

Wärmegedämmte Brandschutztüren EI30

Portes coupe-feu EI30 à isolation thermique

Thermally insulated fire resistant doors EI30

In Stahl und Edelstahl / En acier et acier inox / In steel and stainless steel

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System unico EI30 Tür
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988353/09-23

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Téléchargement

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BIM-Modelle

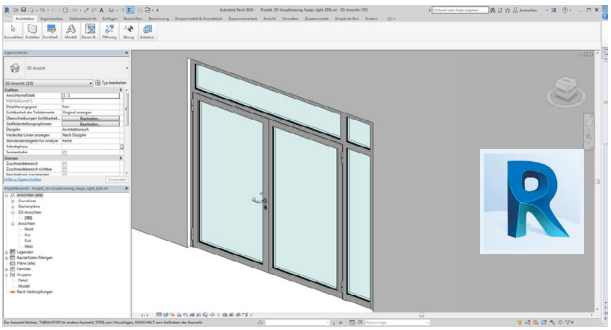
Für die BIM Planungsmethode stehen Ihnen zahlreiche Modelle der Türen Forster unico in Revit und ArchiCAD unter **www.forster-profile.ch/Downloads** zur Verfügung.

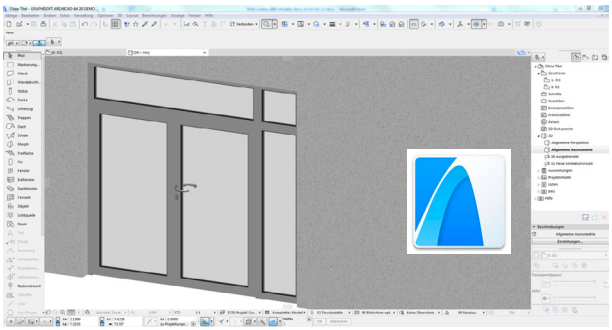
Modèles BIM

De nombreux modèles de portes Forster unico pour la méthode de planification BIM sont disponibles en Revit et ArchiCAD sous **www.forster-profile.ch/telechargement.**

BIM models

For the BIM planning method, numerous models of Forster unico doors are available for Revit and ArchiCAD on **www.forster-profile.ch/Downloads.**





Zeichnungsdaten – dwg

Die in dieser Dokumentation gezeigten Schnitte und Pläne mit nachstehenden Bezeichnungen stehen als dwg-Daten unter **www.forster-profile.ch/Downloads** zur Verfügung.

In der PDF-Version der Dokumentation sind diese Zeichnungen mit einem Link versehen.

un_ep_xxxx	Einbaupläne
un_kd_xxxx	Konstruktionsdetails
un_sd_xxxx	Systemdetails
un_sp_xxxx	Systempläne
un_vv_xxxx	Verglasungsdetails
un_wa_xxxx	Wandanschlüsse

Dessins en dwg

Les coupes et les plans présentés dans cette documentation avec les désignations ci-dessous sont disponibles au format DWG sous **www.forster-profile.ch/telechargement.**

Dans la version PDF de la documentation, ces dessins sont dotés d'un lien.

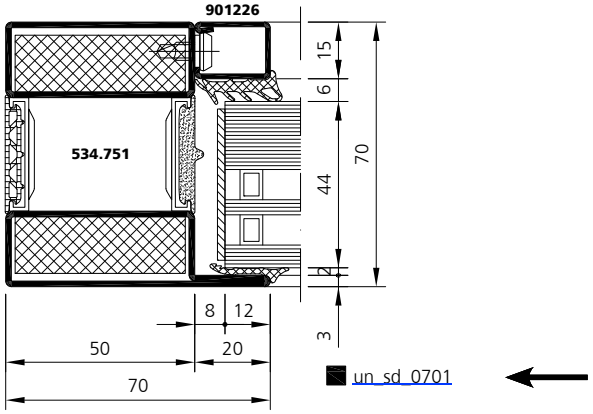
un_ep_xxxx	Plans de la mise en œuvre
un_kd_xxxx	Détails de construction
un_sd_xxxx	Coupes du système
un_sp_xxxx	Plans du système
un_vv_xxxx	Détails de vitrage
un_wa_xxxx	Raccords muraux

Drawing data – dwg

For the dwg format CAD sections and plan details you can download various types as described below with the web address **www.forster-profile.ch/Downloads.**

In the PDF version of the documentation, these drawings are provided with a link.

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un_sd_xxxx	System sections
un_sp_xxxx	System plans
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un_wa_xxxx	Wall abutments



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Änderungen

Version: 09/2023
Artikelnummer: 988353

Modifications

Version: 09/2023
Numéro d'article: 988353

Modifications

Version: 09/2023
item number: 988353

Seite Page Page	Datum Date Date	Erläuterungen Explication Explanation
	07/2022	initiale Version initiale Version initiale Version
3.7.59	03/2023	Richtigstellung Einbaulage Sicherungsbolzen 987714 Correction position de montage goujon de sécurité 987714 Correction mounting position locking pin 987714
1.3.1-1.3.4, 1.3.21, 3.1.6, 3.8.1-3.8.5	09/23	Absenkbare Bodendichtung 905054-060 ersetzt durch 905920-927; 905930-937 Joint de seuil automatique 905054-060 remplacé par 905920-927; 905930-937 Drop seal 905054-060 replaced by 905920-927; 905930-937
6.x.x	09/23	Neues Kapitel 6 unico EI30 Blechtüre Nouveau chapitre 6 unico EI30 porte tôlée New chapter 6 unico EI30 sheet metal door

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Das System

Kombination von Wärmedämmung und Brandschutz EI30

Forster unico EI30 ist das wärmegedämmte Stahl-Profilsystem mit Beschlägen und Zubehör für Brandschutztüren und Fenster sowie für Brandschutzverglasungen im Aussenbereich.

Das System erfüllt die Anforderungen nach EN 1634-1, EN 1634-3 und EN 1191 in Verbindung mit Feuerschutzabschlüsse der Klasse $EI_2$30-S_a/S_{200}-C5 und für Verglasungen nach EN 1364-1 der Klasse EI30.

Die Feuerschutzabschlüsse sind CE- zertifiziert nach EN 16034 und EN 14351-1.

Mit einer Bautiefe von 70 mm können 2- oder 3-fach-Brandschutzisolierglaser und Paneele bis 56 mm Dicke eingebaut werden.

Neuste Technologie, Sicherheit, Energieeffizienz und Ästhetik im Zusammenspiel für verantwortungsvolles und nachhaltiges Bauen.

Le système

Combinaison d'isolation thermique et coupe-feu EI30

Forster unico EI30 est un système de profilés à isolation thermique, qui permet la réalisation de portes et de vitrages fixes coupe-feu pour l'extérieur.

Le système répond aux exigences de la norme DIN EN 1634-1, EN 1634-3 et EN 1191 en relation avec les portes coupe-feu $EI_2$30-S_a/S_{200}-C5 et vitrages fixes EI30 selon EN 1364-1.

Les portes coupe-feu sont certifiées CE selon EN 16034 et EN 14351-1.

Avec une profondeur de 70 mm, double ou triple vitrage isolant coupe-feu et des panneaux jusqu'à 56 mm peuvent être intégrés.

Les dernières technologies, la sécurité, l'efficacité énergétique et l'esthétique en alliance avec la construction durable et responsable.

The system

Combination of thermal insulation and fire resistance EI30

Forster unico EI30 is the thermally insulated profile system with fittings and accessories for fire resistant doors and fixed glazings for exterior use.

The system fulfills the requirements of DIN EN 1634-1, EN1634-3 and EN 1191 in conjunction with for fire doors $EI_2$30-S_a/S_{200}-C5 and glazings EI30 according to EN 1364-1.

The fire doors are CE-certified according to EN 16034 and EN 14351-1.

With a depth of 70 mm, douple or triple insulating fire resistant glass and panels up to 56 mm can be installed.

Newest technology, safety, energy efficiency and aesthetics in combination with responsible and sustainable construction.

Die Vorteile

Einzigartig
Das erste komplett aus Stahl gefertigte wärmegedämmte Profilsystem ohne Kunststoffisolatoren.

High-tech
Eine absolut neue Verbindungstechnologie mittels Laserschweiss-Verfahren ermöglicht die Herstellung dieser aussergewöhnlichen Stahl-Systemprofile.

Wärmedämmend
Die Profile erreichen die heute üblichen Dämmwerte, vergleichbar mit herkömmlichen isolierten Profilserien.

Leicht und stark
Dank der speziellen Tragwerk-Geometrie erreichen die Profile höchste statische Werte. Die Gewichtseinsparung erleichtert gleichzeitig das Handling in der Werkstatt und bei der Montage.

Ökologisch
100 % Stahl, 100 % rezyklierbar

Ästhetisch
Die clevere Verbindungstechnik ermöglicht schlankste Profilquerschnitte.

Sicher
Sämtliche Systemprüfungen entsprechen den Produktnormen EN 14351-1 und EN 16034 und erfüllen damit die Anforderungen der CE-Kennzeichnung.

Effizient
Dank einzigartigem Produktionsverfahren können die Profile innerhalb engster Toleranzen hergestellt werden. Sie lassen sich problemlos zusammenfügen.

Sauber
Beim Schweissen und Schleifen entstehen keine Emissionen durch Kunststoffe.

Einfach
Keine aufwändigen Ausnehmungen beim Schlosseinbau. Zudem bieten die Profile genügend Raum für den – auch nachträglichen – Einbau einer Türautomation.

Schnell
Das Befestigen der Elemente am Mauerwerk kann ohne zusätzliche Bohrungen durch einen Eindrehanker am Rahmen erfolgen.

Les avantages

Unique
Le premier système de profilés à isolation thermique fabriqué entièrement en acier sans isolant en matière synthétique.

Haute technologie
Une technologie absolument révolutionnaire par soudage au rayon laser permet la fabrication des profilés de ce système unique.

Isolation thermique
Ces profilés permettent de respecter sans problèmes les valeurs d'isolation usuelles.

Légèreté et solidité
Grâce à la géométrie spéciale de l'ossature, les profilés atteignent des valeurs statiques particulièrement élevées. L'économie de poids facilite en même temps la manipulation à l'atelier et lors du montage.

Respect de l'environnement
100% acier, 100% recyclable

Esthétique
La technique de raccordement intelligente permet des sections de profilés d'une grande finesse.

Sécurité
Tous les contrôles des systèmes effectués satisfont à la normes produits EN 14351-1 et EN 16034 et répondent ainsi aux exigences du marquage CE.

Efficacité
Ce procédé de fabrication unique fait que les profilés sont de dimensions absolument exactes. Ils peuvent ainsi être assemblés sans problème.

Propreté
Aucune émission de matière synthétique n'a lieu lors du soudage et du ponçage.

Simplicité
Aucun usinage compliqué pour le montage de la serrure. Les profilés offrent en outre suffisamment d'espace libre pour le montage ultérieur d'une automatisation de la porte.

Rapidité
Grâce à une fixation par ancrage sur le cadre, la fixation des châssis n'occasionne pas de perçage additionnel.

The benefits

Unique
The first ever thermally-insulated profile system made entirely from steel and devoid of all synthetic insulating materials.

High-tech
An entirely new joining method employing a laser welding process allows the manufacture of these extraordinary steel system profiles.

Thermally insulating
These profiles achieve today's customary insulation values, comparable with conventional, insulated profile series.

Light and strong
Thanks to the special geometry of the supporting framework, the profiles attain extremely high statical values. The weight reduction simultaneously facilitates handling in the workshop and on-site during installation.

Environmentally-friendly
100 % steel, 100 % recyclable

Aesthetically appealing
The advanced joining method facilitates extremely narrow profile cross sections.

Secure
All system tests comply with the EN 14351-1 and EN 16034 product standards and thereby fulfil the requirements of CE-marking.

Efficient
Thanks to a unique production process, the profiles are 100% true to dimension. Assembly of profiles is so easy as to be practically child's play.

Clean
No emissions are produced during welding or grinding.

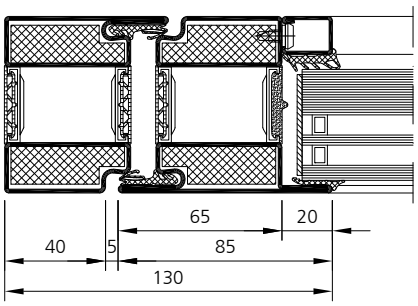
Simple
No time-consuming cutouts for lock installation. The profiles also offer sufficient space for the installation – as well as the retrofit fitting – of door automation systems.

Fast
Fixing of elements can take place with a turn-in anchor, without having to drill additional holes through the frames.

Systemvarianten | Variantes du système | System variations

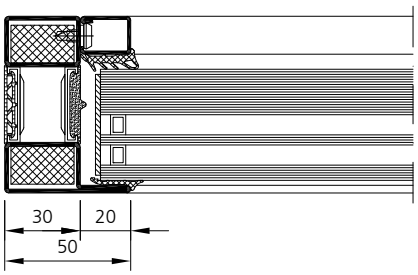
Brandschutz Tür EI30
Porte coupe-feu EI30
Fire resistance door EI30

Stahl (Edelstahl auf Anfrage)
Acier (Acier inox sur demande)
Steel (stainless steel on request)



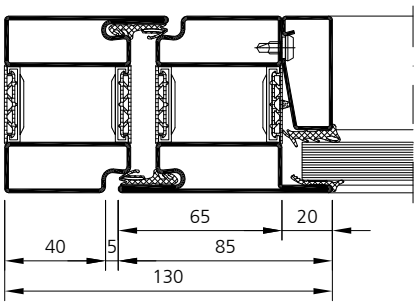
Brandschutz Festverglasung EI30
Vitrage fixe coupe-feu EI30
Fire resistance fixed glazing EI30

Stahl (Edelstahl auf Anfrage)
Acier (Acier inox sur demande)
Steel (stainless steel on request)



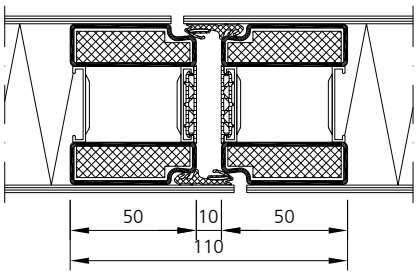
Rauchschutz Tür S_{200}
Porte pare-fumée S_{200}
Smoke protection door S_{200}

Stahl oder Edelstahl
Acier ou acier inox
Steel or stainless steel



Flächenbündig verblechte Brandschutz Tür EI30
Portes coupe-feu EI30 en tôle affleurée
Flush mounted fire resistant sheet metal doors EI30

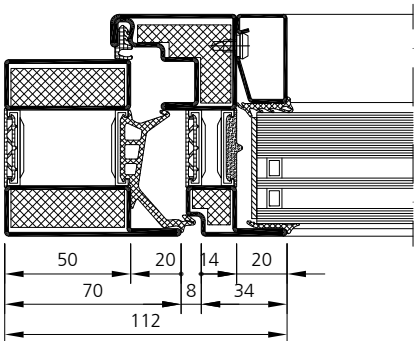
Stahl
Acier
Steel



Brandschutz Fenster EI30
Fenêtre coupe-feu EI30
Fire resistance window EI30

Stahl (Edelstahl auf Anfrage)
Acier (Acier inox sur demande)
Steel (stainless steel on request)

Siehe separate Broschüre forster unico 4 Fenster EI30
Voir brochure séparée forster unico 4 Fenêtre EI30
See separate brochure forster unico 4 Window EI30



Platz für Notizen

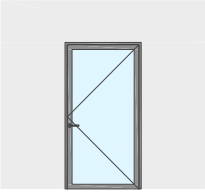
Espace pour les notes

Space for memos

Leistungseigenschaften nach EN 16034

Caractéristiques de performance selon EN 16034

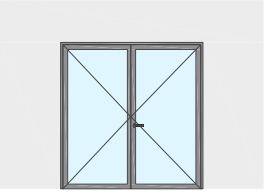
Performance characteristics according to EN 16034



1-flügelige Tür in Tragkonstruktion

Porte à 1 vantail dans une ossature

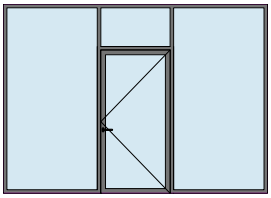
1-leaf door in supporting structure



2-flügelige Tür in Tragkonstruktion

Porte à 2 vantaux dans une ossature

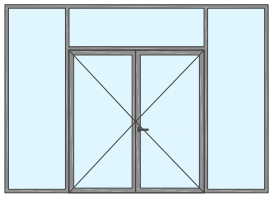
2-leaf door in supporting structure



1-flügelige Tür in Festverglasung

Porte à 1 vantail dans un vitrage fixe

1-leaf door in fixed glazing



2-flügelige Tür in Festverglasung

Porte à 2 vantaux dans un vitrage fixe

2-leaf door in fixed glazing

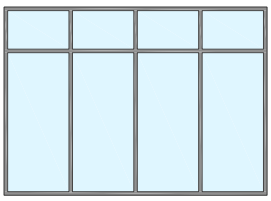
Nach EN 16034 / Selon la norme EN 16034 / According to EN 16034

Nach EN 16034 und nationaler Zulassung /
Selon la norme EN 16034 et homologation nationale /
According to EN 16034 and national approval

Hinweis zur EN 16034
Bewegliche Teile mit Brandschutzanforderung in der Aussenanwendung unterliegen seit dem 1. November 2019 der Brandschutznorm EN 16034. Die Fabrikation und die Montage der Fenster- und Türelemente haben durch Lizenz-Vertragspartner, welche nach der EN 16034 zertifiziert sind, zu erfolgen. Die Bauteile sind mit einem CE Zeichen zu versehen und es ist eine entsprechende Leistungserklärung an den Bauherren zu übergeben (EN 16034 und EN 14351-1).

Renvoi vers la norme EN 16034
Depuis le 1er novembre 2019, les parties mobiles pour l'extérieur avec des exigences en matière de résistance au feu sont soumises à la norme de résistance au feu EN 16034. La fabrication et le montage des éléments de fenêtre et de porte doivent être réalisés par des partenaires contractuels sous licence, certifiés selon la norme EN 16034. Les composants doivent être dotés du marquage CE et une déclaration de performances correspondante doit être remise aux maîtres d'ouvrage (EN 16034 et EN 14351-1).

Note on EN 16034
Moving parts requiring fire protection and used outdoors have been subject to the EN 16034 fire protection standard since 1 November 2019. The window and door elements must be manufactured and installed by licensed contractual partners certified in accordance with EN 16034. The components must be marked with a CE symbol and a corresponding Declaration of Performance must be given to the client (EN 16034 and EN 14351-1).



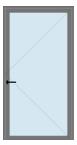
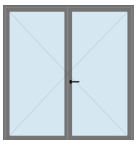
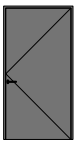
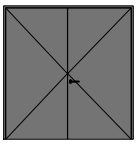
Einbau Tür in Festverglasung nationale Zulassung berücksichtigen
Tenir compte des homologations nationales en cas de montage de la porte dans un vitrage fixe.
Observe national approvals for door installation in fixed glazing

Leistungseigenschaften nach EN 16034

Caractéristiques de performance selon EN 16034

Performance characteristics according to EN 16034

EI_2 30 Türdimensionen in Stahl/Edelstahl
Dimensions de porte EI_2 30 en acier/ acier inox
EI_2 30 door dimensions in steel/stainless steel

			Toleranzbereich Plage de tolérance Tolerance	
	Lichtes Durchgangsmass (BxH) **Passage libre (lxh)** **Inside width (wxh)**	**Flügelgewicht** **Poids de vantail** **Leaf weight**	**Bodenluft** **Marge sol** **Floor clearance**	**Türfalzluft** **Marge feuillure de porte** **Door rebate clearance**
	**max. 1370 x 3010 mm** min. 356 x 391 mm			
	**max. 2700 x 2850 mm** min. 732 x 391 mm max. Flügelbreite 1380 mm Largeur du vantail max. 1380 mm max. leaf width 1380 mm	**max. 300 kg**	**10 mm + 2 / -4 mm**	**10 mm ± 1 mm**
	**1370 x 2715 mm**			
	**2760 x 2715 mm**			

Dimension der Festverglasung
Dimension du vitrage fixe
Dimension of fixed glazing

Spezifikationen in den nationalen Zulassungen berücksichtigen
Tenir compte des spécifications dans les homologations nationales
Observe the specifications in the national approvals

Leistungseigenschaften nach EN 16034

Caractéristiques de performance selon EN 16034

Performance characteristics according to EN 16034

Geprüfte Eigenschaften **Caractéristiques testées** **Tested characteristics**		**Normen** **Normes** **Standards**	**Türen – Klasse / Wert** **Portes – Classe / Valeur** **Doors – Class / Value**	**Blechtüren – Klasse / Wert** **Porte tôlees – Classe / Valeur** **Sheet metal doors – Class / Value**
	Brandschutz Résistance aux feu Fire resistance	**EN 1634-1** **EN 13501-2**	**$EI_2$30**	**$EI_2$30**
	Rauchschutz Etanchéité à la fumée Smoke control	**EN 1634-3** **EN 13501-2**	**S_a / S_{200}**	**npd**
	Fähigkeit zur Freigabe Capacité au déclenchement Ability to release	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Dauerhaftigkeit der Fähigkeit zur Freigabe Endurance de la capacité au déclenchement Durablility of he ability to release	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Selbstschliessung Fermeture automatique Self-closing	**EN 16034** **EN 13501-2**	**C**	**npd**
	Dauerhaftigkeit der Selbstschliessung gegenüber Qualitätsverlust Endurance de la fermeture automatique contre la dégradation Durability of self-closing against degradation	**EN 1191** **EN 16034**	**5** (200'000 Zyklen / cycles)	**5** (200'000 Zyklen / cycles)
	Dauerhaftigkeit der Selbstschliessung gegenüber Alterung (Korrosion) Endurance de la fermeture automatique contre le vieillissement (corrosion) Durability of self-closing against ageing (corrosion)	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**

npd - keine Eigenschaft geprüft / performance non déterminée / no performance determined

Glastypen EI30

Types de verre EI30

Glass types EI30

Pilkington	**Glastyp | Type de verre | Glass type**	Pyrostop 30-xx
	Aufbau | Structure | Structure	2 / 3-fach double / triple
	Min. Abm. | Min. Dim. | Min. Dim.	194 x 250 mm
	Max. Abm. | Max. Dim. | Max. Dim.	
	Türflügel | vantail de porte | door leaf	1264 x 2869 mm
	Seitenteil | partie latérale fixe | screen abutment	1264 x 2869 mm
	Oberlicht | imposte | fanlight	1420 x 169 mm
	Stärke | L'épaisseur | Thickness	29 - 47 mm
	Glaseinstand | prise en feuillure du verre | glass edge cover	12 mm
Vetrotech	**Glastyp | Type de verre | Glass type**	Contraflam 30 IGU
	Aufbau | Structure | Structure	2 / 3-fach double / triple
	Min. Abm. | Min. Dim. | Min. Dim.	194 x 250 mm
	Max. Abm. | Max. Dim. | Max. Dim.	
	Türflügel | vantail de porte | door leaf	1264 x 2719 mm
	Seitenteil | partie latérale fixe | screen abutment	1311 x 2719 mm
	Oberlicht | imposte | fanlight	2794 x 884 mm
	Stärke | L'épaisseur | Thickness	26 - 47 mm
	Glaseinstand | prise en feuillure du verre | glass edge cover	12 mm

Leistungseigenschaften nach EN 16034

Caractéristiques de performance selon EN 16034

Performance characteristics according to EN 16034

Paneeltypen EI30

Panneaux de type EI30

Panel types EI30

Hersteller Fabricant Manufacturer	Aufbau Composition	Min. Abm. Min. Dim. Min. Dim.	Max. Abm. Max. Dim. Max. Dim.	Stärke L`épaisseur Thickness	Glaseinstand prise en feuillure du verre glass edge cover
Fermacell	2 x Mineralwolle 20mm, ≥ 110 kg/m³ 1 x Powerpanel H2O 12mm Blech beidseitig, 1.5 – 2.0 mm 2 x Laine minérale 20mm, ≥ 110 kg/m³ 1 x Powerpanel H2O 12mm Tôle des deux côtés, 1.5 – 2.0 mm 2 x Mineral wool 20mm, ≥ 110 kg/m³ 1 x Powerpanel H2O 12mm Sheet metal double sided, 1.5 – 2.0 mm	250 x 250 mm	Türflügel | vantail de porte | door leaf 1264 x 2869 mm Seitenteil | partie latérale fixe | screen abutment 1324 x 2979 mm Oberlicht | imposte | fanlight 1324 x 2979 mm	56 - 57 mm	12 mm

Glastypen S_a/S_{200}

Types de verre S_a/S_{200}

Glass types S_a/S_{200}

Glastyp | Type de verre | Glass type	ESG Einscheibensicherheitsglas verre trempé de sécurité toughened safety glass	VSG Verbundsicherheitsglas verre feuilleté de sécurité laminated safety glass	Isolierglas mind. Eine Scheibe aus ESG ≥ 8 mm / VSG ≥ 8 mm Vitrage isolant au moins une vitre en ESG ≥ 8 mm / VSG ≥ 8 mm Insulating glass min. one pane of ESG ≥ 8 mm / VSG ≥ 8 mm
Aufbau | Structure | Structure	Monoglas Mono-verre Monoglass	Monoglas Mono-verre Monoglass	2 / 3-fach double / triple
Min. Abm. | Min. Dim. | Min. Dim.	194 x 250 mm	194 x 250 mm	194 x 250 mm
Max. Abm. | Max. Dim. | Max. Dim. Türflügel | vantail de porte | door leaf Seitenteil | partie latérale fixe | screen abutment Oberlicht | imposte | fanlight		1264 x 2869 mm 1324 x 2979 mm 2854 x 884 mm	
Stärke | L`épaisseur | Thickness	≥ 8 mm	≥ 8 mm	57 mm
Glaseinstand | prise en feuillure du verre | glass edge cover	12 mm	12 mm	12 mm

Paneeltypen S_a/S_{200}

Panneaux de type S_a/S_{200}

Panel types S_a/S_{200}

Hersteller Fabricant Manufacturer	Aufbau Composition	Min. Abm. Min. Dim. Min. Dim.	Max. Abm. Max. Dim. Max. Dim.	Stärke L`épaisseur Thickness	Glaseinstand prise en feuillure du verre glass edge cover
Fermacell	1 x Aestuver Brandschutzplatte 40mm, Blech beidseitig, 1.5 – 2.0 mm 1 x Aestuver panneau de protection 40mm, Tôle des deux côtés, 1.5 – 2.0 mm 1 x Aestuver fire protection board 40 mm, heet metal double sided, 1.5 – 2.0 mm	194 x 250 mm	Türflügel | vantail de porte | door leaf 1264 x 2869 mm Seitenteil | partie latérale fixe | screen abutment 1324 x 2979 mm Oberlicht | imposte | fanlight 2854 x 884 mm	43 - 44 mm	12 mm

Leistungseigenschaften nach EN 16034

Materialqualität
- Stahl verzinkt (ZM),
- Edelstahl geschliffen 1.4301

Falzabdeckung
- Türfalz CR-Dichtung
- Glasfalz PE-Dichtung für HI Variante

Dämmschichtbildner
1x vierseitig umlaufend im Glasfalz, abhängig von der Glasdicke

Durchdringungen
Elektro-, Rohr-, Lüftungsdurchbrüche, etc. sind nicht geprüft und nur in Absprache mit den Brandschutzbehörden ausführbar.

Dekorative Beschichtungen
Anstriche ohne Beitrag zum Brandverhalten und Beschichtungen d ≤ 1.5 mm sind zulässig.

Schutzelemente
Oberflächenbefestigte Schutzelemente sind zulässig, ohne Überdeckung der Füllung.

Glashalteleisten
Geklipst, geschraubt als Profile, Rohre, Winkel (Höhe jeweils = 20mm, max. Befestigungsabstand aus den Ecken ≤ 70 mm, ansonsten 300 mm)

Verglasungsart
- Trockenverglasung (CR)
- Nassverglasung (Keramikfaserband)

Caractéristiques de performance selon EN 16034

Qualité du matériau
- Acier zingué (ZM),
- Acier inox 1.4301 meulé,

Recouvrement de feuillure
- Joint CR feuillure de porte
- Joint PE feuillure du verre pour version HI

Composants de la couche isolante
1x faisant le tour des quatre côtés dans la feuillure du verre en fonction de l'épaisseur du verre

Traversées
Les percées électriques, de conduites, de ventilation, etc. ne sont pas contrôlées et ne sont réalisables qu'en concertation avec les autorités de protection incendie.

Revêtements décoratifs
Les peintures ne contribuant pas à la réaction au feu et les revêtements d ≤ 1,5 mm sont autorisés.

Éléments de protection
Les éléments de protection fixés en surface sont autorisés, sans recouvrement du remplissage.

Parcloses
Clipsées, vissées sous forme de profilés, tubes, équerres (hauteur respective = 20mm, distance de montage max. depuis les angles ≤ 70 mm, sinon 300 mm)

Type de vitrage
- Vitrage à sec (CR)
- Vitrage au silicone (ruban en fibres de céramique)

Performance characteristics according to EN 16034

Material quality
- Galvanised steel (ZM),
- Stainless steel 1.4301 grinded

Rebate cover
- Door rebate CR-seal
- Glass rebate PE-seal for HI version

Intumescent
1x on all four sides in the glass rebate, depending on the glass thickness

Openings
Openings for electrics, pipes, ventilation etc. have not been tested and may only be implemented with the agreement of fire protection authoritie

Decorative coatings
Paint that does not affect reaction to fire and coatings d ≤ 1.5 mm are allowed.

Protective elements
Surface-mounted protective elements are allowed without covering the filling.

Glazing beads
Clipped, screwed as profiles, pipes, corner (height = 20 mm each, max. mounting distance from the corners ≤ 70 mm, otherwise 300 mm)

Type of glazing
- Dry glazing (CR)
- Wet glazing (ceramic fibre tape)

Leistungseigenschaften nach EN 16034

Rahmenverbreiterungen
- Füllung Mineralwolle ≥ 120 kg/m³
- Blech beidseitig, 3.0 mm
- Rahmen oben bis max. 415 mm
- Rahmen seitlich bis max. 440 mm

Blechtür
- Füllung Mineralwolle ≥ 85 kg/m3
- Stahlblech beidseitig, 3.0 mm

Tragkonstruktionen
- Massivwände (Betonwände, Porenbeton und Mauerwerk) mit Rohdichte ≥ 600 kg/m³ und Wanddicke ≥ 175 mm
- Forster unico Festverglasung ≥ EI30
- Befestigungsabstände aus der Ecke ≤ 225 mm, ansonsten ≤ 650 mm

Beschläge
- Mehrpunkteschlösser selbstverriegelnd
- Motorenschlösser
- Drücker und horizontale Betätigungsstangen
- Verdeckt- und aufgesetzte Türbänder
- Aufgesetzte Türschliesser
- Drehflügelantriebe

Caractéristiques de performance selon EN 16034

Élargissement de vantail
- Remplissage laine minérale ≥ 120 kg/m³
- Tôle des deux côtés, 3.0 mm
- Cadre en haut jusqu'à max. 415 mm
- Cadre latéral jusqu'à max. 440 mm

Porte en tôle
- Remplissage laine minérale ≥ 85 kg/m3
- Tôle d'acier des deux côtés, 3.0 mm

Ossatures
- Murs massifs (murs en béton, béton poreuxet maçonnerie) avec masse volumique ≥ 600 kg/m³ et épaisseur de mur ≥ 175mm
- Vitrage fixe Forster unico ≥ EI30
- Distances de montage depuis l'angle ≤ 225 mm, sinon ≤ 650 mm

Quincaillerie
- Serrures multipoints à verrouillage automatique
- Serrures motorisées
- Poignées et tiges d'actionnement horizontales
- Paumelles cachées et apparentesr
- Ferme-portes apparents
- Entraînements d'ouvrant à la française

Performance characteristics according to EN 16034

Frame enlargements
- Filling mineral wool ≥ 120 kg/m³
- Sheet metal double sided, 3.0 mm
- Frame top to max. 415 mm
- Side frame up to max. 440 mm

Sheet metal door
- Filling mineral wool ≥ 85 kg/m3
- Sheet steel double sided, 3.0 mm

Supporting structures
- Solid walls (concrete walls, porous concrete and masonry) with gross density ≥ 600 kg/m³ and wall thickness ≥ 175 mm
- Forster unico fixed glazing ≥ EI30
- Mounting distance from the corners ≤ 225 mm, otherwise ≤ 650 mm

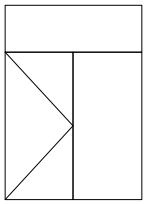
Fittings
- Multi-point locks, self-locking
- Motorised locks
- Handles and horizontal actuation bars
- Concealed and attached hinges
- Attached door closers
- Automatic door openers

Leistungseigenschaften nach EN 16034

Caractéristiques de performance selon EN 16034

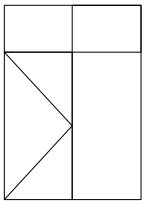
Performance characteristics according to EN 16034

1



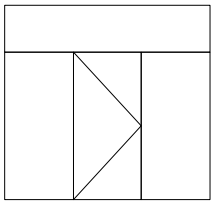
EI	S	C
✓		✓

2



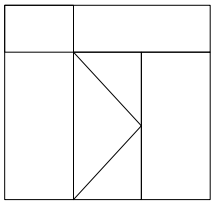
EI	S	C
✓	✓	✓

3



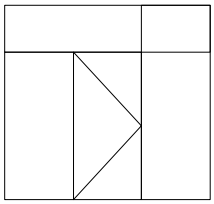
EI	S	C
✓		

4



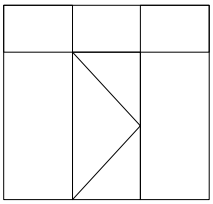
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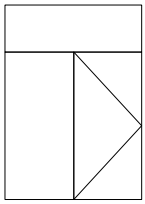
EI	S	C
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6



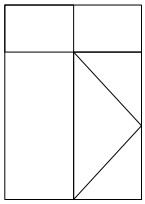
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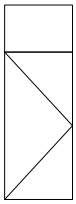
EI	S	C
✓		

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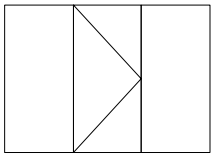
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9



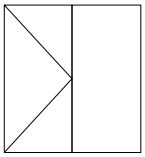
EI	S	C
✓	✓	✓

10



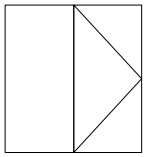
EI	S	C
✓	✓	✓

11



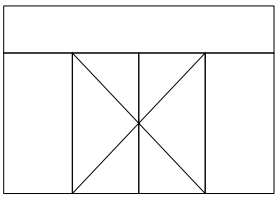
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12



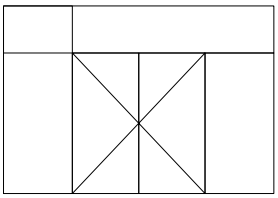
EI	S	C
✓	✓	✓

13



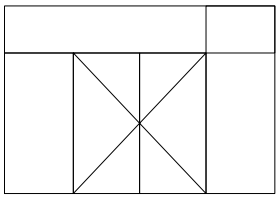
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✓		

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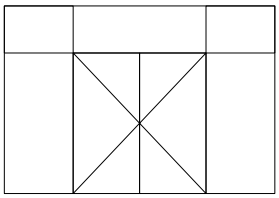
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✓	✓	

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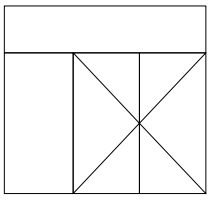
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16



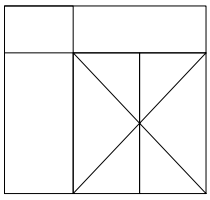
EI	S	C
✓	✓	✓

17



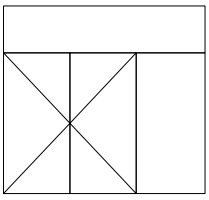
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✓		

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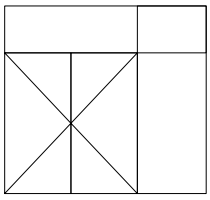
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19



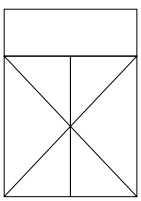
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✓		

20



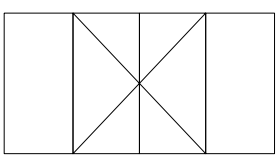
EI	S	C
✓	✓	✓

21



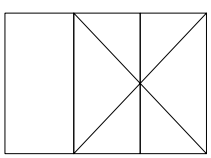
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✓	✓	✓

22



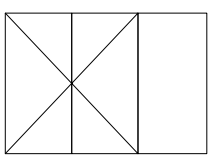
EI	S	C
✓	✓	✓

23



EI	S	C
✓	✓	✓

24

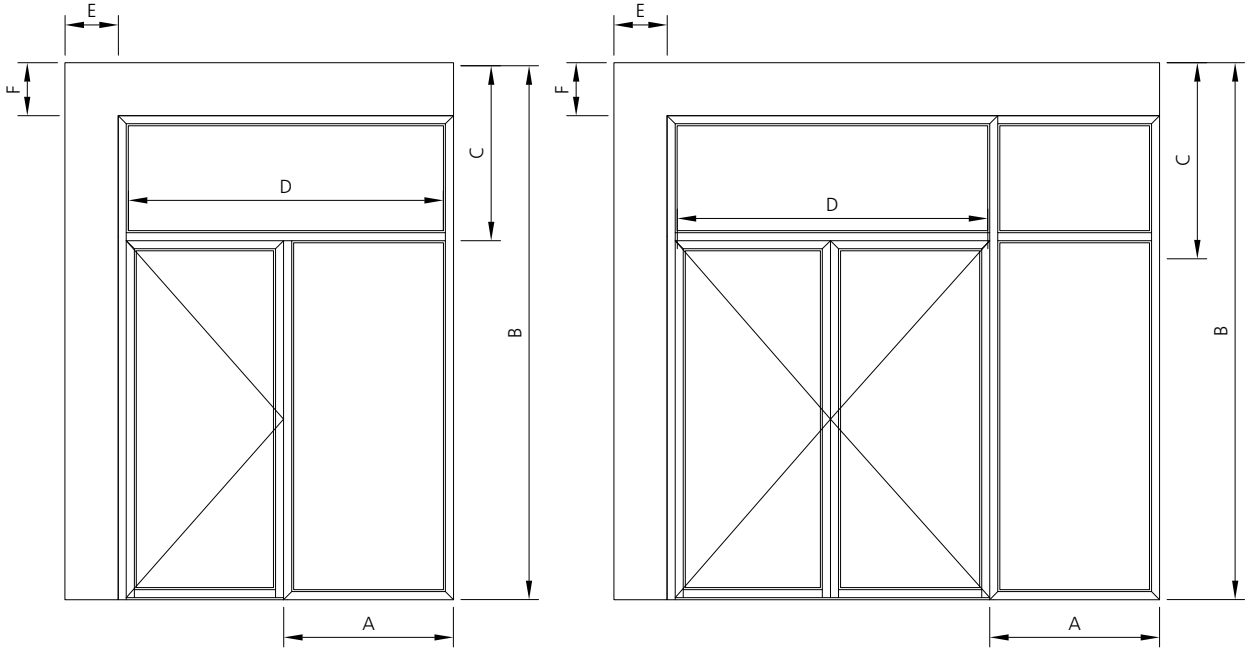


EI	S	C
✓	✓	✓

Leistungseigenschaften nach EN 16034

Caractéristiques de performance selon EN 16034

Performance characteristics according to EN 16034



A	Breite Seitenteil Largeur de la partie latérale fix Width screen abutment	1370 mm
B	Höhe Element Hauteur élément Element height	3700 mm
C	Höhe Oberlicht Hauteur de l'imposte Height fanlight	930 mm
D	Breite Oberlicht Largeur de l'imposte Width fanlight	2870 mm
E	Verbreiterung seitlich Élargissement latéral Enlargement on side	440 mm
F	Verbreiterung oben Élargissement en-haut Enlargement on top	415 mm

Leistungseigenschaften nach EN 14351-1

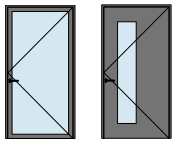
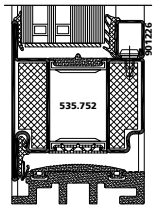
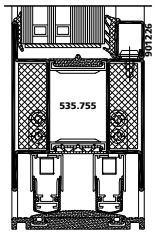
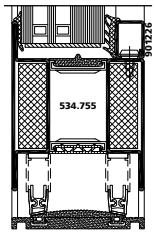
1-flügelige Tür
Auswärts öffnend
Flügelbreite ≤ 1400 mm
Flügelhöhe ≤ 3000 mm

Caractéristiques de performance selon EN 14351-1

1 vantail porte
Ouvrant vers l'extérieur
Largeur du vantail ≤ 1400 mm
Hauteur de vantail ≤ 3000 mm

Performance characteristics according to EN 14351-1

Single-leaf door
Opening outwards
Leaf width ≤ 1400 mm
Leaf height ≤ 3000 mm

	 **EN 12210** Widerstand bei Windlast Résistance au vent Resistance to wind load	 **EN 12208** Schlagregendichtheit Etanchéité à la pluie battante Watertightness	 **EN 13049** Stossfestigkeit Résistance au chocs Impact resistance	 **EN 12207** Luftdurchlässigkeit Perméabilité à l'air Air permeability	 **EN 12217** Bedienkräfte Forces de manœuvre Operating forces
	C3	3A	1 (200 Pa)	3	3
	C3	1A	1 (200 Pa)	3	3
	C3	1A	1 (200 Pa)	3	3

Hinweis
Leistungseigenschaften gültig für verglaste Türen und Blechtüren.

Remarque
Performances valable pour portes vitrées et portes tôlées

Notice
Performance characteristics are applicable for glazed doors and sheet metal doors.

Leistungseigenschaften nach EN 14351-1

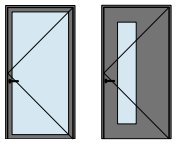
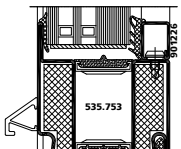
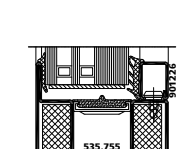
1-flügelige Tür
Einwärts öffnend
Flügelbreite ≤ 1400 mm
Flügelhöhe ≤ 3000 mm

Caractéristiques de performance selon EN 14351-1

1 vantail porte
Ouvrant vers l'intérieur
Largeur du vantail ≤ 1400 mm
Hauteur de vantail ≤ 3000 mm

Performance characteristics according to EN 14351-1

Single-leaf door
Opening inwards
Leaf width ≤ 1400 mm
Leaf height ≤ 3000 mm

	 **EN 12210** Widerstand bei Windlast / Résistance au vent / Resistance to wind load	 **EN 12208** Schlagregendichtheit / Etanchéité à la pluie battante / Watertightness	 **EN 13049** Stossfestigkeit / Résistance au chocs / Impact resistance	 **EN 12207** Luftdurchlässigkeit / Perméabilité à l'air / Air permeability	 **EN 12217** Bedienkräfte / Forces de manœuvre / Operating forces
	C3	3A	1 (200 Pa)	3	3
	C3	1A	1 (200 Pa)	3	3
	C3	1A	1 (200 Pa)	3	3

Hinweis
Leistungseigenschaften gültig für verglaste Türen und Blechtüren.

Remarque
Performances valable pour portes vitrées et portes tôlées

Notice
Performance characteristics are applicable for glazed doors and sheet metal doors.

Leistungseigenschaften nach EN 14351-1

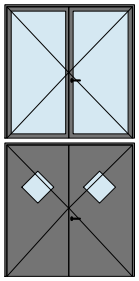
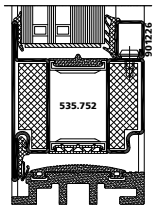
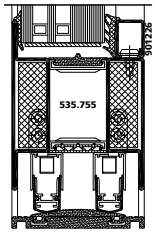
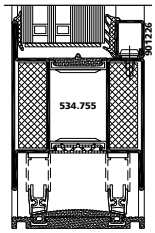
2-flügelige Tür
Auswärts öffnend
Flügelbreite ≤ 1400 mm
Flügelhöhe ≤ 2860 mm

Caractéristiques de performance selon EN 14351-1

2 vantaux porte
Ouvrant vers l'extérieur
Largeur du vantail ≤ 1400 mm
Hauteur de vantail ≤ 2860 mm

Performance characteristics according to EN 14351-1

2-leaf door
Opening outwards
Leaf width ≤ 1400 mm
Leaf height ≤ 2860 mm

	 **EN 12210** Widerstand bei Windlast / Résistance au vent / Resistance to wind load	 **EN 12208** Schlagregendichtheit / Etanchéité à la pluie battante / Watertightness	 **EN 13049** Stossfestigkeit / Résistance au chocs / Impact resistance	 **EN 12207** Luftdurchlässigkeit / Perméabilité à l'air / Air permeability	 **EN 12217** Bedienkräfte / Forces de manœuvre / Operating forces
	C1 / C3*	3A	1 (200 Pa)	2 / 3*	3
	C1 / C3*	1A	1 (200 Pa)	2 / 3*	3
	C1 / C3*	1A	1 (200 Pa)	2 / 3*	3
	C1 / C3*	1A	1 (200 Pa)	2 / 3*	3

Hinweis
Leistungseigenschaften gültig für verglaste Türen und Blechtüren.

Remarque
Performances valable pour portes vitrées et portes tôlées

Notice
Performance characteristics are applicable for glazed doors and sheet metal doors.

*Flügelbreite ≤ 1120 mm
Flügelhöhe ≤ 2500 mm

*Largeur du vantail ≤ 1120 mm
Hauteur de vantail ≤ 2500 mm

*Leaf width ≤ 1120 mm
Leaf height ≤ 2500 mm

Leistungseigenschaften nach EN 14351-1

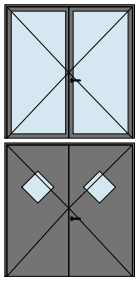
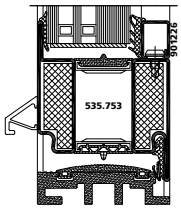
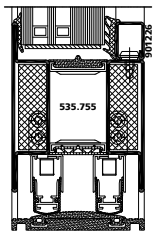
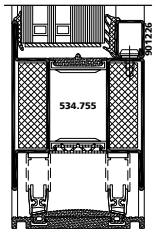
2-flügelige Tür
Einwärts öffnend
Flügelbreite ≤ 1400 mm
Flügelhöhe ≤ 2860 mm

Caractéristiques de performance selon EN 14351-1

2 vantaux porte
Ouvrant vers l'intérieur
Largeur du vantail ≤ 1400 mm
Hauteur de vantail ≤ 2860 mm

Performance characteristics according to EN 14351-1

2-leaf door
Opening inwards
Leaf width ≤ 1400 mm
Leaf height ≤ 2860 mm

	 **EN 12210** Widerstand bei Windlast Résistance au vent Resistance to wind load	 **EN 12208** Schlagregendichtheit Etanchéité à la pluie battante Watertightness	 **EN 13049** Stossfestigkeit Résistance au chocs Impact resistance	 **EN 12207** Luftdurchlässigkeit Perméabilité à l'air Air permeability	 **EN 12217** Bedienkräfte Forces de manœuvre Operating forces
	C1 / C3*	3A	1 (200 Pa)	2 / 3*	3
	C1 / C3*	1A	1 (200 Pa)	2 / 3*	3
	C1 / C3*	1A	1 (200 Pa)	2 / 3*	3

Hinweis
Leistungseigenschaften gültig für verglaste Türen und Blechtüren.

Remarque
Performances valable pour portes vitrées et portes tôlées

Notice
Performance characteristics are applicable for glazed doors and sheet metal doors.

*Flügelbreite ≤ 1120 mm
Flügelhöhe ≤ 2500 mm

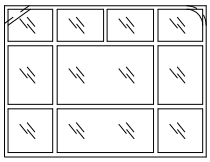
*Largeur du vantail ≤ 1120 mm
Hauteur de vantail ≤ 2500 mm

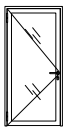
*Leaf width ≤ 1120 mm
Leaf height ≤ 2500 mm

Leistungseigenschaften nach EN 14351-1
Systemvarianten

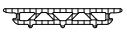
Caractéristiques de performance selon EN 14351-1
Variantes du système

Performance characteristics according to EN 14351-1
System variations





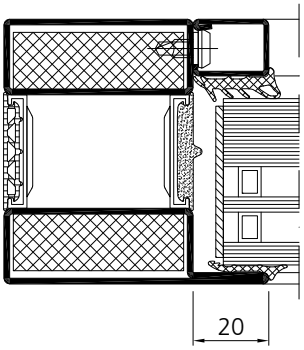
forsterunico HI



985704



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forsterunico HI



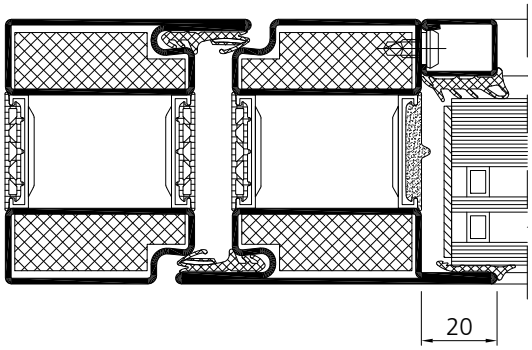
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985704



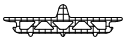
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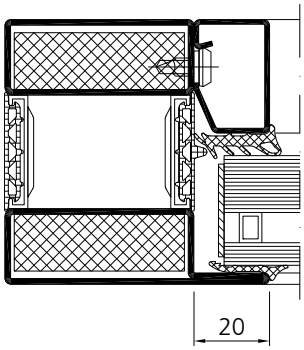
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985704



985705



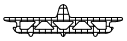
forsterunico



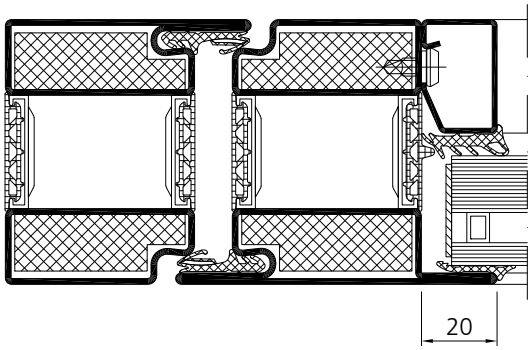
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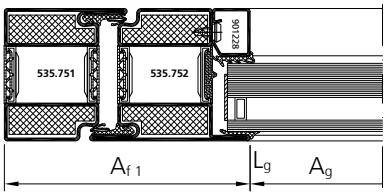


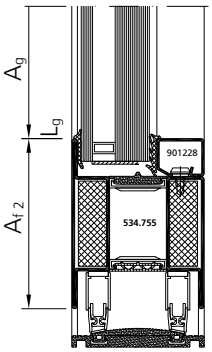
09/23

Berechnung der U-Werte
für ein gesamtes Element gemäss EN 10077 - 1

Die Element U-Werte werden gemäss Norm EN 10077-1 mit folgenden Formeln berechnet

$$U_D = \frac{(A_{f\,1} \times U_f) + (A_{f\,2} \times U_f) + (A_g \times U_g) + (L_g \times \psi_g)}{A_{f\,1} + A_{f\,2} + A_g}$$





U_D	=	U-Wert Tür	[W/(m²K)]
A_f	=	Sichtbare Fläche Rahmen	[m²]
U_f	=	U-Wert der Rahmenkombination	[W/(m²K)]
A_g	=	Sichtbare Fläche Glas	[m²]
U_g	=	U-Wert des Glases	[W/(m²K)]
L_g	=	Umfang des sichtbaren Glasanteils	[m]
ψ_g	=	Längenbezogener Wärmedurchgangskoeffizient Tabelle G.1+G.2 der EN 10077-1 (2010)	[W/(mK)]

Längenbezogener Wärmedurchgangskoeffizient für Abstandhalter aus Aluminium und Stahl, Tabellen G.1 und G.2 der EN 10077-1 (2010) für Abstandhalter mit wärmetechnisch verbesserter Leistungsfähigkeit.

Calcul des valeurs U
pour tout l'élément selon la norme EN 10077 - 1

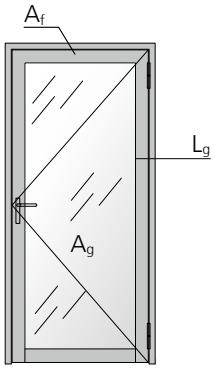
Les valeurs U sont calculées selon la norme EN 10077-1 avec la formule suivante

U_D	=	Coefficient de transmission thermique de la porte	[W/(m²K)]
A_f	=	Surface de l'encadrement	[m²]
U_f	=	Coefficient de transmission thermique de l'encadrement	[W/(m²K)]
A_g	=	Surface du vitrage	[m²]
U_g	=	Coefficient de transmission thermique du vitrage	[W/(m²K)]
L_g	=	Périmètre du vitrage visible	[m]
ψ_g	=	Valeurs du coefficient de transmission thermique linéique pour les intercalaires du vitrage Tableau G.1+G.2 EN 10077-1 (2010)	[W/(mK)]

Valeurs du coefficient de transmission thermique linéique pour les intercalaires de vitrages en aluminium et en acier, tableaux G.1 et G.2 selon EN ISO 10077-1 (2010) pour intercalaires de vitrages avec une efficacité thermique plus performante.

Calculation of U-value
of the complete unit according to EN 10077 - 1

The U-value of the unit will be calculated according to EN 10077-1 with following computation formula



U_D	=	Thermal transmittance of the door	[W/(m²K)]
A_f	=	Area of the frame	[m²]
U_f	=	Thermal transmittance of the frame	[W/(m²K)]
A_g	=	Area of the glazing	[m²]
U_g	=	Thermal transmittance of the glazing	[W/(m²K)]
L_g	=	Perimeter of the visible glazing	[m]
ψ_g	=	Values of linear thermal transmittance for common types of glazing spacer bars Table G.1+G.2 EN 10077-1 (2010)	[W/(mK)]

Values of linear thermal transmittance for common types of glazing spacer bars (aluminium or steel) tables G.1 and G.2 according to EN ISO 10077-1 (2010) for glazing spacer bars with higher thermal efficiency.

	2- oder 3 Scheiben Isolierverglasung, unbeschichtetes Glas, Luft oder Gaszwischenraum Vitrage double ou triple, verre non revêtu, lame d'air ou de gaz Double or triple glazing uncoated glass air- or gas-filled	2- oder 3 Scheiben Isolierverglasung, mit niedrigem Emissionsgrad, Luft oder Gaszwischenraum Vitrage double à faible émissivité, vitrage triple avec deux couches à faible émissivité, lame d'air ou gaz Double a or triple b glazing low-emissivity glass air- or gas-filled
Metallrahmen mit wärmetechnischer Trennung Cadre avec isolation thermique Frame with thermal break	**a) 0.08** **b) 0.06**	**a) 0.11** **b) 0.08**

a) Abstandhalter aus Aluminium und Stahl
b) Abstandhalter mit wärmetechnisch verbesserter Leistungsfähigkeit

a) intercalaire de vitrage en aluminium et en acier
b) intercalaire de vitrage avec une efficacité thermique plus performante

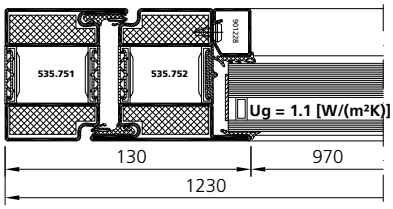
a) glazing spacer bars in aluminium or steel
b) glazing spacer bar with higher thermal efficiency

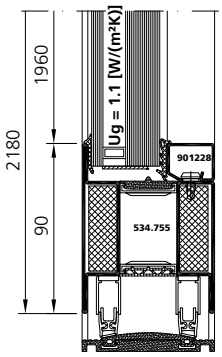
Berechnung der U-Werte
für ein gesamtes Element gemäss EN 10077 - 1

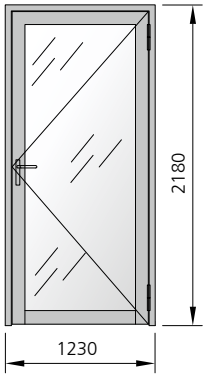
Calcul des valeurs U
pour tout l'élément selon la norme EN 10077 - 1

Calculation of U-value
of the complete unit according to EN 10077 - 1

Beispiel / Exemple / Example



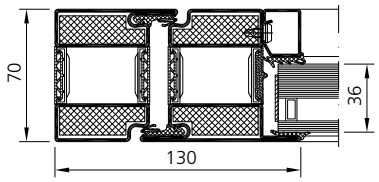




A_D	=	Fläche gesamtes Element 1.23 × 2.18 = 2.681 [m²]	A_D	=	Surface de l'élément 1.23 × 2.18 = 2.681 [m²]	A_D	=	Area of the element 1.23 × 2.18 = 2.681 [m²]
A_g	=	Sichtbare Fläche Glas (1.23 - 2 × 130) × (2.18 - 130 - 90) = 1.901 [m²]	A_g	=	Surface du vitrage (1.23 - 2 × 130) × (2.18 - 130 - 90) = 1.901 [m²]	A_g	=	Area of the glazing (1.23 - 2 × 130) × (2.18 - 130 - 90) = 1.901 [m²]
A_f	=	Sichtbare Fläche Rahmen (total) A_D - A_g 2.681 - 1.901 = 0.78 [m²]	A_f	=	Surface de l'encadrement (total) A_D - A_g 2.681 - 1.901 = 0.78 [m²]	A_f	=	Area of the frame (total) A_D - A_g 2.681 - 1.901 = 0.78 [m²]
$A_{f\,1}$	=	Sichtbare Fläche Rahmen 0.78 [m₂] - 0.087 [m₂] = 0.693 [m²]	$A_{f\,1}$	=	Surface de l'encadrement 0.78 [m₂] - 0.087 [m₂] = 0.693 [m²]	$A_{f\,1}$	=	Area of the frame 0.78 [m₂] - 0.087 [m₂] = 0.693 [m²]
$A_{f\,2}$	=	Sichtbare Fläche Sockel (1.23 - 2 × 130) × 90 = 0.087 [m²]	$A_{f\,2}$	=	Surface du socle (1.23 - 2 × 130) × 90 = 0.087 [m²]	$A_{f\,2}$	=	Area of the threshold (1.23 - 2 × 130) × 90 = 0.087 [m²]
L_g	=	Umfang des sichtbaren Glasanteils ((1.23 - 2 × 130) + (2.18 - 130 - 90)) × 2 = 5.860 [m]	L_g	=	Périmètre du vitrage visible ((1.23 - 2 × 130) + (2.18 - 130 - 90)) × 2 = 5.860 [m]	L_g	=	Perimeter of the visible glazing ((1.23 - 2 × 130) + (2.18 - 130 - 90)) × 2 = 5.860 [m]
U_f	=	U-Wert der Rahmenkombination Rahmen: 2.5 [W/(m²K)] Sockel: 3.1 [W/(m²K)]	U_f	=	Coefficient de transmission thermique de l'encadrement cadre: 2.5 [W/(m²K)] socle: 3.1 [W/(m²K)]	U_f	=	Thermal transmittance of the frame frame: 2.5 [W/(m²K)] threshold: 3.1 [W/(m²K)]
U_g	=	U-Wert des Glases 1.1 [W/(m²K)]	U_g	=	Coefficient de transmission thermique du vitrage 1.1 [W/(m²K)]	U_g	=	Thermal transmittance of the glazing 1.1 [W/(m²K)]
ψ_g	=	Längenbezogener Wärmedurchgangskoeffizient gemäss EN 10077-1 0.11 [W/(mK)]	ψ_g	=	Coefficient de transmission thermique linéique selon EN 10077-1 0.11 [W/(mK)]	ψ_g	=	Linear thermal transmittance according to EN 10077-1 0.11 [W/(mK)]

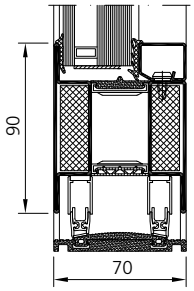
$$U_D = \frac{(A_{f\,1} \times U_f) + (A_{f\,2} \times U_f) + (A_g \times U_g) + (L_g \times \psi_g)}{A_{f\,1} + A_{f\,2} + A_g} \qquad U_D = \frac{(0.693 \times 2.5) + (0.087 \times 3.1) + (1.901 \times 1.1) + (5.86 \times 0.11)}{(0.693 + 0.087 + 1.901)} = \mathbf{1.66\ [W/(m^2K)]}$$

Element – U-Werte
U-Werte Tür U_D



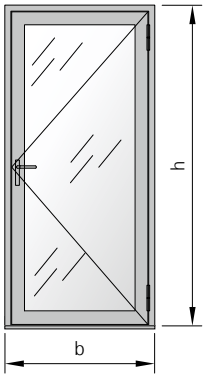
U_f = 2.6 [W/(m² · K)]
ψ = 0.08 [W/(m · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la porte U_D



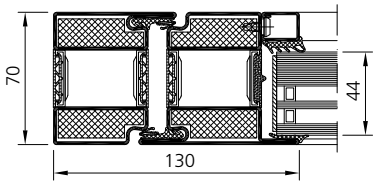
U_f = 2.7 [W/(m² · K)]

Element – Thermal transmittance
Thermal transmittance of the door U_D



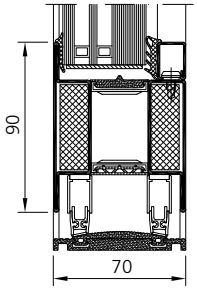
U_g-Wert Glas 1.1 Valeur U_g verre 1.1 U_g-value glass 1.1		Breite b / largeur b / width b [mm]				
		800	1000	1200	1400	1600
Höhe h / hauteur h / height h [mm]	2000	1.94	1.83	1.75	1.69	1.65
	2200	1.93	1.81	1.73	1.68	1.63
	2400	1.92	1.80	1.72	1.66	1.62
	2600	1.91	1.79	1.70	1.65	1.60
	2800	1.90	1.78	1.69	1.64	1.59
	3000	1.89	1.77	1.69	1.63	1.58

Element – U-Werte
U-Werte Tür U_D



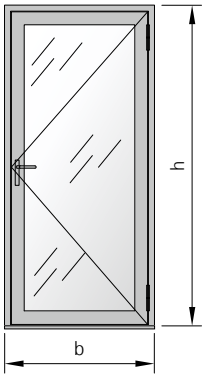
U_f = 2.6 [W/(m² · K)]
ψ = 0.08 [W/(m · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la porte U_D



U_f = 2.6 [W/(m² · K)]

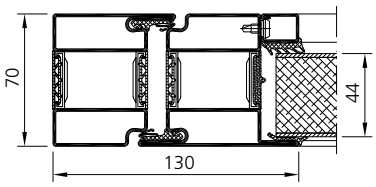
Element – Thermal transmittance
Thermal transmittance of the door U_D



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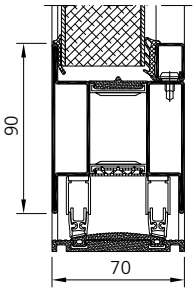
U_g-Wert Glas 0.7 Valeur U_g verre 0.7 U_g-value glass 0.7		Breite b / largeur b / width b [mm]				
		800	1000	1200	1400	1600
Höhe h / hauteur h / height h [mm]	2000	1.70	1.56	1.47	1.40	1.35
	2200	1.68	1.54	1.45	1.38	1.33
	2400	1.67	1.53	1.43	1.36	1.31
	2600	1.66	1.51	1.42	1.35	1.30
	2800	1.65	1.50	1.40	1.33	1.28
	3000	1.64	1.49	1.39	1.32	1.27

Element – U-Werte
U-Werte Paneel U_D



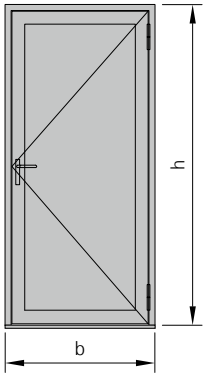
U_f = 2.6 [W/(m² · K)]
ψ = 0.04 [W/(m · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la panneau U_D



U_f = 2.6 [W/(m² · K)]

Element – Thermal transmittance
Thermal transmittance of the panel U_D



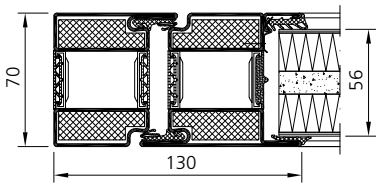
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Rauchschutz Sa nach EN 1634-3
Protection contre la fumée Sa selon EN 1634-3
Smoke protection Sa in accordance with EN 1634-3

U-Wert Paneel 2.77 Valeur U panneau 2.77 U-value panel 2.77		Breite b / largeur b / width b [mm]				
		800	1000	1200	1400	1600
Höhe h / hauteur h / height h [mm]	2000	2.82	2.81	2.81	2.81	2.80
	2200	2.82	2.81	2.81	2.80	2.80
	2400	2.82	2.81	2.81	2.80	2.80
	2600	2.82	2.81	2.81	2.80	2.80
	2800	2.82	2.81	2.81	2.80	2.80
	3000	2.82	2.81	2.81	2.80	2.80

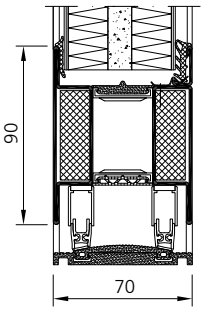
Paneel-Füllung / Panneau remplissage / Paneel filling:
Aestuver Brandschutzplatte / Aestuver panneau de protection / Aestuver fire protection board

Element – U-Werte
U-Werte Paneel U_D



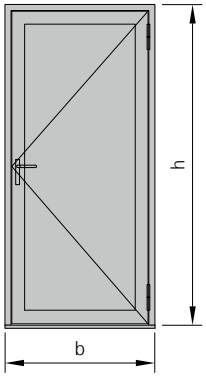
U_f = 2.5 [W/(m² · K)]
ψ = 0.04 [W/(m · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la panneau U_D



U_f = 2.6 [W/(m² · K)]

Element – Thermal transmittance
Thermal transmittance of the panel U_D



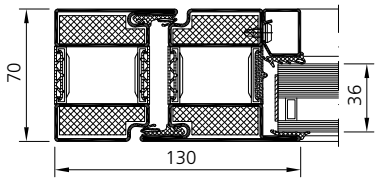
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U-Wert Paneel 0.74 Valeur U panneau 0.74 U-value panel 0.74		Breite b / largeur b / width b [mm]				
		800	1000	1200	1400	1600
Höhe h / hauteur h / height h [mm]	2000	1.57	1.46	1.38	1.32	1.28
	2200	1.56	1.44	1.36	1.31	1.26
	2400	1.55	1.43	1.35	1.29	1.25
	2600	1.53	1.41	1.33	1.28	1.23
	2800	1.53	1.41	1.32	1.27	1.22
	3000	1.52	1.40	1.32	1.26	1.21

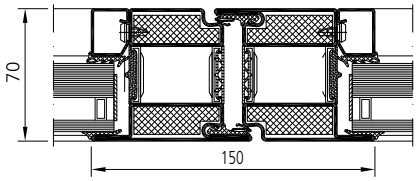
Paneel-Füllung / Panneau remplissage / Paneel filling:
2x Mineralwolle / 2x laine minérale / 2x mineral wool
1 x Fermacell Powerpanel H2O

Element – U-Werte

U-Werte Tür U_D



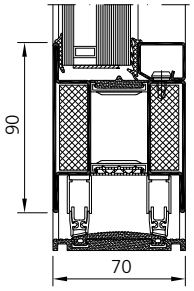
U_f = 2.6 [W/(m² · K)]
ψ = 0.08 [W/(m · K)]



U_f = 2.5 [W/(m² · K)]

Élément – Coefficient de transmission thermique

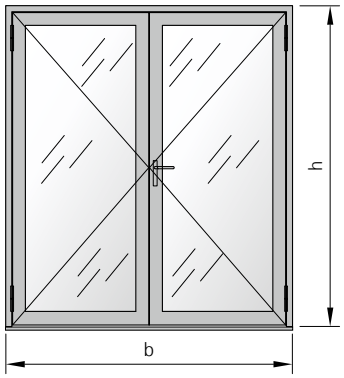
Coefficient de transmission thermique de la porte U_D



U_f = 2.6 [W/(m² · K)]

Element – Thermal transmittance

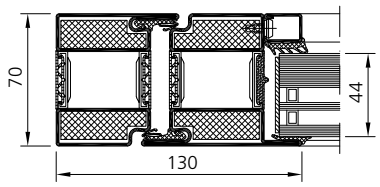
Thermal transmittance of the door U_D



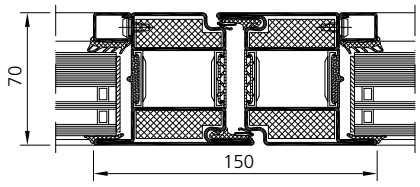
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U_g-Wert Glas 1.1 Valeur U_g verre 1.1 U_g-value glass 1.1		Breite b / largeur b / width b [mm]									
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
Höhe h / hauteur h / height h [mm]	2000	1.89	1.81	1.76	1.71	1.68	1.65	1.62	1.60	1.58	1.57
	2200	1.87	1.80	1.74	1.69	1.66	1.63	1.60	1.58	1.57	1.55
	2400	1.86	1.78	1.73	1.68	1.64	1.61	1.59	1.57	1.55	1.53
	2600	1.85	1.77	1.71	1.67	1.63	1.60	1.57	1.55	1.54	1.52
	2800	1.84	1.76	1.70	1.66	1.62	1.59	1.56	1.54	1.52	1.51
	3000	1.84	1.76	1.70	1.65	1.61	1.58	1.55	1.53	1.51	1.50

Element – U-Werte
U-Werte Tür U_D

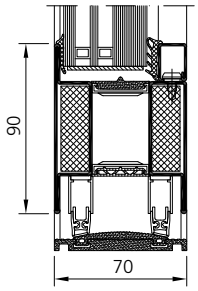


U_f = 2.6 [W/(m² · K)]
ψ = 0.08 [W/(m · K)]



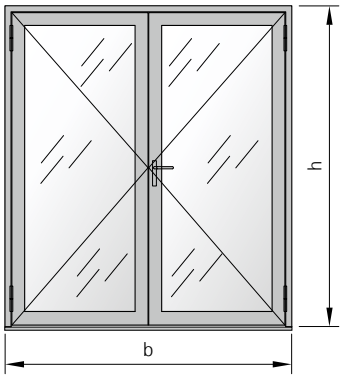
U_f = 2.6 [W/(m² · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la porte U_D



U_f = 2.6 [W/(m² · K)]

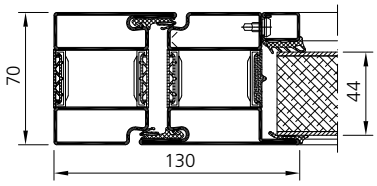
Element – Thermal transmittance
Thermal transmittance of the door U_D



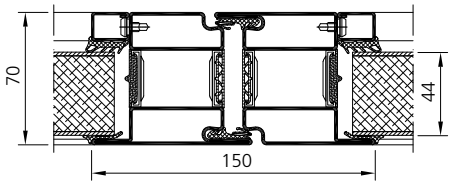
forsterunico HI

U_g-Wert Glas 0.7 Valeur U_g verre 0.7 U_g-value glass 0.7		Breite b / largeur b / width b [mm]									
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
Höhe h / hauteur h / height h [mm]	2000	1.67	1.57	1.50	1.45	1.40	1.37	1.34	1.31	1.29	1.27
	2200	1.65	1.55	1.48	1.43	1.38	1.34	1.31	1.29	1.27	1.25
	2400	1.64	1.54	1.47	1.41	1.36	1.33	1.29	1.27	1.25	1.23
	2600	1.62	1.53	1.45	1.39	1.35	1.31	1.28	1.25	1.23	1.21
	2800	1.61	1.51	1.44	1.38	1.34	1.30	1.27	1.24	1.22	1.20
	3000	1.61	1.51	1.43	1.37	1.32	1.29	1.25	1.23	1.20	1.18

Element – U-Werte
U-Werte Paneel U_D

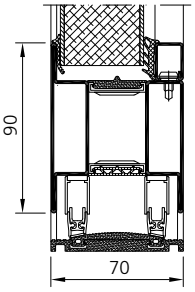


U_f = 2.6 [W/(m² · K)]
ψ = 0.04 [W/(m · K)]



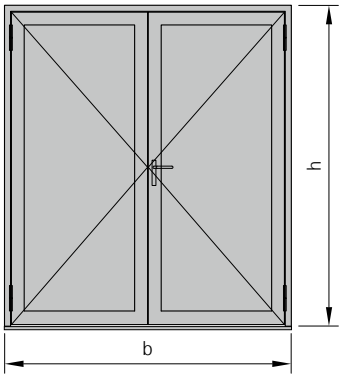
U_f = 2.6 [W/(m² · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la porte U_D



U_f = 2.6 [W/(m² · K)]

Element – Thermal transmittance
Thermal transmittance of the door U_D



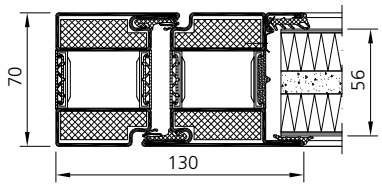
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Rauchschutz Sa nach EN 1634-3
Protection contre la fumée Sa selon EN 1634-3
Smoke protection Sa in accordance with EN 1634-3

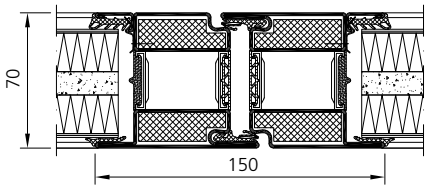
U-Wert Paneel 2.77 Valeur U panneau 2.77 U-value panel 2.77		Breite b / largeur b / width b [mm]									
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
Höhe h / hauteur h / height h [mm]	2000	2.78	2.78	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79
	2200	2.78	2.78	2.78	2.78	2.79	2.79	2.79	2.79	2.79	2.79
	2400	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.79	2.79
	2600	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78
	2800	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78
	3000	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78

Paneel-Füllung / Panneau remplissage / Paneel filling:
Aestuver Brandschutzplatte / Aestuver panneau de protection / Aestuver fire protection board

Element – U-Werte
U-Werte Paneel U_D

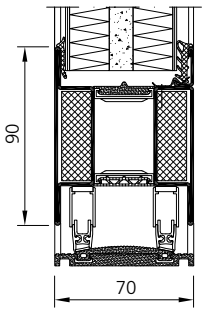


U_f = 2.5 [W/(m² · K)]
ψ = 0.04 [W/(m · K)]



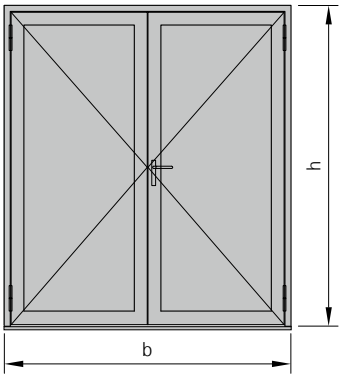
U_f = 2.4 [W/(m² · K)]

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique de la porte U_D



U_f = 2.6 [W/(m² · K)]

Element – Thermal transmittance
Thermal transmittance of the door U_D



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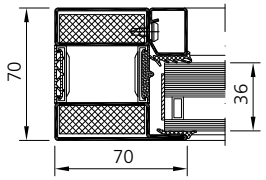
U-Wert Paneel 0.74 Valeur U panneau 0.74 U-value panel 0.74		Breite b / largeur b / width b [mm]									
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
Höhe h / hauteur h / height h [mm]	2000	1.56	1.48	1.42	1.37	1.33	1.30	1.27	1.25	1.23	1.22
	2200	1.54	1.46	1.40	1.35	1.31	1.28	1.26	1.23	1.22	1.20
	2400	1.53	1.45	1.38	1.34	1.30	1.27	1.24	1.22	1.20	1.18
	2600	1.52	1.44	1.37	1.32	1.29	1.25	1.23	1.20	1.19	1.17
	2800	1.51	1.43	1.36	1.31	1.27	1.24	1.22	1.19	1.17	1.16
	3000	1.50	1.42	1.35	1.30	1.27	1.23	1.21	1.18	1.16	1.15

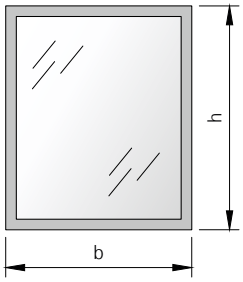
Paneel-Füllung / Panneau remplissage / Paneel filling:
2x Mineralwolle / 2x laine minérale / 2x mineral wool
1 x Fermacell Powerpanel H2O

Element – U-Werte
U-Werte Festfeld U_D

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique du vitrage fixe U_D

Element – Thermal transmittance
Thermal transmittance of fixed glazing U_D





U_f = 2.5 [W/(m² · K)]
ψ = 0.08 [W/(m · K)]

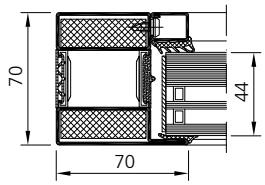
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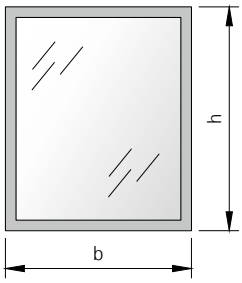
U_g-Wert Glas 1.1 Valeur U_g verre 1.1 U_g-value glass 1.1		Breite b / largeur b / width b [mm]									
		600	800	1000	1200	1400	1600	1800	2000	2200	2400
Höhe h / hauteur h / height h [mm]	600	2.09	1.99	1.93	1.89	1.86	1.84	1.82	1.81	1.80	1.79
	800	1.99	1.88	1.81	1.77	1.73	1.71	1.69	1.68	1.67	1.66
	1000	1.93	1.81	1.74	1.69	1.66	1.63	1.61	1.60	1.58	1.57
	1200	1.89	1.77	1.69	1.64	1.61	1.58	1.56	1.54	1.53	1.52
	1400	1.86	1.73	1.66	1.61	1.57	1.54	1.52	1.51	1.49	1.48
	1600	1.84	1.71	1.63	1.58	1.54	1.52	1.50	1.48	1.46	1.45
	1800	1.82	1.69	1.61	1.56	1.52	1.50	1.47	1.46	1.44	1.43
	2000	1.81	1.68	1.60	1.54	1.51	1.48	1.46	1.44	1.42	1.41
	2200	1.80	1.67	1.58	1.53	1.49	1.46	1.44	1.42	1.41	1.40
	2400	1.79	1.66	1.57	1.52	1.48	1.45	1.43	1.41	1.40	1.38
	2600	1.78	1.65	1.57	1.51	1.47	1.44	1.42	1.40	1.39	1.37
	2800	1.78	1.64	1.56	1.50	1.46	1.43	1.41	1.39	1.38	1.36
	3000	1.77	1.63	1.55	1.50	1.46	1.43	1.40	1.38	1.37	1.36

Element – U-Werte
U-Werte Festfeld U_D

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique du vitrage fixe U_D

Element – Thermal transmittance
Thermal transmittance of fixed glazing U_D





U_f = 2.5 [W/(m² · K)]
ψ = 0.08 [W/(m · K)]

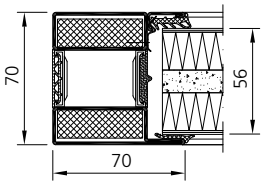
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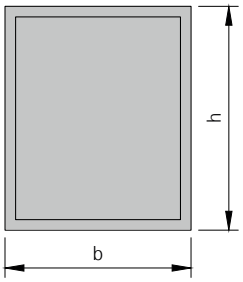
U_g-Wert Glas 0.7 Valeur U_g verre 0.7 U_g-value glass 0.7		Breite b / largeur b / width b [mm]									
		600	800	1000	1200	1400	1600	1800	2000	2200	2400
Höhe h / hauteur h / height h [mm]	600	1.85	1.73	1.67	1.62	1.59	1.56	1.54	1.53	1.51	1.50
	800	1.73	1.60	1.53	1.47	1.44	1.41	1.39	1.37	1.36	1.34
	1000	1.67	1.53	1.44	1.39	1.35	1.32	1.30	1.28	1.26	1.25
	1200	1.62	1.47	1.39	1.33	1.29	1.26	1.24	1.22	1.20	1.19
	1400	1.59	1.44	1.35	1.29	1.25	1.22	1.19	1.17	1.16	1.14
	1600	1.56	1.41	1.32	1.26	1.22	1.18	1.16	1.14	1.12	1.11
	1800	1.54	1.39	1.30	1.24	1.19	1.16	1.13	1.11	1.10	1.08
	2000	1.53	1.37	1.28	1.22	1.17	1.14	1.11	1.09	1.08	1.06
	2200	1.51	1.36	1.26	1.20	1.16	1.12	1.10	1.08	1.06	1.04
	2400	1.50	1.34	1.25	1.19	1.14	1.11	1.08	1.06	1.04	1.03
	2600	1.49	1.33	1.24	1.18	1.13	1.10	1.07	1.05	1.03	1.02
	2800	1.49	1.33	1.23	1.17	1.12	1.09	1.06	1.04	1.02	1.01
	3000	1.48	1.32	1.22	1.16	1.11	1.08	1.05	1.03	1.01	1.00

Element – U-Werte
U-Werte Festfeld U_W

Élément – Coefficient de transmission thermique
Coefficient de transmission thermique du vitrage fixe U_W

Element – Thermal transmittance
Thermal transmittance of fixed glazing U_W





U_f = 2.4 [W/(m² · K)]
ψ = 0.04 [W/(m · K)]

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U-Wert Paneel 0.74 Valeur U panneau 0.74 U-value panel 0.74		Breite b / largeur b / width b [mm]									
		600	800	1000	1200	1400	1600	1800	2000	2200	2400
Höhe h / hauteur h / height h [mm]	600	1.63	1.54	1.48	1.44	1.42	1.40	1.38	1.37	1.36	1.35
	800	1.54	1.44	1.37	1.33	1.30	1.28	1.27	1.25	1.24	1.23
	1000	1.48	1.37	1.31	1.27	1.24	1.21	1.20	1.18	1.17	1.16
	1200	1.44	1.33	1.27	1.22	1.19	1.17	1.15	1.13	1.12	1.11
	1400	1.42	1.30	1.24	1.19	1.16	1.13	1.11	1.10	1.09	1.08
	1600	1.40	1.28	1.21	1.17	1.13	1.11	1.09	1.07	1.06	1.05
	1800	1.38	1.27	1.20	1.15	1.11	1.09	1.07	1.05	1.04	1.03
	2000	1.37	1.25	1.18	1.13	1.10	1.07	1.05	1.04	1.03	1.01
	2200	1.36	1.24	1.17	1.12	1.09	1.06	1.04	1.03	1.01	1.00
	2400	1.35	1.23	1.16	1.11	1.08	1.05	1.03	1.01	1.00	0.99
	2600	1.35	1.22	1.15	1.10	1.07	1.04	1.02	1.01	0.99	0.98
	2800	1.34	1.22	1.14	1.10	1.06	1.03	1.01	1.00	0.98	0.97
	3000	1.33	1.21	1.14	1.09	1.05	1.03	1.01	0.99	0.98	0.97

Paneel-Füllung / Panneau remplissage / Paneel filling:
2x Mineralwolle / 2x laine minérale / 2x mineral wool
1 x Fermacell Powerpanel H2O

U_f-Werte
Tür

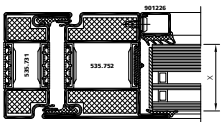
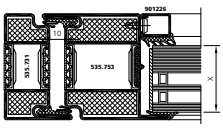
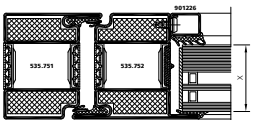
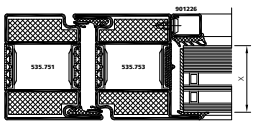
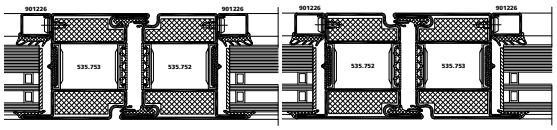
Valeurs U_f
Porte

U_f-values
Door



EN ISO 10077-2:2017

Nass- und trockenverglast / Vitrage à sec et au silicone / Dry and silicone glazing

	Glasdicke **Ep. du verre** **Glass thickness** X [mm]	**Verglasung** **Vitrage** **Glazing**	**Dichtung** **Joint** **Sealing**	**U_f Stahl** **U_f Acier** **U_f Steel** [W/(m²·K)]	**U_f CrNi** [W/(m²·K)]
 	24	2-fach / double	Standard	**2.9**	**2.7**
	36	3-fach / triple	Hi	**2.8**	**2.6**
	42	3-fach / triple	Hi	**2.8**	**2.6**
 	24	2-fach / double	Standard	**2.8**	**2.6**
	36	3-fach / triple	Hi	**2.6**	**2.4**
	42	3-fach / triple	Hi	**2.6**	**2.4**
	24	2-fach / double	Standard	**2.8**	**2.6**
	36	3-fach / triple	Hi	**2.5**	**2.3**
	42	3-fach / triple	Hi	**2.5**	**2.3**

U_f-Werte
Verblechte Tür

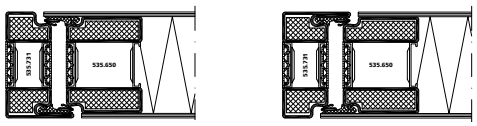
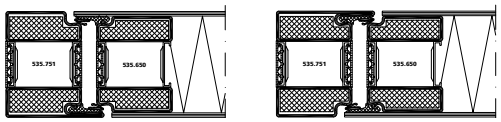
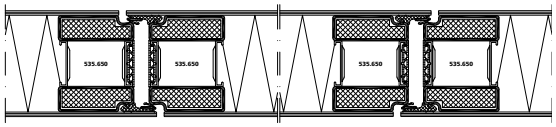
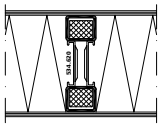
Valeurs U_f
Porte tôlée

U_f-values
Sheet metal door



EN ISO 10077-2:2017

Nass- und trockenverglast / Vitrage à sec et au silicone / Dry and silicone glazing

		Dichtung Joint Sealing	**U_f Stahl U_f Acier U_f Steel** [W/(m²·K)]	
		Standard	**2.9**	
		Hi	**2.6**	
		Standard	**2.4**	
		Hi	**2.2**	
		Standard	**2.4**	
		Hi	**2.3**	
		Standard	**3.6**	

U_f-Werte
Tür
Schwellen

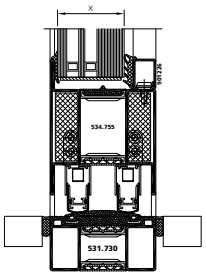
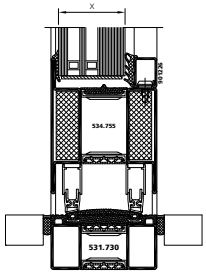
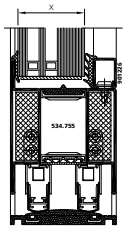
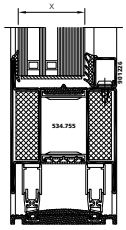
Valeurs U_f
Porte
Seuils

U_f-values
Door
Thresholds



EN ISO 10077-2:2017

Nass- und trockenverglast / Vitrage à sec et au silicone / Dry and silicone glazing

Glasdicke **Ep. du verre** **Glass thickness** X [mm]	**Verglasung** **Vitrage** **Glazing**	**Dichtung** **Joint** **Sealing**	**U_f Stahl** **U_f Acier** **U_f Steel** [W/(m²·K)]	**U_f CrNi** [W/(m²·K)]
				
24	2-fach / double	Standard	**4.5**	**4.2**
36	3-fach / triple	Hi	**4.4**	**4.1**
42	3-fach / triple	Hi	**4.3**	**4.0**
				
24	2-fach / double	Standard	**3.0**	**2.8**
36	3-fach / triple	Hi	**2.9**	**2.7**
42	3-fach / triple	Hi	**2.8**	**2.6**
				
24	2-fach / double	Standard	**4.8**	**4.5**
36	3-fach / triple	Hi	**4.6**	**4.3**
42	3-fach / triple	Hi	**4.4**	**4.2**
				
24	2-fach / double	Standard	**2.8**	**2.6**
36	3-fach / triple	Hi	**2.7**	**2.5**
42	3-fach / triple	Hi	**2.6**	**2.4**

U_f-Werte
Tür
Schwellen

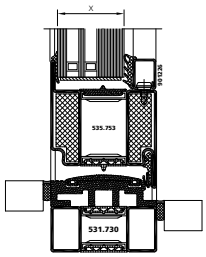
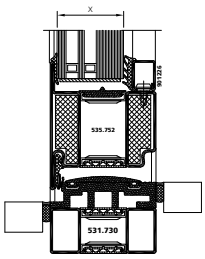
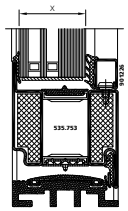
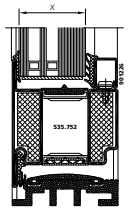
Valeurs U_f
Porte
Seuils

U_f-values
Door
Thresholds



EN ISO 10077-2:2017

Nass- und trockenverglast / Vitrage à sec et au silicone / Dry and silicone glazing

Glasdicke **Ep. du verre** **Glass thickness** X [mm]	**Verglasung** **Vitrage** **Glazing**	**Dichtung** **Joint** **Sealing**	**U_f Stahl** **U_f Acier** **U_f Steel** [W/(m²·K)]	**U_f CrNi** [W/(m²·K)]
				
24	2-fach / double	Standard	**2.9**	**2.6**
36	3-fach / triple	Hi	**2.7**	**2.5**
42	3-fach / triple	Hi	**2.7**	**2.5**
				
24	2-fach / double	Standard	**2.9**	**2.6**
36	3-fach / triple	Hi	**2.7**	**2.5**
42	3-fach / triple	Hi	**2.7**	**2.5**
				
24	2-fach / double	Standard	**2.8**	**2.5**
36	3-fach / triple	Hi	**2.6**	**2.4**
42	3-fach / triple	Hi	**2.6**	**2.4**
				
24	2-fach / double	Standard	**2.8**	**2.5**
36	3-fach / triple	Hi	**2.6**	**2.4**
42	3-fach / triple	Hi	**2.6**	**2.4**

U_f-Werte für Rahmenverbreiterungen auf Anfrage
Les coefficients U_f pour des élargissements de vantail sont disponibles sur demande
U_f values for frame enlargements available on request

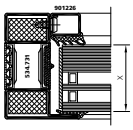
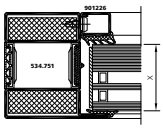
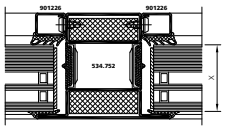
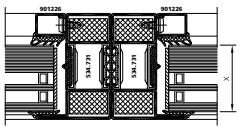
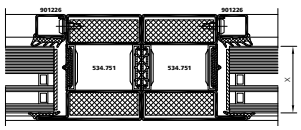
U_f-Werte
Festfeld

Valeurs U_f
Vitrage fixe

U_f-values
Fixed glazing

EN ISO 10077-2:2017

Nass- und trockenverglast / Vitrage à sec et au silicone / Dry and silicone glazing

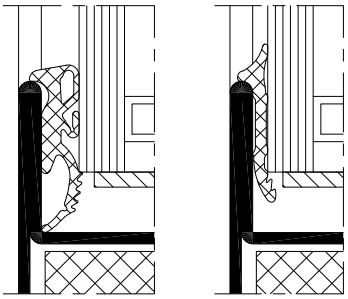
	Glasdicke **Ep. du verre** **Glass thickness** X [mm]	**Verglasung** **Vitrage** **Glazing**	**Dichtung** **Joint** **Sealing**	**U_f Stahl** **U_f Acier** **U_f Steel** [W/(m²·K)]	**U_f CrNi** [W/(m²·K)]
	24	2-fach / double	Standard	**3.2**	**2.9**
	36	2-fach / double	Hi	**2.9**	**2.6**
	42	3-fach / triple	Hi	**2.9**	**2.7**
	24	2-fach / double	Standard	**2.8**	**2.5**
	36	2-fach / double	Hi	**2.5**	**2.3**
	42	3-fach / triple	Hi	**2.5**	**2.3**
	24	2-fach / double	Standard	**2.7**	**2.5**
	36	2-fach / double	Hi	**2.2**	**2.1**
	42	3-fach / triple	Hi	**2.4**	**1.9**
	24	2-fach / double	Standard	**3.2**	**2.9**
	36	2-fach / double	Hi	**2.8**	**2.6**
	42	3-fach / triple	Hi	**2.9**	**2.7**
	24	2-fach / double	Standard	**2.7**	**2.5**
	36	2-fach / double	Hi	**2.5**	**2.3**
	42	3-fach / triple	Hi	**2.8**	**2.3**

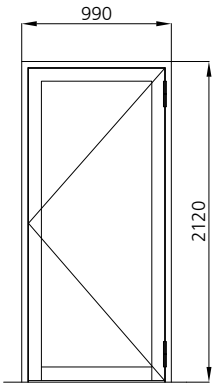
U_f-Werte für Rahmenverbreiterungen auf Anfrage
Les coefficients U_f pour des élargissements de vantail sont disponibles sur demande
U_f values for frame enlargements available on request

Schalldämmwerte
Werte gültig für Stahl- und Edelstahlprofile

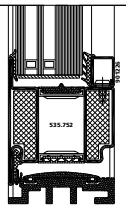
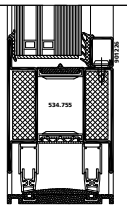
Coefficients d'isolation phonique
Valeurs valables pour profilés en acier et en acier inox

Sound insulation factor
Values valid for steel and stainless steel profiles





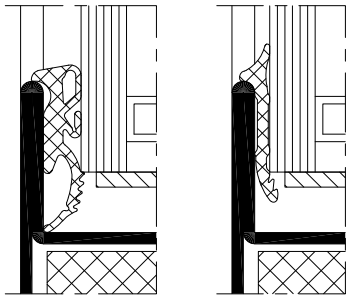
A_D = 0.99 [m] x 2.12 [m]
= 2.10 [m²]

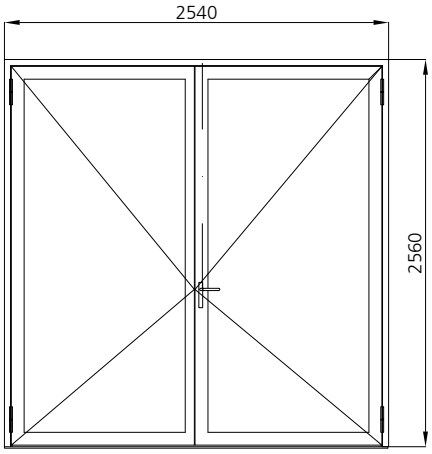
			
R_w(Glas) R_w(Verre) R_w(Glas)	32 [dB]	$R_{w(Element)}$ = **33** [dB] (C = -2 ; C_{tr} = -5)	$R_{w(Element)}$ = **33** [dB] (C = -2 ; C_{tr} = -5)
R_w(Glas) R_w(Verre) R_w(Glas)	38 [dB]	$R_{w(Element)}$ = **39** [dB] (C = -2 ; C_{tr} = -5)	$R_{w(Element)}$ = **37** [dB] (C = -1 ; C_{tr} = -3)
R_w(Glas) R_w(Verre) R_w(Glas)	45 [dB]	$R_{w(Element)}$ = **44** [dB] (C = -2 ; C_{tr} = -6)	$R_{w(Element)}$ = **40** [dB] (C = -1 ; C_{tr} = -3)
R_w(Glas) R_w(Verre) R_w(Glas)	50 [dB]	$R_{w(Element)}$ = **46** [dB] (C = -2 ; C_{tr} = -5)	$R_{w(Element)}$ = **42** [dB] (C = -2 ; C_{tr} = -3)

Schalldämmwerte
Werte gültig für Stahl- und Edelstahlprofile

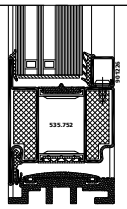
Coefficients d'isolation phonique
Valeurs valables pour profilés en acier et en acier inox

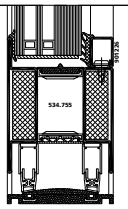
Sound insulation factor
Values valid for steel and stainless steel profiles





A_D = 2.54 [m] x 2.56 [m]
= 6.50 [m²]



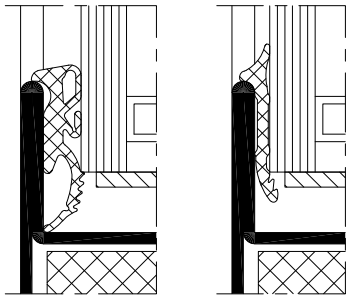


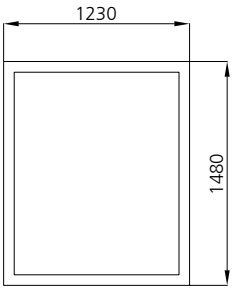
R_w(Glas) R_w(Verre) 32 [dB] R_w(Glas)	$R_{w(Element)}$ = **33** [dB] (C = -2 ; C_{tr} = -5)	$R_{w(Element)}$ = **33** [dB] (C = -2 ; C_{tr} = -5)
R_w(Glas) R_w(Verre) 38 [dB] R_w(Glas)	$R_{w(Element)}$ = **39** [dB] (C = -2 ; C_{tr} = -5)	$R_{w(Element)}$ = **37** [dB] (C = -1 ; C_{tr} = -3)
R_w(Glas) R_w(Verre) 45 [dB] R_w(Glas)	$R_{w(Element)}$ = **44** [dB] (C = -2 ; C_{tr} = -6)	$R_{w(Element)}$ = **40** [dB] (C = -1 ; C_{tr} = -3)
R_w(Glas) R_w(Verre) 50 [dB] R_w(Glas)	$R_{w(Element)}$ = **46** [dB] (C = -2 ; C_{tr} = -5)	$R_{w(Element)}$ = **42** [dB] (C = -2 ; C_{tr} = -3)

Schalldämmwerte
Werte gültig für Stahl- und Edelstahlprofile

Coefficients d'isolation phonique
Valeurs valables pour profilés en acier et en acier inox

Sound insulation factor
Values valid for steel and stainless steel profiles





A_w = 1.23 [m] x 1.48 [m]
= 1.82 [m²]

		R_w (Element) R_w (Element) R_w (Element)	Spektrum - Anpassungswerte (C und Ctr) Termes d' adaptation à un spectre (C et Ctr) Spectrum adaptation terms (C and Ctr)
R_w(Glas) R_w(Verre) R_w(Glas)	32 [dB]	$R_{w(Element)}$ = **32** [dB]	C = -1 [dB] C_{tr} = -5 [dB]
R_w(Glas) R_w(Verre) R_w(Glas)	38 [dB]	$R_{w(Element)}$ = **39** [dB]	C = -2 [dB] C_{tr} = -5 [dB]
R_w(Glas) R_w(Verre) R_w(Glas)	45 [dB]	$R_{w(Element)}$ = **44** [dB]	C = -1 [dB] C_{tr} = -4 [dB]
R_w(Glas) R_w(Verre) R_w(Glas)	50 [dB]	$R_{w(Element)}$ = **47** [dB]	C = -1 [dB] C_{tr} = -4 [dB]

Zusätzliche Leistungseigenschaften
Statik

Die Geometrischen Querschnittswerte um die y-Achse verändern sich mit zunehmender Länge, die um die z-Achse nicht. Die Geometrischen Querschnittswerte werden aus diesem Grund längenabhängig für jedes Profil in einer Tabelle dargestellt.

Beispiel:
Ein Profil mit einer Länge von 2535 [mm] hat gemäss der unten stehenden Tabelle einen ly-Wert von 29.44 [cm^4] und einen Wy von 8.53 [cm^3].

Caractéristiques de performance supplémentaires
Statique

Les valeurs de résistance de l'axe y varient avec la longueur, celles de l'axe z ne changent pas. Les valeurs de résistance sont par conséquent répertoriées par longueur pour chaque profilé.

Exemple:
un profilé d'une longueur de 2535 [mm] a suivant le tableau ci-dessous une valeur ly de 29,44 [cm^4] et une valeur Wy de 8,53 [cm^3].

Additional performance characteristics
Static

The mechanical strength properties of the y-axis change with increasing length, those of the z-axis do not. The mechanical strength properties are therefore listed for every profile in the table according to length.

Example:
A profile with a length of 2535 [mm] has according to the table below a ly-value of 29.44 [cm^4] and a Wy of 8.53 [cm^3].

L [mm]	I_y [cm^4]	W_y [cm^3]	I_z [cm^4]	W_z [cm^3]
0 - 1999	**22.51**	**8.04**	**20.57**	**4.57**
2000 - 2499	**26.76**	**8.37**		
2500 - 2999	**29.44**	**8.53**		
3000 - 3499	**32.32**	**8.63**		
3500 - 3999	**33.13**	**8.69**		
4000 - 6000	**33.70**	**8.73**		

Der Werkstoff der Halbschale definiert den E-Modul des Profils. Somit ist für die Stahlprofile (obwohl der Isolator aus Edelstahl ist) der E-Modul für Stahl zu verwenden. Da es sich bei den Edelstahlprofilen um keine Werkstoffkombination handelt, wird für die Edelstahlprofile der E-Modul von Edelstahl eingesetzt.

E-Module
E-Modul Stahlprofile: 210'000 [N/mm^2]
E-Modul Edelstahlprofile: 170'000 [N/mm^2]

Le matériau du semi-profilé définit le module E du profilé. Pour les profilés en acier, il faut ainsi utiliser le module E de l'acier (bien que l'isolant soit en acier inox). Pour les profilés en acier inox, on utilisera le module E de l'acier inox puisque ces profilés ne sont pas formés de matériaux combinés.

Modules E
Module E des profilés en acier: 210'000 [N/mm^2]
Module E des profilés en acier inox: 170'000 [N/mm^2]

The material of the semi shell defines the E-module of the profile. Therefore for the steel profile (even though the insulator is made of stainless steel) the E-module for steel must be used. As stainless steel profiles are not a combination of materials, the E-module for stainless steel is used for stainless steel profiles.

E-modules
E-module steel profiles: 210'000 [N/mm^2]
E-module stainless steel profiles: 170'000 [N/mm^2]

Zusätzliche Leistungseigenschaften
Statik

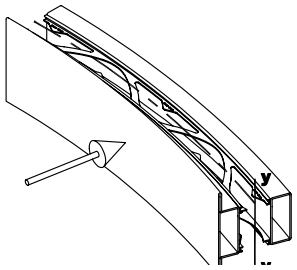
Belastungen
Profile, welche als Pfosten eingesetzt werden, sind im Regelfall mit Verkehrslasten beaufschlagt. Für diese Belastung sind die Werte bezüglich der y-Achse zu wählen.

Caractéristiques de performance supplémentaires
Statique

Charges
Les profilés utilisés comme montants subissent en général des charges vives. Pour cette charge, il faut choisir les valeurs relatives à l'axe y.

Additional performance characteristics
Static

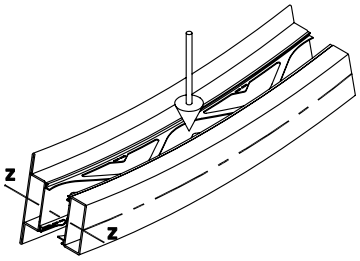
Loads
Profiles, used as transom are normally subjected to traffic loads. For these loads, select the value in respect to the y-axis.



Profile, welche als Riegel eingesetzt werden, sind im Regelfall mit der Belastung vom Glasgewicht beaufschlagt. Für diese Belastung sind die Werte bezüglich der z-Achse zu wählen.

Les profilés utilisés comme traverses subissent en général une charge équivalent au poids du verre. Pour cette charge, il faut choisir les valeurs relatives à l'axe z.

Profiles, used as mullion are normally subjected to the loads of the weight of the glass. For these loads, select the value in respect to the z-axis.



Allgemeine Verarbeitungsrichtlinien

1. Normen / Werkstoffe

Grundlage dieser Technischen Dokumentation für den Tür-/Fensterbau bilden die gültigen Richtlinien und Normen der Landes-Fachverbände SZFF-, SIA- sowie DIN-Normen.

Massgebend sind ausschliesslich die für Ihr Land gültigen Zulassungen.

2. Werkstoffe

Die von uns gelieferten Werkstoffe entsprechen den heute gültigen Normen. Materialien aus Werkstoffen, die ausserhalb unseres Einflussbereiches liegen, sind vom Verarbeitungsbetrieb eigenverantwortlich auf Qualitäts- und Funktionseignung zu prüfen.

Kohlenstoffstahl:
- Oberfläche unico-Profile:
  - blank = geölt oder gebondert
  - ZM = Zink Magnesium Schichtdicke ca. 7 µm
  - Z = im Schmelzverfahren bandverzinkter Überzug, Schichtdicke ca. 20 µm
- Oberfläche Glashalteleisten/Wetterschenkel:
  - im Schmelzverfahren bandverzinkter Überzug, Schichtdicke ca. 20 µm

Edelstahl-Isolator:
- Edelstahl walzblank

Edelstahl:
- unico-Profile:
  - Qualität 1.4301
  - geschliffen (Korn 220-240), mit Schutzfolie
- Glashalteleisten:
  - Qualität 1.4301
  - geschliffen (Korn 220-240), mit Schutzfolie

Directives relatives à la mise en œuvre

1. Normes / Matières premières

Les directives et normes en vigueur des associations professionnelles suisses CSFF, SIA, ainsi que les normes DIN, constituent la base de cette documentation technique, pour la construction de portes / fenêtres.

Nous vous demanderons de vous reporter aux procès-verbaux de classement en cours de validité dans votre pays.

2. Matières premières

Les matières premières que nous fournissons correspondent aux normes actuellement valables. Les qualités et la convenance de matériaux réalisés à partir de matières premières qui sont hors de notre zone d'influence doivent être vérifiées.

Acier au carbone :
- Surface des profilés unico
  - bruts = huilés ou bondérisés
  - ZM = zinc-magnésium, épaisseur de couche d'env. 7 µm
  - Z = Revêtement zingué de feuillard dans le procédé de fusion, épaisseur de couche d'env. 20 µm
- Surface des parcloses / renvois d'eau :
  - Revêtement de zinc à chaud, épaisseur de couche d'env. 20 µm

Isolation en acier inox :
- Inox décapé

Acier inoxydable :
- Profilés unico:
  - qualité 1.4301
  - meulés (grain 220-240), avec film adhésif
- Parcloses:
  - qualité 1.4301
  - meulés (grain 220-240), avec film adhésif

General processing guidelines

1. Standards / Materials

This Technical Documentation for the construction of doors/windows is based on the directives and standards of the Swiss National Trades Associations SZFF and SIA currently in force, as well as on DIN standards.

Only the certificates valid in your country are relevant.

2. Materials

The materials we deliver meet the requirements of today's standards. The processing company is responsible for checking materials made from stock that is beyond our control, with regard to suitability of quality and function.

Carbon steel:
- Surface unico profiles:
  - raw = oiled or bonded
  - ZM = zinc-magnésium, thickness of coat approx. 7 µm
  - Z = hot-dipped galvanised coating by fusion, thickness of coat approx. 20 µm
- Surface glazing beads / weatherboard:
  - hot-dipped galvanised coating by fusion, thickness of coat approx. 20 µm

Stainless steel insulation:
- Stainless steel plain-rolled bank

Stainless steel:
- unico profiles:
  - quality 1.4301
  - brushed (grade 220-240), with adhesive protection tape
- Glazing beads:
  - quality 1.4301
  - brushed (grade 220-240), with adhesive protection tape

Allgemeine Verarbeitungsrichtlinien

3. Transport / Lagerung

- Zum Abladen am besten geeignet ist ein Kran mit Traverse und zwei Gurten mit mind. 80 mm Breite. Wird mit Stapler abgeladen, so nur mit breiten, auf grossen Abstand eingestellten Gabelzinken.
- Zur Vermeidung von Dellen oder Deformationen empfehlen wir, Kunststoff- oder Holz-Zwischenlagen zu verwenden.
- Saubere Auf- und Unterlagen verhindern Deformationen von kleinen Profilquerschnitten. Die Entnahme aus Lagergestellen darf nur durch Herausheben erfolgen.
- Sämtliche Systemkomponenten sind in geeigneten Räumen trocken zu lagern.
- Stahl- und Edelstahlprofile müssen getrennt gelagert werden, um Korrosionsgefahr durch Fremdrost-Partikel auf nichtrostendem Stahl auszuschliessen.

4. Verarbeitung

Dem Fachbetrieb und Fachhandwerk allgemein bekannte Verarbeitungshinweise werden nicht speziell erwähnt.

Hilfreiche Videos zur Verarbeitung der Forster Systeme stehen auf unserer Website www.forster-profile.ch zur Verfügung.

4.1 Zuschneiden allgemein

- Der Einspannung von Profilstahlrohren und Glashalteleisten ist besondere Beachtung zu schenken. Der Druck der hydraulischen oder pneumatischen Spannvorrichtungen sollte von Hand auf die einzuspannenden Materialien einreguliert und angepasst werden können.

Directives relatives à la mise en œuvre

3. Transport / stockage

- Une grue avec traverse et deux sangles d'une largeur d'au moins 80 mm convient le mieux pour le déchargement. Si le déchargement a lieu au moyen d'un élévateur, n'utiliser que des fourches larges réglées avec un grand écartement.
- Pour éviter des enfoncements ou des déformations, nous recommandons d'utiliser des pièces intercalaires en matière plastique ou en bois.
- Des cales et supports propres empêchent les déformations des petits profilés. L'enlèvement à l'entreposage ne doit se faire qu'en soulevant les éléments avec soin.
- Tous les composants des systèmes doivent être stockés au sec dans des locaux adéquats.
- Les profilés en acier et en acier inoxydable doivent être entreposés séparément, afin d'exclure le risque de corrosion par des particules de rouille erratique sur l'acier inox.

4. Mise en œuvre

Les règles de mise en oeuvre professionnelles, généralement connues des entreprises et artisans, ne sont pas spécialement mentionnées.

Des vidéos très utiles de la mise en œuvre des systèmes Forster sont disponibles sur notre site web www.forster-profile.ch.

4.1 Coupe en général

- Il faut vouer une attention particulière à l'assemblage des profilés en acier et des parcloses. La pression des dispositifs de serrage hydrauliques ou pneumatiques devrait pouvoir être réglée et ajustée à la main en fonction des matériaux à serrer.

General processing guidelines

3. Transport / Storage

- The most suitable means of transport is a crane with a cross-arm and two belts at least 80 mm wide. If unloading with a high-lift truck, then only with broad fork-arms set wide apart.
- In order to avoid dents or deformations we recommend inserting plastic or wooden supports in between.
- Clean covers and supports prevent small-profiled cross-sections from becoming deformed. When removing from storage racks, always lift the profiles.
- All components of the system must be stored in dry, suitable rooms.
- Steel and stainless steel profiles must be stored separately in order to avoid all risk of corrosion due to extraneous rust particles on non-rusting steel.

4. Processing

Processing procedures that are generally known in the industry are not specifically mentioned.

Helpful videos for processing of the Forster systems are available on our website www.forster-profile.ch.

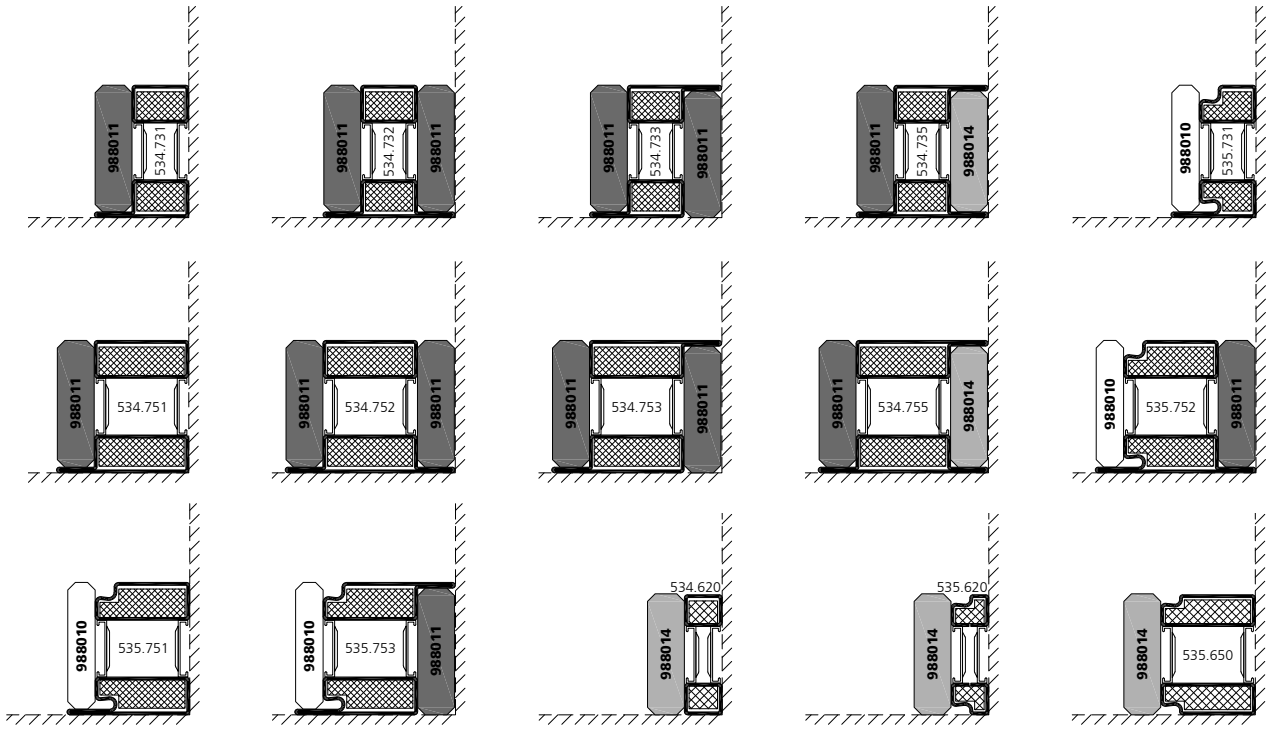
4.1 Cutting to size in general

- Pay particular attention when clamping profiled steel tubes and glazing beads. It must be possible to adjust by hand the pressure exerted by hydraulic or pneumatic clamping devices to suit the material to be clamped.

Allgemeine Verarbeitungsrichtlinien

Directives relatives à la mise en œuvre

General processing guidelines



- Beim Zuschneiden der verschiedenen Profilarten wird empfohlen, der Profilform entsprechende Einlegefutter aus Hartholz, Metall oder Kunststoff zu verwenden.
- Speziell zu beachten ist auch die Winkelgenauigkeit beim Zuschneiden und beim Zusammenbau.

- Lors de la coupe des divers genres de profilés, il est recommandé d'utiliser des intercalaires en bois dur, métal ou matière plastique, correspondants à la forme du profilé.
- Prêtez une attention particulière à l'exactitude des angles, lors de la coupe ainsi qu'au moment de l'assemblage.

- When cutting the various kinds of profiled section to size, we recommend that you use suitable supports underneath made from hardwood, metal or plastic.
- Pay particular attention to the accuracy of the angle both in cutting to size and during assembly.

4.1.1 Zuschneiden Blendrahmen

Bei der Fabrikation der Blendrahmen sind folgende Einbautoleranzen (Falzspiel) für den Einbau von Flügelrahmen vorgegeben:
Nennmass +1 / -0 mm

4.1.1 Coupe des cadres dormants

Lors de la fabrication des cadres dormants, les tolérances de montage suivantes (jeu de la feuillure), pour le montage des vantaux, sont prédéfinies :
Dimension nominale +1 / -0 mm

4.1.1 Cutting the outer frame to size

During the manufacture of the outer frame, the following location deviations (rebate play) are prescribed for the installation of leaf-frames.
Nominal dimension +1 / -0 mm

4.1.2 Zuschneiden Flügelrahmen

Bei der Fabrikation der Flügelrahmen sind die Einbautoleranzen (Falzspiel) im Zusammenbau mit den Blendrahmen abzustimmen:
Zuschnitt-Toleranz +0 / -1 mm.

4.1.2 Coupe de cadres de vantaux

Lors de la fabrication des cadres de vantaux, il faut ajuster les tolérances de montage (jeu de la feuillure) au moment de l'assemblage avec les cadres dormants :
Tolérance pour coupe de +0 / -1 mm.

4.1.2 Cutting leaf frames to size

During the manufacture of leaf frames the location deviations (rebate play) must be determined during assembly including outer frames.
Cutting tolerance +0 / -1 mm.

Allgemeine Verarbeitungsrichtlinien

4.2 Verarbeitung Stahlprofile

Das Zuschneiden von Stahlprofilen und Glashalteleisten erfolgt in der Regel mit Metall-Kaltkreissägen:

Schnittgeschwindigkeit:		ca. 25 m / min
Vorschub:	45°	max. 120 mm / min
	90°	max. 160 mm / min
Zahnteilung:		6 - 8 mm
Sägeblattdicke:		4 mm
Kühlung:		Emulsion / Sprühkühlung

Das Bohren in Stahlprofile erfolgt mit Spiralbohrern aus Schnellarbeitsstahl:

Schnittgeschwindigkeit:	25 m / min
Vorschub max.:	0.12 - 0.25 mm / U
Kühlung:	Emulsion / Sprühkühlung

Das Fräsen in Stahlprofile erfolgt mit Schaftfräsern aus Schnellarbeitsstahl:

Schnittgeschwindigkeit:	25 m / min
Vorschub max.:	0.05 mm / Zahn
Kühlung:	Emulsion / Sprühkühlung

Die oben aufgeführten Angaben sind Richtwerte und sind mit dem verwendeten Werkzeug abzustimmen.

Bei der Verarbeitung von Forster Profilstahlrohren ist auf eine plane Arbeitsfläche zu achten, d.h. die Profile müssen plan und parallel aufliegen. Vor dem Schweissen sind die Rahmen auf der Ober- und Unterseite mass- und winkelgerecht zu heften (Diagonale überprüfen!). Beim Schweissen kann dem Verziehen der Elemente durch die Schweissrichtung (gemäss Zeichnung) entgegengewirkt werden.

Directives relatives à la mise en œuvre

4.2 Mise en œuvre des profilés en acier

La coupe de profilés en acier et parcloses se fait en général avec des scies circulaires pour métaux :

Vitesse de coupe :		env. 25 m / min.
Avance :	45°	max. 80 mm / min
	90°	max. 120 mm / min
Pas de dent :		6 - 8 mm
Épaisseur de la lame de scie:		4 mm
Refroidissement:		émulsion / refroidissement par aspersion

Le perçage des profilés avec coques en acier est réalisé avec des forets hélicoïdaux en acier pour usinage grande vitesse:

Vitesse de coupe :	25 m / min.
Avance max. :	0.12 - 0.25 mm / U
Refroidissement :	émulsion / refroidissement par aspersion

Le fraisage des profilés en acier est réalisé avec des fraises en acier pour usinage grande vitesse :

Vitesse de coupe :	25 m / min.
Avance max. :	0.05 mm / dent
Refroidissement :	émulsion / refroidissement par aspersion

Les indications figurant ci-dessus sont des valeurs indicatives et doivent être adaptées à l'outil utilisé.

Lors de la mise en œuvre de tubes profilés en acier Forster, il faut veiller à avoir une surface de travail plane, c.-à-d. que les profilés doivent reposer à plat et parallèle. Avant le soudage, il convient de pointer les cadres sur la face supérieure et inférieure en respectant les dimensions et d'équerrage (contrôler les diagonales !). Lors du soudage, il est possible de prévenir toute déformation des éléments en veillant au sens de la soudure (selon le dessin).

General processing guidelines

4.2 Processing steel profiles

Steel profiles and glazing beads are generally cut to size using a metal circular cold saw:

Cutting speed:		approx. 25 m / min
Forward feed:	45°	max. 80 mm / min
	90°	max. 120 mm / min
Spacing:		6 - 8 mm
Thickness of saw blade:		4 mm
Cooling:		emulsion / spray cooling

Steel profiles are drilled using twist drills made of high-speed steel:

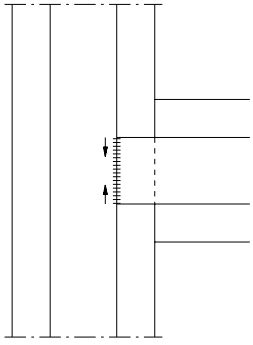
Cutting speed:	25 m / min
Forward feed max.:	0.12 - 0.25 mm / rev
Cooling:	emulsion / spray cooling

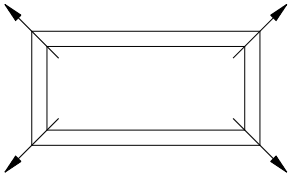
Steel profiles are milled using end-mill cutters made of high-speed steel:

Cutting speed:	25 m / min
Forward feed max.:	0.05 mm / tooth
Cooling:	emulsion / spray cooling

The figures given above are guidelines and must be determined individually for each tool used.

When processing Forster profiled steel sections, make sure that the working surface is level, i.e. the sections must lie flat and parallel to one another. Before welding, tack the frames on the top and bottom sides to secure the size and angles (check the diagonals!). You can counteract the distortion of the elements during welding by working in the right direction (see sketch).





Allgemeine Verarbeitungsrichtlinien

Folgende Schweiss-Empfehlungen werden abgegeben:

Schutzgas-Schweissung: MAG/TIG -Verfahren
Draht-Ø: 0,6 bis 0,8 mm
Schutzgas: Abgestimmt auf Schweissdraht
Schweissdraht Stahl: SG2 oder SG3
Schweissdraht Edelstahl: 1.4316 oder 1.4430

Der Schweissarbeitsplatz sollte gut belüftet sein oder mit einer Rauchgasabsaugunganlage (z.B. Schildabsaugung oder mobile Absauganlage) ausgerüstet sein. Dies gilt vor allem beim Schweissen von vorgängig behandelten Profilstahlrohren (z.B. ZM).

Sind beim Schweissen der Rahmen, trotz aller beschriebenen Vorkehrungen, geringe Verzüge aufgetreten, können diese unter Zuhilfenahme von Spindelpressen oder hydraulischen Pressen wieder gerade gerichtet werden. Um Deformationen, Beulen oder Dellen vorzubeugen, sind geeignete Holz- oder Kunststoff-Zwischenlagen zu verwenden.

Schweissnähte (Sprossenstösse, Rahmenecken, usw.) werden üblicherweise mit der Tellerschleifscheibe und Schleifscheiben (Körnung: 36) und Fiberscheiben (Körnung: 18) verputzt. Schleifspuren sind zu vermeiden, da diese nach der Oberflächenbehandlung sichtbar werden. Die Kantenradien der geschweissten Sprossenstösse und Rahmenecken sind mit der Feile leicht nachzubearbeiten.

Directives relatives à la mise en œuvre

Les recommandations de soudage suivantes sont données :
Soudage sous protection gazeuse : procédé MAG/TIG
Ø du fil : 0,6 à 0,8 mm
Gaz de protection : adapté au type de fil à souder
Fil de soudage acier: SG2 oder SG3
Fil de soudage acier inox: 1.4316 oder 1.4430

Le poste de travail pour le soudage devrait être bien aéré ou être équipé d'une installation d'aspiration de gaz (telle qu'aspiration à extraction ou installation d'aspiration mobile). Ceci est surtout valable pour le soudage de tubes profilés en acier préalablement traités (p. ex., ZM).

Si de légers gauchissements se produisent lors du soudage des cadres, en dépit de toutes les mesures décrites, il est possible de les rectifier en ayant recours à des presses manuelles ou hydrauliques. Pour prévenir des déformations, des bosses ou des enfoncements, il convient d'utiliser des pièces intercalaires en bois ou en matière plastique.

Les cordons de soudure (raccords de traverses, angles de cadres, etc.) sont généralement polis au moyen d'une meule à disque et de disques de meulage (granulation : 36) et de disques en fibres (granulation : 18). Il convient d'éviter les traces de meulage, car elles restent visibles après le traitement de surface. Les arêtes des angles des cadres et des raccords de traverses doivent être ensuite légèrement meulé.

General processing guidelines

The following is recommended for welding:

Shielded arc welding: MAG/TIG process
Wire Ø: 0,6 to 0,8 mm
Inert gas: Matched to welding wire
Welding wire steel: SG2 or SG3
Welding wire stainless steel: 1.4316 or 1.4430

The welding work place should be well ventilated or equipped with a smoke-collecting unit (e.g. shield or mobile smoke-collecting unit). This applies especially when welding pre-treated profiled steel sections (e.g. ZM).

If, in spite of taking all the precautions recommended, slight distortions occur while welding the frames, these can be straightened out again by using screw presses or hydraulic presses. To prevent deformations, bulges or dents, use suitable wooden or plastic supports and underlays.

Welds (transom joints, corners of frames etc.) are usually trimmed with the disk-grinding machine and grinding disk (grain: 36) and coarse-grained grinding wheel (grain: 18). Stress marks should be avoided as they become visible after the surface treatment. Gently trim the edges of the welded transom joints and frame corners with a file.

Allgemeine Verarbeitungsrichtlinien

4.4 Verarbeitung Edelstahlprofile

Anwendungsbereich Edelstahlprofile/ Haftungsausschluss für nicht systemkonforme Anwendung

Profilstahlrohre aus Edelstahl sind ausschliesslich für die Anwendung in Forster-Konstruktionen wie Türen, Festfeldern etc. einzusetzen. Die Schweissnahtlage ist hierbei so definiert, dass diese im nicht sichtbaren Bereich zu liegen kommt. (>Glasfalz/ Wandanschluss).
Für Anwendungen ausserhalb von Forster-Konstruktionen, wo die Schweissnahtlage in den Sichtbereich zu stehen kommen kann, übernimmt „Forster" keinerlei Haftung/Gewährleistung.
Werkzeuge, die für die Bearbeitung von unlegiertem Stahl verwendet werden, dürfen nicht für Edelstahl Rostfrei benützt werden.

Alle nachfolgenden Angaben sind Richtwerte und sind mit dem verwendeten Werkzeug abzustimmen.

Das Zuschneiden der Edelstahlprofile und Glashalteleisten erfolgt mit einer Metall-Kaltkreissäge.

Sägeblätter:	HSS
Schnittgeschwindigkeit:	7 - 10 m / min
Zahnteilung:	8 - 10 mm
Vorschub bis max.:	25 mm / min
Sägeblattdicke:	4 - 6 mm
Kühlung:	Emulsion / Sprühkühlung

Für Bohrungen in Edelstahlprofile empfehlen wir Spiralbohrer aus Schnellarbeitsstahl. Von Vorteil werden TiN-beschichtete Werkzeuge verwendet.

Schnittgeschwindigkeit:	6 - 12 m / min
Vorschub max.:	0.05 - 0.15 mm / U
Kühlung:	Emulsion / Sprühkühlung

Das Fräsen in Edelstahlprofile erfolgt mit Schaftfräsern aus Schnellarbeitsstahl.

Directives relatives à la mise en œuvre

4.4 Mise en œuvre de profilés en acier inoxydable

Champs d'application pour profilés en acier inox / Clause de non-responsabilité lors d'applications non conformes des systèmes

Les profilés en acier inox doivent être utilisés exclusivement pour des éléments Forster tels que les portes, vitrages fixes, etc. L'emplacement des soudures est défini et positionné dans la zone invisible (>fond de feuillure/ raccord mural).
Pour des applications hors construction Forster où les soudures sont situées en zone visible, «Forster» exclut toute responsabilité ou garantie de fonctionnement.

Des outils utilisés pour l'usinage d'acier non allié ne doivent pas être employés pour l'acier inoxydable.

Toutes les indications ci-après sont des valeurs indicatives et doivent être adaptées à l'outil utilisé.

La coupe des profilés en acier inoxydable et de parcloses a lieu au moyen d'une scie circulaire à froid pour métaux.

Lames de scies :	HSS
Vitesse de coupe :	7 - 10 m / min
Pas de dent :	8 - 10 mm
Avance jusqu'à max. :	25 mm / min
Épaisseur de la lame de scie :	4 - 6 mm
Refroidissement :	émulsion / refroidissement par aspersion

Pour des perçages dans des profilés en acier inoxydable, nous recommandons des forets hélicoïdaux en acier pour usinage grande vitesse. Des outils revêtus de Tungstène seront de préférence utilisés.

Vitesse de coupe :	6 - 12 m / min.
Avance max. :	0.05 - 0.15 mm / U
Refroidissement :	émulsion / refroidissement par aspersion

Le fraisage dans des profilés en acier inoxydable est réalisé au moyen de fraises deux tailles en acier pour usinage grande vitesse.

General processing guidelines

4.4 Processing stainless steel profiles

Application stainless steel profiles / exclusion of liability for non-conforming application

Stainless steel profiles are exclusively for use in Forster constructions such as doors, fixed glazings, etc. The position of the welding seam is defined for the non-visible area. (> glass rebate /wall connection).

For applications outside of Forster constructions, where the position of the welding seam can be in the visible area, „Forster" assumes no liability whatsoever.

Tools used for processing unalloyed steel must not be used for stainless steel.

All the figures given below are guidelines and must be determined individually for each tool used.

Stainless steel profiles and glazing beads are cut to size with a metal circular cold saw.

Saw blades:	HSS
Cutting speed:	7 - 10 m / min
Spacing:	8 - 10 mm
Forward feed max.:	25 mm / min
Thickness of saw blade:	4 - 6 mm
Cooling:	emulsion / spray cooling

For drilling stainless steel profiles we recommend twist drills made from high-speed steel. TiN-coated tools are preferable.

Cutting speed:	6 - 12 m / min
Forward feed max.:	0.05 - 0.15 mm / U
Cooling:	emulsion / spray cooling

Stainless steel profiles are milled using end-mill cutters made of high-speed steel.

Allgemeine Verarbeitungsrichtlinien

Schnittgeschwindigkeit: 10 - 20 m / min
Vorschub max.: 0.08 - 0.3 mm / Zahn
Kühlung: Emulsion / Sprühkühlung

Schweissen:
Die austenitischen Edelstähle lassen sich mit nahezu allen in der Praxis üblichen Verfahren schmelz- und widerstandsschweissen. Vom Gasschweissen (Sauerstoff-Azetylen) ist abzuraten. Die Schweiss-Zusatzwerkstoffe entsprechen weitgehend den Grundwerkstoffen.

Gegenüber den unlegierten Stählen sind für das Schweissen folgende Abweichungen zu beachten:

- Die Wärmeausdehnung ist ca. 50 % grösser (ausreichend fest einspannen).
- Die Wärmeleitfähigkeit ist geringer (50 %). Wärmeableitende Schweissbeilagen begünstigen die Schweissung.
- Der elektrische Widerstand ist etwa 6 x grösser.

Diese Unterschiede beeinflussen die Wahl und die Durchführung des Schweissverfahrens. Sie erfordern Schweissen mit deutlich niedrigeren Stromstärken.

Um Verzug und Verzunderung gering zu halten, sollte mit möglichst geringer Wärmeeinbringung geschweisst werden. Damit werden schmale Schweissnähte mit engem Anlauffarbbereich erreicht, die weniger Nacharbeit erfordern.

Für einwandfreie Schweissungen sind fettfreie, glatte Schnittkanten erforderlich.

Nach dem Schweissen sind alle Spritzer, Zunder und Anlauffarben vom Werkstück zu entfernen, da sonst solche Stellen nicht mehr die optimale Korrosionsbeständigkeit aufweisen.

Directives relatives à la mise en œuvre

Vitesse de coupe : 10 - 20 m / min.
Avance max.: 0.08 - 0.3 mm / dent
Refroidissement : émulsion / refroidissement par aspersion

Soudage :
Les aciers inoxydables austénitiques peuvent être soudés par fusion ou par résistance, avec presque toutes les méthodes habituelles utilisées dans la pratique. Le soudage au gaz (oxygène - acétylène) est déconseillé. Les métaux d'apport correspondent en grande partie aux métaux de base.

Par rapport aux aciers non alliés, les écarts suivants doivent être pris en considération pour le soudage :

- La dilatation thermique est supérieure d'environ 50 % (serrer suffisamment et avec fermeté).
- La conductivité thermique est inférieure (50 %). Des cales de soudage dissipant la chaleur favorisent le soudage.
- La résistance électrique est à peu près 6 x plus grande.

Ces différences influencent le choix et la réalisation du procédé de soudage. Elles nécessitent un soudage avec des intensités de courant nettement plus faibles.

Pour minimaliser la distorsion et l'oxydation, il faudrait souder avec le moins possible d'apport thermique. De minces cordons de soudage avec des zones de couleurs de métal chauffé réduites, qui nécessiteront moins de travail par la suite, sont ainsi obtenus.

Pour des soudures parfaites, il faut que les coupes soient à bords vifs, non gras et lisses.

Après le soudage, il faut débarrasser la pièce à usiner de toutes projections et couleurs du métal chauffé, sous peine que ces endroits ne présentent plus une résistance optimale à la corrosion.

General processing guidelines

Cutting speed: 10 - 20 m / min
Forward feed max.: 0.08 - 0.3 mm / tooth
Cooling: emulsion / spray cooling

Welding:
Austenitic stainless steels can be welded using practically any of the customary fusion and resistance welding processes. Gas welding (oxyacetylene) is not recommended. The filler metals used are largely identical to the parent metals.

Regarding unalloyed steels, please note the following deviations when welding.

- Thermal expansion is approx. 50 % greater (clamp tightly enough).
- Thermal conductivity is lower (50 %). Heat dissipating added material improve welding.
- The electrical resistance is approx. 6 x greater.

These differences affect the choice of welding method and how it is performed. They require welding methods with distinctly lower voltages.

To keep distortion and scale at a minimum, as little heat as possible should be introduced during welding. This results in thin weld seams with only a narrow strip of discoloration, which require less retouching.

For perfect welds cut edges must be free of grease and smooth.

After welding remove all spatter formation, scale and tarnish from the workpiece, otherwise these areas will no longer be optimally resistant to corrosion.

Allgemeine Verarbeitungsrichtlinien

Mechanische Nachbehandlung

Zum Entfernen von Anlauffarben und Zunder kommen bürsten, schleifen oder strahlen in Betracht. Die Schleif- und Strahlmittel müssen eisenfrei sein, d.h. sie dürfen auch nicht vorher zum Bearbeiten unlegierter Stähle verwendet worden sein.

Nach dem Strahlen ist zum Erzielen einer guten Korrosionsbeständigkeit ein anschlies-sendes Beizen erforderlich.

Chemische Nachbehandlung

Zum Entfernen von Anlauffarben und Zunder verwendet man handelsübliche Beizpasten. Der direkte Kontakt mit dem Isolator ist zu vermeiden. Säurereste dürfen keinesfalls an den Profilen zurückbleiben (Flächen, Spalten, Hohlräume).

Nach der Beizbehandlung muss mit Wasser kräftig nachgespült werden.

Korrosion

Die Korrosionsbeständigkeit der Edelstähle beruht auf einer sehr dünnen passiven Oberflächendeckschicht aus Chromoxyden. Nach mechanischer Zerstörung bildet sich diese Schicht bei Anwesenheit von Sauerstoff (Luft) oder oxidierenden Medien erneut aus.

Wird diese Schutzschicht unter Einwirkung aggressiver Medien zerstört, beginnt der Korrosionsvorgang.

Oberflächenbeschaffenheit

Die dem chemischen Angriff ausgesetzte Stahloberfläche muss möglichst glatt sein. Die Oberfläche muss frei von Verunreinigungen aller Art sein. Die bei der Bearbeitung in die Oberfläche eingedrückten Fremdstoffe wie z.B. Schleifmittelrückstände oder Werkzeugabrieb vermindern die Korrosionsbeständigkeit.

Interkristalline Korrosion

Sie kann entstehen bei Wärmebehandlung oder Schweissvorgängen.

Beachten:

- Richtige Materialwahl (mit niederem C-Gehalt)
- Anlauffarben bearbeiten

Directives relatives à la mise en œuvre

Traitement mécanique subséquent

Pour éliminer les couleurs du métal chauffé et les projections, on peut procéder par brossage, ponçage ou grenaillage. Les produits de ponçage ou de grenaillage ne doivent pas contenir de fer, c'est-à-dire qu'ils ne doivent pas avoir été précédemment utilisés pour le traitement d'aciers non alliés.
Après le grenaillage, il faut décaper l'élément, si l'on veut obtenir une bonne résistance à la corrosion.

Traitement chimique subséquent

Pour éliminer les couleurs du métal chauffé et les projections, on utilise des pâtes de décapage du commerce. Il faut éviter le contact direct avec l'isolateur. Des résidus acides sur les profilés doivent à tout prix disparaître (surfaces, fentes, espaces creux).

Après le traitement au décapant, il faut bien rincer à l'eau.

Corrosion

La résistance à la corrosion des aciers inoxydables repose sur une couche de surface passive extrêmement mince en oxyde de chrome. Après destruction mécanique, cette couche se reforme en présence d'oxygène (air) ou au contact d'oxydants.

Si cette couche de protection est détruite sous l'effet de milieux agressifs, le processus de corrosion commence.

Caractéristiques de la surface

La surface en acier exposée à l'attaque chimique doit être la plus lisse possible. La surface doit être exempte d'impuretés de toute nature. Tous matériaux étrangers insérés au moment du traitement dans la surface, tels que résidus de produits abrasifs ou déchets de meulage, diminuent la résistance à la corrosion.

Corrosion intergranulaire

Elle peut survenir lors d'un traitement thermique ou de procédés de soudage.

Veiller à :

- sélectionner des matériaux adéquats (avec une faible teneur en C)
- travailler les couleurs de métal chauffé

General processing guidelines

Mechanical reworking

Brushing, grinding or blasting are suitable ways of removing tarnish and scale. The abrasives used for grinding and blasting must be nonferrous, i.e. they must not have been used previously for treating unalloyed steel.

After blasting, pickling is necessary to ensure good resistance to corrosion.

Chemical Aftertreatment

To remove discoloration and scale, use commercial mordant pastes. Avoid any direct contact with the insulator. On no account must any acid residue be left on the profiles (surfaces, crevices, hollow spaces).

After the pickling treatment, rinse well with water.

Corrosion

The corrosion resistance of stainless steel depends on a very thin passive surface top coat of chromium oxide. When destroyed mechanically, this layer develops again in the presence of oxygen (air) or oxidising media.

Should this layer be destroyed by aggressively acting media, corrosion will set in.

Surface structure

The steel surface exposed to the chemical attack must be as smooth as possible and free from contamination of any kind. Any foreign substances such as abrasive residue or tool attrition that gets pressed into the surface during the treatment will adversely affect resistance to corrosion.

Intercrystalline corrosion

This can occur during heat treatment or welding.

Note:

- Correct choice of material (with low C-content)
- Treat discoloration

Allgemeine Verarbeitungsrichtlinien

Fremdrost

Unter Fremdrost versteht man Ablagerungen von Rostteilchen, die nicht an der betreffenden Stelle entstanden, sondern von irgendwo anders her hinzugetragen wurden. Fremdrost tritt bevorzugt auf bei nichtgetrennter Lagerung und Verarbeitung von «schwarzem» und „weissem" Stahl. Aber auch Werkzeugabrieb kann zu Fremdrost führen. Durch Ablagerungen von Fremdrost können die Bedingungen für Spaltkorrosion erfüllt sein.

Beachten:

- Verarbeitung und Lagerung von Edelstahl Rostfrei und unlegiertem Stahl in getrennten Räumen.
- Werkzeuge nur für Edelstahl Rostfrei oder unlegierten Stahl verwenden.

Mechanische Oberflächenbehandlung (schleifen, polieren, strahlen)

Da die Wärmeleitfähigkeit von austenitischen Edelstählen geringer ist als bei unlegiertem Stahl, darf nicht mit zu grossem Andruck gearbeitet werden, sonst könnte wegen örtlicher Erwärmung das Material anlaufen oder sich verwerfen. Die Schleif- und Strahlmittel müssen eisenfrei sein, um Fremdrost zu vermeiden. Für Schleifscheiben, Schleifbänder oder Schleifkorn dürfen also nur eisenoxidfreie Schleifmittel verwendet werden.

Schleifscheiben oder -bänder sowie Strahlmittel, die für Teile aus unlegiertem Stahl verwendet werden, dürfen nicht auch für Edelstahl Rostfrei benutzt werden, da sie Fremdrost verursachen.

Für das Nachbearbeiten von Schweissnähten benutzt man Handschleifmaschinen mit Schleifscheiben oder Schleifsteinen.

Die Körnung sollte zwischen 16 und 46 liegen, die Umlaufgeschwindigkeit bei 30 m/s. Die Nahtstelle wird dann mit feinerer Körnung in der Stufung 80 - 120 - 180 geglättet. Hierzu können auch Bandschleifgeräte verwendet werden.
Für den Fertigschliff sind die Kornabstufungen 80 - 120 - 180 - 240 üblich. Die

Directives relatives à la mise en œuvre

Rouille erratique

Par rouille erratique, on entend des dépôts de petites particules de rouille qui ne proviennent pas de l'endroit concerné, mais viennent d'ailleurs. La rouille erratique apparaît surtout en cas de stockage non isolé et de traitement de l'acier «noir» et "blanc". Mais les déchets de meulage peuvent également entraîner l'apparition de rouille erratique. Les dépôts de rouille erratique peuvent donner lieu à une corrosion des fissures.

Veiller à :

- traiter et stocker de l'acier inoxydable et de l'acier non allié dans des locaux séparés.
- utiliser des outils soit pour l'acier inoxydable soit pour l'acier non allié.

Traitement mécanique des surfaces (ponçage, polissage, grenaillage)

Étant donné que la conductivité thermique d'aciers inoxydables austénitiques est inférieure à celle de l'acier non allié, il ne faut pas travailler avec une trop grande pression, faute de quoi le matériau pourrait changer de couleur ou gauchir en raison de l'échauffement local. Les produits de ponçage ou de grenaillage ne doivent pas contenir de fer, afin d'éviter de la rouille erratique. Seuls des produits de ponçage exempts d'oxyde de fer peuvent donc être utilisés pour les disques de meulage, des bandes abrasives ou le grain abrasif.

Des disques de meulage ou des bandes abrasives, ainsi que des produits de grenaillage qui sont utilisés pour des éléments en acier non allié, ne peuvent pas aussi être employés pour de l'acier inoxydable, vu qu'ils occasionnent de la rouille erratique.

Pour le traitement préliminaire de cordons de soudage, on utilise des meuleuses portatives avec disques de meulage ou meules.

La granulation devrait se situer entre 16 et 46, la vitesse de rotation à 30 m/s. Le point de raccord est ensuite poli avec une granulation plus fine de graduation 80 - 120 - 180. Des appareils à rubans abrasifs peuvent, en l'occurrence, aussi être utilisés.
Pour le polissage final, les gradations de grains 80 - 120 - 180 – 240 sont habituelles.

General processing guidelines

Extraneous rust

Extraneous rust refers to deposits of rust particles that did not start at the spot in question but were brought there from somewhere else. Extraneous rust occurs mainly when "white" and "black" steel are not stored and processed separately. However, particles rubbed off tools (attrition) can also lead to extraneous rust. Deposits of extraneous rust can provide the basic conditions for crevice corrosion.

Note:

- Processing and storage of stainless steel and unalloyed steel in separate rooms.
- Use tools for stainless steel only or for unalloyed steel only.

Mechanical surface treatment (grinding, polishing, blasting)

Since the thermal conductivity of austenitic steels is lower that that of unalloyed steel, applied pressure during processing must not be too great or else the material could discolour or become distorted due to uneven warming. The abrasives used for grinding and blasting must be nonferrous in order to prevent extraneous rust. For grinding wheels, grinding belts or abrasive grain, therefore, only abrasives that are free of iron oxide may be used.

Grinding wheels, grinding belts and abrasives used for parts made of unalloyed steel must not also be used for stainless steel, as they will cause extraneous rust.

For the subsequent treatment of welding seams, use manual grinding machines with grinding wheels or stones.

The grain should be between 16 and 46, the peripheral speed 30 m/s. The seam is then masked with a finer grain, progressing from 80 - 120 - 180. Belt grinders can also be used for this.

For the finish, the usual grain progression is 80 - 120 - 180 - 240. The grain is often

Allgemeine Verarbeitungsrichtlinien

Körnung richtet sich oft nach optischen Gesichtspunkten. Je nach gewünschtem Aussehen sind dabei die unterschiedlichen Schleifverfahren (Trocken-, Nass-, Ölschliff) zu berücksichtigen.

Die Schleifgeschwindigkeit darf 40 m/s nicht überschreiten, weil sonst starke Erwärmung auftritt. Für die Bearbeitung grossflächiger Teile sind Schleifautomaten üblich. Kräftige und schwingungsfreie Vorrichtungen helfen, Rattermarken zu vermeiden.

Nähere Angaben finden Sie in den Publikationen der Informationsstelle Edelstahl Rostfrei, Postfach 10 22 05,

Directives relatives à la mise en œuvre

La granulation dépend souvent de points de vue optiques. Suivant l'apparence désirée, les divers procédés de meulage (ponçage à sec, meulage en mouillant, ponçage à l'huile) doivent en l'occurrence être pris en considération.

La vitesse de meulage ne doit pas excéder 40 m/s, faute de quoi un fort échauffement pourrait se produire. Des machines à rectifier automatiques sont habituelles, pour le traitement d'éléments à grande surface. Des dispositifs robustes et exempts de vibrations contribuent à éviter des stries.

Des indications plus détaillées figurent dans les publications du service d'information concernant l'acier inoxydable, case postale 10 22 05, D-40013 Düsseldorf.

General processing guidelines

determined by the look required, and here a wide variety of grinding methods are possible (dry, wet, oil).

The grinding speed must not exceed 40 m/s, as otherwise there is risk of overheating. For processing parts with a surface area automatic grinders are usual. Powerful, vibration-free appliances help to prevent chatter marks.

You will find more detailed information in the publications of the Information Centre for Stainless Steel, Postfach 10 22 05, D-40013 Düsseldorf.

Allgemeine Verarbeitungsrichtlinien

5 Abdichten der Rahmen- / Flügelzonen

Für die Abdichtung von nicht durch Schweissen geschlossene Flügelzonen bei Rahmenverbindungen (stumpf und auf Gehrung) empfehlen wir dringend die Verwendung des hierfür in unserem Programm vorgesehenen Dichtstoffs (Art. Nr. 908005), da bei diesem Produkt ein optimales kapillares Eindringen in die Fugen und eine gute Haftung auf allen Oberflächen sichergestellt ist.

Directives relatives à la mise en œuvre

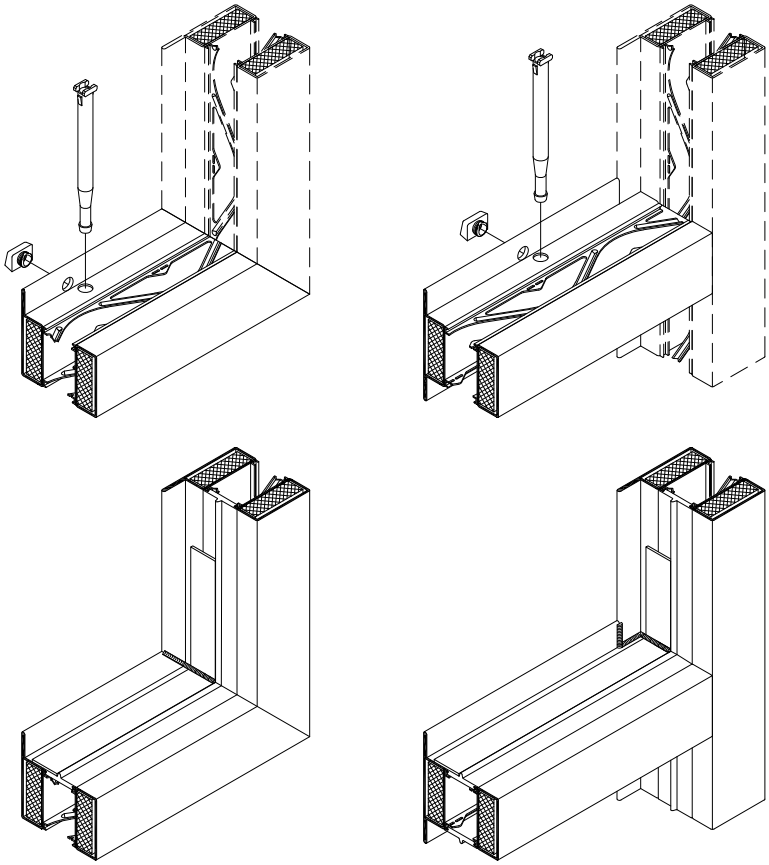
5 Étanchement des cadres / zones de vantails

Pour l'étanchéité des zones de vantail non soudées dans l'assemblage avec le cadre (droits ou en onglets), nous recommandons d'utiliser le produit d'étanchéité pour joints spécialement prévu à cet effet dans notre programme (art nr 908001), étant donné qu'une pénétration capillaire optimale dans les joints et une bonne adhérence sur toutes les surfaces sont garanties par ce produit.

General processing guidelines

5 Sealing frames / leaf zones

For sealing leaf zones that are not welded when joining frames (butt or mitred joints) we strongly recommend using the joint sealing compound included in our range (art. no. 908005), as this product ensures optimum capillary penetration in the joints and good adhesion on all surfaces.



Siehe Kapitel Dichtungseinbau
Voir le chapitre installation des joints
See chapter seal installation

Allgemeine Verarbeitungsrichtlinien

6 Oberflächenbehandlung

Grundsätzlich sind die Beschichtungsvorgaben des Beschichtungsunternehmens, abgestimmt auf das jeweilige verwendete Systems, abzustimmen bzw. zu berücksichtigen.
Das Vorbehandlungsverfahren und das Beschichtungssystem sind ebenso von der Korrosionsbelastung des Bauteiles abhängig. In der Regel kann von der Korrosionsschutzklasse III in Abhängigkeit der zu erwartenden Schutzdauer nach EN ISO 12944-2 „Korrosionsschutz von Stahlbauteilen durch Beschichtungssysteme" Teil 2 „Einteilung der Umgebungsbedingungen" bzw. der DIN 55634 ausgegangen werden.

Für die Innenanwendung ohne erhöhte „Belastungen" wie erhöhte Luftfeuchtigkeit, aggressive Medien in der Umgebungsluft usw. kann auch die Korrosionsschutzklasse II voraus gesetzt werden

Vorbehandlungsverfahren

Allgemein
Als Grundlage dienen die Angaben aus der EN ISO 12944-4 „Korrosionsschutz von Stahlbauteilen durch Beschichtungssysteme" Teil 4 „Arten der Oberflächen und Oberflächenvorbehandlungen". Hier sind die Oberflächenvorbehandlungen in Abhängigkeit von der jeweiligen Metalloberfläche beschrieben.

Wir, Forster Profilsysteme, empfehlen die Richtlinie „Internationale Qualitätssicherung für Bauteilbeschichtung aus Stahl" GSB ST 663 der GSB International in der Ausgabe Mai 2011 zu berücksichtigen bzw. anzuwenden.
In Auszügen kann auch die Richtlinie „Industrielle Beschichtung von feuerverzinkten Bauteilen des Deutschen Institutes für Gütesicherung und Kennzeichnung E.V." die RAL –GZ 663 herangezogen werden.

Directives relatives à la mise en œuvre

6 Traitement des surfaces

On prendra en compte/adaptera les indications de traitement des entreprises de revêtement en fonction du revêtement utilisé.
La méthode de préparation et le système de revêtement dépendent aussi de la sensibilité à la corrosion de l'élément. En général, on peut présupposer la classe anticorrosion III en fonction de la durée de protection attendue selon EN ISO 12944-2 „Anticorrosion des structures en acier par systèmes de peinture" partie 2 „Classification des environnements" ou DIN 55634.

En cas d'usage intérieur sans „contraintes" accrues, comme par exemple une humidité de l'air accrue, des gaz agressifs dans l'air ambiant, etc. on peut aussi prendre la classe anticorrosion II comme base.

Traitement préalable

Général:
Les indications EN ISO 12944-4 „Anticorrosion des structures en acier par systèmes de peinture" partie 4 „Types de surfaces et préparation de surfaces" servent de base. Elles décrivent les méthodes de préparation en fonction de la surface métallique traitée.

Forster Systèmes profilés recommande de tenir compte de/d'appliquer la directive „Assurance qualité internationale pour revêtement de pièces en acier" GSB ST 663 de GSB International, édition mai 2011.
On peut aussi se référer à certains extraits de la directive sur le revêtement de pièces galvanisées à chaud du „Deutsche Institut für Gütesicherung und Kennzeichnung E.V.", RAL –GZ 663.

General processing guidelines

6 Surface treatment

Generally, the coating specifications of the coating company which is adapted to the specific system used, may still have to be adjusted.
The pretreatment process and the coating system to be used also depend on the degree of corrosion the component is subjected to. As a rule, the assumptions can be based on Corrosion Protection class III, in dependence on the expected period of protection according to EN ISO 12944-2 „Corrosion protection of steel components by coating systems" part 2 „Classification of the environmental conditions" or DIN 55634.

For interior applications without increased „loads" such as air humidity, aggressive mediums in the air etc, the assumptions can be based on Corrosion Protection class II.

Pre-treatment procedure

In general:
The specifications EN ISO 12944-4 „Corrosion protection of steel components by coating systems" part 4 „Types of surfaces and pretreatments" serve as a basis. Surface pretreatments in dependence of the specific metal surfaces are described here.

We, Forster Profile Systems, recommend applying or taking into consideration the „International quality assurance for the coating of steel components" GSB ST 663 guidelines in the GSB International May 2011 edition.
Excerpts of the RAL –GZ 663 guidelines „Industrial coating of hot-galvanized components by the German Institute for quality assurance and markings E.V." can also be consulted.

Allgemeine Verarbeitungsrichtlinien

Beschichtungssysteme

Wichtig
Aufgrund der Beschaffenheit und der Zusammensetzung des speziellen Isolators dürfen **keine** Vorbehandlungsverfahren angewendet werden, bei denen das Entfetten der Profile bzw. Elemente durch Eintauchen von/in Flüssigkeiten erfolgt.

Hand- und sprühentfettete Werkstücke müssen für die anschliessende Beschichtung trocken sein.

Mögliche Reinigungsverfahren:
- Phosphatieren / chromatieren im Sprühverfahren
- Abwaschen mit Lösungsmitteln
- Dampf- oder Heisswasserstrahlentfettung mit Reinigerzusatz und anschliessend gründlicher Umlufttrocknung. Innerhalb eines Arbeitstages müssen die gereinigten/getrockneten Profile beschichtet werden.
- Neutrale Reinigungschemikalien (chloridfrei) verwenden. Es dürfen keine Salzrückstände oder Korrosionsprodukte auf der gereinigten Oberfläche zurückbleiben. Unverträglichkeiten mit starken Säuren, Laugen, Oxidationsmitteln, Ethanol, Aceton, Dichlormethan und Zinkchlorid beachten.
- Die Entfettung kann auch durch Staub- oder Sandstrahlen erfolgen, wobei beim letzteren der Isolator vor zu starkem Abtrag mit geeigneten Mitteln zu schützen ist.

Stahl-Glashalteleisten: Keine Einschränkungen bei der Vorbehandlung und der Beschichtung.

Beim Aufhängen der Elemente ist besonders darauf zu achten, dass die Lasten des zu beschichtenden Elementes nicht durch den mittigen Isolator abgetragen werden, da sich dieser durch die hohen Gewichte während des Beschichtungsvorgangs bleibend verformen könnte.

Directives relatives à la mise en œuvre

Systèmes de traitement de surface:

Important
Compte tenu de la structure et de la composition de l'isolateur spécial, **aucun** traitement préalable de dégraissage des profilés ou des châssis par immersion avec /dans des liquides ne doit être utilisé.

Les pièces dégraissés à la main ou par vaporisation doivent être sèches avant le traitement de surface ultérieur.

Procédés de nettoyages possibles :
- bondérisation / chromatation par pulvérisation
- rinçage avec des solvants
- dégraissage de l'acier à la vapeur ou à l'eau chaude avec nettoyeur additif et ensuite un séchage à fond à circulation d'air. En l'espace d'un jour de travail, les profilés nettoyés / séchés doivent être laqués. Utiliser des produits de nettoyages chimiques neutres (exempts de chlorure). Aucun résidu salin ou produit de corrosion ne doivent subsister sur la surface nettoyée. Tenir compte des incompatibilités avec des acides forts, des lessives alcalines, des oxydants, l'éthanol, l'acétone, le dichlorométhane et la chlorure de zinc.
- Le dégraissage peut aussi avoir lieu par grenaillage ou sablage ; en ce qui concerne ce dernier, il faut toutefois protéger l'isolateur d'une trop grande abrasion, par des moyens appropriés.

Parcloses en acier : Aucunes restrictions pour le traitement préalable et le revêtement.

Lors de la suspension des éléments, il convient de veiller particulièrement à ce que les charges de l'élément à peindre ne soient pas absorbées par l'isolateur central. Celui-ci peut se déformer durablement sous le poids des charges dégagé par le processus de traitement de surface.

General processing guidelines

Coating systems

Important
Due to the condition and the composition of the special insulator **no** pre-treatment procedures may be applied, with which the degreasing of the profiles resp. elements is made by dipping of/into liquids.

Workpieces degreased by hand or by spraying must be dry for the subsequent coating.

Possible methods of cleaning:
- Phosphating / chromating by spray process
- Rinsing with a solvent
- Degreasing by steam or hot water jet with cleaning additive, and finally through drying by recirculating hot air. The cleaned/dried profiles must be coated within one working day.
- Using neutral cleaning chemicals (chloride free). There must be no salt residue or corrosion products left on the cleaned surface. Beware of incompatible strong acids, solvents, oxidising agents, ethanol, acetone, dichlormethane and zinc chloride.
- Degreasing can also take place by means of powder- or sand-blasting, whereby in the latter case suitable means must be used to protect the insulator from excessive abrasion.

Steel- and aluminium glazing beads: no restrictions with regard to pre-treatment and coating.

When hanging the elements it has to be paid attention in particular that the weights of the element to be coated do not weigh on the centric insulator, since it could permanently deform by heavy weights input during the coating procedure.

Allgemeine Verarbeitungsrichtlinien

Nasslackbeschichtung
Beschichtungssysteme in Abhängigkeit der zu erwartenden Schutzdauer und Korrosivitätskategorie sind in der EN ISO 12944-5 „Korrosionsschutz von Stahlbauteilen durch Beschichtungssysteme" Teil 5 „Beschichtungssysteme" sowie der DIN 55634 beschrieben.

Die Auswahl des Beschichtungssystems erfolgt in Eigenverantwortung durch das ausführende Beschichtungsunternehmen.

Sollten entsprechende Nachweise bzw. Gewährleistungen des Beschichtungsunternehmens nicht vorliegen, empfehlen wir eine Muster- bzw. Probebeschichtung an einem repräsentativen Element mit anschliessender Güteüberprüfung der Beschichtung (an verdeckten Bereichen des Elementes), entsprechend den Prüfmethoden der RAL Gütesicherung nach RAL-GZ 663.

Pulverlackbeschichtung
Die Auswahl des Beschichtungssystems erfolgt in Eigenverantwortung durch das ausführende Beschichtungsunternehmen.

Aufgrund der energieverzehrenden Wirkung der Spezialisolatoren muss die Einbrenndauer bzw. Haltezeit der Profile bzw. Elemente im Ofen erhöht werden. Um die notwendige Oberflächentemperatur zu erreichen, welche für die Aushärtung des Pulverlackes massgebend ist, empfehlen wir für herkömmliche Pulverbeschichtungssysteme eine Ofentemperatur von ca. 230 °C bei einer Haltezeit von ca. 3000s und einer Schichtdicke von 80-120 µ entsprechend der ISO 2360. Bei Niedertemperaturbeschichtungssystemen können sich die vorgenannten Werte entsprechend verringern.

Directives relatives à la mise en œuvre

Traitement de surface par laquage liquide
Les systèmes de revêtement sont décrits dans la norme EN ISO 12044-5 «Anticorrosion des structures en acier par systèmes de peinture», 5e partie «Systèmes de peinture» ainsi que dans la norme DIN 55634 en fonction de la durée de protection que l'on peut en attendre et de la classe de corrosivité.

Le choix du système traitement de surface est de la propre responsabilité de l'entreprise exécutante.

Au cas où l'entreprise de revêtement ne peut fournir de justifications ou garanties spécifiques, nous recommandons de procéder à un échantillonnage ou à un revêtement d'essai sur un élément représentatif avec vérification ultérieure du revêtement et de sa qualité (sur un endroit peu visible), conformément aux méthodes d'essai et à l'assurance de la qualité RAL selon AL-GZ 663.

Traitement de surface électrostatique par poudre
Le choix de ce système de revêtement implique la propre responsabilité de l'entreprise exécutante.

Compte tenu du fort potentiel d'absorption énergétique des isolateurs, la durée de recuit ou de séjour des profilés ou éléments dans le four doit être prolongée. Pour atteindre la température superficielle nécessaire et décisive pour le durcissement du revêtement par poudre, et compte tenu de la norme ISO 2360, nous recommandons pour les systèmes conventionnels de revêtement par poudre de chauffer le four à une température d'env. 230 °C pour une durée de séjour d'env. 3000 s et une épaisseur de couche de 80-120 µ. En cas de systèmes de revêtement à basses températures, les valeurs précitées peuvent être réduites en proportion.

General processing guidelines

Wet lacquer coating
Coating systems in dependence of the period of protection to be expected and corrosiveness category are described in the EN ISO 12944-5 "Corrosion protection of steel structures by protective paint systems" part 5 "Protective paint systems" as well as DIN 55634.

The selection of the coating system is made in self-reliance of the executing coating enterprise.

If corresponding proofs resp. guarantees of the coating enterprise are not available, we recommend a sample resp. trial coating at a representative element with a subsequent quality inspection of the coating (at covered areas of the element) in accordance with the testing methods of the RAL Quality Assurance according to RAL-GZ 663.

Powder coating
The selection of the coating system is made in self-reliance of the executing coating enterprise.

Due to the energy-consuming effect of the special insulators the burn-in time resp. hold time of the profiles resp. elements in the furnace has to be increased. In order to reach the necessary surface temperature, which is decisive for the hardening of the powder coating, we recommend a furnace temperature of approx. 230 °C for conventional powder coating systems with a hold time of approx. 3000s and a layer thickness of 80-120 µ according to the ISO 2360. With low-temperature coating systems the above named values respectively reduce.

Allgemeine Verarbeitungsrichtlinien

Zur Sicherstellung der Beschichtungsqualität bzw. Gebrauchsfähigkeit empfehlen wir, folgende Prüfmethoden

- Glanz nach Gardner entsprechend ISO 2813
- Eindruckhärte nach ISO 2815
- Gitterschnitt nach ISO 2409

an repräsentativen Elementen (an verdeckten Bereichen des Elementes) mit anschliessender Dokumentierung durch den Beschichtungsunternehmer.

Als Vorbehandlung empfehlen wir Sweepen (siehe Vorbemerkungen). Ein Handreinigen mit geeigneten Entfettungsflüssigkeiten wie z. B. „Lesonal" ist unter geregelten Bedingungen ebenfalls möglich. Bei dieser Vorbehandlungsmethode ist mit grösster Sorgfalt vorzugehen, um die Beschichtungsqualität nicht negativ zu beeinflussen.

Allgemeiner Hinweis

Die Oberflächenbehandlung nach dem Schweissen und Schleifen der Elemente zur Sicherstellung des temporären Oberflächenschutzes (Lager und Transport der Elemente nach der Fertigung) ist mit dem Beschichtungsbetrieb abzustimmen und entsprechend vorzusehen.

7 Schäumstreifen

Vor dem Aufkleben des Schäumstreifens ist zu beachten, dass die Oberfläche trocken, frei von Staub, Öl, Trennmitteln und anderen Verunreinigungen ist.

Die Verarbeitungstemperatur liegt zwischen +10 °C und +20 °C. Insbesondere gilt es, Kondensatbildungen zu vermeiden. Die Lagerung des Schäumstreifens soll bei einer Temperatur von +20 °C und einer Luftfeuchtigkeit von 50 % erfolgen.

Detallierte Informationen sind in der Verpackungseinheit enthalten.

Directives relatives à la mise en œuvre

Afin d'assurer la qualité du revêtement, respectivement son aptitude au fonctionnement, nous recommandons de procéder aux contrôles suivants :

- Brillance selon Gardner et en appui sur ISO 2813
- Dureté à la pénétration selon ISO 2815
- Coupe en treillis selon ISO 2409

sur des éléments représentatifs (et sur des endroits peu visibles) avec documentation ultérieure par l'entreprise de revêtement.

Nous recommandons Sweepen en tant que prétraitement (voir remarques préalables). Le lavage de la main peut se faire à l'aide d'un dégraissant adéquat et utilisé comme il se doit, tel que «Lesonal» par exemple. Ce processus de traitement exige un maximum de soin afin de ne pas influencer négativement la qualité du revêtement.

Remarque générale

Le traitement de surface successif au soudage et à la rectification des éléments en vue d'assurer une protection superficielle temporaire (stockage et transport des éléments après fabrication) est à définir et à appliquer conformément. selon entente avec l'entreprise spécialisée.

7 Bande intumescente

Avant de coller la bande intumescente veiller à ce que la surface soit sèche, exempte de poussière, d'huile et d'autres impuretés.

La température ambiante doit être comprise entre +10 °C et +20 °C. Eviter toute trace de condensation. Stocker à +20 °C et à une humidité relative de 50 %.

Informations détaillées incluses dans l'unité de conditionnement.

General processing guidelines

In order to guarantee the quality of the coating resp. usability we recommend the following test methods

- Gardner gloss according to ISO 2813
- Indentation hardness acc. to ISO 2815
- right-angle lattice pattern according to ISO 2409

at representative elements (at covered areas of the element) with subsequent documentation by the coating entrepreneur.

As pre-treatment we recommend ‚sweep' (see preliminary remark). A hand cleaning with suitable degreasing liquids such as e.g. „Lesonal" is also possible under regulated conditions. This pre-treatment has to be done with utmost care, in order not to affect the coating quality negatively.

General information

The surface treatment after welding and grinding of the elements in order to guarantee the temporary surface protection (storage and transport of the elements after the manufacturing) has to be coordinated with the coating enterprise and arranged accordingly.

7 Intumescent strip

Before sticking on the intumescent strip make sure the surface is dry, dust-, oil- and additive-free.

The ambient temperature should lie between +10 °C and +20 °C. Avoid condensation. Stock intumescent strip at a temperature of approx. +20 °C and an approx. humidity of 50 %.

Detailed information are included in the packing unit.

Allgemeine Verarbeitungsrichtlinien

8 Verglasung und Füllungen

Die Verglasung von Glasscheiben und Füllungen ist nach DIN 18 361-Verglasungsarbeiten vorzunehmen. Zu beachten sind die Verglasungsrichtlinien der Glashersteller. Weiter empfehlen wir die "Informationsschriften" des Instituts des Glashandwerks für Verglasungstechnik und Fensterbau, D-65589 Hadamar.

Teilschritte der Trockenverglasung:

- Reinigung des Glasfalzes
- Aufkleben der Verglasungsdichtung z.B.Art. Nr. 905712, 985702 an die Profillappen (unmittelbar vor dem Glaseinsatz)
- Entfernen der Schutzfolie
- Die Benetzung des Butylbandes mit Wasser-Sprüher erleichtert die genaue Positionierung des Glaselementes. Ohne Spül-Zusätze! Kein Seifenwasser verwenden!
- Positionieren der Tragklötze auf Stahlauflagen (Siehe Skizze)
- Glaselement einsetzen und gemäss Verklotzungsrichtlinien spannungsfrei verklotzen.
- Einklipsen der Glashalteleisten
- Nach Austrocknen des Wassers baut sich der Klebeverbund zwischen Glas und Dichtungsprofil wieder auf.
- Eindrücken der auf Gehrung zugeschnittenen inneren Verglasungsdichtung z.B.Art. Nr. 905784-786 (Zuschnitt mit 1% Längenzuschlag)

Directives relatives à la mise en œuvre

8 Vitrage et remplissages

L'installation des verres et des remplissages doit être effectuée selon la DIN 18 361- Travaux de vitrage. Il faut tenir compte des directives en matière de vitrage des fabricants de verres. Nous recommandons par ailleurs les «brochures d'informations» de l'Institut des professions du verre pour la technique de vitrages et la construction de fenêtres, D-65589 Hadamar.

Phases partielles du vitrage à sec :

- Nettoyer de la feuillure du verre
- Collage du joint de vitrage p.ex.(art no 905712, 985702) contre les battues du profilé (directement avant le montage du verre)
- Enlever la feuille de protection
- L'humidification de la bande en butyle avec un vaporisateur d'eau facilite le positionnement précis de l'élément en verre. Sans additifs de rinçage ! N'utiliser aucune eau savonneuse !
- Positionnement des cales supports sur supports acier (voir schéma)
- Insertion de l'élément en verre et calage exempt de contrainte selon directives de calage.
- Clipser les parcloses
- Après le séchage de l'eau, le collage entre le verre et le joint d'étanchéité se reconstitue.
- Enfoncer le joint de vitrage intérieur dans l'angle – p.ex.art no 905784-786 (longueur avec un surplus de 1%)

General processing guidelines

8 Glazing and panel infills

Carry out glazing and the insertion of panel infills according to DIN 18 361-glazing. Pay particular attention to the glazing instructions of the glass manufacturer. We also recommend the "Information documentation" of the Institut des Glashandwerks für Verglasungstechnik und Fensterbau, D-65589 Hadamar.

Steps in dry glazing:

- Clean the glass rebate
- Stick the glazing gasket e.g. art. no. 905712, 985702 onto the profile lip (immediately before inserting the glass)
- Remove the protective foil
- Spraying the butyl strip with water makes it easier to position the glass element more precisely. Without rinsing additive. Do not use soapy water.
- Position support setting blocks on steel rests (see diagram)
- Insert glass and cushion it without stress according to instructions.
- Clip glazing beads in place.
- When the water has dried up, the adhesive bond between glass and weatherstripping forms again.
- Press the inner glazing weatherstripping (mitred) e.g. art. no. 905784-786 into place. (Allow 1% extra length when cutting to size)

Teilschritte Nassverglasung (ohne Falzentspannung zur Aussenseite):

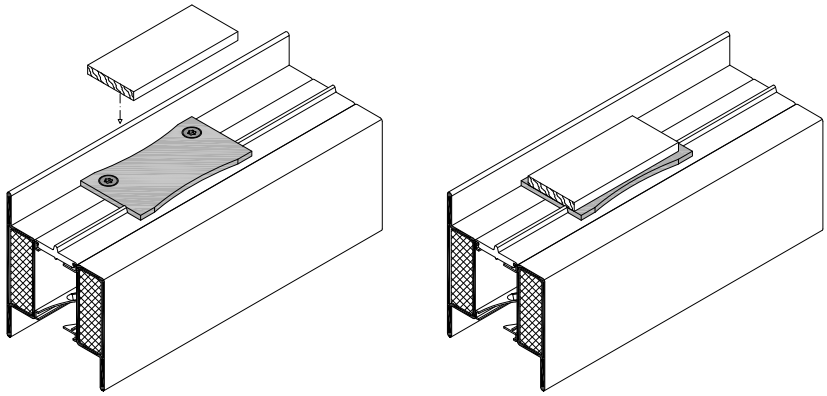
- Reinigung des Glases
- Vor dem Einsatz: Reinigen der Klebeflächen (Profile und Glashalteleisten)
- Aufkleben der Vorlegebänder auf Lappen + Glashalteleisten
- Positionieren der Tragklötze auf Stahlauflagen (Siehe Skizze)
- Glaselement einsetzen und gemäss Verklotzungsrichtlinien spannungsfrei verklotzen.
- Einklipsen der Glashalteleisten
- Einbringen der Dichtungsmasse
- Glätten der Dichtungsmasse

Phases partielles du vitrage au silicone (sans décompression de la feuillure par rapport à la face extérieure) :

- Nettoyer le verre
- Avant l'insertion: nettoyer les surfaces à coller (profilés et parcloses)
- Coller des bandes d'écartement sur languettes + parcloses
- Positionnement des cales supports sur supports acier (voir schéma)
- Insertion de l'élément en verre et calage exempt de contrainte selon directives de calage.
- Clipser les parcloses
- Introduire la masse à étancher
- Égaliser la masse à étancher

Steps in wet glazing (without rebate run-off towards outside):

- Clean the glass
- Before inserting glass: clean the bonding surfaces (profiles and glazing beads)
- Stick packing strips in place on lips + glazing beads
- Position support setting blocks on steel rests (see diagram)
- Insert glass element and cushion it without stress according to instructions.
- Clip glazing beads in place.
- Apply sealing compound.
- Smooth sealing compound.



Allgemeine Verarbeitungsrichtlinien

9 Bauliche Gegebenheiten / Statische Erfordernisse

Sämtliche Elemente, einschliesslich der Verbindungselemente, müssen alle auf sie einwirkenden Kräfte aufnehmen und an die Tragwerke des Baukörpers abgeben können. Die Verbindungen und Befestigungen müssen so konstruiert sein, dass ein Toleranzausgleich gegenüber dem Rohbau möglich ist.

Wir möchten darauf hinweisen, dass die jeweils gültigen länderspezifischen Normen und Richtlinien (z.B. SIA, DIN, SZFF) zur Anwendung gebracht werden müssen.

10 Funktionstüchtigkeit / Wartung

Bewegliche Beschläge müssen gewartet werden, damit sich der Verschleiss sowie deren Korrosionsanfälligkeit reduziert. Die Intervalle der Reinigung und Pflege sind vom Ausmass der chemischen und mechanischen Belastung der Umgebung abhängig. Sie sind jedoch jährlich oder nach 50'000 Öffnungen mindestens 1 Mal durchzuführen.

Zuständigkeit
Die Wartung der Brandschutztüren ist Sache des Betreibers.
Dem Betreiber bleibt es überlassen, mit dem Türhersteller einen Wartungsvertrag abzuschliessen.

Um mögliche Fehler rechtzeitig erkennen und beheben zu können, sowie eine optimale Lebensdauer zu erzielen, empfehlen wir eine regelmässige Sicherheitsprüfung und Wartung der Brandschutzabschlüsse in Gebäuden. Dem Betreiber kann bei Sach- oder Personenschäden bei nicht ordnungsgemäss geprüften Brandschutzabschlüssen eine Haftung drohen.

Allgemeines
Die Kontrollen müssen durch einen Fachmann oder durch eine instruierte/sachkundige Person (z.B. Hauswart) durchgeführt werden. Defekte oder mangelhafte Teile dürfen nur von einem autorisierten Fachbetrieb ausgewechselt werden. Die Kontrollen und Massnahmen sind in einem Protokoll (z.B. Prüfbuch) festzuhalten.

Directives relatives à la mise en œuvre

9 Données de construction / exigences statiques

Tous les éléments, y inclus les raccords, doivent absorber toutes les forces agissant sur eux et pouvoir les diffuser aux structures porteuses de la construction. Les raccords et les fixations doivent être construits de sorte à ce qu'une compensation de tolérances latérales soit possible par rapport au gros oeuvre.

Nous signalons que les normes et directives respectives en vigueur dans les divers pays et spécifiques à ceux-ci (telles que SIA, DIN, CSFF) doivent être appliquées.

10 Aptitude de fonctionnement / maintenance

Les ferrements mobiles doivent être entretenus, afin que l'usure et leur sensibilité à la corrosion soient réduites. Les intervalles de nettoyage et d'entretien dépendent de l'étendue de la sollicitation chimique et mécanique de l'environnement. Ils doivent toutefois être effectués au moins une fois par an ou après 50'000 ouvertures.

Responsabilité
L'entretien des portes coupe-feu est du ressort de l'exploitant.
L'exploitant est libre de conclure un contrat d'entretien avec le fabricant des portes.

En vue d'une détection et d'une suppression précoces d'éventuels défauts, et d'une durée de vie optimale, il est recommandé d'effectuer un contrôle de sécurité et une maintenance périodiques des fermetures coupe-feux dans les bâtiments. Si les fermetures coupe-feux ne font pas l'objet d'une vérification correcte, l'exploitant risque de devoir répondre des dommages matériels et corporels provoqués.

Généralités
Les contrôles doivent être effectués par un spécialiste ou une personne instruite/compétente (ex: concierge). Les pièces endommagées ou défectueuses ne doivent être remplacées que par une entreprise spécialisée et autorisée. Les contrôles et les mesures prises doivent faire l'objet d'un protocole (ex: livret de contrôle).

General processing guidelines

9 Structural conditions / Static requirements

All elements, including connecting parts, must be able to absorb the forces likely to affect them and transmit these to the supporting system of the structure. The connections and fastenings must be constructed in such a way that tolerance compensation is possible in relation to the shell.

We would like to point out that the national standards and directives in force in the country concerned (e.g. SIA, DIN, SZFF) must be applied.

10 Operational efficiency / Maintenance

Mobile fittings have to be maintained in order to keep down wear and tear as well as reduce susceptibility to corrosion. The intervals between cleaning and maintenance jobs depend on the extent of chemical and mechanical environmental stress. However, they should be carried out at least once a year or after 50'000 openings.

Responsibility
The user is responsible for the maintenance of the fire doors.
The user may, at his own discretion, conclude a service contract with the manufacturer.

In order to detect possible faults in good time, and achieve optimum service life, we recommend regular safety inspections and maintenance of the fire resistant screens in buildings. In case of damage to property or personal injury, the operator may liable to pay damages if fire resistant screens were not tested properly.

General
Inspections must be carried out by an expert or a trained/competent person (e.g. janitor). Defective or faulty parts may only be changed by an authorised specialist company. The inspections and measures taken must be recorded in a log (e.g. inspection book).

Allgemeine Verarbeitungsrichtlinien

Detaillierte Informationen und Dokumente zur Inbetriebnahme und Wartung stehen auf unserer Website www.forster-profile.ch zur Verfügung.



- Montage- und Wartungsanleitung für Fenster und Türen



- Ergänzende Montage- und Wartungsanleitung für Feuer- und Rauchschutzabschlüsse



- Bedienungs- und Sicherheitsanleitung für Fenster und Türen

Directives relatives à la mise en œuvre

Des informations détaillées et des documents pour la mise en service et la maintenance sont disponibles sur notre site web www.forster-profile.ch.



- Instructions de montage et de maintenance pour fenêtres et portes



- Instructions complémentaires de montage et de maintenance pour cloisons coupe-feux et pare-flammes



- Instructions d'emploi et de sécurité pour fenêtres et portes

General processing guidelines

Detailed information and documents to commissioning and maintenance are available on our website www.forster-profile.ch.



- Installation and maintenance instructions for windows and doors



- Additional installation and maintenance instructions for fire and smoke protection closures



- Operating and safety manual for windows and doors

Platz für Notizen

Espace pour les notes

Space for memos

Allgemeine Hinweise

Die Forster-Profilstahlrohr-Serien und das entsprechende Zubehör sind für unterschiedliche Anwendungsmöglichkeiten im Metall- und Fassadenbau entwickelt. Die Serien sind bestimmt für die Verarbeitung durch Fachbetriebe des Metallbaus, der Fensterherstellung und dergleichen, welche vertraut sind mit den anerkannten Regeln der Technik, insbesondere auf dem Gebiet des Metall-, Türen-, Fenster- und Fassadenbaus und bei denen die Kenntnisse aller einschlägigen Normen, Richtlinien und Verarbeitungshinweise der Profillieferanten vorausgesetzt werden kann.

Alle von uns herausgegebenen Unterlagen, die sich mit der Kombination, dem Zusammenbau, der Anordnung, Verarbeitung, Veredelung und Montage der angebotenen Artikel befassen, sind freiwillige Dienstleistungen, die dem Facharbeiter Anregungen und Vorschläge bieten sollen oder aber einen Bericht über bereits ausgeführte Kombinationen und Anlagen zum Inhalt haben. Dabei muss der Facharbeiter bei Benutzung solcher Unterlagen stets selber kritisch prüfen, ob die hier gemachten Vorschläge für seinen Fall in jeder Hinsicht geeignet und zutreffend sind, da die Vielzahl der in der Praxis vorkommenden Einbau- und Belastungsfälle in derartigen Unterlagen nicht erfasst werden kann.

Généralités

Les séries de profilés en acier Forster et les accessoires correspondants sont développés en vue d'offrir diverses possibilités d'applications pour les constructions métalliques et les façades. Ces séries sont destinées à la mise en œuvre par des entreprises spécialisées dans la construction métallique, la fabrication de fenêtres et autres secteurs similaires, et qui connaissent les règles reconnues de la technique, notamment dans le domaine de la construction de portes, fenêtres et façades métalliques, et qui disposent des connaissances nécessaires sur toutes les normes, directives et indications de mise en œuvre applicables des fournisseurs de profilés.

Tous les documents publiés par nos soins et qui portent sur les possibilités de combinaison, l'assemblage, l'implantation, la mise en œuvre, la finition et le montage des articles que nous proposons, constituent des prestations de plein gré censées fournir au spécialiste des suggestions et des solutions ou rendre compte des combinaisons et installations déjà réalisées. En utilisant cette documentation, le spécialiste devra toujours l'examiner de manière critique et vérifier que les propositions qu'elle présente sont bien pertinentes et adaptées à son propre cas à tous égards, car il est impossible de résumer dans une documentation de ce type la multitude des cas de figure rencontrés dans la pratique tant en termes d'installations que de sollicitations.

General advice

Forster's series of profiled steel sections and the corresponding accessories have been developed for a wide range of applications in the manufacture of metal structures and façades. These series are designed for processing by specialist firms in the metal-working industry, window construction and similar, who are familiar with the appropriate technical standards, particularly in the field of metal working, door, window and façade construction and where an adequate knowledge of all relevant standards, directives and suppliers' processing instructions can safely be assumed.

All the documentation published by us concerning the combination, erection, arrangement, processing, refinement and assembly of the articles on offer are voluntary services intended as suggestions and ideas for the expert, or else represent a report on combinations and installations already assembled. In all cases when using this documentation, the expert must always critically study whether the suggestions and ideas are suitable and appropriate for the case in point, since loads and stresses vary so greatly that it is impossible in this kind of documentation to cover every eventuality occurring in practice.

Allgemeine Hinweise

Technische Beratung bei Planung und Projektierung

Die kostenlose technische Beratung bei Planung und Projektierung sind weder als Haupt- noch als Nebenpflicht Gegenstand unserer Angebotes bzw. des Kaufvertrages. Die Forster Profilsysteme AG hat diesbezüglich keinen Rechtsbindungswillen.

Alle Anregungen, Ausschreibungs-, Konstruktions- und Einbauvorschläge, statische Berechnungen, Materialkalkulationen, etc., die im Rahmen der Beratung und Diskussion, in Skizzenform, Zeichnungen, Schriftwechsel oder Ausarbeitung von Mitarbeitern unseres Hauses gemacht werden, erfolgen nach bestem Wissen und sind als kostenlose und unverbindliche Dienstleistung zu verstehen, für die wir keine Haftung übernehmen. Die Planungshoheit liegt jederzeit ausschliesslich beim Bauherrn und Architekten. Bauseitige Vorgaben werden durch die Forster Profilsysteme AG nicht geprüft.

Werden verbindliche Auskünfte erwünscht, insbesondere über den Einbau der Elemente und über bauphysikalische Probleme, wie z. B. Statik, Befestigung, Wärme-, Feuchtigkeits-, Brand-, Rauch- oder Schallschutz, etc. oder über den Einbau von Komponenten anderer Hersteller in den Fassaden- bzw. Metallbaukonstruktionen von Forster Profilsysteme AG muss ein gesonderter entgeltlicher Beratervertrag in schriftlicher Form abgeschlossen werden.

Généralités

Conseil technique lors de la planification et de l'établissement du projet

Le conseil technique gratuit fourni lors de la planification et de l'établissement du projet ne constitue ni une obligation principale ni une obligation secondaire de notre offre ou du contrat de vente. Forster Systèmes de profilés SA n'exprime pas la volonté de se lier juridiquement à ce sujet.

Toutes les idées, propositions de soumission, de construction et de montage, de même que tous les calculs statiques, calculs de matériel, etc. fournis par nos collaborateurs dans le cadre des prestations de conseil ou discussions, sous forme de croquis, de dessins, de correspondance ou d'une étude, sont donnés en toute bonne foi et s'entendent comme service gratuit non contractuel pour lequel nous déclinons toute responsabilité. A tout moment, la planification relève exclusivement des compétences du maître de l'ouvrage et de l'architecte. Forster Systèmes de profilés SA ne contrôle pas les exigences incombant à ces autorités.

La demande de renseignements contractuels, notamment en relation avec le montage des éléments et les questions relatives à la physique des constructions, comme la statique, la fixation, la protection contre la chaleur, l'humidité, le feu ou le bruit, etc. ou concernant le montage de composants d'autres fabricants dans les façades ou les constructions métalliques de Forster Systèmes de profilés SA exige la conclusion d'un contrat de conseil payant établi séparément par écrit.

General advice

Technical support in planning and project work

Free of charge technical consultation during planning and project preparation does not form part of our quotation or contract of sale as either a primary or secondary obligation. Forster Profile Systems Ltd. has no intention to create legal relations in this regard.

All ideas, suggestions for tender, design and installation, static calculations, material calculations, etc. provided within the context of consultation and discussion, in the form of sketches, drawings, correspondence or plans drawn up by our employees are made to the best of our knowledge and ability and shall be considered a free of charge service without any obligation for which we do not accept any liability. The responsibility for the planning lies at all times exclusively with the builder and architect. On-site plans will not be verified by Forster Profile Systems Ltd.

A separate consultancy contract involving payment must be concluded in the written form if information of a binding nature is required, especially with regard to the installation of the elements and the building physics involved in problems such as static calculations, fastenings, thermal insulation, waterproofing, fire, smoke and sound protection, etc. or to the installation of components from other manufacturers in the façades or metal structures from Forster Profile Systems Ltd.

Allgemeine Hinweise

Gewährleistung

Sofern nicht schriftlich eine andere Vereinbarung getroffen wird, besteht eine Gewährleistung der Forster Profilsysteme AG lediglich im Rahmen der dem Käufer bekannten „Allgemeinen Verkaufs- und Lieferbedingungen der Forster Profilsysteme AG".

Voraussetzung ist in jedem Fall die ausschliessliche Verwendung von Original-Konstruktionsteilen (Profile, Zubehör, Beschläge) aus dem jeweils gültigen Forster-Lieferprogramm. Für Mängel, welche aus der Verwendung von anderen Artikeln als Forster-Original-Artikeln herrühren, wird jede Haftung abgelehnt. Werden nicht Original-Konstruktionsteile zur Anwendung gebracht, verlieren die an Forster verliehenen Prüfzeugnisse und Atteste für derartig ausgeführte Konstruktionen ihre Gültigkeit.

Hinweis

Die Aktualität, Vollständigkeit oder Qualität der Inhalte wird nicht gewährleistet. Wir behalten uns vor, den technischen Inhalt ohne Vorankündigung ganz oder teilweise zu ändern. Für Schäden irgendwelcher Art, die aufgrund der Verwendung der Informationen in diesem Dokument oder aufgrund deren Unvollständigkeit entstehen, wird keinerlei Haftung übernommen.

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Généralités

Garantie

Dans la mesure où aucune autre convention par écrit n'a été passée, la garantie de la société Forster Systèmes de profilés SA n'est applicable que dans le cadre des «Conditions générales de vente et de livraison de Forster Systèmes de profilés SA», qui sont connues de l'acheteur.

Cela suppose dans chaque cas l'utilisation exclusive d'éléments de construction d'origine (profilés, accessoires, quincailleries) provenant du programme de fournitures Forster respectivement applicable. Toute responsabilité est déclinée dans le cas de vices résultant de l'utilisation de tout autre article que les éléments d'origine Forster. Dans l'éventualité où les éléments utilisés ne sont pas des pièces de construction d'origine, les certificats d'essais et attestations attribués à Forster pour les constructions de ce type perdent toute validité.

Remarque

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Le non-respect des informations spécifiques aux produits et générales qui sont consultables sur le site du fabricant dans leur version actualisée, en particulier concernant l'utilisation conforme aux dispositions, les consignes de sécurité, les caractéristiques et l'entretien du produit, de même que les obligations d'informations et d'instructions, dégage le fabricant de sa responsabilité du fait des produits.

General advice

Warranty

Unless a written agreement on the contrary has been concluded, the warranty granted by Forster Profile Systems Ltd. applies solely to the extent of the "General Conditions of Sale and Delivery of Forster Profile Systems Ltd." with which the customer is already familiar.

In all cases the warranty only applies provided that original construction parts (profiles, accessories, fittings) are used from the currently valid Forster range. All liability is declined for any damage arising from the use of articles other than Forster original articles. If articles other than Forster original articles are used, test certificates and attestations granted to Foster for constructions built using such articles are deemed to be invalid.

Note

The up-to-dateness, completeness or quality of the contents are not guaranteed. We reserve the right to make technical alterations in the content wholly or partially with no prior notice. We are not liable for damages of any kind, which arise from the use of the information in this document or on the basis of its incompleteness.

The non-observance of the information on the home page of the manufacturer which is currently retrievable, specific for the product, as well as general, in particular with regard to the use for the purpose intended, safety regulations, product performance, product maintenance as well as the duty to inform and instruct, releases the manufacturer from his liability for his product.

Platz für Notizen

Espace pour les notes

Space for memos

Zulassungen / Klassifizierungsbericht

Bitte legen Sie die in Ihrem Land gültigen Zulassungen und Klassifizierungsberichte in dieses Kapitel.
Jeweils aktuelle Informationen erhalten Sie unter www.forster-profile.ch/downloads.

Homologations / Rapport de classification

Vous pouvez insérer les homologations conformes à la réglementation en vigueur de votre pays dans ce châpitre.
Des informations actuelles sont disponibles directement sur www.forster-profile.ch/téléchargement.

Certificates / Classification report

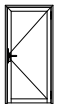
Please place the certificates valid in your country in this chapter.
You will always get up to date information under www.forster-profile.ch/downloads.

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System unico EI30 Tür		
Systemübersicht		3.1.1 - 3.1.6
Profile		3.2.1 - 3.2.10
Beschläge		3.3.1 - 3.3.64
Zubehör		3.4.1 - 3.4.18
Anwendungszeichnungen		3.5.1 - 3.5.32
	Systemschnitte	3.5.1 - 3.5.9
	Systempläne	3.5.10 - 3.5.15
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	Bänder, Drücker, Türschliesser	3.7.30 - 3.7.98
Verarbeitung Zubehör		3.8.1 - 3.8.46

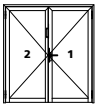
Système unico EI30 porte		
Tableau du système		3.1.1 - 3.1.6
Profilés		3.2.1 - 3.2.10
Quincaillerie		3.3.1 - 3.3.64
Accessoires		3.4.1 - 3.4.18
Coupes et plans		3.5.1 - 3.5.32
	Coupes du système	3.5.1 - 3.5.9
	Plans du système	3.5.10 - 3.5.15
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System unico EI30 door		
Synopsis of system		3.1.1 - 3.1.6
Profiles		3.2.1 - 3.2.10
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	Additional locking	3.7.26 - 3.7.29
	Hinges, handles, door closers	3.7.30 - 3.7.98
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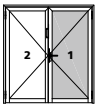
Symbole



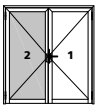
1-flügelige Tür ohne Antipanik-Funktion
Porte à 1 vantail sans fonction anti-panique
Single-leaved door without anti-panic-function



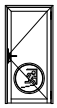
2-flügelige Tür ohne Antipanik-Funktion
Porte à 2 vantaux sans fonction anti-panique
Double-leaved door without anti-panic-function



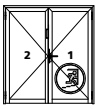
2-flügelige Tür, Verwendung Forster Artikel auf Gangflügel
Porte à 2 vantaux, utilisation des articles Forster sur le vantail de service
Double-leaved door, use Forster articles for opening leaf



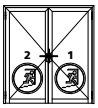
2-flügelige Tür, Verwendung Forster Artikel auf Standflügel
Porte à 2 vantaux, utilisation des articles Forster sur le vantail semi-fixe
Double-leaved door, use Forster articles for fixed leaf



1-flügelige Tür mit Antipanik-Funktion
Porte à 1 vantail avec fonction anti-panique
Single-leaved door with anti-panic-function



2-flügelige Tür mit Antipanik-Funktion auf Gangflügel
Porte à 2 vantaux avec fonction anti-panique sur le vantail de service
Double-leaved door with anti-panic-function only on opening leaf



2-flügelige Tür mit Antipanik-Funktion auf Stand- und Gangflügel
Porte à 2 vantaux avec fonction anti-panique sur le vantail de service et le vantail semi-fixe
Double-leaved door with anti-panic-function on opening and fixed leaf

Symboles

Symbols



Türen ohne Antipanik-Anforderung
Portes sans exigence anti-panique
Doors without anti-panic requirement



Türen mit Antipanik-Anforderung
Portes avec exigence anti-panique
Doors with anti-panic requirement



Artikel gemäss Norm EN 179
Référence selon norme EN 179
Article according to EN 179



Artikel gemäss Norm EN 1125
Référence selon norme EN 1125
Article according to EN 1125

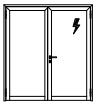
Symbole



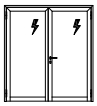
Position E-Öffner
Position ouverture électrique
Position electric door opener



1-flügelige Tür mit E-Öffner
Porte à 1 vantail avec ouverture électrique
Single-leaved door with electro door opener



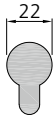
2-flügelige Tür mit E-Öffner auf Gangflügel
Porte à 2 vantaux avec ouverture électrique sur le vantail de service
Double-leaved door with electric door opener only on active leaf



2-flügelige Tür mit E-Öffner auf Stand- und Gangflügel
Porte à 2 vantaux avec ouverture électrique sur le vantail de service et vantail semi-fixe
Double-leaved door with electro door opener on active and inactive leaf



Profilzylinder (PZ)
Cylindre profilé (CP)
Profile cylinder (PC)



Rundzylinder (RZ)
Cylindre rond (CR)
Round cylinder (RC)

ZV **Abkürzung für Zusatzverriegelung**
Abréviation de verrouillage supplémentaire
Abbreviation for additional locking

Symboles

Symbols

Zeichnungsdaten – dwg

Die in dieser Dokumentation gezeigten Schnitte und Pläne mit nachstehenden Bezeichnungen stehen als dwg-Daten unter **www.forster-profile.ch/downloads** zur Verfügung.

In der PDF-Version der Dokumentation sind diese Zeichnungen mit einem Link versehen.

un_ep_xxxx Einbaupläne
un_kd_xxxx Konstruktionsdetails
un_sd_xxxx Systemdetails
un_sp_xxxx Systempläne
un_vv_xxxx Verglasungsdetails
un_wa_xxxx Wandanschlüsse

Dessins en dwg

Les coupes et les plans présentés dans cette documentation avec les désignations ci-dessous sont disponibles au format DWG sous **www.forster-profile.ch/téléchargement.**

Dans la version PDF de la documentation, ces dessins sont dotés d'un lien.

un_ep_xxxx Plans de la mise en œuvre
un_kd_xxxx Détails de construction
un_sd_xxxx Coupes du système
un_sp_xxxx Plans du système
un_vv_xxxx Détails de vitrage
un_wa_xxxx Raccords muraux

Drawing data – dwg

The sections and plans in this documentation with the below-mentioned designations are available as DWG files on **www.forster-profile.ch/downloads.**

In the PDF version of the documentation, these drawings are provided with a link.

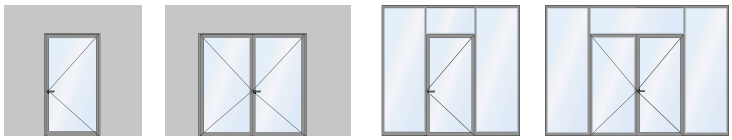
un_ep_xxxx Processing plans
un_kd_xxxx Construction details
un_sd_xxxx System sections
un_sp_xxxx System plans
un_vv_xxxx Glazing details
un_wa_xxxx Wall abutments

Platz für Notizen

Espace pour les notes

Space for memos

Das System auf einen Blick



Ausgangsmaterial
- Stahl ZM (Zink Magnesium)
- Edelstahl geschliffen

Abmessungen
- Schmalste Profilquerschnitte: Kastenbreite 30 / 50 mm
- Blendrahmen-/Flügelmass ab 110 mm
- Bautiefe Flügel und Rahmen 70 mm, flächenbündig
- Wandstärke 1.5 mm

Harmonisierung
- Gleiche Ansicht wie Forster presto und Forster fuego light

Öffnungsarten
- Anschlagtüren nach innen und nach aussen öffnend
- Antipaniktüren

Schloss und Beschlag
- Auf das System abgestimmte Beschläge, auch für Fluchttüren nach EN 179 und EN 1125
- Elegante Edelstahl-Griffgarnituren und schlanke Rollentürbänder
- Aufgesetzte Türschliesser in Kopf-Normalmontage innen/aussen
- Integrierte, unsichtbare Türbänder

Schutz und Sicherheit
- CE-Kennzeichnung nach EN 16034 Brand- und Rauchschutz und Kombinationen
- CE-Kennzeichnung nach EN 14351-1

Verarbeitung
- Äusserst wirtschaftliche Fertigung ohne Sondereinrichtung

Füllungen
- Transparent
- Opak (Paneele)

Für Festverglasungen gelten nationale Zulassungen.

Le système en un coup d'œil

Matériau de base
- Acier ZM (zinc-magnésium)
- Acier inox meulé

Dimensions
- Finesse des profilés : largeur des corps 30 / 50 mm
- Dimensions du cadre dormant / vantail à partir de 110 mm
- Profondeur du vantail et dormant de 70 mm, affleuré
- Épaisseur 1,5 mm

Harmonisation
- Façes vue identiques: Forster presto et Forster fuego light

Genres d'ouvertures
- Portes à battues ouvrant vers l'intérieur et vers l'extérieur
- Portes anti-panique

Serrures et quincailleries
- Quincailleries harmonisées au système, aussi pour portes de secours selon E N 179 et EN 1125
- Garnitures de poignées en acier inox aux formes élégantes et paumelles de portes élancées
- Ferme-portes apparents en montage normal et inversé intérieur/extérieur
- Paumelles intégrées invisibles

Protection et sécurité
- Marquage CE selon EN 16034 Coupe-feu et pare-fumée et combinaisons
- Marquage CE selon EN 14351-1

Finitions
- Fabrication extrêmement économique sans outillage spécial

Remplissages
- Transparent
- Opaque (panneaux)

Les homologations nationales s'appliquent aux vitrages fixes.

The system at a glance

Base material
- Steel ZM (zinc-magnesium)
- Stainless steel grinded

Dimensions
- Extremely slim profile cross-sections: box width 30 / 50 mm
- Outer frame / leaf size from 110 mm
- Structural depth leaf and frame 70 mm, flush-fitting
- Wall thickness 1,5 mm

Compatibility
- Same constructions widths as Forster presto and fuego light

Types of openings
- Leaf doors opening inwards and out-wards
- Panic version door

Locks and Fittings
- Fittings to match the system, also for emergency doors according to EN 179 and EN 1125
- Attractively shaped stainless steel handles set and slender roller door hinges
- Attached door closers in standard transom mounting indoors/outdoors
- Integrated, concealed hinges

Protection and safety
- CE-Marking according to EN 16034 fire and smoke protection and combinations
- CE-Marking according to EN 14351-1

Processing
- Extremely economical manufacture with no special machinery needed.

Fillings
- Transparent
- Opaque (panels)

National approvals apply to fixed glazing.

Übersicht Eigenschaften nach EN 16034

Tableau des caractéristiques selon EN 16034

Synopsis of characteristics according to EN 16034

Geprüfte Eigenschaften **Caractéristiques testées** **Tested characteristics**		**Normen** **Normes** **Standards**	**Türen – Klasse / Wert** **Portes – Classe / Valeur** **Doors – Class / Value**
Nach EN 16034	**Selon EN 16034**		**According to EN 16034**
	Brandschutz Résistance aux feu Fire resistance	**EN 1634-1** **EN 13501-2**	**$EI_2$30**
	Rauchschutz Etanchéité à la fumée Smoke control	**EN 1634-3** **EN 13501-2**	**S_a / S_{200}**
	Fähigkeit zur Freigabe Capacité au déclenchement Ability to release	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Dauerhaftigkeit der Fähigkeit zur Freigabe Endurance de la capacité au déclenchement Durablility of he ability to release	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Selbstschliessung Fermeture automatique Self-closing	**EN 16034** **EN 13501-2**	**C**
	Dauerhaftigkeit der Selbstschliessung gegenüber Qualitätsverlust Endurance de la fermeture automatique contre la dégradation Durability of self-closing against degradation	**EN 1191** **EN 16034**	**5** (200'000 Zyklen / cycles)
	Dauerhaftigkeit der Selbstschliessung gegenüber Alterung (Korrosion) Endurance de la fermeture automatique contre le vieillissement (corrosion) Durability of self-closing against ageing (corrosion)	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**

Übersicht Eigenschaften nach EN 14351-1

Tableau des caractéristiques selon EN 14351-1

Synopsis of characteristics according to EN 14351-1

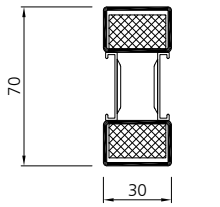
Geprüfte Eigenschaften Caractéristiques testées Tested characteristics		Normen Normes Standards	Türen – Klasse / Wert Portes – Classe / Valeur Doors – Class / Value
Nach EN 14351-1	**Selon EN 14351-1**		**According to EN 14351-1**
	Widerstand bei Windlast Résistance au vent Resistance to wind load	**EN 12211** **EN 12210**	**bis / jusqu'à / up to** **A3 / B3 / C3**
	Schlagregendichtheit Etanchéité à la pluie battante Watertightness	**EN 1027** **EN 12208**	**bis / jusqu'à / up to** **3A**
	Stossfestigkeit Résistance au chocs Impact resistance	**EN 13049**	**1 (200 Pa)**
	Fähigkeit zur Freigabe Capacité au déclenchement Ability to release	**EN 179** **EN 1125**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Schallschutz Performance acoustique Acoustic performance	**EN 717-1**	**bis / jusqu'à / up to** **Rw 46 dB**
	Wärmedurchgangskoeffizient Coefficient de transmission thermique Thermal transmittance	**EN 10077-1**	**bis / jusqu'à / up to** **U_D 1.3 [W/(m²·K)]**
	Luftdurchlässigkeit Perméabilité à l'air Air permeability	**EN 1026** **EN 12207**	**bis / jusqu'à / up to** **4 (600 Pa)**
	Bedienkräfte Forces de manœuvre Operating forces	**EN 12217** **EN 12046-2**	**3**
	Mechanische Festigkeit Résistance mécanique Mechanical strength	**EN 947-950** **EN 1192**	**3**
	Barrierefreiheit Absence d'entrave au passage Barrier-free	**DIN 18040**	**Schwellenlose Ausführung /** **Execution sans seuil** **Execution without threshold**
	Differenzklimaverhalten Comportement entre climats différents Behaviour between different climates	**EN 12219** **EN 1121**	**3(d) / 3(e)**

EI30

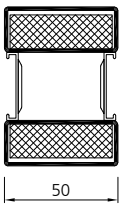
Stahl
Acier
Steel

Edelstahl
Acier inox
Stainless steel

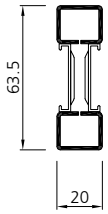
Systemübersicht — Tableau du système — Synopsis of system



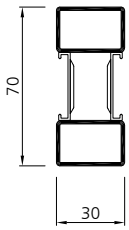
534.730 ZM
534.730 CrNi*



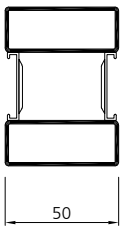
534.750 ZM
534.750 CrNi*



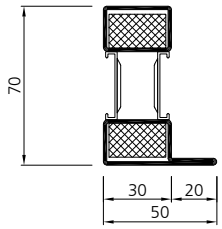
530.620**
530.620 ZM**
530.620 CrNi* **



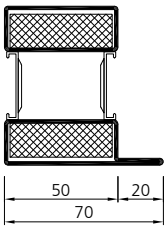
531.730**
531.730 ZM**
531.730 CrNi* **



531.750**
531.750 ZM**
531.750CrNi* **



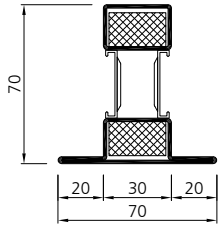
534.731 ZM
534.731 CrNi*



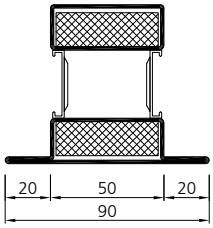
534.751 ZM
534.751 CrNi*

**** nur für Schwelle**
seulement pour seuil
only for bottom rail

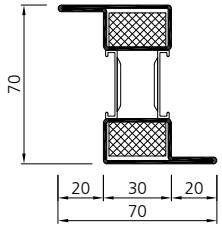
*** auf Anfrage**
sur demande
on request



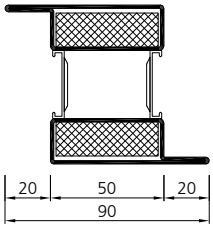
534.732 ZM*
534.732 CrNi*



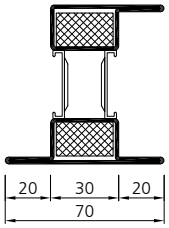
534.752 ZM
534.752 CrNi*



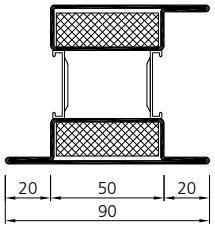
534.733 ZM*
534.733 CrNi*



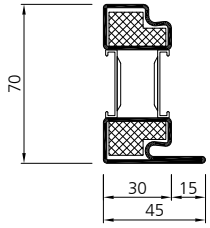
534.753 ZM
534.753 CrNi*



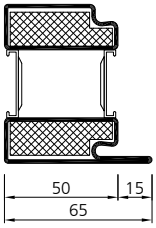
534.735 ZM *
534.735 CrNi*



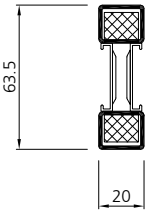
534.755 ZM
534.755 CrNi*



535.731 ZM*



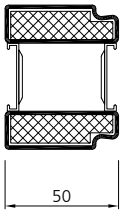
535.751 ZM
535.751 CrNi*



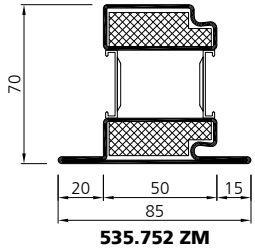
534.620 ZM
534.620 CrNi*



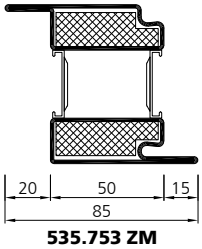
535.620 ZM



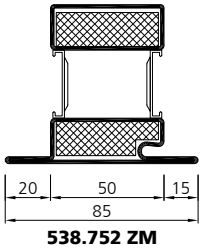
535.650 ZM
535.650 CrNi*



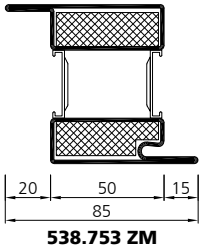
535.752 ZM
535.752 CrNi*



535.753 ZM
535.753 CrNi*



538.752 ZM
538.752 CrNi*



538.753 ZM
538.753 CrNi*

Systemübersicht | Tableau du système | Synopsis of system



907662
907664
(15 mm)



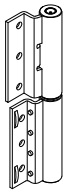
907667
907668
(15 mm)



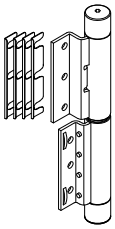
907663
(17 mm)



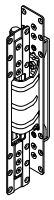
907669
(17 mm)



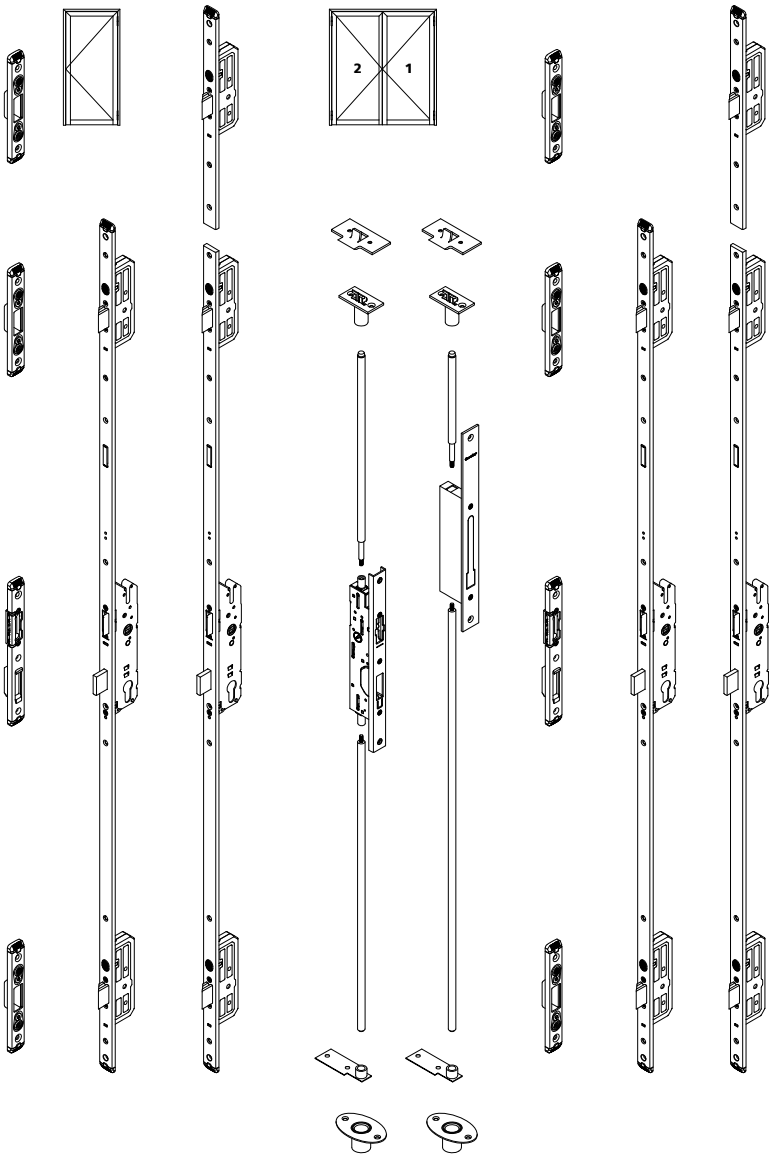
987612 - 987613
987623 - 987624
(12 mm)

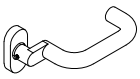


987680
987681
(13.5 mm)

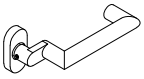


907740





907350



907351



907356



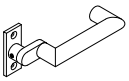
907352



907353



907327



907326



907329



907337



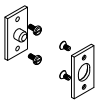
907335



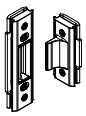
907338



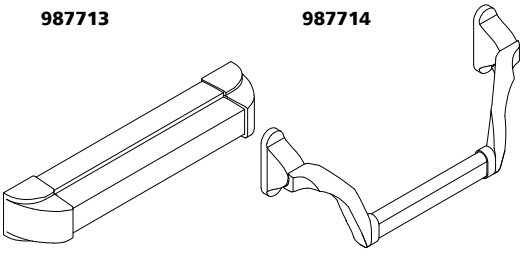
907336



987713



987714



987207 - 987210

907286 - 907289

* auf Anfrage / sur demande / on request

3

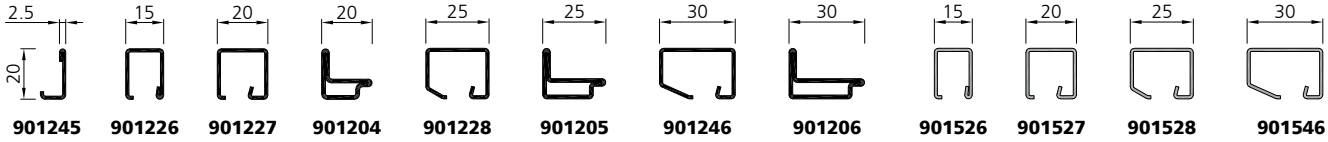
EI30

Stahl
Acier
Steel

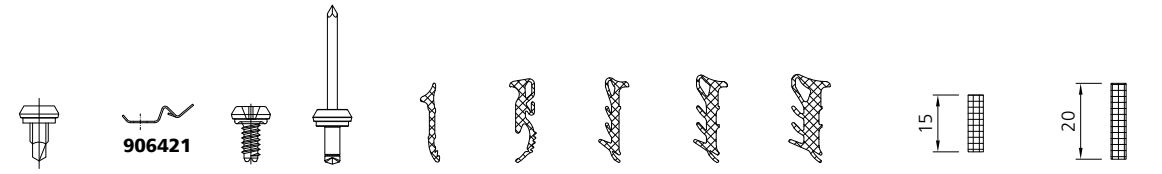
Edelstahl
Acier inox
Stainless steel

VBUT 3.1.6

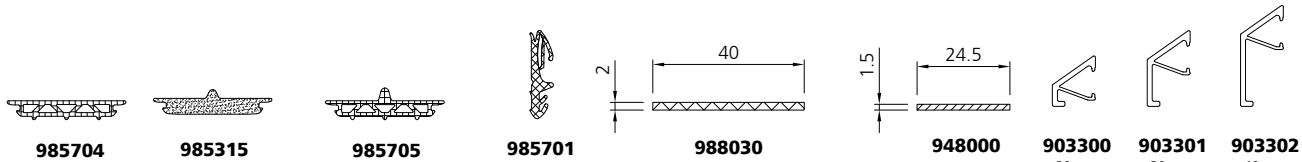
Systemübersicht — Tableau du système — Synopsis of system



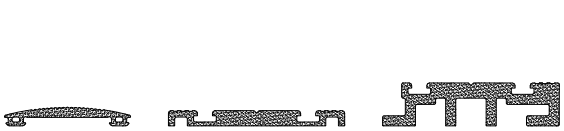
901245 **901226** **901227** **901204** **901228** **901205** **901246** **901206** **901526** **901527** **901528** **901546**



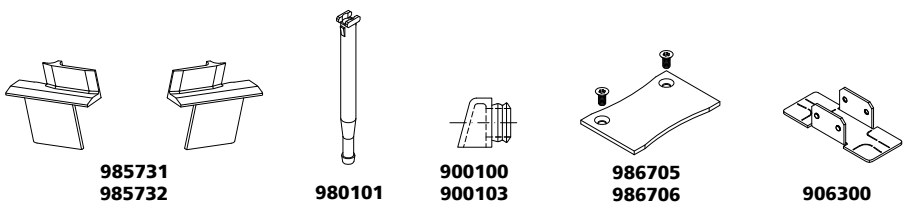
906577 (VE 100 Stk/pcs)
906578 (VE 1000 Stk/pcs)
906579 (Mag. 200 Stk/pcs)
906421
906583 **906574**
905712 2 mm
985702 5 mm
905784 3-4 mm
905785 5-6 mm
905786 7-8 mm
948003 3 mm
948004 4 mm
948005 5 mm
948006 6 mm
948007 3 mm
948008 4 mm
948009 5 mm
948010 6 mm



985704 **985315** **985705** **985701** **988030** **948000** **903300** 20 mm **903301** 30 mm **903302** 40 mm



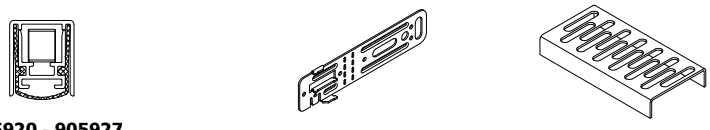
985721 **984851** **984850**



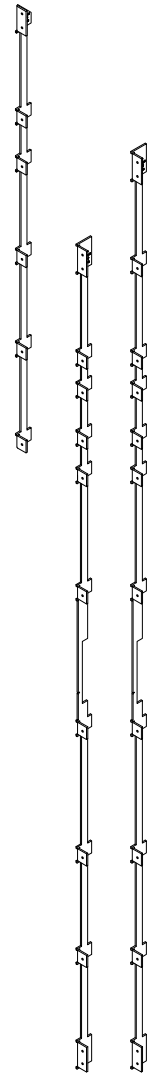
985731
985732
980101
900100
900103
986705
986706
906300



905021 **905010 - 905019** **987039** **987040** **987081**



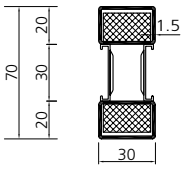
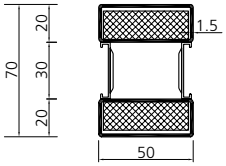
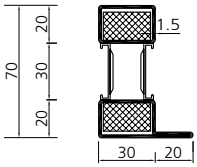
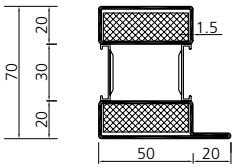
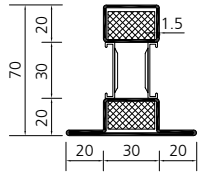
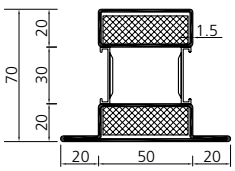
905920 - 905927
905930 - 905937
987073
907008



987035 - 987037

09/23

Profile / Stahl — Profilés / Acier — Profiles / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**534.730**	ZM	6000	3.391			1.71	1.41	35.00	15.00	0.235
			- 1999 mm		13.34	5.00					
			2000 - 2499 mm		15.04	5.17					
			2500 - 2999 mm		16.01	5.25					
			3000 - 3499 mm		16.98	5.30					
			3500 - 3999 mm		17.24	5.33					
			4000 - 6000 mm		17.42	5.35					
	**534.750**	ZM	6000	5.046			6.09	2.44	35.00	25.00	0.315
			- 1999 mm		17.47	7.03					
			2000 - 2499 mm		20.31	7.33					
			2500 - 2999 mm		22.02	7.48					
			3000 - 3499 mm		23.10	7.57					
			3500 - 3999 mm		23.81	7.62					
			4000 - 6000 mm		24.30	7.63					
	**534.731**	ZM	6000	3.839			4.44	1.58	29.11	19.38	0.270
			- 1999 mm		16.55	5.60					
			2000 - 2499 mm		18.95	5.78					
			2500 - 2999 mm		20.35	5.87					
			3000 - 3499 mm		21.21	5.92					
			3500 - 3999 mm		21.77	5.95					
			4000 - 6000 mm		22.15	5.95					
	**534.751**	ZM	6000	5.507			11.78	3.15	30.69	29.49	0.310
			- 1999 mm		20.40	7.65					
			2000 - 2499 mm		24.02	7.96					
			2500 - 2999 mm		26.26	8.12					
			3000 - 3499 mm		27.69	8.22					
			3500 - 3999 mm		28.64	8.27					
			4000 - 6000 mm		29.30	8.31					
	**534.732***	ZM	6000	4.263			9.17	2.62	25.04	35.00	0.310
			- 1999 mm		18.68	5.93					
			2000 - 2499 mm		21.60	6.12					
			2500 - 2999 mm		23.34	6.21					
			3000 - 3499 mm		24.42	6.27					
			3500 - 3999 mm		25.13	6.30					
			4000 - 6000 mm		25.62	6.32					
	**534.752**	ZM	6000	5.942			20.57	4.57	27.37	45.00	0.350
			- 1999 mm		22.51	8.04					
			2000 - 2499 mm		26.76	8.37					
			2500 - 2999 mm		29.44	8.53					
			3000 - 3499 mm		32.32	8.63					
			3500 - 3999 mm		33.13	8.69					
			4000 - 6000 mm		33.70	8.73					



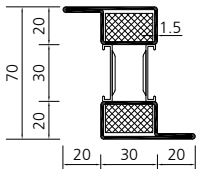
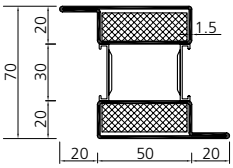
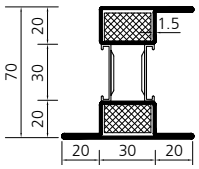
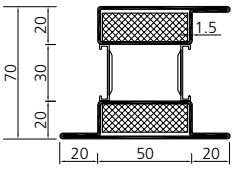
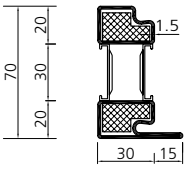
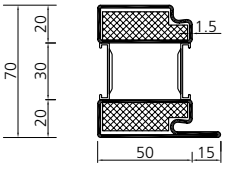
Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

* auf Anfrage / sur demande / on request

Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**534.733***	ZM	6000	4.269			4.44	1.58	35.00	35.00	0.310
			- 1999 mm		20.57	8.58					
			2000 - 2499 mm		24.02	8.85					
			2500 - 2999 mm		26.10	8.99					
			3000 - 3499 mm		27.41	9.07					
			3500 - 3999 mm		28.27	9.12					
			4000 - 6000 mm		28.87	9.15					
	**534.753**	ZM	6000	5.968			20.57	4.57	35.00	45.00	0.350
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**534.735**	ZM	6000	4.711			9.17	2.62	34.12	35.64	0.350
			- 1999 mm		23.28	9.04					
			2000 - 2499 mm		27.56	9.34					
			2500 - 2999 mm		30.21	9.48					
			3000 - 3499 mm		31.90	9.56					
			3500 - 3999 mm		33.03	9.61					
			4000 - 6000 mm		33.81	9.64					
	**534.755**	ZM	6000	6.403			20.57	4.57	31.58	48.57	0.390
			- 1999 mm		26.27	11.04					
			2000 - 2499 mm		31.80	11.49					
			2500 - 2999 mm		35.40	11.72					
			3000 - 3499 mm		37.77	11.85					
			3500 - 3999 mm		38.12	11.93					
			4000 - 6000 mm		38.78	11.56					
	**535.731**	ZM	6000	3.738			4.44	1.58	27.97	17.99	0.280
			- 1999 mm		16.55	5.60					
			2000 - 2499 mm		18.95	5.78					
			2500 - 2999 mm		20.35	5.87					
			3000 - 3499 mm		21.21	5.92					
			3500 - 3999 mm		21.77	5.95					
			4000 - 6000 mm		22.15	5.95					
	**535.751**	ZM	6000	5.408			11.78	3.15	29.78	28.68	0.320
			- 1999 mm		20.40	7.65					
			2000 - 2499 mm		24.02	7.96					
			2500 - 2999 mm		26.26	8.12					
			3000 - 3499 mm		27.69	8.22					
			3500 - 3999 mm		28.64	8.27					
			4000 - 6000 mm		29.30	8.31					



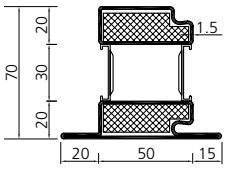
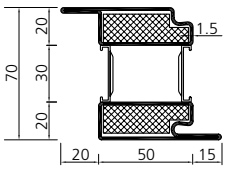
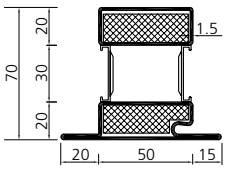
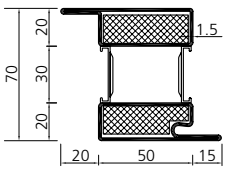
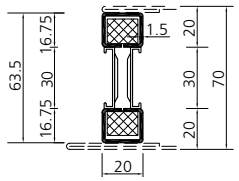
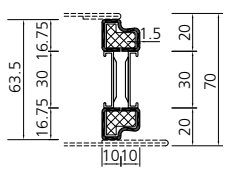
Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

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Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**535.752**	ZM	6000	5.851			20.57	4.57	26.65	44.39	0.350
			- 1999 mm		22.51	8.04					
			2000 - 2499 mm		26.76	8.37					
			2500 - 2999 mm		29.44	8.53					
			3000 - 3499 mm		32.32	8.63					
			3500 - 3999 mm		33.13	8.69					
			4000 - 6000 mm		33.70	8.73					
	**535.753**	ZM	6000	5.849			11.78	3.15	34.08	44.39	0.350
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**538.752**	ZM	6000	5.952			20.57	4.57	44.10	35.00	0.361
			- 1999 mm		22.51	8.04					
			2000 - 2499 mm		26.76	8.37					
			2500 - 2999 mm		29.44	8.53					
			3000 - 3499 mm		32.32	8.63					
			3500 - 3999 mm		33.13	8.69					
			4000 - 6000 mm		33.70	8.73					
	**538.753**	ZM	6000	5.970			11.78	3.15	44.10	36.10	0.361
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**534.620**	ZM	6000	2.257			0.60	0.60	31.75	10.00	0.200
			- 1999 mm		9.70	3.67					
			2000 - 2499 mm		10.71	3.77					
			2500 - 2999 mm		11.26	3.82					
			3000 - 3499 mm		11.59	3.85					
			3500 - 3999 mm		11.79	3.86					
			4000 - 6000 mm		11.93	3.87					
	**535.620**	ZM	6000	2.008			0.60	0.60	31.75	9.29	0.200
			- 1999 mm		9.70	3.67					
			2000 - 2499 mm		10.71	3.77					
			2500 - 2999 mm		11.26	3.82					
			3000 - 3499 mm		11.59	3.85					
			3500 - 3999 mm		11.79	3.86					
			4000 - 6000 mm		11.93	3.87					

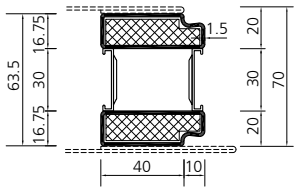
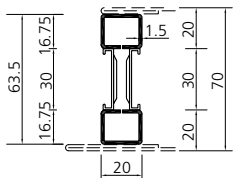
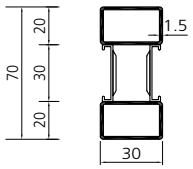
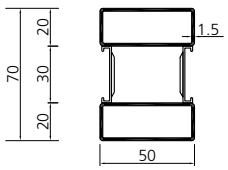


Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**535.650**	ZM	6000	4.042			5.78	2.31	31.75	24.47	0.260
			- 1999 mm		15.70	6.67					
			2000 - 2499 mm		18.25	6.95					
			2500 - 2999 mm		19.78	7.09					
			3000 - 3499 mm		20.74	7.17					
			3500 - 3999 mm		21.38	7.22					
			4000 - 6000 mm		21.81	7.23					
	**530.620****	ZM	6000	1.835			0.60	0.60	31.75	10.00	0.200
			- 1999 mm		9.70	3.67					
			2000 - 2499 mm		10.71	3.77					
			2500 - 2999 mm		11.26	3.82					
			3000 - 3499 mm		11.59	3.85					
			3500 - 3999 mm		11.79	3.86					
			4000 - 6000 mm		11.93	3.87					
	**531.730****	ZM	6000	2.460			1.71	1.41	35.00	15.00	0.235
			- 1999 mm		13.34	5.00					
			2000 - 2499 mm		15.04	5.17					
			2500 - 2999 mm		16.01	5.25					
			3000 - 3499 mm		16.98	5.30					
			3500 - 3999 mm		17.24	5.33					
			4000 - 6000 mm		17.42	5.35					
	**531.750****	ZM	6000	3.408			6.09	2.44	35.00	25.00	0.315
			- 1999 mm		17.47	7.03					
			2000 - 2499 mm		20.31	7.33					
			2500 - 2999 mm		22.02	7.48					
			3000 - 3499 mm		23.10	7.57					
			3500 - 3999 mm		23.81	7.62					
			4000 - 6000 mm		24.30	7.63					

** Nur für Schwelle / seulement pour le seuil / only for threshold



Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

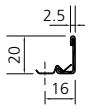
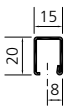
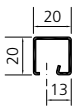
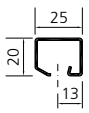
m = Material / Matériau / Material

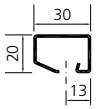
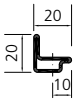
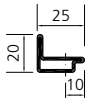
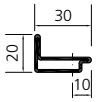
O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

Glashalteleisten aus Stahl

Parcloses en acier

Glazing beads of steel

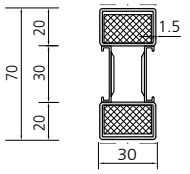
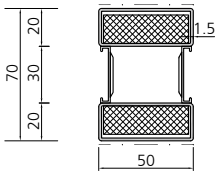
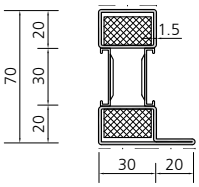
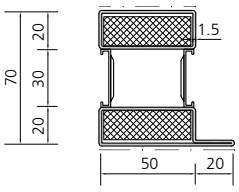
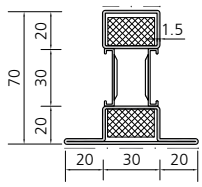
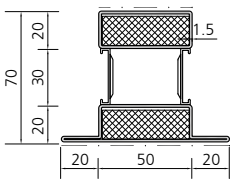
Profile Profilés Profiles (1:4)				
Art. Nr. art. no.	**901245**	**901226**	**901227**	**901228**
m	ZM			
L [mm]	6000			
G [kg/m]	0.329	0.568	0.657	0.734
O [m²/m]	0.038	0.059	0.067	0.075

Profile Profilés Profiles (1:4)				
Art. Nr. art. no.	**901246**	**901204**	**901205**	**901206**
m	ZM			
L [mm]	6000			
G [kg/m]	0.829	0.844	0.956	1.074
O [m²/m]	0.083	0.064	0.069	0.074

m = Material
Matériau
Material

O = Umlaufende Oberfläche per Laufmeter
Surface périphérique par mètre courant
Outlying surface per running meter

Profile Edelstahl — Profilés Acier inox — Profiles Stainless steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]	mo [cm]
	**534.730 CrNi***	CrNi 1.4301	6000	3.473			1.73	1.15	35.00	15.00	0.230	0.060
			- 1999 mm		14.07	5.10						
			2000 - 2499 mm		15.61	5.25						
			2500 - 2999 mm		16.47	5.32						
			3000 - 3499 mm		16.98	5.36						
			3500 - 3999 mm		17.30	5.25						
			4000 - 6000 mm		17.42	5.06						
	**534.750 CrNi***	CrNi 1.4301	6000	5.164			6.41	2.46	35.00	25.00	0.270	0.100
			- 1999 mm		18.62	7.17						
			2000 - 2499 mm		21.24	7.44						
			2500 - 2999 mm		22.76	7.57						
			3000 - 3499 mm		23.70	7.64						
			3500 - 3999 mm		24.31	6.66						
			4000 - 6000 mm		24.41	6.36						
	**534.731 CrNi***	CrNi 1.4301	6000	3.938			4.44	1.58	29.11	19.38	0.270	0.080
			- 1999 mm		17.55	5.71						
			2000 - 2499 mm		19.73	5.87						
			2500 - 2999 mm		20.97	5.95						
			3000 - 3499 mm		21.72	5.99						
			3500 - 3999 mm		22.20	5.96						
			4000 - 6000 mm		22.53	5.76						
	**534.751 CrNi***	CrNi 1.4301	6000	5.641			11.78	3.15	30.69	29.49	0.310	0.120
			- 1999 mm		21.83	7.81						
			2000 - 2499 mm		25.20	8.08						
			2500 - 2999 mm		27.21	8.22						
			3000 - 3499 mm		28.46	8.30						
			3500 - 3999 mm		29.28	7.37						
			4000 - 6000 mm		29.26	7.04						
	**534.732 CrNi***	CrNi 1.4301	6000	4.396			9.17	2.62	25.04	35.00	0.310	0.100
			- 1999 mm		19.89	6.06						
			2000 - 2499 mm		22.58	6.22						
			2500 - 2999 mm		24.13	6.31						
			3000 - 3499 mm		25.07	6.35						
			3500 - 3999 mm		25.68	6.37						
			4000 - 6000 mm		26.09	6.17						
	**534.752 CrNi***	CrNi 1.4301	6000	6.084			20.57	4.57	27.37	45.00	0.350	0.140
			- 1999 mm		24.18	8.21						
			2000 - 2499 mm		28.17	8.50						
			2500 - 2999 mm		30.58	8.64						
			3000 - 3499 mm		32.09	8.72						
			3500 - 3999 mm		33.09	7.96						
			4000 - 6000 mm		33.72	7.48						

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meulé, grain 220-240, avec film adhésif
grinded, 220-240 grain, with adhesive protection tape



Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

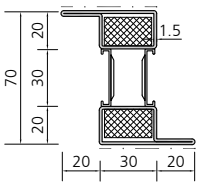
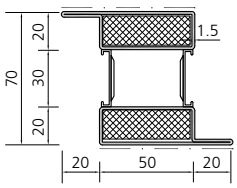
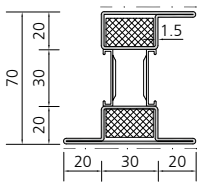
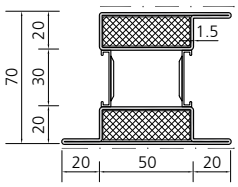
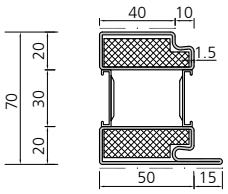
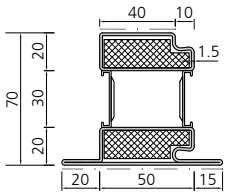
mo = Schleifbare Oberfläche / Surface poncable / Grindable surface

09/23

Profile
Edelstahl

Profilés
Acier inox

Profiles
Stainless steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]	mo [cm]
	**534.733 CrNi***	CrNi 1.4301	6000	4.391			4.44	1.58	35.00	35.00	0.310	0.100
			- 1999 mm		21.95	8.71						
			2000 - 2499 mm		25.12	8.95						
			2500 - 2999 mm		26.97	9.07						
			3000 - 3499 mm		28.11	9.14						
			3500 - 3999 mm		28.85	8.77						
			4000 - 6000 mm		29.36	7.99						
	**534.753 CrNi***	CrNi 1.4301	6000	6.118			11.78	3.15	35.00	45.00	0.350	0.140
			- 1999 mm		25.61	10.73						
			2000 - 2499 mm		29.99	11.11						
			2500 - 2999 mm		32.67	11.29						
			3000 - 3499 mm		34.37	11.40						
			3500 - 3999 mm		35.49	10.65						
			4000 - 6000 mm		35.65	9.09						
	**534.735 CrNi***	CrNi 1.4301	6000	4.729			9.17	2.62	25.04	35.00	0.310	0.100
			- 1999 mm		19.89	6.06						
			2000 - 2499 mm		22.58	6.22						
			2500 - 2999 mm		24.13	6.31						
			3000 - 3499 mm		25.07	6.35						
			3500 - 3999 mm		25.68	6.37						
			4000 - 6000 mm		26.09	6.17						
	**534.755 CrNi***	CrNi 1.4301	6000	6.561			20.57	4.57	31.58	48.57	0.390	0.160
			- 1999 mm		28.40	11.25						
			2000 - 2499 mm		33.63	11.64						
			2500 - 2999 mm		36.89	11.84						
			3000 - 3499 mm		38.98	11.89						
			3500 - 3999 mm		39.45	11.81						
			4000 - 6000 mm		39.91	11.55						
	**535.751 CrNi***	CrNi 1.4301	6000	5.545			11.78	3.15	29.78	28.68	0.320	0.105
			- 1999 mm		21.83	7.81						
			2000 - 2499 mm		25.20	8.08						
			2500 - 2999 mm		27.21	8.22						
			3000 - 3499 mm		28.46	8.30						
			3500 - 3999 mm		29.28	7.37						
			4000 - 6000 mm		29.26	7.04						
	**535.752 CrNi***	CrNi 1.4301	6000	5.995			20.57	4.57	26.65	44.39	0.360	0.125
			- 1999 mm		24.18	8.21						
			2000 - 2499 mm		28.17	8.50						
			2500 - 2999 mm		30.58	8.64						
			3000 - 3499 mm		32.09	8.72						
			3500 - 3999 mm		33.09	7.96						
			4000 - 6000 mm		33.72	7.48						

* auf Anfrage / sur demande / on request

— · — · — geschliffen, Korn 220-240, mit Schutzfolie
meulé, grain 220-240, avec film adhésif
grinded, 220-240 grain, with adhesive protection tape



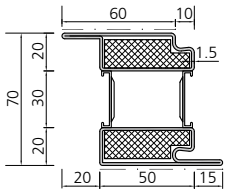
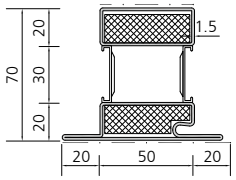
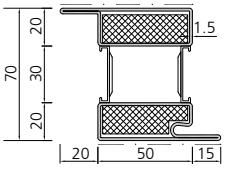
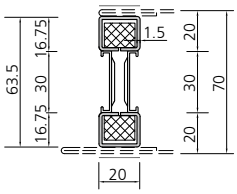
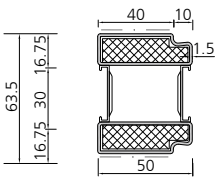
Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

m = Material
Matériau
Material

O = Umlaufende Oberfläche per Laufmeter
Surface périphérique par mètre courant
Outlying surface per running meter

mo = Schleifbare Oberfläche
Surface ponçable
Grindable surface

Profile Edelstahl — Profilés Acier inox — Profiles Stainless steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]	mo [cm]
	**535.753 CrNi***	CrNi 1.4301	6000	5.944			11.78	3.15	34.08	44.39	0.360	0.125
			- 1999 mm		25.61	10.73						
			2000 - 2499 mm		29.99	11.11						
			2500 - 2999 mm		32.67	11.29						
			3000 - 3499 mm		34.37	11.40						
			3500 - 3999 mm		35.49	10.65						
			4000 - 6000 mm		35.65	9.09						
	**538.752 CrNi***	CrNi 1.4301	6000	6.131			20.57	4.57	26.65	44.39	0.350	
			- 1999 mm		22.51	8.04						
			2000 - 2499 mm		26.76	8.37						
			2500 - 2999 mm		29.44	8.53						
			3000 - 3499 mm		32.32	8.63						
			3500 - 3999 mm		33.13	8.69						
			4000 - 6000 mm		33.70	8.73						
	**538.753 CrNi***	CrNi 1.4301	6000	5.996			11.78	3.15	34.08	44.39	0.360	0.125
					25.61	10.73						
					29.99	11.11						
					32.67	11.29						
					34.37	11.40						
					35.49	10.65						
					35.65	9.09						
	**534.620 CrNi***	CrNi 1.4301	6000	2.143			0.60	0.60	31.75	10.00	0.200	0.040
			- 1999 mm		9.75	3.35						
			2000 - 2499 mm		10.53	3.40						
			2500 - 2999 mm		10.93	3.42						
			3000 - 3499 mm		11.17	3.42						
			3500 - 3999 mm		11.31	3.43						
			4000 - 6000 mm		11.41	3.44						
	**535.650 CrNi***	CrNi 1.4301	6000	3.882			5.78	2.31	31.75	24.47	0.260	0.08
			- 1999 mm		16.80	6.81						
			2000 - 2499 mm		19.15	7.05						
			2500 - 2999 mm		20.50	7.18						
			3000 - 3499 mm		21.32	7.24						
			3500 - 3999 mm		21.86	6.43						
			4000 - 6000 mm		21.78	6.13						

* auf Anfrage / sur demande / on request

geschliffen, Korn 220-240, mit Schutzfolie
meulé, grain 220-240, avec film adhésif
grinded, 220-240 grain, with adhesive protection tape



Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

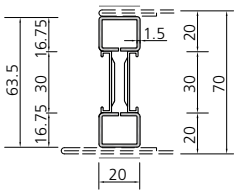
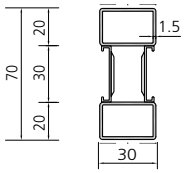
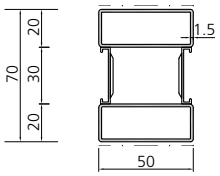
m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

mo = Schleifbare Oberfläche / Surface ponçable / Grindable surface

09/23

Profile Edelstahl
Profilés Acier inox
Profiles Stainless steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]	mo [cm]
	**530.620 CrNi***	CrNi 1.4301	6000	1.885			0.60	0.60	31.75	10.00	0.200	0.040
			- 1999 mm		9.75	3.35						
			2000 - 2499 mm		10.53	3.40						
			2500 - 2999 mm		10.93	3.42						
			3000 - 3499 mm		11.17	3.42						
			3500 - 3999 mm		11.31	3.43						
			4000 - 6000 mm		11.41	3.44						
	**531.730 CrNi***	CrNi 1.4301	6000	2.613			1.73	1.15	35.00	15.00	0.230	0.060
			- 1999 mm		14.07	5.10						
			2000 - 2499 mm		15.61	5.25						
			2500 - 2999 mm		16.47	5.32						
			3000 - 3499 mm		16.98	5.36						
			3500 - 3999 mm		17.30	5.25						
			4000 - 6000 mm		17.42	5.06						
	**531.750 CrNi***	CrNi 1.4301	6000	3.579			6.41	2.46	35.00	25.00	0.270	0.100
			- 1999 mm		18.62	7.17						
			2000 - 2499 mm		21.24	7.44						
			2500 - 2999 mm		22.76	7.57						
			3000 - 3499 mm		23.70	7.64						
			3500 - 3999 mm		24.31	6.66						
			4000 - 6000 mm		24.41	6.36						

** Nur für Schwelle / seulement pour le seuil / only for threshold

3

— · — · — geschliffen, Korn 220-240, mit Schutzfolie
meulé, grain 220-240, avec film adhésif
grinded, 220-240 grain, with adhesive protection tape



Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

mo = Schleifbare Oberfläche / Surface ponçable / Grinding surface

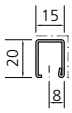
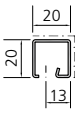
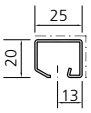
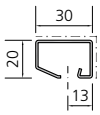
* auf Anfrage / sur demande / on request

09/23

Glashalteleisten aus Edelstahl

Parcloses en acier inox

Glazing beads of stainless steel

Profile **Profilés** **Profiles** **(1:4)**				
Art. Nr. **art. no.**	**901526**	**901527**	**901528**	**901546**
m	CrNi 1.4301			
L **[mm]**	6000			
G **[kg/m]**	0.572	0.661	0.735	0.834
O **[m²/m]**	0.059	0.067	0.075	0.083
mo **[m²/m]**	0.035	0.040	0.045	0.050

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

09/23

Ermittlung der richtigen Schlossfunktion

Déterminer la fonction adéquate de la serrure

Determination of the correct lock function

Weist die Tür eine **Fluchtfunktion** auf?

Une **fonction anti-panique** est-elle affectée à la porte?

Does the door have an **escape function?**

NEIN / NON / NO →

Funktion W
(Drücker bei geschlossener Tür blockiert)
Fonction W
(Si la porte est fermée, la poignée est bloquée)
Function W
(Handle blocked when the door is closed)

JA / OUI / YES ↓

Ist auf der Aussenseite ein Drücker montiert?

Une poignée est-elle montée sur le côté extérieur?

Is a handle fitted on the outside?

NEIN / NON / NO →

Funktion E
Auf der Aussenseite darf nie ein Drücker montiert werden.
Fonction E
Il ne doit jamais y avoir de poignée sur le côté extérieur.
Function E
It is never allowed to fit a handle on the outside.

JA / OUI / YES ↓

Muss / darf die Tür nach einer Paniköffnung geöffnet bleiben?

La porte peut-elle/doit-elle rester ouverte après un actionnement antipanique?

Must / is the door allowed to remain opened after panic opening?

NEIN / NON / NO →

Funktion B
Nach einer Paniköffnung bleibt dir Tür von aussen her nach wie vor geschlossen (Drücker blockiert). Der Riegel bleibt jedoch eingezogen.
Fonction B
Après un actionnement antipanique la porte doit continuer à être condamnée depuis l'extérieur (poignée bloquée). Le bec de cane reste enclenché.
Function B
After panic opening the door remains closed as before from the outside (handle blocked).
The bolt remains however pulled in.



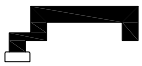
RZ / CR / RC
Rundzylinder
Cylindre rond
Round cylinder



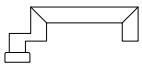
PZ / CP / PC
Profilzylinder
Cylindre profilé
Profile cylinder

Schliessfunktionen

Schliessfunktionen für 1- und 2-flügelige Türen



mit Öffnungsfunktion
avec mode d'ouverture
with opening function



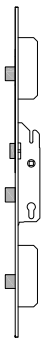
ohne Öffnungsfunktion
sans mode d'ouverture
without opening function

Fonctions de fermeture

Fonctions de fermeture pour portes à 1 et 2 vantaux



Grundstellung
(Schloss entriegelt)
Position initiale
(Serrure débloqué)
Basic position
(Lock unlocked)



Schaltstellung
(Schloss verriegelt)
Position condamnée
(Serrure fermée)
Switch position
(Lock locked)

Locking functions

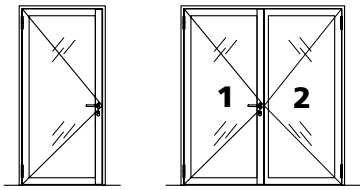
Locking functions for single and double leaved doors

Die Antipanik-Funktion ist ausgerichtet auf auswärts öffnende Konstruktionen. Bei einwärts öffnender Konstruktion muss die Schliessfunktion entgegengesetzt sein (Sonderbestellung).

La fonction anti-panique est conçue pour une ouverture à l'extérieur. En cas d'ouverture à l'intérieur la fonction de fermeture est inversée (commande spéciale).

The anti-panic function is ment to doors opening outwards. In case of doors opening inwards, the locking function has to be on opposite side (special order).

DIN links / gauche / left

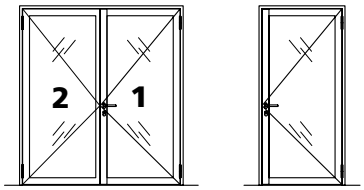


DIN-Angaben beziehen sich immer auf den Gangflügel.

Spécifications DIN se réfèrent toujours au vantail de service.

DIN specifications always refer to the opening leaf.

DIN rechts / droite / right

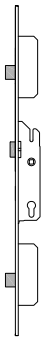


Schliessfunktionen

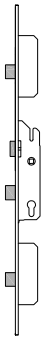
Funktion W
Wechselfunktion ohne Anti-Panik

Einsatzort
Türen ohne Panikfunktion, die eine Begehung von innen und aussen ohne Schlüssel entweder dauernd ermöglichen oder dauernd verhindern müssen.

Grundstellung
Die Tür kann auf der Bandseite nur mit dem Schlüssel geöffnet werden.



Schaltstellung
Ein Öffnen der Tür ist auf der Bandseite und Bandgegenseite ohne Schlüssel nicht möglich. Der Drücker ist blockiert.



Schlossdefinition W

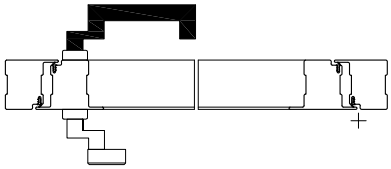
Panikfunktion:	Nein
Wechselfunktion:	**Ja**
Schliessende Fallen:	Ja, gegen Zurückdrücken gesichert
Riegel:	Ja
Vierkant-Nuss:	9 mm durchgehend
Mass Nuss/Zyl.	94 (RZ), 92 (PZ)
Dornmass:	35 mm
Stulpplatte:	CrNi U-24 × 6
Mehrfachverriegelung:	Ja

Fonctions de fermeture

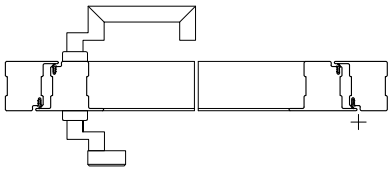
Fonction W
Fonction à levier sans anti-panique

Lieu d'application
Portes sans fonction anti-panique qui doivent autoriser ou empêcher en permanence un accès de l'intérieur et de l'extérieur sans clé.

Position initiale
La porte peut seulement être ouverte avec la clé, sur le côté paumelle.



Position condamnée
L'ouverture de la porte n'est pas possible sans clé, côté paumelle et sur le côté opposé aux paumelles. La poignée est bloquée.



Définition de serrure W

Fonct. anti-panique:	non
Fonction à levier:	**oui**
Becs de cane:	oui, bloqués contre le repoussement
Pêne:	oui
Fouillot carré:	9 mm en continu
Cote fouillot/cyl.	94 (CR), 92 (CP)
Dist. au cylindre:	35 mm
Gâche:	CrNi U-24 × 6
Verrouillage multiple:	oui

Locking functions

Function W
Lever handle set without anti-panic version

Usage
Doors without panic function that must continuously provide or continuously prevent access from inside and outside without a key.

Basic position
On the hinge side the door can only be opened with the key.

Switch position
The door cannot be opened on the hinge side or the side opposite the hinge without the key. The handle is blocked.

Lock definition W

Panic function:	No
Latch function:	**Yes**
Locking latches:	Yes, secured against being forced back
Bolt:	Yes
Square spindle:	9 mm continuous
Dimension spindle/cyl.	94 (CR), 92 (CP)
Pin size:	35 mm
Face plate:	CrNi U-24 × 6
Multi-point lock:	Yes

Schliessfunktionen

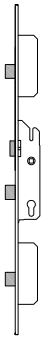
Funktion E
Wechselfunktion mit Anti-Panik

Einsatzort
Fluchttüren, bei denen eine unberechtigte Öffnung von aussen ohne Schlüssel **dauernd** verhindert werden soll (auch nach einer Panikentriegelung).

Grundstellung
Die Tür ist auf der Bandseite nur mit dem Schlüssel zu öffnen.



Schaltstellung
Auf der Bandgegenseite kann die Tür über den Drücker, auch bei ausgeschlossenem Riegel, immer geöffnet werden.



Auf der Aussenseite darf NIE ein Drücker montiert werden!

Schlossdefinition E

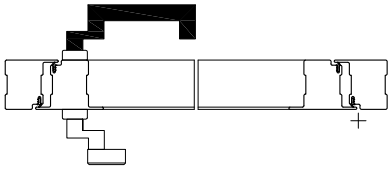
Panikfunktion:	Ja
Wechselfunktion:	**Ja**
Schliessende Falle:	Ja, gegen Zurückdrücken gesichert
Riegel:	Ja
Vierkant-Nuss:	9 mm durchgehend
Mass Nuss/Zyl.	94 (RZ), 92 (PZ)
Dornmass:	35 mm
Stulpplatte:	CrNi U-24 × 6
Mehrfachverriegelung:	Ja

Fonctions de fermeture

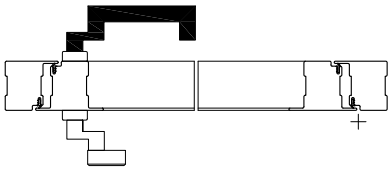
Fonction E
Fonction à levier avec anti-panique

Lieu d'application
Portes de secours devant empêcher **en permanence** une ouverture non autorisée de l'extérieur sans clé (même après un déverrouillage anti-panique).

Position initiale
La porte peut seulement être ouverte avec la clé, côté paumelle.



Position condamnée
Sur le côté opposé aux paumelles, la porte peut toujours être ouverte au moyen de la poignée, même verrouillée.



Ne JAMAIS monter une poignée sur la face extérieure!

Définition de serrure E

Fonct. anti-panique:	oui
Fonction à levier:	**oui**
Bec de cane:	oui, bloqués contre le repoussement
Pêne:	oui
Fouillot carré:	9 mm en continu
Cote fouillot/cyl.	94 (CR), 92 (CP)
Dist. au cylindre:	35 mm
Gâche:	CrNi U-24 × 6
Verrouillage multiple:	oui

Locking functions

Function E
Lever handle set with anti-panic version

Usage
Escape doors on which unauthorised opening from the outside without a key must be **permanently** prevented (also after panic unlocking).

Basic position
On the hinge side the door can only be opened with the key.

Switch position
The door can always be opened on the side opposite the hinge by using the handle, even if the bolt is shot

On the outside it is NEVER allowed to fit a handle!

Lock definition E

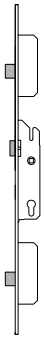
Panic function:	Yes
Latch function:	**Yes**
Locking latch:	Yes, secured against being forced back
Bolt:	Yes
Square spindle:	9 mm continuous
Dimension spindle/cyl.	94 (CR), 92 (CP)
Pin size:	35 mm
Face plate:	CrNi U-24 × 6
Multi-point lock:	Yes

Schliessfunktionen

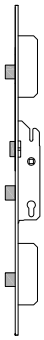
Funktion B
Umschaltfunktion mit Anti-Panik

Einsatzort
Fluchttüren, die je nach Bedarf entweder eine dauernde Begehbarkeit von aussen sicherstellen müssen oder den Zutritt von aussen zeitweise verunmöglichen sollen.
Besondere Beachtung gilt der Schlüsselbetätigung.

Grundstellung
Beide Türdrücker sind freigeschaltet. Die Tür ist begehbar.
Achtung: Um den Aussendrücker anzukoppeln muss der Schlüssel beim Aufschliessen um eine 1/4 Drehung überdreht werden. Wird der Schlüssel nur bis in die vertikale Stellung gedreht (wie gewohnt), bleibt der Aussendrücker in Leerlaufstellung.



Schaltstellung
Durch Schlüsselbetätigung ist der bandseitige Drücker blockiert.
Nach Betätigung der Anti-Panikfunktion bleibt der Drücker auf der Bandseite abgekoppelt.



Schlossdefinition B

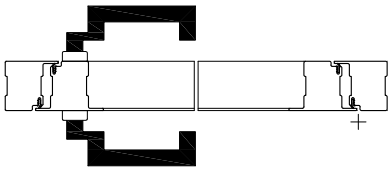
Panikfunktion:	Ja
Wechselfunktion:	**Nein**
Schliessende Falle:	Ja, gegen Zurückdrücken gesichert
Riegel:	Ja
Vierkant-Nuss:	9 mm **geteilt**
Mass Nuss/Zyl.	94 (RZ), 92 (PZ)
Dornmass:	35 mm
Stulpplatte:	CrNi U-24 × 6
Mehrfachverriegelung:	Ja

Fonctions de fermeture

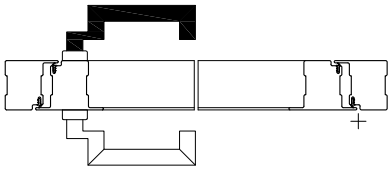
Fonction B
Fonction avec anti-panique

Lieu d'application
Portes de secours devant garantir au besoin un accès permanent de l'extérieur ou empêcher temporairement l'accès de l'extérieur.
L'actionnement de la clé doit faire l'objet d'une attention particulière.

Position initiale
Les deux poignées de portes sont déverrouillées. La porte est praticable.
Attention: pour accoupler la poignée extérieure, il faut tourner, à l'ouverture, la clé d'un 1/4 de tour de plus. Si l'on tourne seulement la clé jusqu'en position verticale (cas habituel), la poignée extérieure reste sans fonction.



Position condamnée
En actionnant la clé, la poignée côté paumelle est bloquée.
Après avoir actionné la fonction anti-panique, la poignée côté paumelle reste désaccouplée.



Définition de serrure B

Fonct. anti-panique:	oui
Fonction à levier:	**non**
Bec de cane:	oui, bloqués contre le repoussement
Pêne:	oui
Fouillot carré:	9 mm **fractionné**
Cote fouillot/cyl.	94 (CR), 92 (CP)
Dist. au cylindre:	35 mm
Gâche:	CrNi U-24 × 6
Verrouillage multiple:	oui

Locking functions

Function B
Switch function with anti-panic version

Usage
Escape doors that must either provide continuous access from the outside, or temporarily prevent access from the outside.
Key actuation requires special attention.

Basic position
Both door handles are unlocked. The door can be opened.
Attention: To couple the exterior handle, the key must be turn past by 1/4 of a turn on unlocking. If the key is only turned to the vertical position (as usual), the exterior handle remains uncoupled.

Switch position
The handle on the hinge side is blocked by turning the key.
After actuating the panic version the handle remains disconnected on the hinge side.

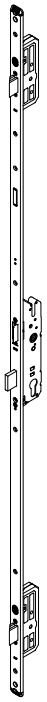
Lock definition B

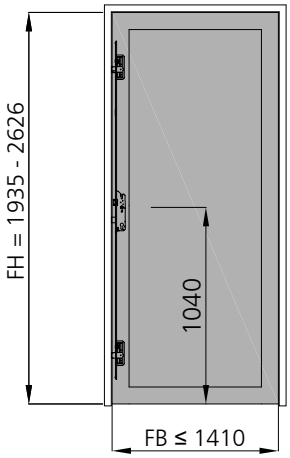
Panic function:	Yes
Latch function:	**No**
Locking latch:	Yes, secured against being forced back
Bolt:	Yes
Square spindle:	9 mm **split**
Dimension spindle/cyl.	94 (CR), 92 (CP)
Pin size:	35 mm
Face plate:	CrNi U-24 × 6
Multi-point lock:	Yes

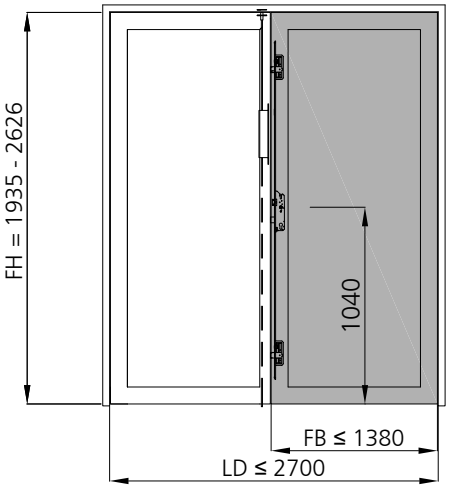
Beschläge
Übersicht Schlösser
Gangflügel

Ferrements
Tableau de serrures
Vantail de service

Fittings
Synopsis of locks
Opening leaf



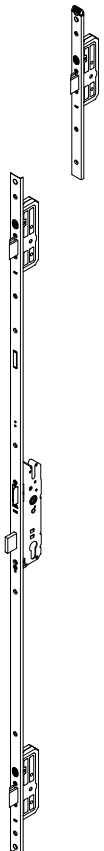


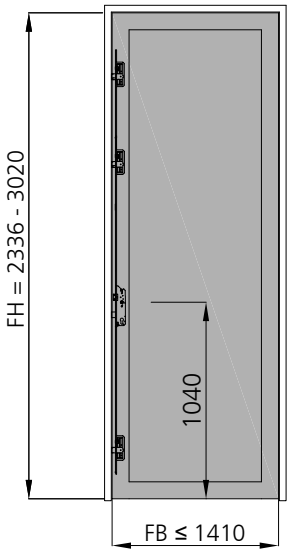


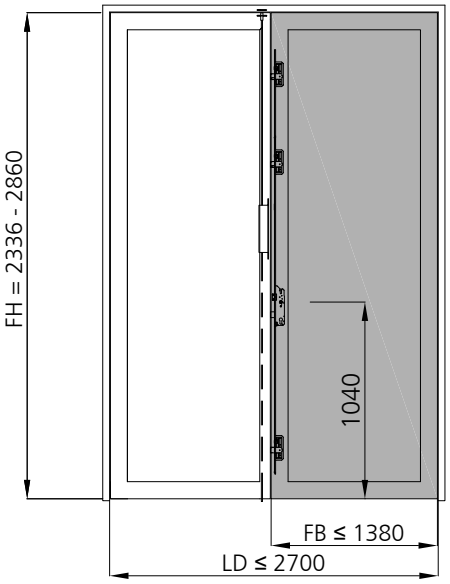
FH = Flügelhöhe
FH = Hauteur du vantail
FH = Leaf height

FB = Flügelbreite
FB = Largeur du vantail
FB = Leaf width

LD = lichter Durchgang
LD = Passage libre
LD = Inside width







Massgebend sind ausschliesslich die für Ihr Land gültigen Zulassungen.

Nous vous demandons de vous reporter aux procès-verbaux de classement en cours de validité dans votre pays.

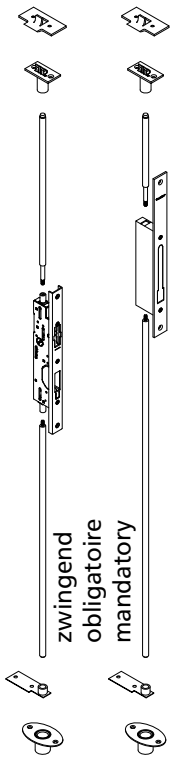
Only the certificates valid in your country are relevant.

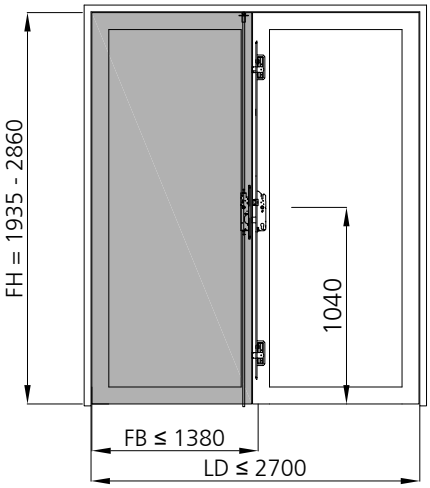
09/23

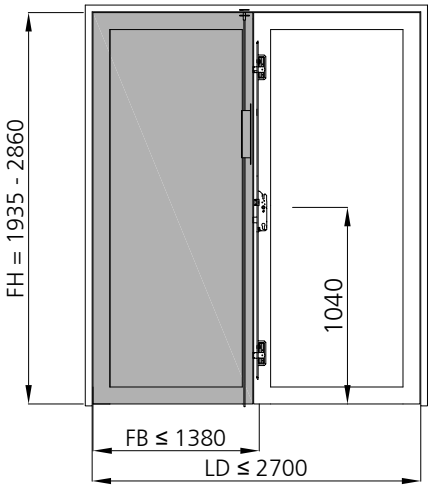
Beschläge
Übersicht Schlösser
Standflügel

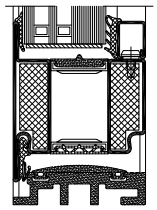
Ferrements
Tableau de serrures
Vantail semi-fixe

Fittings
Synopsis of locks
Fixed leaf





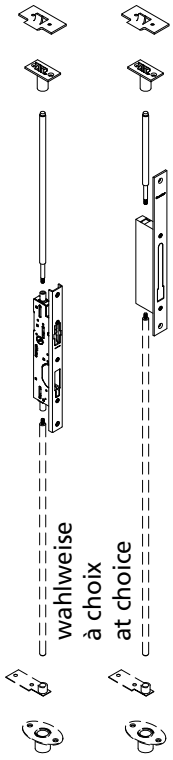


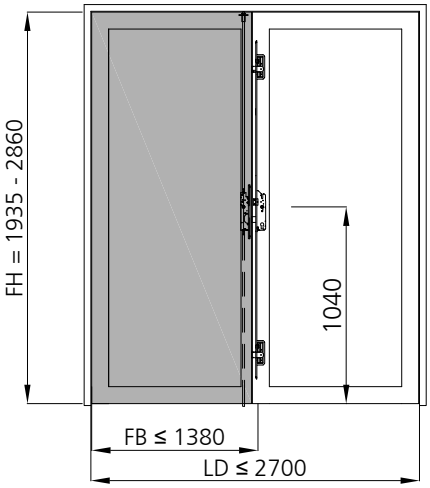


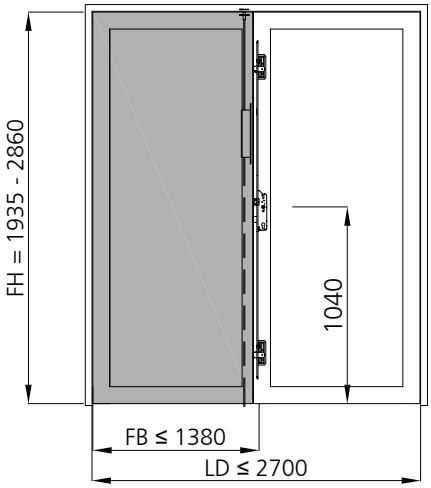
FB = Flügelbreite
FB = Largeur du vantail
FB = Leaf width

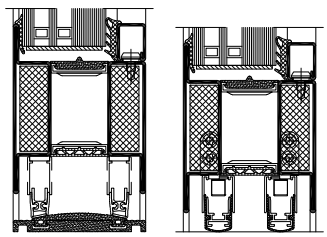
LD = lichter Durchgang
LD = Passage libre
LD = Inside width

FH = Flügelhöhe
FH = Hauteur du vantail
FH = Leaf height









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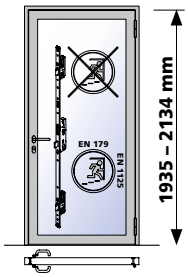
Übersicht Beschlageinbau Disposition de la quincaillerie Placement of fittings

EN 179 Notausgangsverschlüsse / Fermetures sorties d'urgences / Emergency exit devices

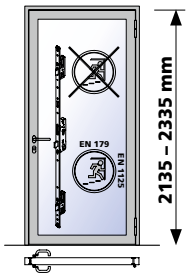
EN 1125 Paniktürverschlüsse / Fermetures anti-paniques / Panic exit devices

22 RZ / CR / RC 17 PZ / CP / PC

3-Punkt-Verriegelung Verrouillage 3 points 3 point locking

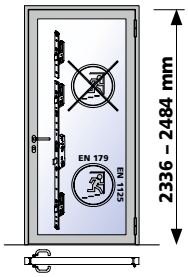


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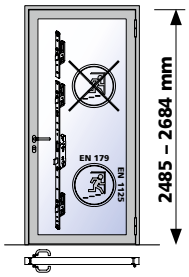


RZ/CR/RC = un_ep_0431
PZ/CP/PC = un_ep_0391

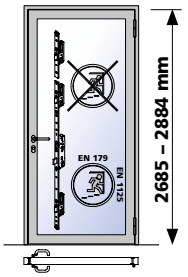
4-Punkt-Verriegelung Verrouillage 4 points 4 point locking



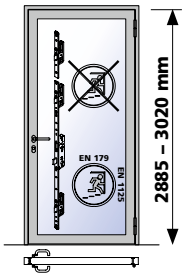
RZ/CR/RC = un_ep_0433
PZ/CP/PC = un_ep_0393



RZ/CR/RC = un_ep_0434
PZ/CP/PC = un_ep_0394

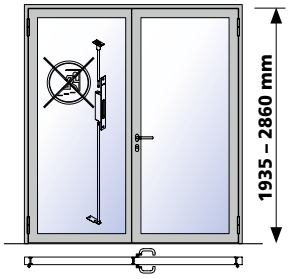


RZ/CR/RC = un_ep_0435
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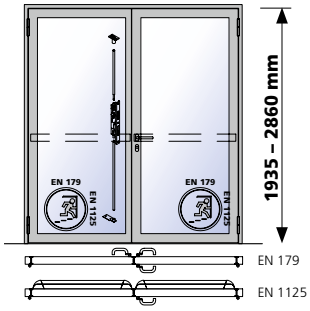


RZ/CR/RC = un_ep_0436
PZ/CP/PC = un_ep_0396

Standflügelverriegelung Verrouillage du vantail semi-fixe Fixed leaf lock



un_ep_0239



un_ep_0389

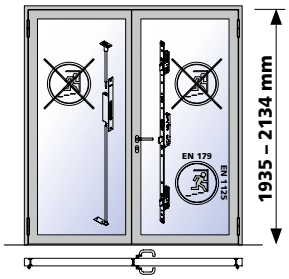
Übersicht Beschlageinbau Disposition de la quincaillerie Placement of fittings

EN 179 Notausgangsverschlüsse / Fermetures sorties d'urgences / Emergency exit devices

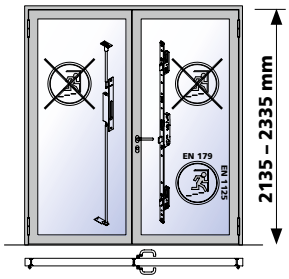
EN 1125 Paniktürverschlüsse / Fermetures anti-paniques / Panic exit devices

22 RZ / CR / RC 17 PZ / CP / PC

3-Punkt-Verriegelung Verrouillage 3 points 3 point locking

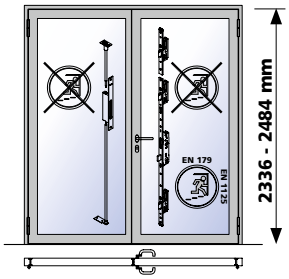


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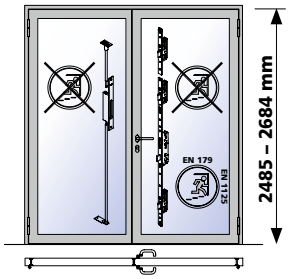


RZ/CR/RC = un_ep_0438
PZ/CP/PC = un_ep_0398

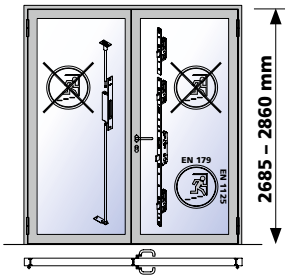
4-Punkt-Verriegelung Verrouillage 4 points 4 point locking



RZ/CR/RC = un_ep_0440
PZ/CP/PC = un_ep_0400

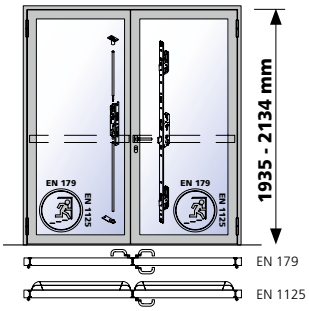


RZ/CR/RC = un_ep_0441
PZ/CP/PC = un_ep_0401

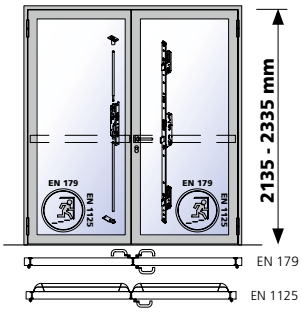


RZ/CR/RC = un_ep_0442
PZ/CP/PC = un_ep_0402

3-Punkt-Verriegelung – Antipanik Verrouillage 3 points – anti-panique 3 point locking – anti-panic

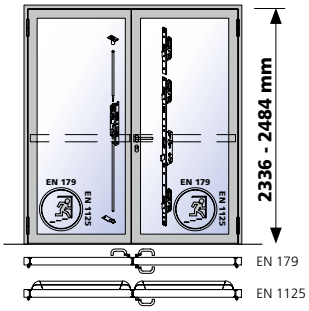


RZ/CR/RC = un_ep_0444
PZ/CP/PC = un_ep_0404

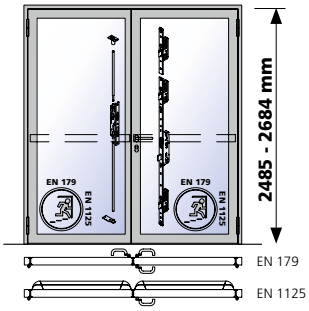


RZ/CR/RC = un_ep_0445
PZ/CP/PC = un_ep_0405

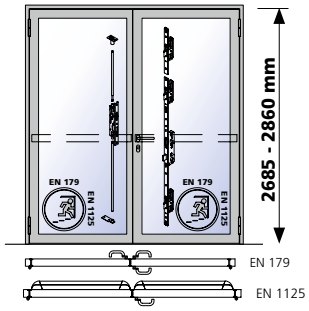
4-Punkt-Verriegelung – Antipanik Verrouillage 4 points – anti-panique 4 point locking – anti-panic



RZ/CR/RC = un_ep_0447
PZ/CP/PC = un_ep_0407



RZ/CR/RC = un_ep_0448
PZ/CP/PC = un_ep_0408



RZ/CR/RC = un_ep_0449
PZ/CP/PC = un_ep_0409

Beschläge
Schlossgarnituren
3-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 3 points

Fittings
Sets of locks
3 point locking

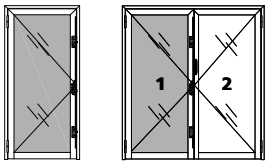
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

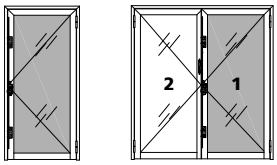
Wechselfunktion ohne Anti-Panik
Fonction à levier sans anti-panique
Lever handle set without anti-panic version

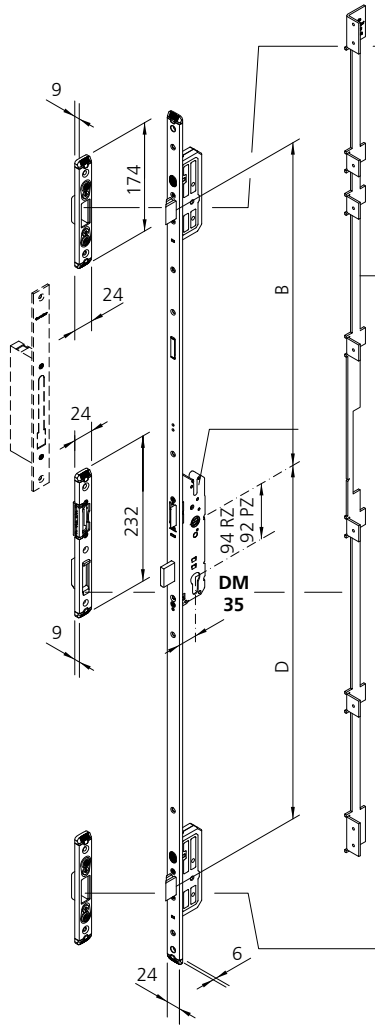
Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right





	Flügelhöhe / hauteur de vantail / leaf hight	
	1935 - 2134	**2135 - 2335**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep	
Schliessblech / gâche / keep **987026**	1x	1x
Mass / dimension **B**	729	929
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987037**
Schloss / serrure / lock **RZ**	**986461**	**986463**
Schloss / serrure / lock **PZ**	**986460**	**986462**
DIN links / gauche / left Schliessblech / gâche / keep **987027** **987028** DIN rechts / droite / right	1x	1x
Mass / dimension **D**	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040
Order fastening set art. no. 987039, 987040 separately.

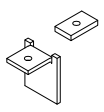


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

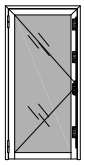
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

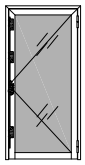
Wechselfunktion ohne Anti-Panik
Fonction à levier sans anti-panique
Lever handle set without anti-panic version

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right



	Flügelhöhe / hauteur de vantail / leaf hight			
	2336 - 2484	**2485 - 2684**	**2685 - 2884**	**2885 - 3020**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep			
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **C**	350	550	750	950
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **B**	729	729	729	729
Schloss / serrure / lock **RZ**	**986461**	**986461**	**986461**	**986461**
Schloss / serrure / lock **PZ**	**986460**	**986460**	**986460**	**986460**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**	**987036**
DIN links / gauche / left				
Schliessblech / gâche / keep **987027** **987028**	1x	1x	1x	1x
DIN rechts / droite / right				
Mass / dimension **D**	782.5	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

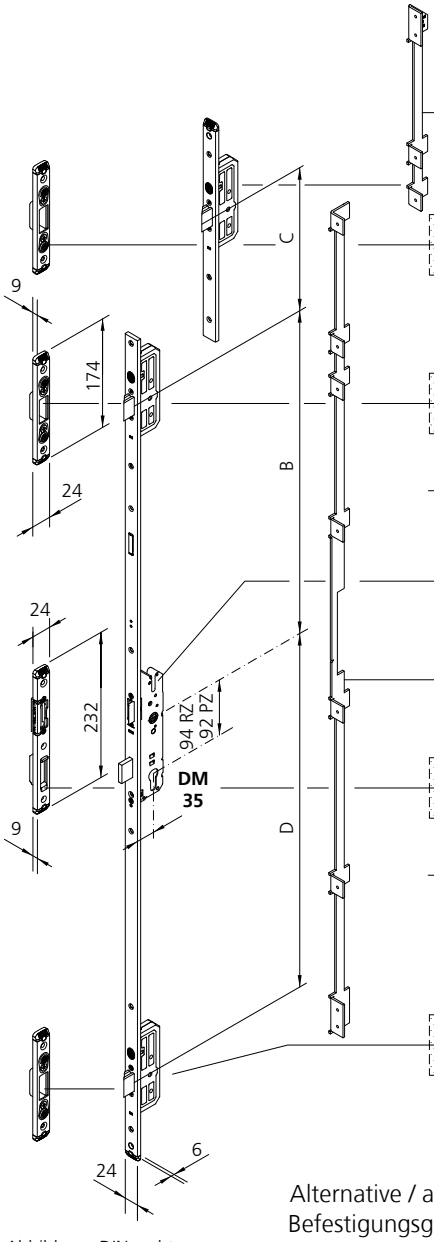
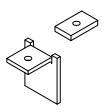


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



3

09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

EN 179 EN 1125

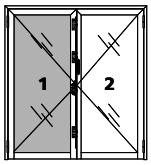
RZ Ø 22 mm
PZ Ø 17 mm



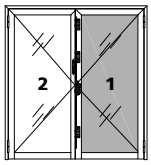
Wechselfunktion ohne Anti-Panik
Fonction à levier sans anti-panique
Lever handle set without anti-panic version

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right



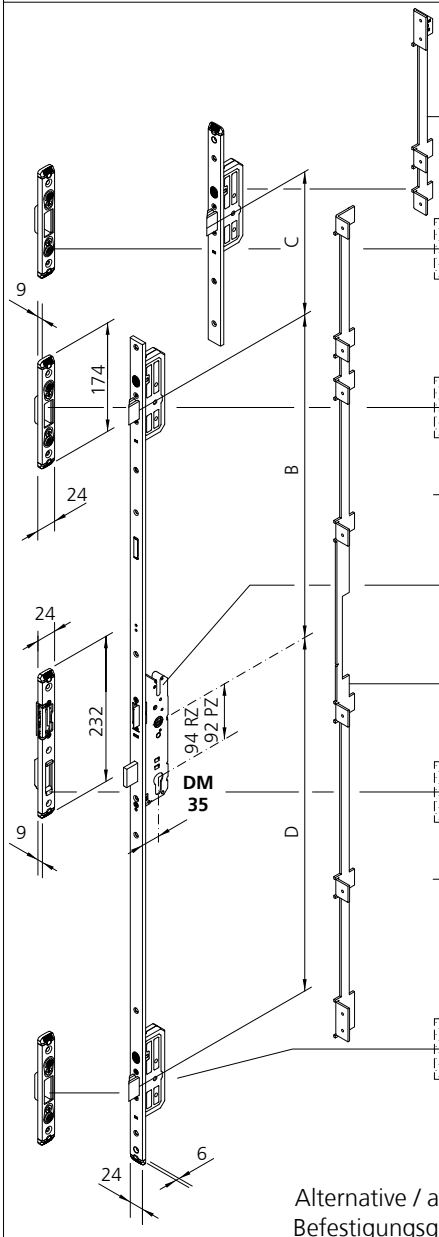
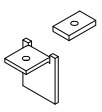


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

	Flügelhöhe / hauteur de vantail / leaf hight		
	2336 - 2484	**2485 - 2684**	**2685 - 2860**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep		
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x
Mass / dimension **C**	350	550	750
Schliessblech / gâche / keep **987026**	1x	1x	1x
Mass / dimension **B**	729	729	729
Schloss / serrure / lock **RZ**	**986461**	**986461**	**986461**
PZ	**986460**	**986460**	**986460**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**
DIN links / gauche / left			
Schliessblech / gâche / keep **987027** **987028**	1x	1x	1x
DIN rechts / droite / right			
Mass / dimension **D**	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



09/23

Beschläge
Schlossgarnituren
3-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 3 points

Fittings
Sets of locks
3 point locking

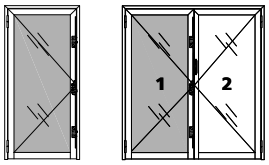
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

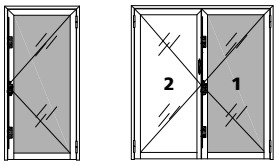
Umschaltfunktion mit Antipanik **B**
Fonction avec anti-panique **B**
Switch function with anti-panic version **B**

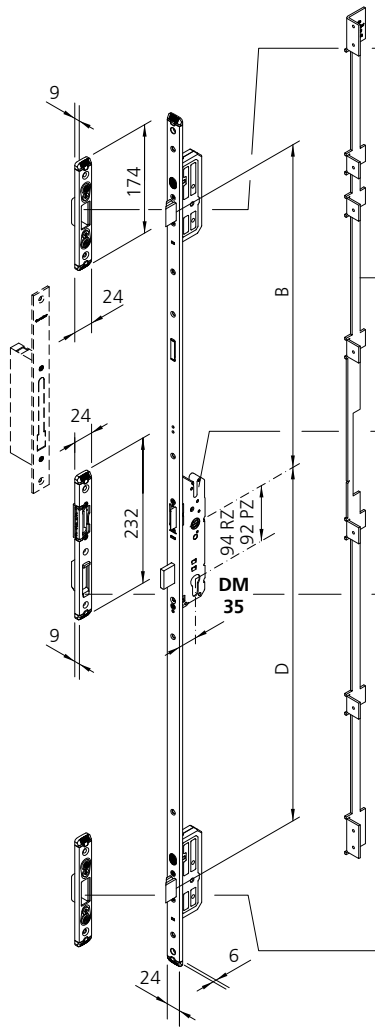
Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right





	Flügelhöhe / hauteur de vantail / leaf hight			
	1935 - 2134	**2135 - 2335**	**1935 - 2134**	**2135 - 2335**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep			
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **B**	729	929	729	929
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987037**	**987036**	**987037**
Schloss / serrure / lock **RZ**	**986479**	**986481**	**986478**	**986480**
Schloss / serrure / lock **PZ**	**986473**	**986475**	**986472**	**986474**
DIN links / gauche / left				
Schliessblech / gâche / keep **987027**	1x	1x		
Schliessblech / gâche / keep **987028**			1x	1x
DIN rechts / droite / right				
Mass / dimension **D**	782.5	782.5	782.5	782.5
	EN 179 EN 1125	EN 179 EN 1125	EN 179 EN 1125	EN 179 EN 1125
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.

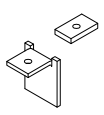


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

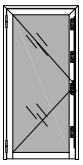
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

Umschaltfunktion mit Antipanik **B**
Fonction avec anti-panique **B**
Switch function with anti-panic version **B**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



	Flügelhöhe / hauteur de vantail / leaf hight			
	2336 - 2484	**2485 - 2684**	**2685 - 2884**	**2885 - 3020**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep			
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **C**	350	550	750	950
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **B**	729	729	729	729
Schloss / serrure / lock **RZ**	**986479**	**986479**	**986479**	**986479**
Schloss / serrure / lock **PZ**	**986473**	**986473**	**986473**	**986473**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**	**987036**
DIN links / gauche / left				
Schliessblech / gâche / keep **987027**	1x	1x	1x	1x
Mass / dimension **D**	782.5	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

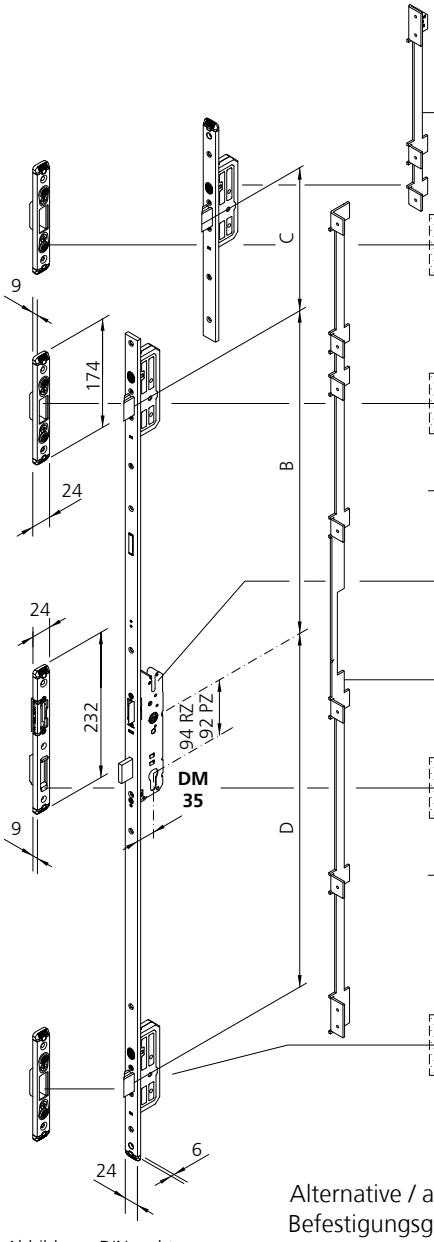
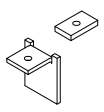


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

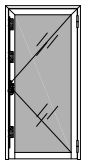
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

Umschaltfunktion mit Antipanik **B**
Fonction avec anti-panique **B**
Switch function with anti-panic version **B**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN rechts / droite / right



Flügelhöhe / hauteur de vantail / leaf hight	2336 - 2484	2485 - 2684	2685 - 2884	2885 - 3020
Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep				
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **C**	350	550	750	950
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **B**	729	729	729	729
Schloss / serrure / lock **RZ**	**986478**	**986478**	**986478**	**986478**
PZ	**986472**	**986472**	**986472**	**986472**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**	**987036**
Schliessblech / gâche / keep **987028**	1x	1x	1x	1x
DIN rechts / droite / right				
Mass / dimension **D**	782.5	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

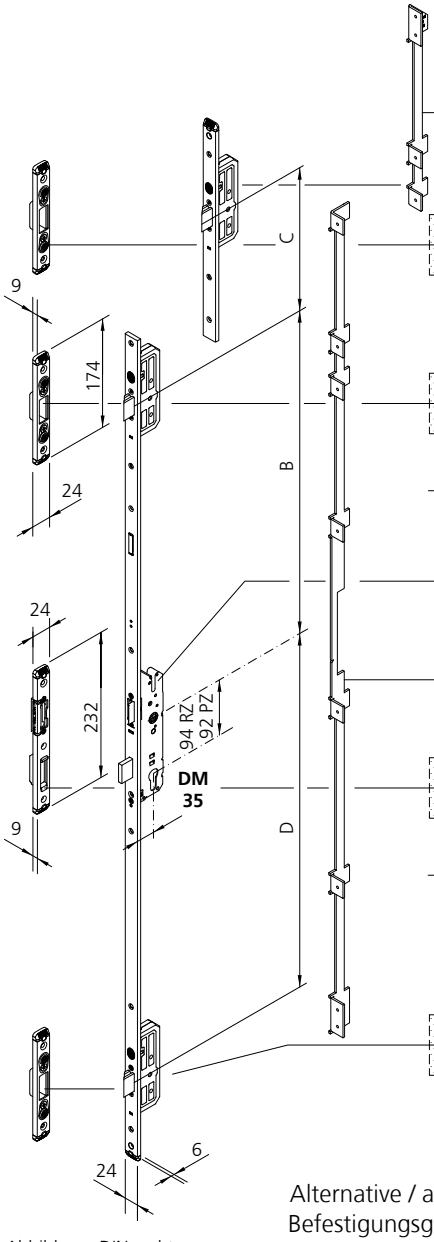
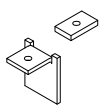


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm



Umschaltfunktion mit Antipanik **B**
Fonction avec anti-panique **B**
Switch function with anti-panic version **B**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

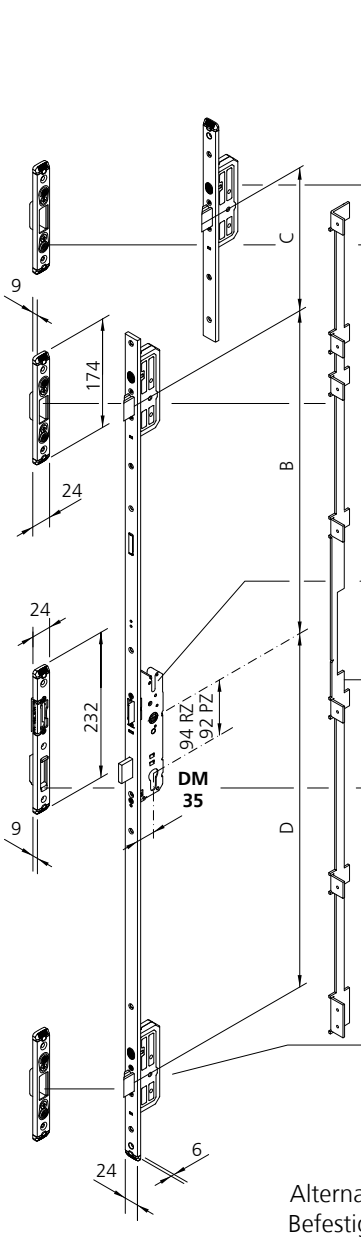
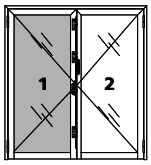
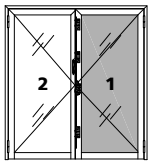
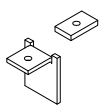


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

	DIN links / gauche / left			DIN rechts / droite / right		
						
Flügelhöhe / hauteur de vantail / leaf hight	**2336 - 2484**	**2485 - 2684**	**2685 - 2860**	**2336 - 2484**	**2485 - 2684**	**2685 - 2860**
Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep						
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x	1x	1x
Mass / dimension **C**	350	550	750	350	550	750
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x	1x	1x
Mass / dimension **B**	729	729	729	729	729	729
Schloss / serrure / lock **RZ**	**986479**	**986479**	**986479**	**986478**	**986478**	**986478**
Schloss / serrure / lock **PZ**	**986473**	**986473**	**986473**	**986472**	**986472**	**986472**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**	**987036**	**987036**	**987036**
DIN links / gauche / left						
Schliessblech / gâche / keep **987027**	1x	1x	1x			
Schliessblech / gâche / keep **987028**				1x	1x	1x
DIN rechts / droite / right						
Mass / dimension **D**	782.5	782.5	782.5	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



09/23

Beschläge
Schlossgarnituren
3-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 3 points

Fittings
Sets of locks
3 point locking

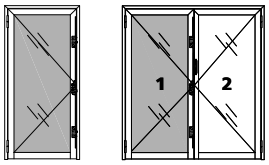
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

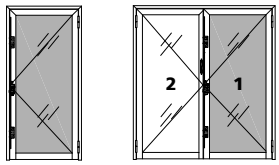
Wechselfunktion mit Anti-Panik **E**
Fonction à levier avec anti-panique **E**
Lever handle set with anti-panic version **E**

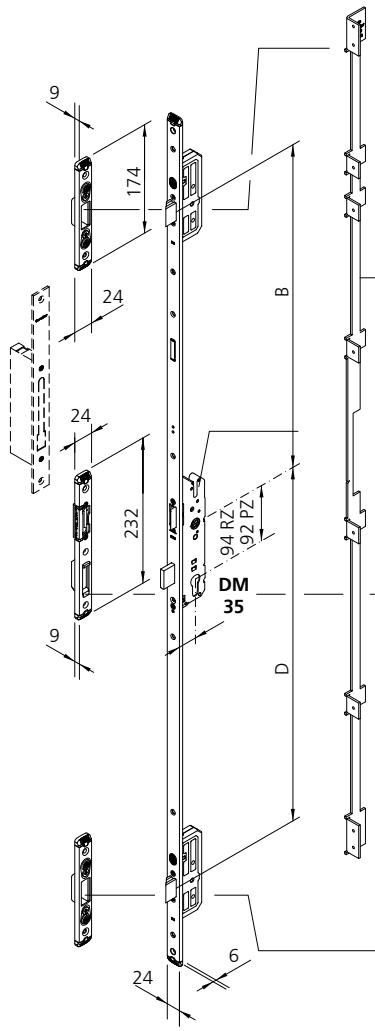
Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right





	Flügelhöhe / hauteur de vantail / leaf hight 1935 - 2134	Flügelhöhe / hauteur de vantail / leaf hight 2135 - 2335
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep	
Schliessblech / **987026** gâche / keep	1x	1x
Mass / dimension **B**	729	929
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987037**
Schloss / serrure / lock **RZ**	**986467**	**986469**
Schloss / serrure / lock **PZ**	**986466**	**986468**
DIN links / gauche / left		
Schliessblech / **987027** gâche / keep **987028**	1x	1x
DIN rechts / droite / right		
Mass / dimension **D**	782.5	782.5
	EN 179 EN 1125	EN 179 EN 1125
Schliessblech / **987026** gâche / keep	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.

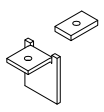


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

3

09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

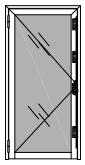
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

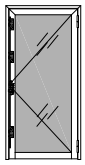
Wechselfunktion mit Anti-Panik **E**
Fonction à levier avec anti-panique **E**
Lever handle set with anti-panic version **E**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right



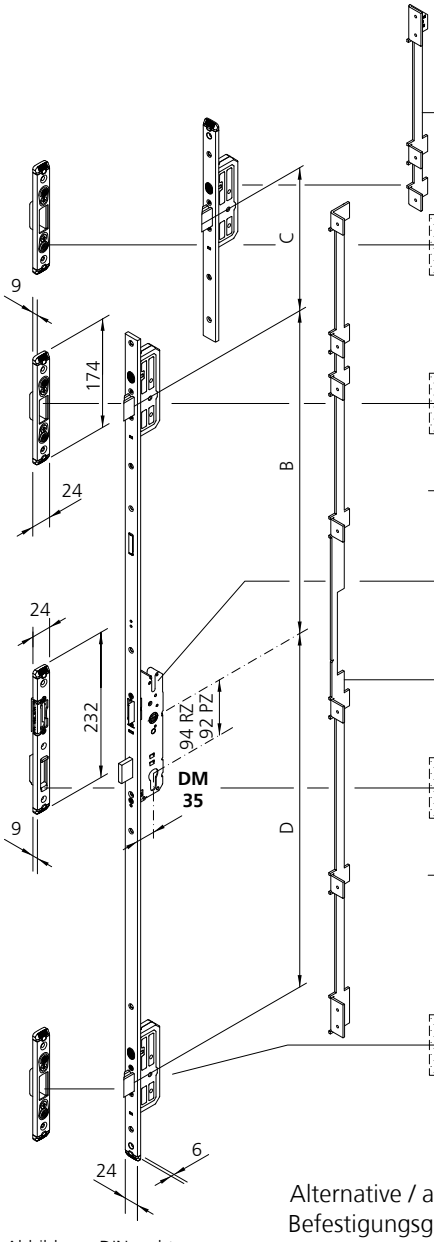
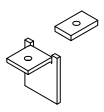


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

	Flügelhöhe / hauteur de vantail / leaf hight			
	2336 - 2484	**2485 - 2684**	**2685 - 2884**	**2885 - 3020**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep			
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **C**	350	550	750	950
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **B**	729	729	729	729
Schloss / serrure / lock **RZ**	**986467**	**986467**	**986467**	**986467**
PZ	**986466**	**986466**	**986466**	**986466**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**	**987036**
DIN links / gauche / left				
Schliessblech / gâche / keep **987027** **987028**	1x	1x	1x	1x
DIN rechts / droite / right				
Mass / dimension **D**	782.5	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung

Ferrements
Garnitures de serrures
Verrouillage 4 points

Fittings
Sets of locks
4 point locking

EN 179 EN 1125

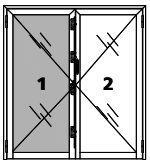
RZ Ø 22 mm
PZ Ø 17 mm



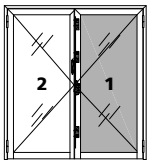
Wechselfunktion mit Anti-Panik **E**
Fonction à levier avec anti-panique **E**
Lever handle set with anti-panic version **E**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right



	Flügelhöhe / hauteur de vantail / leaf hight		
	2336 - 2484	**2485 - 2684**	**2685 - 2860**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep		
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x
Mass / dimension **C**	350	550	750
Schliessblech / gâche / keep **987026**	1x	1x	1x
Mass / dimension **B**	729	729	729
Schloss / serrure / lock **RZ**	**986467**	**986467**	**986467**
Schloss / serrure / lock **PZ**	**986466**	**986466**	**986466**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**
DIN links / gauche / left			
Schliessblech / gâche / keep **987027** **987028**	1x	1x	1x
DIN rechts / droite / right			
Mass / dimension **D**	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

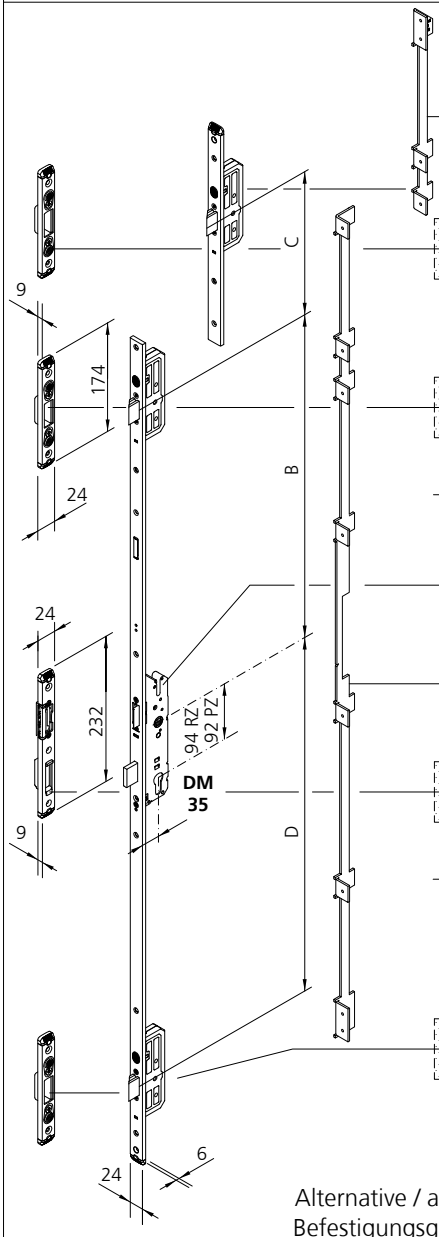
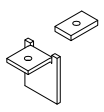


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



3

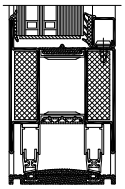
09/23

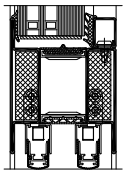
Beschläge
Verriegelung Standflügel

Ferrements
Verrouillage du vantail semi-fixe

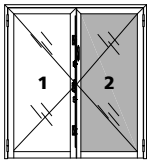
Fittings
Locking of fixed leaf

RZ Ø 22 mm
PZ Ø 17 mm





DIN links / DIN gauche / DIN left



DIN rechts / DIN droite / DIN right

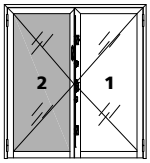
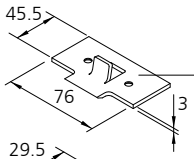
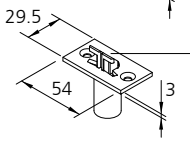


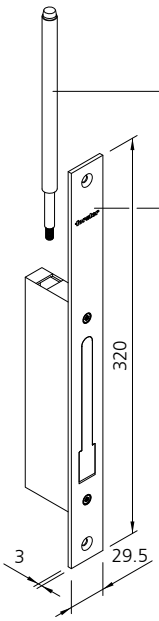
Abbildung: DIN rechts / fig.: DIN droite / fig.: DIN right



Schliessblech / Gâche / Keep — **987006** — 1x

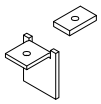


Schaltschloss / Serrure de maintien / Switch latch — **987002** — 1x



Stange nach oben / Tringle vers le haut / Rod upwards — **987004** — 1x

Selbstverriegelndes Falztreibriegel-Schloss / Crémone de commande à levier, verrouillage automatique / Self-locking drive bolt-lock — **987456** — 1x

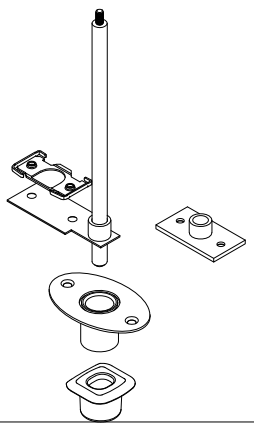


Befestigungsgarnitur Art.Nr. 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987040.
Order fastening set art. no. 987040 separately.

Senkschrauben M5 x 10 mm beiliegend / vis coniques M5 x 10 mm jointes / countersunk screw M5 x 10 mm supplied

Einzelteile bestellen
pièces détachées à commander
order individual parts

wahlweise / à choix / at choice:



Stange nach unten / Tringle vers le bas / Rod downwards
Art. Nr. / art. no. / art. no. 987005

Stangenführung / Guide de tringle / Rod guide
Sockel stumpf / socle coupe droite / butt joint
Art. Nr. / art. no. / art. no. 987011 + 987072
Gehrung / coupe en onglet / mitre joint
Art. Nr. / art. no. / art. no. 987010

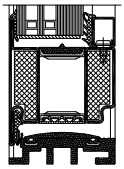
Verstellbare Bodenschliesshülse / Douille de fermeture au sol régable / Adjustable floor covering bush
Art. Nr. / art. no. / art. no. 987051
Art. Nr. / art. no. / art. no. 987052

Beschläge
Verriegelung Standflügel

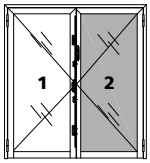
Ferrements
Verrouillage du vantail semi-fixe

Fittings
Locking of fixed leaf

RZ Ø 22 mm
PZ Ø 17 mm



DIN links / DIN gauche / DIN left



DIN rechts / DIN droite / DIN right

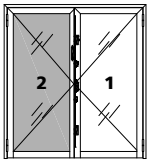
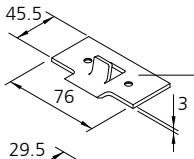
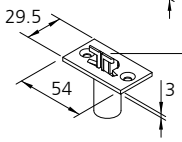


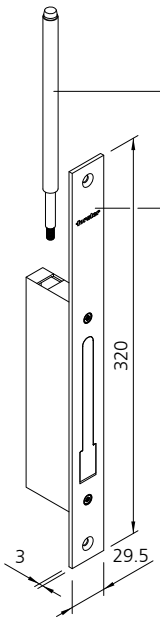
Abbildung: DIN rechts / fig.: DIN droite / fig.: DIN right



Schliessblech / Gâche / Keep — **987006** — 1x

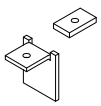


Schaltschloss / Serrure de maintien / Switch latch — **987002** — 1x

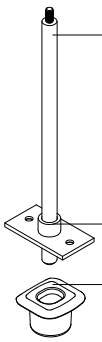


Stange nach oben / Tringle vers le haut / Rod upwards — **987004** — 1x

Selbstverriegelndes Falztreibriegel-Schloss / Crémone de commande à levier, verrouillage automatique / Self-locking drive bolt-lock — **987456** — 1x



Befestigungsgarnitur Art.Nr. 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987040.
Order fastening set art. no. 987040 separately.



Stange nach unten / Tringle vers le bas / Rod downwards — **987005** — 1x

Stangenführung / Guide de tringle / Rod guide — **987010** — 1x

Verstellbare Bodenschliesshülse / Douille de fermeture au sol régable / Adjustable floor covering bush — **987052** — 1x

Einzelteile bestellen
pièces détachées à commander
order individual parts

Senkschrauben M5 x 10 mm beiliegend / vis coniques M5 x 10 mm jointes / countersunk screw M5 x 10 mm supplied

3

09/23

Beschläge
Schlossgarnituren
3-Punkt-Verriegelung
Antipanik-Gegenkasten

Ferrements
Garnitures de serrures
Verrouillage 3 points
Crémone anti-panique

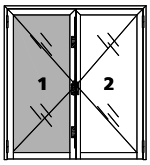
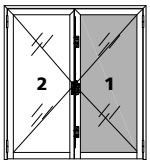
Fittings
Sets of locks
3 point locking
Anti-panic opposite lock

EN 179 EN 1125

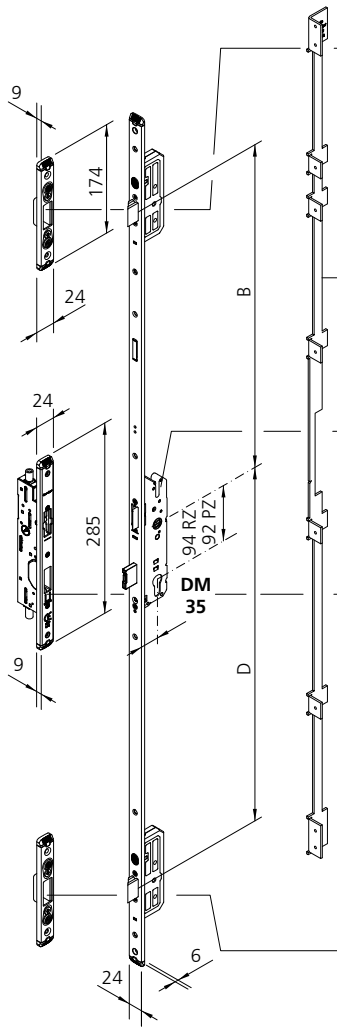
RZ Ø 22 mm
PZ Ø 17 mm

Umschaltfunktion mit Antipanik **B**
Fonction avec anti-panique **B**
Switch function with anti-panic version **B**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

	DIN links / gauche / left		DIN rechts / droite / right	
				
	Flügelhöhe / hauteur de vantail / leaf hight			
	1935 - 2134	**2135 - 2335**	**1935 - 2134**	**2135 - 2335**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep			
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x
Mass / dimension **B**	729	929	729	929
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987037**	**987036**	**987037**
Schloss / serrure / lock **RZ**	**986499**	**986501**	**986498**	**986500**
Schloss / serrure / lock **PZ**	**986493**	**986495**	**986492**	**986494**
Antipanik-Gegenkasten / crémone anti-panique / anti-panic opposite lock **977400**	1x	1x	1x	1x
Mass / dimension **D**	782.5	782.5	782.5	782.5
	EN 179 EN 1125	EN 179 EN 1125	EN 179 EN 1125	EN 179 EN 1125
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied



Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.

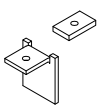


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung
Antipanik-Gegenkasten

Ferrements
Garnitures de serrures
Verrouillage 4 points
Crémone anti-panique

Fittings
Sets of locks
4 point locking
Antipanik-Gegenkasten

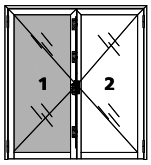
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

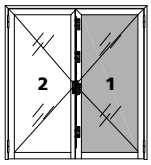
Umschaltfunktion mit Antipanik **B**
Fonction avec anti-panique **B**
Switch function with anti-panic version **B**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right



Flügelhöhe / hauteur de vantail / leaf hight

2336 - 2484	2485 - 2684	2685 - 2860	2336 - 2484	2485 - 2684	2685 - 2860
Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep					
Befestigungswinkel / l'angle de fixation / fixing angle **987035**	**987035**	**987035**	**987035**	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x	1x	1x
Mass / dimension **C**	350	550	750	350	550	750
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x	1x	1x
Mass / dimension **B**	729	729	729	729	729	729
Schloss / serrure / lock **RZ**	**986499**	**986499**	**986499**	**986498**	**986498**	**986498**
PZ	**986493**	**986493**	**986493**	**986492**	**986492**	**986492**
Befestigungswinkel / l'angle de fixation / fixing angle **987036**	**987036**	**987036**	**987036**	**987036**	**987036**	**987036**
Antipanik-Gegenkasten / crémone anti-panique / anti-panic opposite lock **977400**	1x	1x	1x	1x	1x	1x
Mass / dimension **D**	782.5	782.5	782.5	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

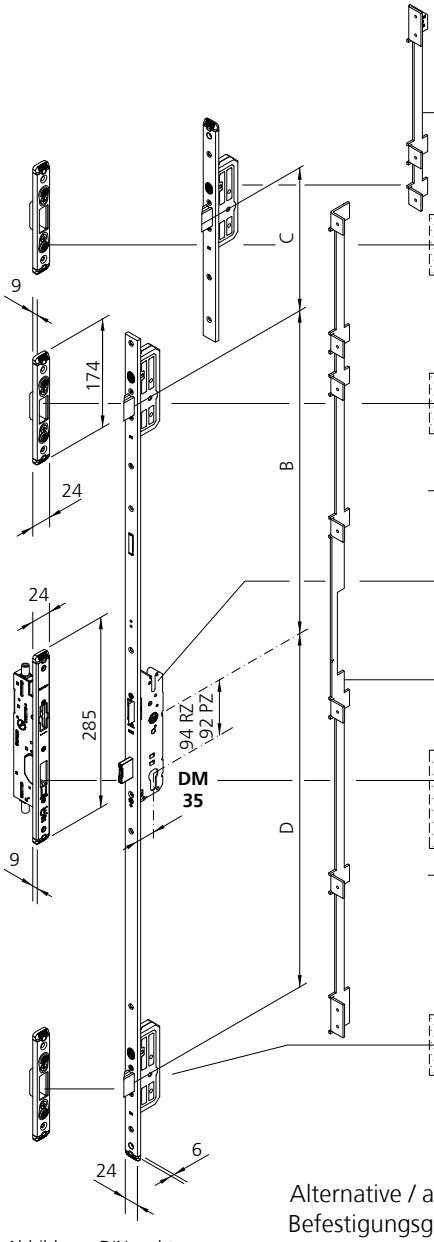
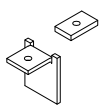


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



3

09/23

Beschläge
Schlossgarnituren
3-Punkt-Verriegelung
Antipanik-Gegenkasten

Ferrements
Garnitures de serrures
Verrouillage 3 points
Crémone anti-panique

Fittings
Sets of locks
3 point locking
Anti-panic opposite lock

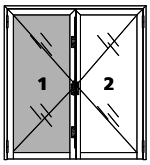
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

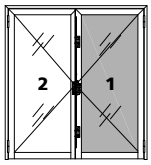
Wechselfunktion mit Anti-Panik **E**
Fonction à levier avec anti-panique **E**
Lever handle set with anti-panic version **E**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



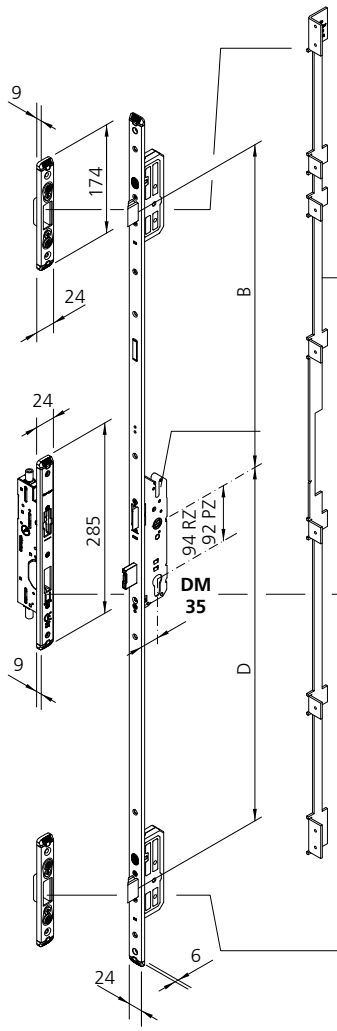
DIN rechts / droite / right



Flügelhöhe / hauteur de vantail / leaf hight

	1935 - 2134	**2135 - 2335**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep	
Schliessblech / gâche / keep **987026**	1x	1x
Mass / dimension **B**	729	929
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987037**
Schloss / serrure / lock **RZ**	**986487**	**986489**
Schloss / serrure / lock **PZ**	**986486**	**986488**
Antipanik-Gegenkasten / crémone anti-panique / anti-panic opposite lock **977400**	1x	1x
Mass / dimension **D**	782.5	782.5
	EN 179 EN 1125	EN 179 EN 1125
Schliessblech / gâche / keep **987026**	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied



Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.

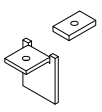


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

09/23

Beschläge
Schlossgarnituren
4-Punkt-Verriegelung
Antipanik-Gegenkasten

Ferrements
Garnitures de serrures
Verrouillage 4 points
Crémone anti-panique

Fittings
Sets of locks
4 point locking
Anti-panic opposite lock

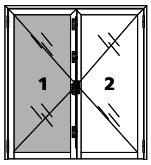
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm

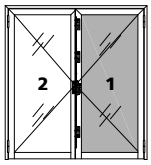
Wechselfunktion mit Anti-Panik **E**
Fonction à levier avec anti-panique **E**
Lever handle set with anti-panic version **E**

Selbstverriegelnd (Magnetkontakt)
Verrouillage automatique (contact magnétique)
Self-locking (magnetic contacts)

DIN links / gauche / left



DIN rechts / droite / right



	Flügelhöhe / hauteur de vantail / leaf hight		
	2336 - 2484	**2485 - 2684**	**2685 - 2860**
	Schloss mit Schliessblech bestellen serrure avec gâche à commander order lock with keep		
Befestigungswinkel / l'angle de fixation / fixing angle	**987035**	**987035**	**987035**
Verlängerung / extension **986484**	1x	1x	1x
Schliessblech / gâche / keep **987026**	1x	1x	1x
Mass / dimension **C**	350	550	750
Schliessblech / gâche / keep **987026**	1x	1x	1x
Mass / dimension **B**	729	729	729
Schloss / serrure / lock **RZ**	**986487**	**986487**	**986487**
Schloss / serrure / lock **PZ**	**986486**	**986486**	**986486**
Befestigungswinkel / l'angle de fixation / fixing angle	**987036**	**987036**	**987036**
Antipanik-Gegenkasten / crémone anti-panique / anti-panic opposite lock **977400**	1x	1x	1x
Mass / dimension **D**	782.5	782.5	782.5
Schliessblech / gâche / keep **987026**	1x	1x	1x

Senkschrauben M5 x 16 mm beiliegend / vis coniques M5 x 16 mm jointes / countersunk screw M5 x 16 mm supplied

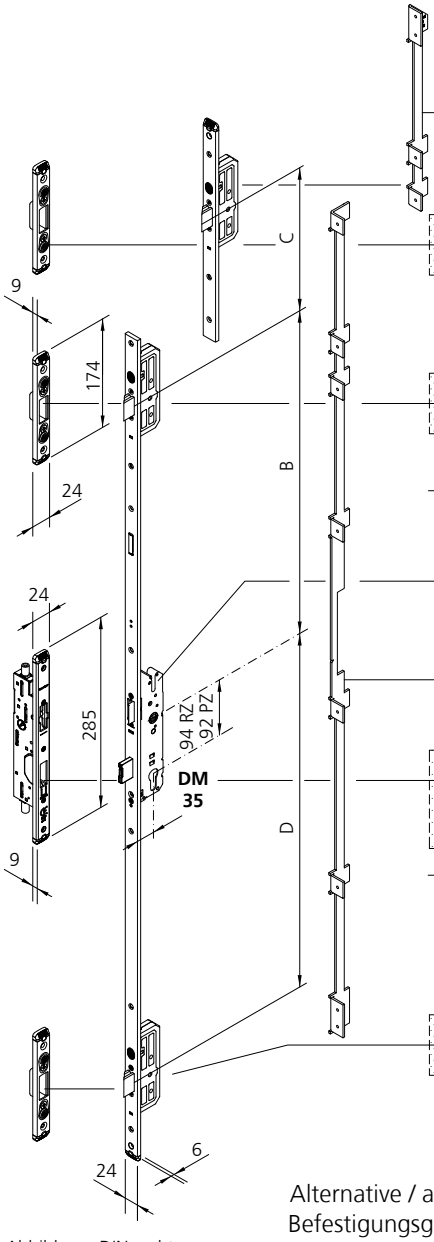
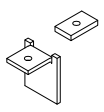


Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

Alternative / alternative / alternative
Befestigungsgarnitur Art.Nr. 987039, 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987039, 987040.
Order fastening set art. no. 987039, 987040 separately.



3

09/23

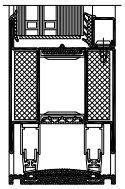
Beschläge
Verriegelung Standflügel
Antipanik-Gegenkasten

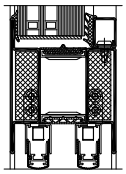
Ferrements
Verrouillage du vantail semi-fixe
Crémone anti-panique

Fittings
Locking of fixed leaf
Anti-panic opposite lock

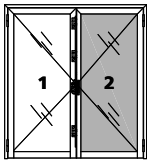
EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm





DIN links / DIN gauche / DIN left



DIN rechts / DIN droite / DIN right

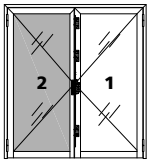
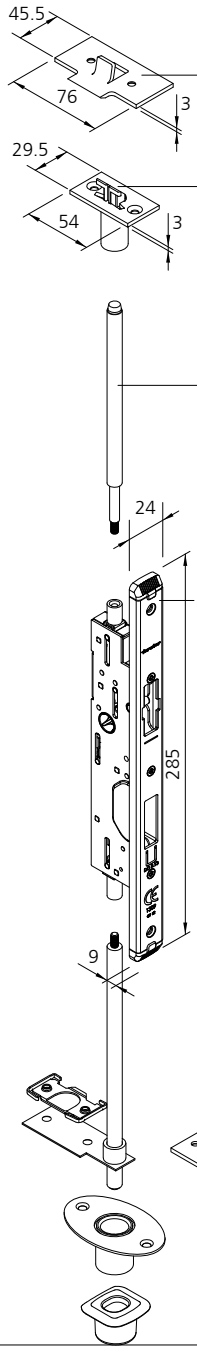


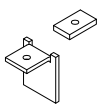
Abbildung: DIN rechts / fig.: DIN droite / fig.: DIN right



Einzelteile bestellen
pièces détachées à commander
order individual parts

Schliessblech / Gâche / Keep	**987006**	1x
Schaltschloss / Serrure de maintien / Switch latch	**987002**	1x
Stange nach oben / Tringle vers le haut / Rod upwards	**987004**	1x
Antipanik-Gegenkasten / crémone anti-panique / anti-panic opposite lock	**977400**	1x

Senkschrauben M5 x 10 mm beiliegend /
vis coniques M5 x 10 mm jointes /
countersunk screw M5 x 10 mm supplied



Befestigungsgarnitur Art.Nr. 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987040.
Order fastening set art. no. 987040 separately.

wahlweise / à choix / at choice:

Stange nach unten / Tringle vers le bas / Rod downwards
Art. Nr. / art. no. / art. no. 987005

Stangenführung / Guide de tringle / Rod guide
Sockel stumpf / socle coupe droite / butt joint
Art. Nr. / art. no. / art. no. 987011 + 987072
Gehrung / coupe en onglet / mitre joint
Art. Nr. / art. no. / art. no. 987010

Verstellbare Bodenschliesshülse / Douille de fermeture au sol régable / Adjustable floor covering bush
Art. Nr. / art. no. / art. no. 987051
Art. Nr. / art. no. / art. no. 987052

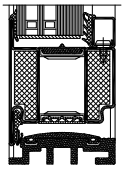
Beschläge
Verriegelung Standflügel
Antipanik-Gegenkasten

Ferrements
Verrouillage du vantail semi-fixe
Crémone anti-panique

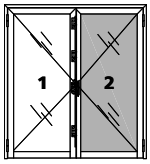
Fittings
Locking of fixed leaf
Anti-panic opposite lock

EN 179 EN 1125

RZ Ø 22 mm
PZ Ø 17 mm



DIN links / DIN gauche / DIN left



DIN rechts / DIN droite / DIN right

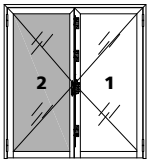
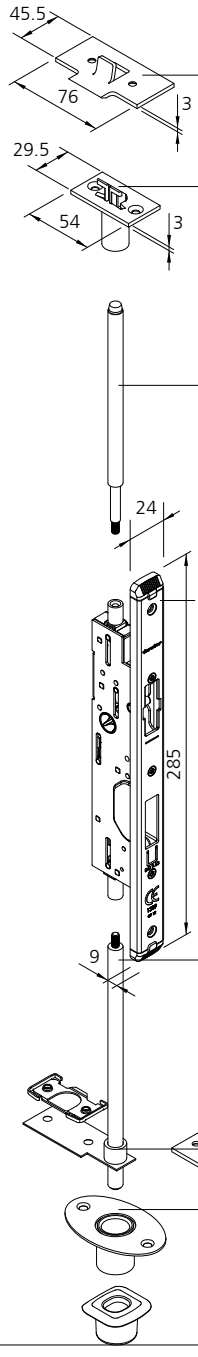
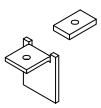


Abbildung: DIN rechts / fig.: DIN droite / fig.: DIN right



Einzelteile bestellen
pièces détachées à commander
order individual parts

Schliessblech / Gâche / Keep	**987006**	1x
Schaltschloss / Serrure de maintien / Switch latch	**987002**	1x
Stange nach oben / Tringle vers le haut / Rod upwards	**987004**	1x
Antipanik-Gegenkasten / crémone anti-panique / anti-panic opposite lock	**977400**	1x
Stange nach unten / Tringle vers le bas / Rod downwards	**987005**	1x
Stangenführung / Guide de tringle / Rod guide	**987010**	1x
Verstellbare Bodenschliesshülse / Douille de fermeture au sol régable / Adjustable floor covering bush	**987052**	1x



Befestigungsgarnitur Art.Nr. 987040 zusätzlich bestellen.
Commander séparément la garniture de fixation, art. no. 987040.
Order fastening set art. no. 987040 separately.

Senkschrauben M5 x 10 mm beiliegend / vis coniques M5 x 10 mm jointes / countersunk screw M5 x 10 mm supplied

3

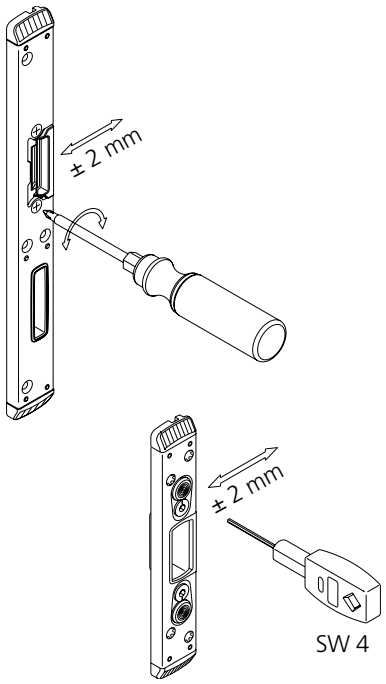
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Beschläge
Verstellungen

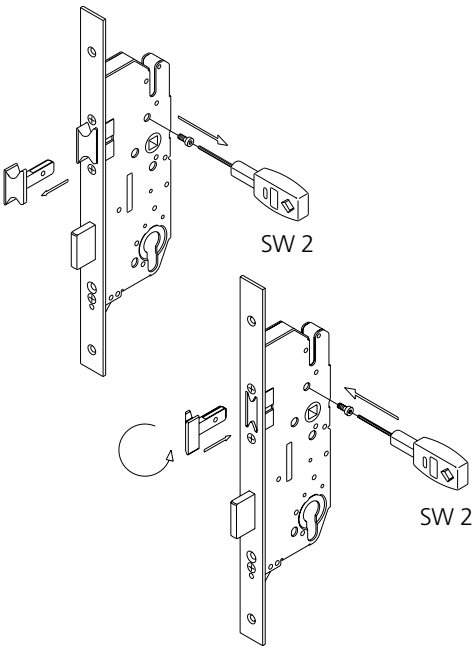
Ferrements
Réglage

Fittings
Adjustments

Verstellung der Schliessteile
Gâche réversible gauche / droite
Adjustement of strike plates

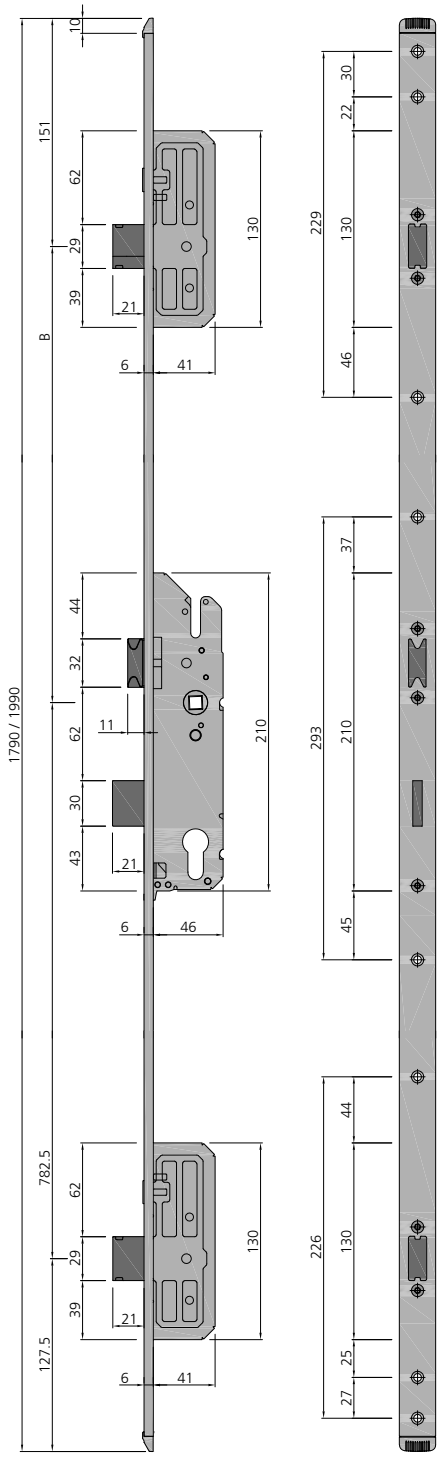


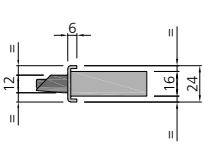
Fallenumstellung
Bec de cane réversible gauche / droite
Latch changing

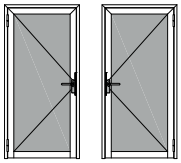


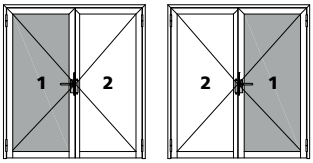
Beschläge / Ferrements / Fittings

Schlösser / Serrures / Locks

Abbildung / Figure / Figure	Bezeichnung / Désignation / Designation	Verkaufseinheit / Unité de vente / Sales unit	Art.Nr. / art. no. / art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN links und DIN rechts** verwendbar; Selbstverriegelnd; Umlegbare Falle; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN gauche et DIN droite**; verrouillage automatique; bec de cane basculant; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN left and DIN right**; Self-locking; switchable handle; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws **Mehrfachverriegelung-Schloss** **Serrure à verrouillage multiple** **Multi-point lock** Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm** Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm**	1 Stk./pce	**RZ** **986461** **PZ** **986460**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm** Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm**	1 Stk./pce	**RZ** **986463** **PZ** **986462**

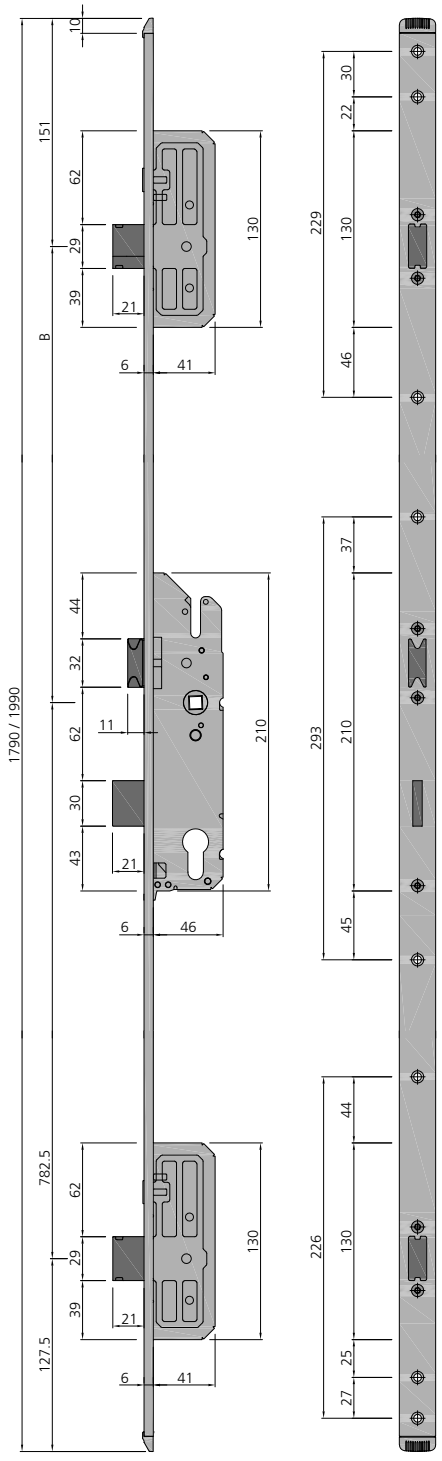


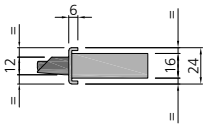


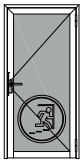


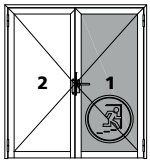
Beschläge / Ferrements / Fittings

Schlösser / Serrures / Locks

Abbildung / Figure / Figure	Bezeichnung / Désignation / Designation	Verkaufseinheit / Unité de vente / Sales unit	Art.Nr. / art. no. / art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN rechts** verwendbar; Selbstverriegelnd; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN droite**; verrouillage automatique; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN right**; Self-locking; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws		**Funktion B** **Fonction B** **Function B**
	Mehrfachverriegelung-Schloss, **DIN rechts** Serrure à verrouillage multiple, **DIN droite** Multi-point lock, **DIN right**		EN 179 / EN 1125
	Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986478**
	Ø 17 mm	**PZ**	**986472**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986480**
	Ø 17 mm	**PZ**	**986474**





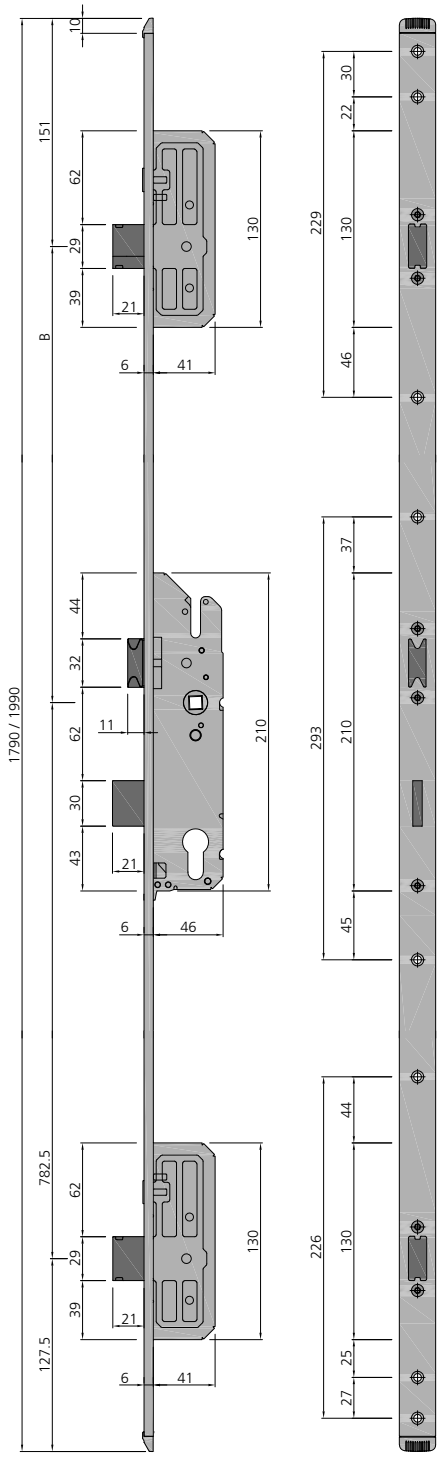


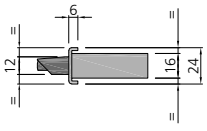
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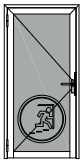
Beschläge
Schlösser

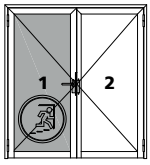
Ferrements
Serrures

Fittings
Locks

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN links** verwendbar; Selbstverriegelnd; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN gauche**; verrouillage automatique; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN left**; Self-locking; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws		**Funktion B** **Fonction B** **Function B**
	Mehrfachverriegelung-Schloss, **DIN links** Serrure à verrouillage multiple, **DIN gauche** Multi-point lock, **DIN left**		EN 179 EN 1125
	Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986479**
	Ø 17 mm	**PZ**	**986473**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986481**
	Ø 17 mm	**PZ**	**986475**

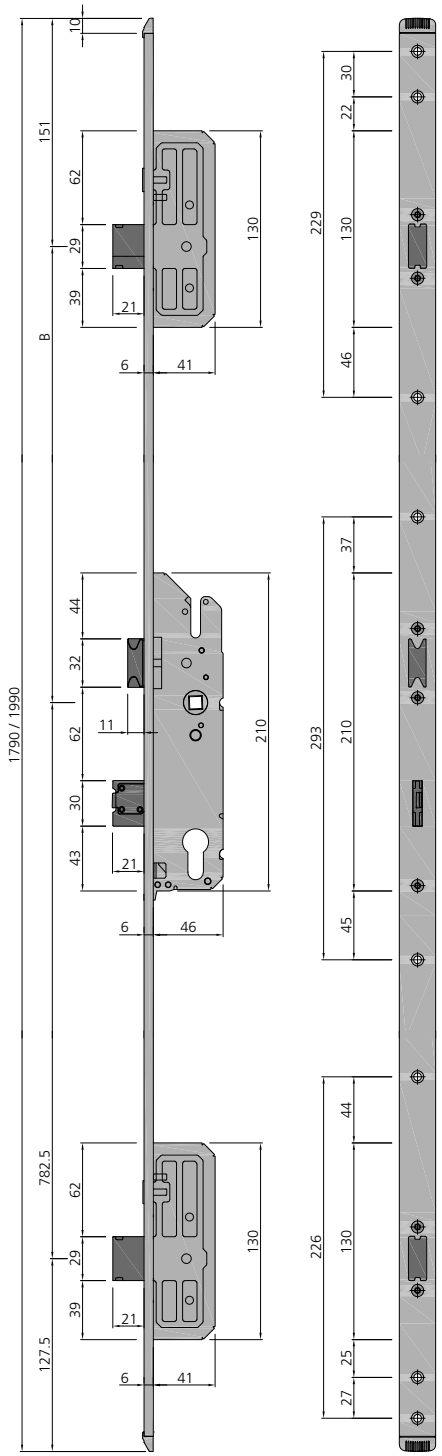


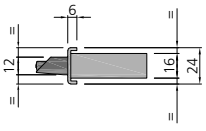


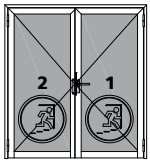


Beschläge / Ferrements / Fittings

Schlösser / Serrures / Locks

Abbildung / Figure / Figure	Bezeichnung / Désignation / Designation	Verkaufseinheit / Unité de vente / Sales unit	Art.Nr. / art. no. / art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN rechts** verwendbar; Selbstverriegelnd; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN droite**; verrouillage automatique; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN right**; Self-locking; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws		**Funktion B** **Fonction B** **Function B**
	Mehrfachverriegelung-Schloss, **DIN rechts** Serrure à verrouillage multiple, **DIN droite** Multi-point lock, **DIN right**		EN 179 / EN 1125
	Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986498**
	Ø 17 mm	**PZ**	**986492**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986500**
	Ø 17 mm	**PZ**	**986494**

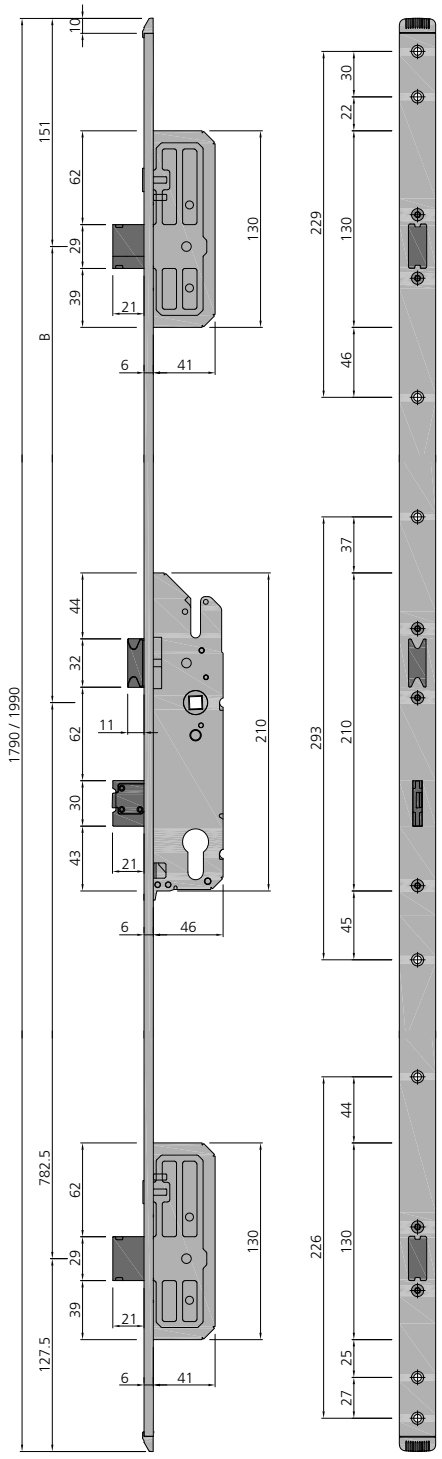


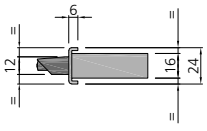


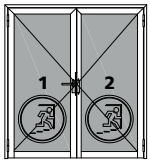
Beschläge
Schlösser

Ferrements
Serrures

Fittings
Locks

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN links** verwendbar; Selbstverriegelnd; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN gauche**; verrouillage automatique; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN left**; Self-locking; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws		**Funktion B** **Fonction B** **Function B**
	Mehrfachverriegelung-Schloss, **DIN links** Serrure à verrouillage multiple, **DIN gauche** Multi-point lock, **DIN left**		EN 179 EN 1125
	Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986499**
	Ø 17 mm	**PZ**	**986493**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm**		
	Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm** — Ø 22 mm	1 Stk./pce **RZ**	**986501**
	Ø 17 mm	**PZ**	**986495**



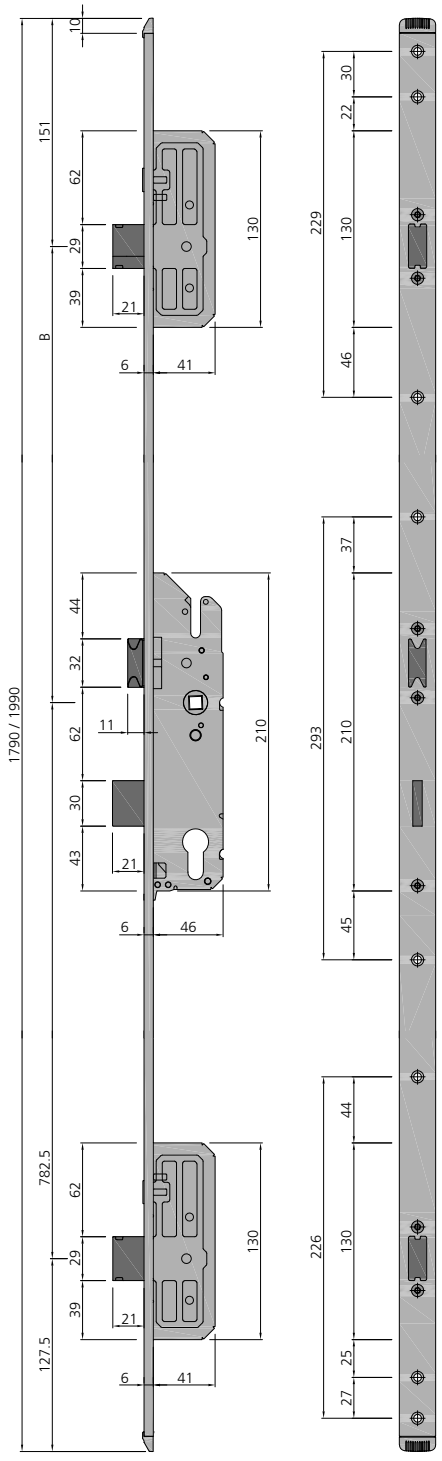


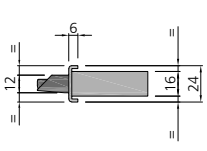
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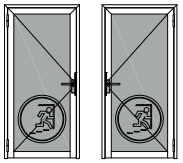
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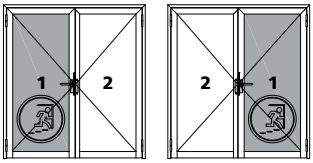
Beschläge / Ferrements / Fittings

Schlösser / Serrures / Locks

Abbildung / Figure / Figure	Bezeichnung / Désignation / Designation	Verkaufseinheit / Unité de vente / Sales unit	Art.Nr. / art. no. / art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN links und DIN rechts** verwendbar; Selbstverriegelnd; Umlegbare Falle; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN gauche et DIN droite**; verrouillage automatique; bec de cane basculant; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN left and DIN right**; Self-locking; switchable handle; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws **Mehrfachverriegelung-Schloss** **Serrure à verrouillage multiple** **Multi-point lock** Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm** Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm**	1 Stk./pce	**Funktion E** **Fonction E** **Function E** EN 179 EN 1125 Ø 22 mm **RZ** **986467** Ø 17 mm **PZ** **986466**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm** Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm**	1 Stk./pce	Ø 22 mm **RZ** **986469** Ø 17 mm **PZ** **986468**





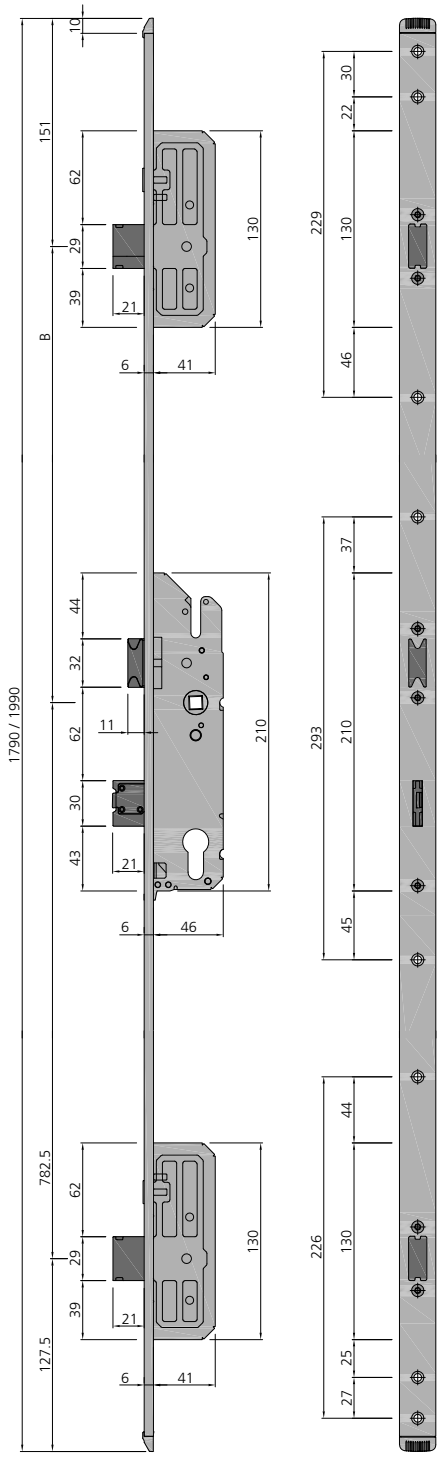


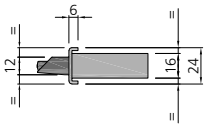
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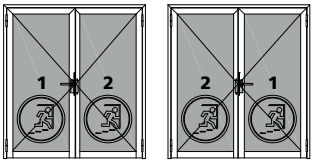
Beschläge
Schlösser

Ferrements
Serrures

Fittings
Locks

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	 **RZ** **PZ** Zylinder Ø 22 / Ø 17 mm; **DIN links und DIN rechts** verwendbar; Selbstverriegelnd; Umlegbare Falle; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben Cylindre Ø 22 / Ø 17 mm; utilisation possible **DIN gauche et DIN droite**; verrouillage automatique; bec de cane basculant; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation Ø 22 / Ø 17 mm cylinder; applicable on **DIN left and DIN right**; Self-locking; switchable handle; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws **Mehrfachverriegelung-Schloss** **Serrure à verrouillage multiple** **Multi-point lock** Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm** Länge Stulp / Longueur têtière / Face plate length = **1790 mm** B = **729 mm** Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm** Länge Stulp / Longueur têtière / Face plate length = **1990 mm** B = **929 mm**	1 Stk./pce	**Funktion E** **Fonction E** **Function E** EN 179 EN 1125 Ø 22 mm **RZ** **986487** Ø 17 mm **PZ** **986486** Ø 22 mm **RZ** **986489** Ø 17 mm **PZ** **986488**

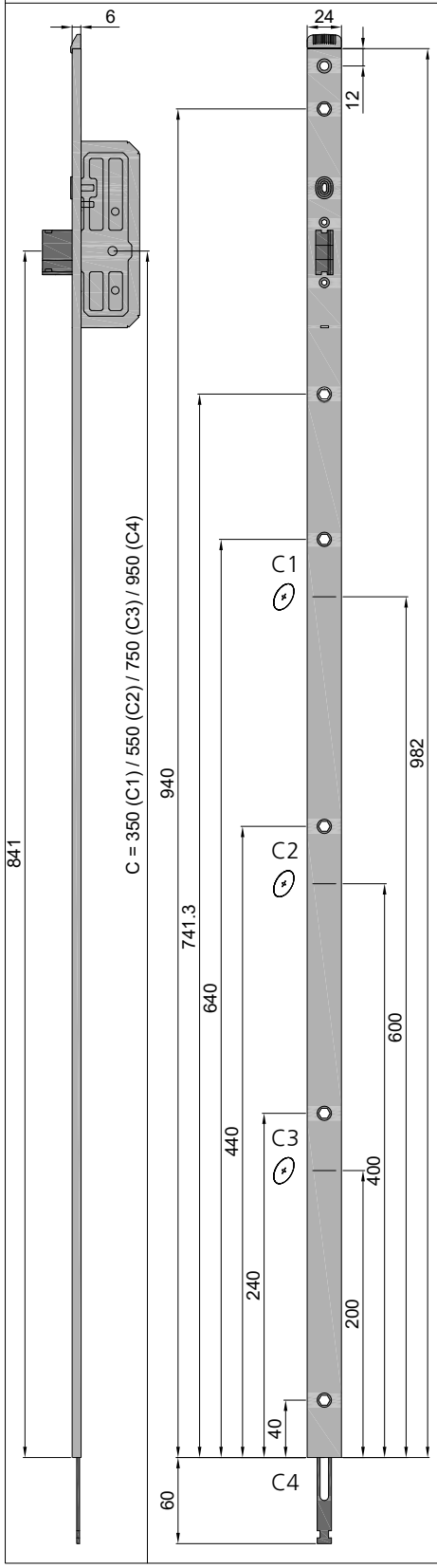


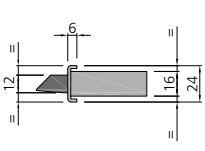


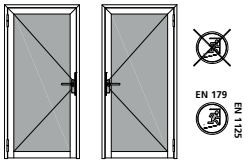
Beschläge
Schlösser
Verlängerung

Ferrements
Serrures
Extension

Fittings
Locks
Extension

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	**DIN links und DIN rechts** verwendbar; Selbstverriegelnd; Umlegbare Falle; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben; in Kombination mit 986460/-461, 986478/-479, 986472/-473, 986466/-467 utilisation possible **DIN gauche et DIN droite**; verrouillage automatique; bec de cane basculant; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation; en combinaison avec 986460/-461, 986478/-479, 986472/-473, 986466/-467 applicable on **DIN left and DIN right**; Self-locking; switchable handle; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws; in combination with 986460/-461, 986478/-479, 986472/-473, 986466/-467 **Verlängerung für Mehrfachverriegelung** **Extension pour serrure à verrouillage multiple** **Extension for multi-point lock** Flügelhöhe / Hauteur de vantail / Leaf height: **2285 -2484 mm** Länge Stulp / Longueur têtière / Face plate length = **382 mm** C1 = **600 mm** / C = **350 mm** Flügelhöhe / Hauteur de vantail / Leaf height: **2485 - 2684 mm** Länge Stulp / Longueur têtière / Face plate length = **582 mm** C2 = **400 mm** / C = **550 mm** Flügelhöhe / Hauteur de vantail / Leaf height: **2685 - 2884 mm** Länge Stulp / Longueur têtière / Face plate length = **782 mm** C3 = **200 mm** / C = **750 mm** Flügelhöhe / Hauteur de vantail / Leaf height: **2885 - 3020 mm** Länge Stulp / Longueur têtière / Face plate length = **982 mm** C4 = **0 mm** / C = **950 mm**	1 Stk./pce 1 Stk./pce 1 Stk./pce 1 Stk./pce	EN 179 EN 1125 **986484**



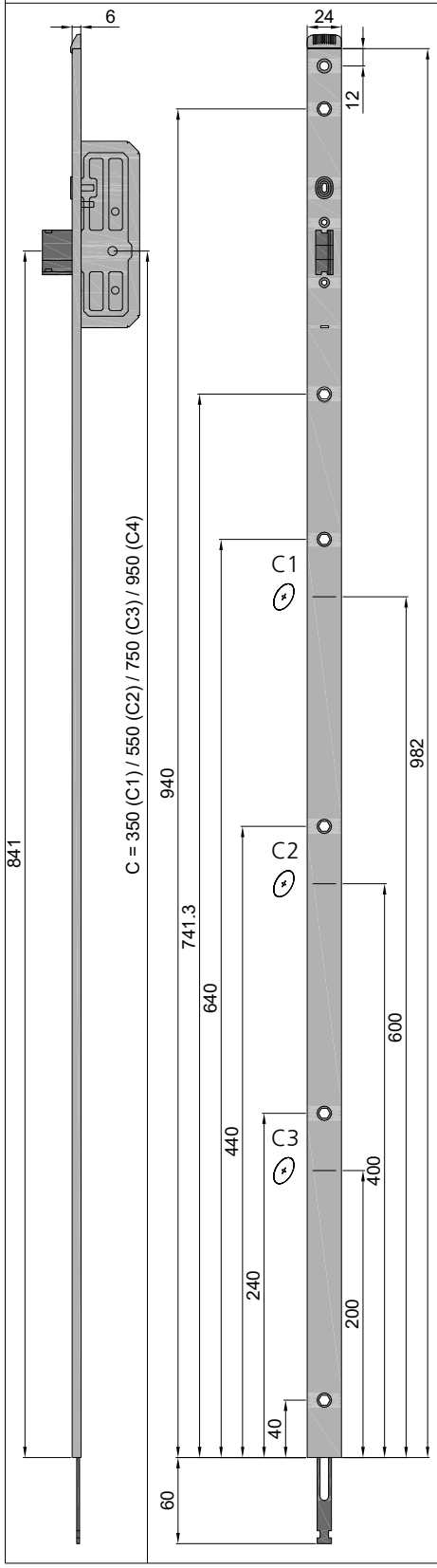


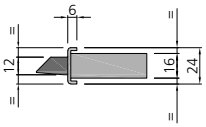
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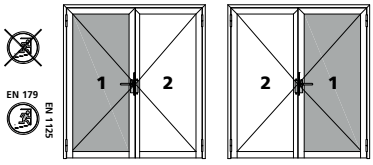
Beschläge
Schlösser
Verlängerung

Ferrements
Serrures
Extension

Fittings
Locks
Extension

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	**DIN links und DIN rechts** verwendbar; Selbstverriegelnd; Umlegbare Falle; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; inklusive Befestigungsschrauben; in Kombination mit 986460/-461, 986478/-479, 986472/-473, 986466/-467 utilisation possible **DIN gauche et DIN droite**; verrouillage automatique; bec de cane basculant; têtière Forster en acier inox meulé; boîtier de serrure zingué; avec vis de fixation; en combinaison avec 986460/-461, 986478/-479, 986472/-473, 986466/-467 applicable on **DIN left and DIN right**; Self-locking; switchable handle; Forster front plate stainless steel polished; lock casing galvanised; including fastening screws; in combination with 986460/-461, 986478/-479, 986472/-473, 986466/-467 **Verlängerung für Mehrfachverriegelung** **Extension pour serrure à verrouillage multiple** **Extension for multi-point lock** Flügelhöhe / Hauteur de vantail / Leaf height: **2285 -2484 mm** Länge Stulp / Longueur têtière / Face plate length = **382 mm** C1 = **600 mm** / C = **350 mm** Flügelhöhe / Hauteur de vantail / Leaf height: **2485 - 2684 mm** Länge Stulp / Longueur têtière / Face plate length = **582 mm** C2 = **400 mm** / C = **550 mm** Flügelhöhe / Hauteur de vantail / Leaf height: **2685 - 2860 mm** Länge Stulp / Longueur têtière / Face plate length = **782 mm** C3 = **200 mm** / C = **750 mm**	1 Stk./pce 1 Stk./pce 1 Stk./pce	EN 179 EN 1125 **986484**





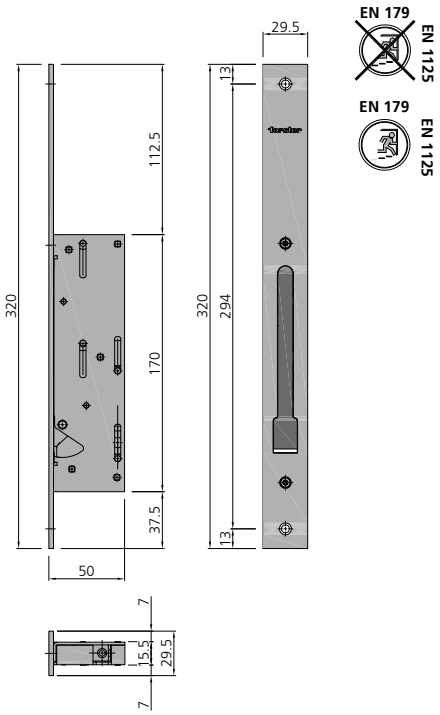
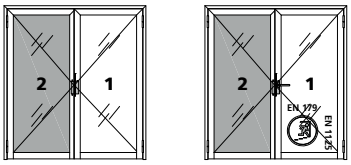
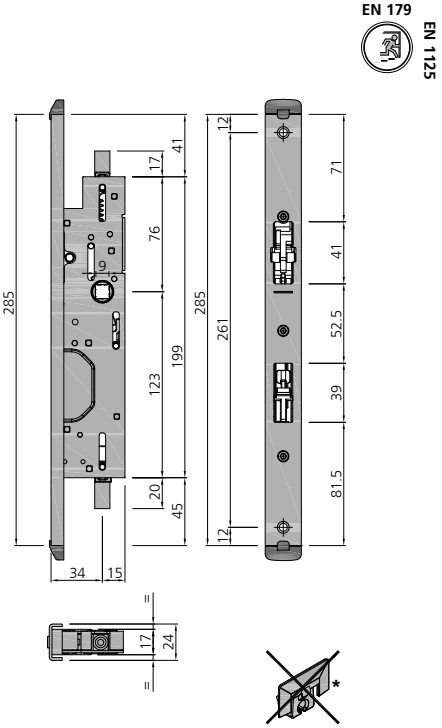
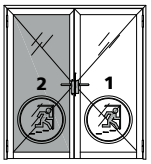
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Beschläge
Verriegelung Standflügel

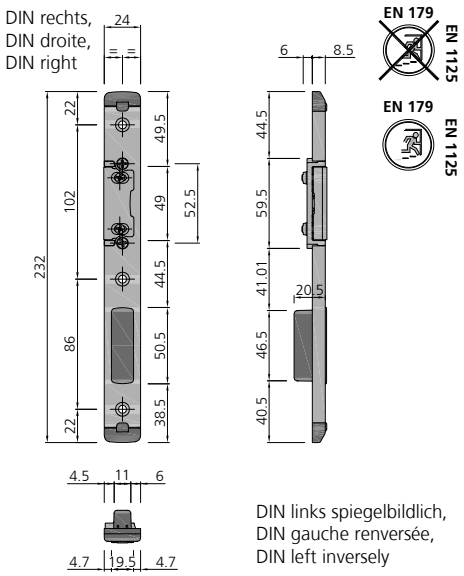
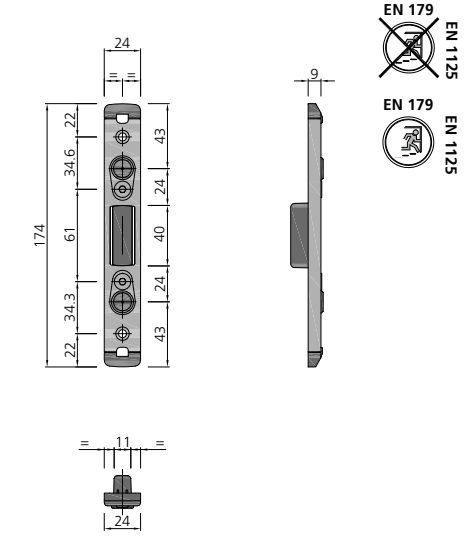
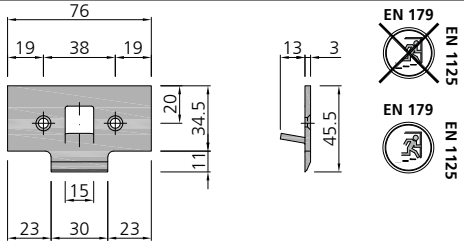
Ferrements
Verrouillage du vantail semi-fixe

Fittings
Locking of fixed leaf

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
	Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; Anschlussgewinde M5; Hub = 20 mm; inklusive Befestigungsschrauben têtière Forster en acier inox poli; boîtier de crémone zingué; filetage de raccordement M5; course = 20 mm; avec vis de fixation Forster front plate stainless steel polished; lock casing galvanised; connecting thread M5; stroke = 20 mm; including fastening screws Selbstverriegelndes Falztreibriegel-Schloss Crémone de commande à levier, verrouillage automatique Self-locking drive bolt lock 	1 Stk./pce	**987456**
 ***wird nicht benötigt ne pas nécessaire not requirede**	Für Voll-Anti-Panik-Türen; DIN links und DIN rechts verwendbar; Forster-Stulp Edelstahl geschliffen; Schlosskasten verzinkt; Anschlussgewinde M5; Hub = 20 mm; inklusive Befestigungsschrauben und Endkappen zu U-Stulp Pour porte à fonction anti-panique; utilisation possible DIN gauche et DIN droite; têtière Forster en acier inox poli; boîtier de serrure zingué; filetage de raccordement M5; course = 20 mm; avec vis de fixation et embouts dem fermeture pour têtière U For full-anti-panic doors; upplicable on DIN left and DIN right; Forster front plate stainless steel polished; lock casing galvanised; connecting thread M5; stroke = 20 mm; including fastening screws and end caps for U front plate Antipanik-Gegenkasten Crémone anti-panique Opposite lock anti-panic-version 	1 Stk./pce	**977400**

Beschläge / Ferrements / Fittings

Schliessbleche / Gâches / Keeps

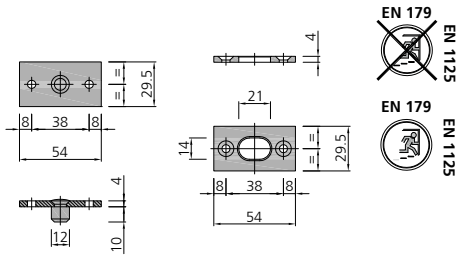
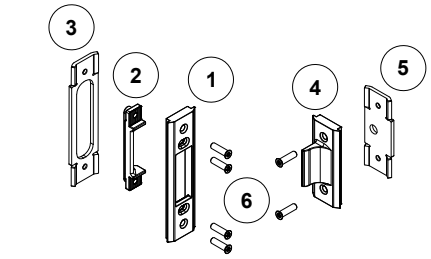
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
DIN rechts, DIN droite, DIN right  DIN links spiegelbildlich, DIN gauche renversée, DIN left inversely	Schliessblech für Hauptschloss Verstellbereich +/- 2 mm Gâche pour serrure principale Plage de réglage +/- 2 mm Keep for main lock Adjustment range +/- 2 mm DIN links, DIN gauche, DIN left DIN rechts, DIN droite, DIN right Kombinierbar mit Riegelschaltkontakt Fuhr Art. Nr. RFZ126VDS10 Combinable avec contacts de fond de pêne Fuhr art. no. RFZ126VDS10 Combinable with bolt switch contact Fuhr art. no. RFZ126VDS10	1 Stk./pce	**987027** **987028**
 	Schliessblech für Nebenschloss gross DIN links und DIN rechts anwendbar Verstellbereich +/- 2 mm Gâche pour grand serrure secondaire utilisage DIN gauche et DIN droite Plage de réglage +/- 2 mm Keep for auxiliary lock gross usage DIN left and DIN right Adjustment range +/- 2 mm	1 Stk./pce	**987026**
 	Schliessblech Gâche Keep of door	1 Stk./pce	**987006**

3

Beschläge
Zubehör

Ferrements
Accessoires

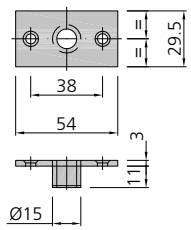
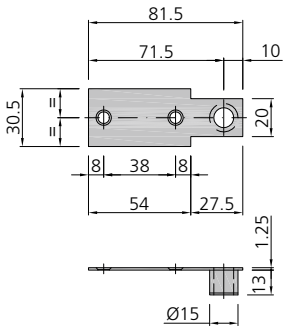
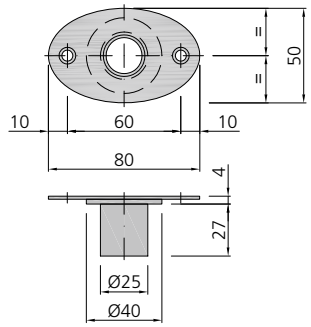
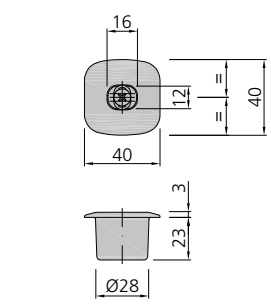
Fittings
Accessories

Abbildung **Figure** **Figure**	**Bezeichnung** **Désignation** **Designation**	**Verkaufseinheit** **Unité de vente** **Sales unit**	**Art.Nr.** **art no** **art. no.**
	Sicherungsbolzen Boulon de sécurité Locking pin	1 Stk./pce	**987713**
Nur im Set erhältlich Disponible seulement en kit Only available in set 	Sicherungsbolzen Einsatz bei verdecktliegendem Band Art.Nr. 907740 Edelstahl Boulon de sécurité utilisé pour paumelle invisible art no 907740 acier inox Locking pin for use on invisible hinge stainless steel 1 Schliessblech Text-F Text-E — 1 Stk/pcs 2 Verstellbacke Text-F Text-E — 1 Stk/pcs 3 Befestigungsplatte Text-F Text-E — 1 Stk/pcs 4 Schliesszapfen Text-F Text-E — 1 Stk/pcs 5 Befestigungsplatte Text-F Text E — 4 Stk/pcs 6 Kleinkopfsenkschraube M5x18 Text-F Text E — 4 Stk/pcs	1 Set/Kit	**987714**

Beschläge
Zubehör

Ferrements
Accessoires

Fittings
Accessories

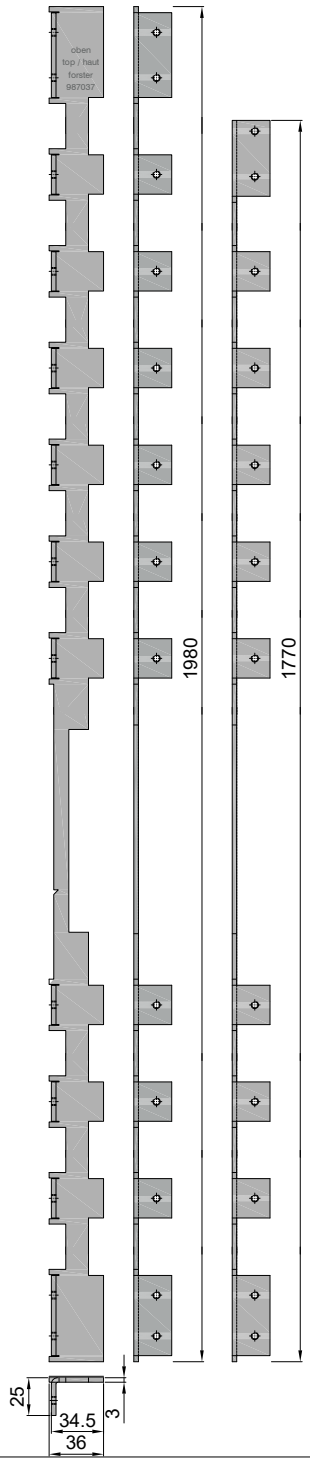
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
 EN 179 EN 1125 EN 179 EN 1125	Stangenführung für Gehrung Guide de tringle pour coupe en onglet Rod guide for mitre joint	1 Stk./pce	**987010**
	Ersatzschraube M5 x 6.5 für Schlösser, Schliessbleche und Standflügelverriegelung Vis de rechange M5 x 6.5 pour serrure, gâches et verrouillages de vantail semi-fixe Replacement screw M5 x 6.5 for locks, keeps and vertical locks	100 Stk./pcs	**986800**
 EN 179 EN 1125 EN 179 EN 1125	Stangenführung für Sockel stumpf Guide de tringle pour socle coupe droite Rod guide for butt joint	1 Stk./pce	**987011**
 EN 179 EN 1125 EN 179 EN 1125	Verstellbare Bodenschliesshülse Edelstahl Verstellbereich +/- 3 mm Douille de fermeture au sol réglable Acier inox Plage de réglage +/- 3 mm Adjustable floor covering sheath Stainless steel Adjustment range +/- 3 mm	1 Stk./pce	**987051**
 EN 179 EN 1125 EN 179 EN 1125	Verstellbare Bodenschliesshülse Edelstahl, Verstellbereich +/- 2 mm Douille de fermeture au sol réglable Acier inox, plage de réglage +/- 2 mm Adjustable floor covering bush stainless steel, adjustment range +/- 2 mm	1 Stk./pce	**987052**

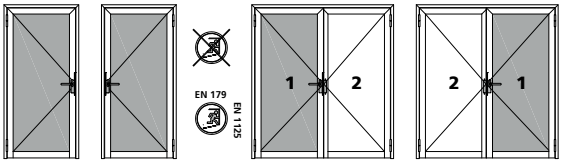
3

Beschläge
Befestigungsschiene

Ferrements
Barre de fixation

Fittings
Fastening rail

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	**DIN links und DIN rechts** verwendbar; Edelstahl; utilisation possible **DIN gauche et DIN droite**; acier inox; applicable on **DIN left and DIN right**; stainless steel; **Befestigungswinkel für Mehrfachverriegelung** **L'angle de fixiation pour serrure à verrouillage multiple** **Fixing angle for multiple lock** Flügelhöhe / Hauteur de vantail / Leaf height: **1935 - 2134 mm** Länge Winkel / Longueur angle / Angle length = **1770 mm**	1 Stk./pce	**987036**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2135 - 2335 mm** Länge Winkel / Longueur angle / Angle length = **1980 mm**	1 Stk./pce	**987037**

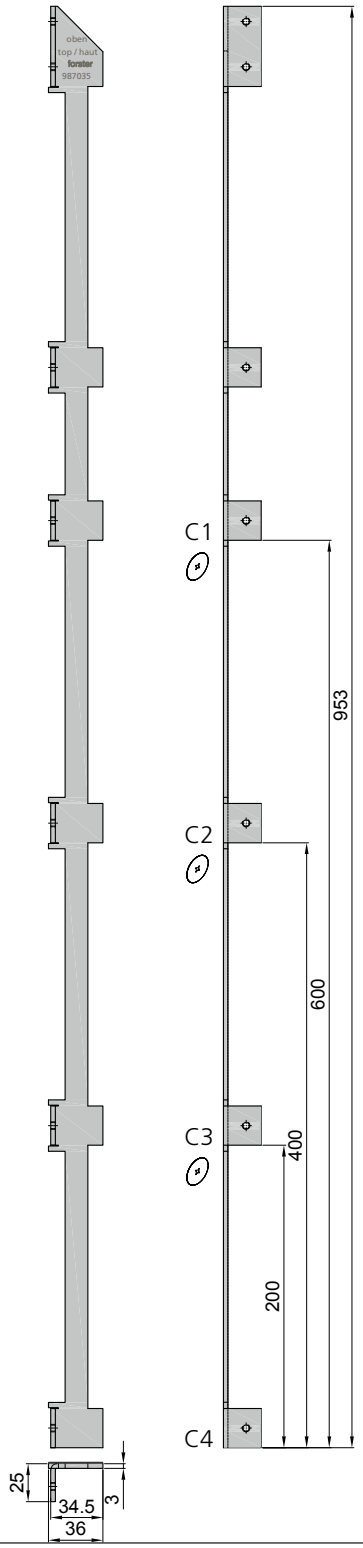


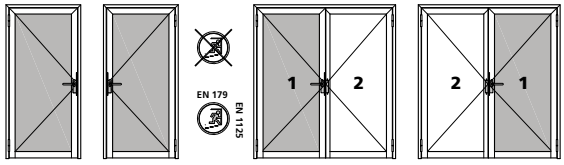
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Beschläge
Befestigungsschiene

Ferrements
Barre de fixation

Fittings
Fastening rail

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	**DIN links und DIN rechts** verwendbar; Edelstahl; in Kombination mit 987036 utilisation possible **DIN gauche et DIN droite**; acier inox; en combinaison avec 987036 applicable on **DIN left and DIN right**; stainless steel; in combination with 987036 **Befestigungsschiene für Verlängerung Mehrfachverriegelung** **Barre de fixiation pour l'extension de la serrure multipoint** **Fastening rail for multi-point lock extension** Flügelhöhe / Hauteur de vantail / Leaf height: **2285 - 2484 mm** Länge Winkel / Longueur angle / Angle length = **353 mm** C1 = **600 mm**	1 Stk./pce	**987035**
	Flügelhöhe / Hauteur de vantail / Leaf height: **2485 - 2684 mm** Länge Winkel / Longueur angle / Angle length = **553 mm** C2 = **400 mm**	1 Stk./pce	
	Flügelhöhe / Hauteur de vantail / Leaf height: **2685 - 2884 mm** Länge Winkel / Longueur angle / Angle length = **753 mm** C3 = **200 mm**	1 Stk./pce	
	Flügelhöhe / Hauteur de vantail / Leaf height: **2885 - 3020 mm** Länge Winkel / Longueur angle / Angle length = **953 mm** C4 = **0 mm**	1 Stk./pce	



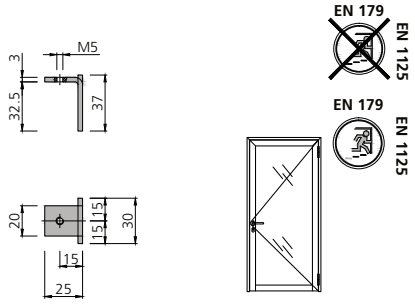
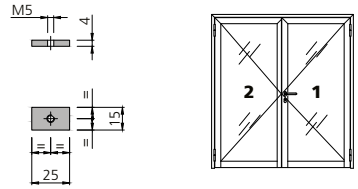
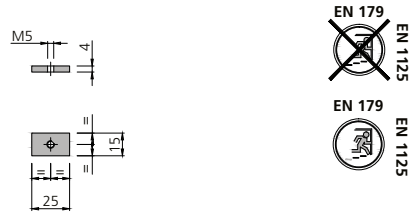
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09/23

Beschläge
Zubehör

Ferrements
Accessoires

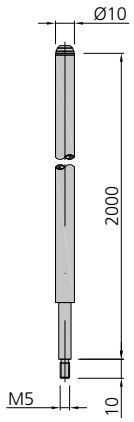
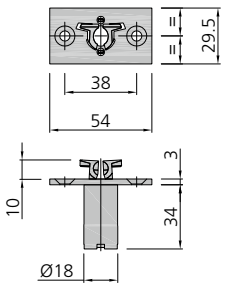
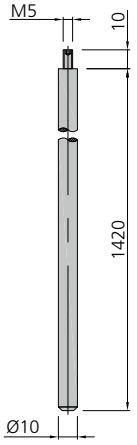
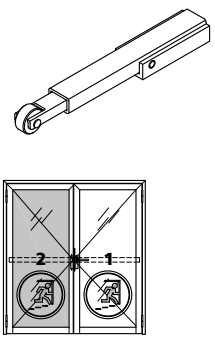
Fittings
Accessories

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
1 	Befestigungsgarnitur 1-flügelig 1 - Einschweisswinkel 22 Stk. Garniture de fixation 1 vantail 1 - Angle à souder 22 pcs Set fastening single-leaved 1 Angle to the welding 22 pcs	1 Stk./pce	**987039**
2 	Befestigungsgarnitur 2-flügelig 1 - Einschweisswinkel 22 Stk. 2 - Einschweissplatte 6 Stk. Garniture de montage 2 vantaux 1 - Angle à souder 22 pcs 2 - Tôle à souder 6 pcs Set order mounting double-leaved 1 Angle to the welding 22 pcs 2 Plate to the welding 6 pcs	1 Stk./pce	**987040**
	Befestigungsplatte 25.3 x 15 x 4 Plaque de fixation 25.3 x 15 x 4 Fastening plate 25.3 x 15 x 4	10 Stk./pcs	**987081**

Beschläge
Obere und untere Verriegelung

Ferrements
Verrouillage vers le haut et vers le bas

Fittings
Shootbolt up- and downwards

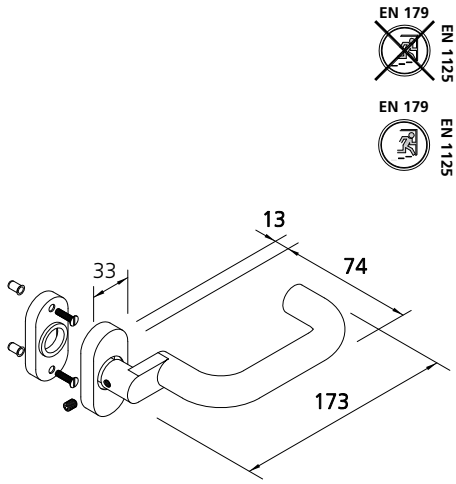
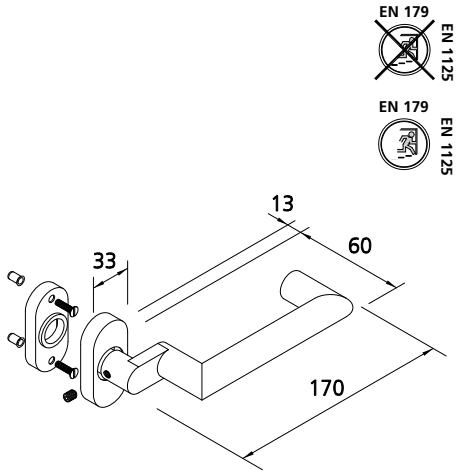
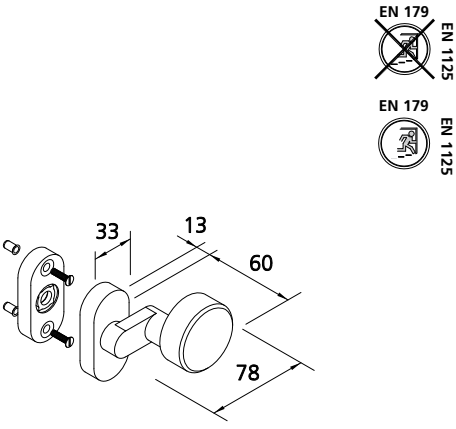
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
 EN 179 EN 1125 EN 179 EN 1125	Stange nach oben Tringle vers le haut Rod upwards	1 Stk./pce	**987004**
 EN 179 EN 1125 EN 179 EN 1125	Schaltschloss Serrure de maintien Switch latch	1 Stk./pce	**987002**
 EN 179 EN 1125 EN 179 EN 1125	Stange nach unten Tringle vers le bas Rod downwards	1 Stk./pce	**987005**
 EN 179 EN 1125 WK1 CR 1 RC 1	Mitnehmerklappe aufgesetzt Stahl verzinkt, Einsatz nur bei 2-flügeligen Antipaniktüren Taquet d'entraînement quincaillerie acier zingué, utilisation seulement pour des portes anti-panique à deux vantaux Attached carry bar galvanized steel, for use on panic doors with 2 leaves only	1 Stk./pce	**907103**

3

Beschläge
Drücker

Quincaillerie
Poignées

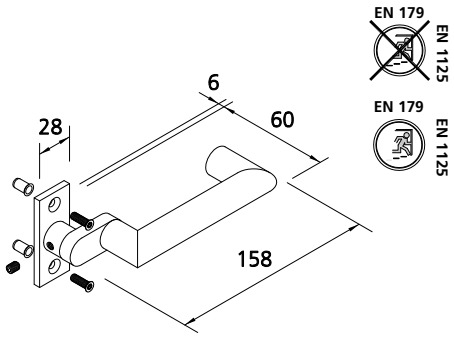
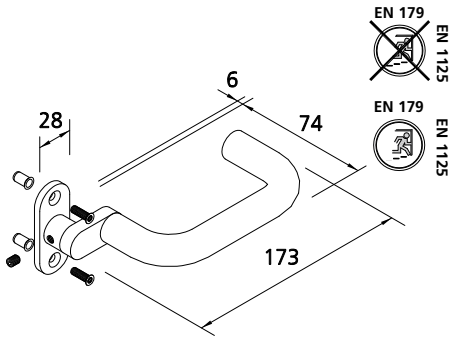
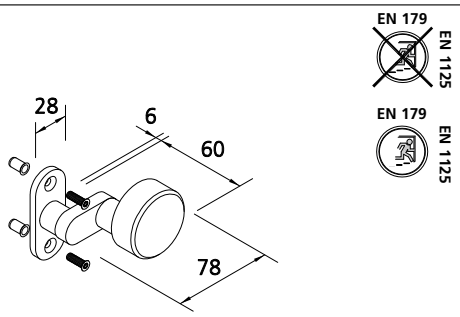
Fittings
Handles

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
	Türdrücker Edelstahl (matt geschliffen), Dorn 9 mm, mit Rückhaltefeder Poignée de porte acier inox (poli mat), carré de 9 mm, avec ressort de rappel Door handle stainless steel (polished mat finish), nut spindle 9 mm, with backing spring 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter 2 pces de M5 x 20 mm vis avec rivet taraudé 2 units M5 x 20 mm screws with rivet nut	1 Stk./pce	**907350**
	Türdrücker Edelstahl (matt geschliffen), Dorn 9 mm, mit Rückhaltefeder Poignée de porte acier inox (poli mat), carré de 9 mm, avec ressort de rappel Door handle stainless steel (polished mat finish), nut spindle 9 mm, with backing spring 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter 2 pces de M5 x 20 mm vis avec rivet taraudé 2 units M5 x 20 mm screws with rivet nut	1 Stk./pce	**907351**
	Türknopf Edelstahl (matt geschliffen), Dorn 9 mm Bouton de porte acier inox (poli mat), carré de 9 mm Door knob stainless steel (polished mat finish), nut spindle 9 mm 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter 2 pces de M5 x 20 mm vis avec rivet taraudé 2 units M5 x 20 mm screws with rivet nut	1 Stk./pce	**907356**

Beschläge
Drücker

Quincaillerie
Poignées

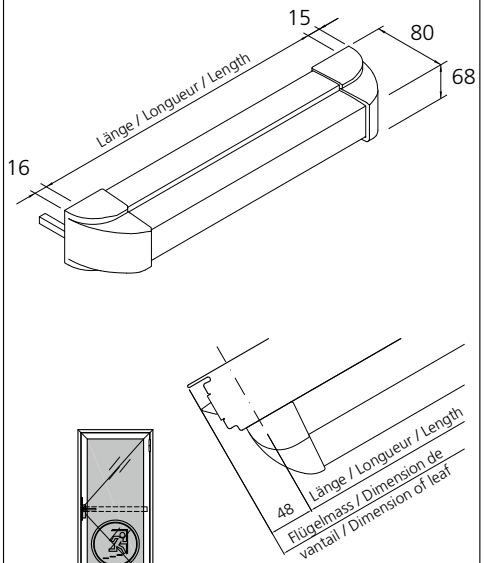
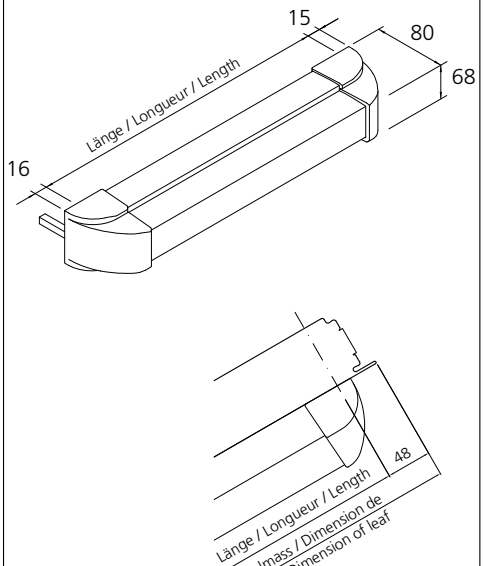
Fittings
Handles

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art no art. no.
	Türdrücker Edelstahl (matt geschliffen), Dorn 9 mm, Poignée de porte acier inox (poli mat), carré de 9 mm, Door handle stainless steel (polished mat finish), nut spindle 9 mm, 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter 2 pces de M5 x 20 mm vis avec rivet taraudé 2 units M5 x 20 mm screws with rivet nut	1 Stk./pce	**907326**
	Türdrücker Edelstahl (matt geschliffen), Dorn 9 mm, Poignée de porte acier inox (poli mat), carré de 9 mm, Door handle stainless steel (polished mat finish), nut spindle 9 mm, 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter 2 pces de M5 x 20 mm vis avec rivet taraudé 2 units M5 x 20 mm screws with rivet nut	1 Stk./pce	**907327**
	Türknopf Edelstahl (matt geschliffen), Dorn 9 mm Bouton de porte acier inox (poli mat), carré de 9 mm Door knob stainless steel (polished mat finish), nut spindle 9 mm 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter 2 pces de M5 x 20 mm vis avec rivet taraudé 2 units M5 x 20 mm screws with rivet nut	1 Stk./pce	**907329**

Beschläge
Antipanik-Druckstange

Ferrements
Barre anti-panique

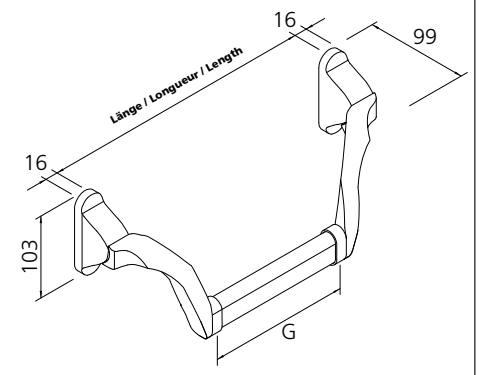
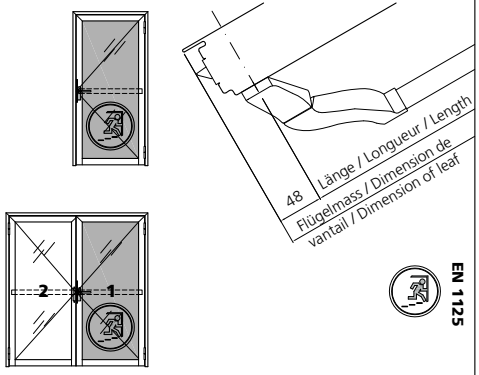
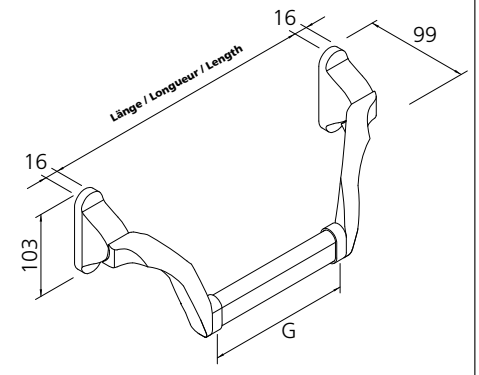
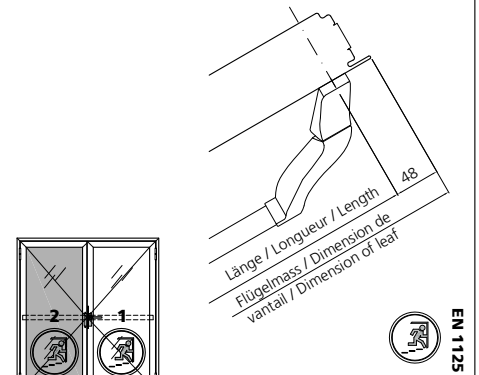
Fittings
Anti-panic pushbar

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	Antipanik-Druckstange für Gangflügel mit 30° Drehwinkel, DIN links und DIN rechts verwendbar, inkl. Befestigungsmaterial, Edelstahl matt Pushbar anti-panique pour vantail de service avec angle de rotation 30°, utilisable DIN gauche ou DIN droite, accessoires de fixation inclus, inox mat. Anti-panic touch-bar for active leaf with 30° angle of tilt, using for opening left and right, including fixing kit, stainless steel Länge / Longueur / Length 750 - 1000 mm Länge / Longueur / Length 1001 - 1250 mm	1 Stk./pce	**987207** **987208**
	Antipanik-Druckstange für Standflügel mit 40° Drehwinkel, DIN links und DIN rechts verwendbar, inkl. Befestigungsmaterial, Edelstahl matt Pushbar anti-panique pour vantail de semifixe avec angle de rotation 40°, utilisable DIN gauche ou DIN droite, accessoires de fixation inclus, inox mat. Anti-panic touch-bar for passive leaf with 40° angle of tilt, using for opening left and right, including fixing kit, stainless steel Länge / Longueur / Length 750 - 1000 mm Länge / Longueur / Length 1001 - 1250 mm	1 Stk./pce	**987209** **987210**

Beschläge
Antipanik-Stangengriff

Ferrements
Barre anti-panique

Fittings
Anti-panic push-bar

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
 	**Antipanik-Stangengriff** für Gangflügel mit 30° Drehwinkel, Flach-Oval-Rohr 38.5 x 19.5 mm DIN links und DIN rechts verwendbar inkl. Befestigungsmaterial, Edelstahl matt **Barre anti-panique** pour vantail de service avec angle d'ouverture 30° tube oval-plate 38.5 x 19.5 mm Utilisable DIN gauche ou DIN droite accessoires de fixation inclus, inox mat. **Anti-panic push-bar** for active leaf with 30° angle of tilt, flat and oval tube 38.5 x 19.5 mm Using for opening left and right, including fixing kit, stainless steel Länge / Longueur / Length 750 - 1369 mm Länge / Longueur / Length 1370 - 1719 mm G = Länge / Longueur / Length - 219 mm	1 Stk./pce	**907286** **907288**
 	**Antipanik-Stangengriff** für Standflügel mit 45° Drehwinkel, Flach-Oval-Rohr 38.5 x 19.5 mm DIN links und DIN rechts verwendbar inkl. Befestigungsmaterial, Edelstahl matt **Barre anti-panique** pour vantail semi-fixe avec angle d'ouverture 45° tube oval-plate 38.5 x 19.5 mm Utilisable DIN gauche ou DIN droite accessoires de fixation inclus, inox mat. **Anti-panic push-bar** for passive leaf with 45° angle of tilt, flat and oval tube 38.5 x 19.5 mm Using for opening left and right, including fixing kit, stainless steel Länge / Longueur / Length 750 - 1369 mm Länge / Longueur / Length 1370 - 1719 mm G = Länge / Longueur / Length - 219 mm	1 Stk./pce	**907287** **907289**

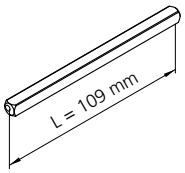
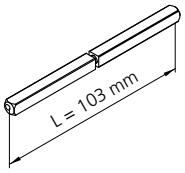
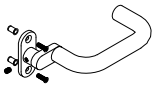
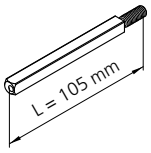
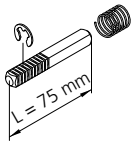
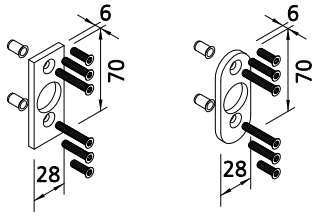
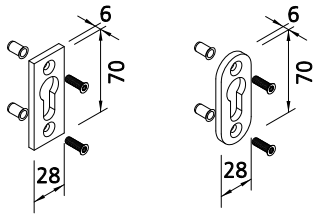
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09/23

Beschläge
Drückstifte / Rosetten

Ferrements
Carrés de poignées / rosaces

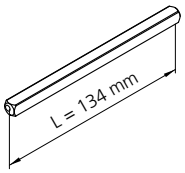
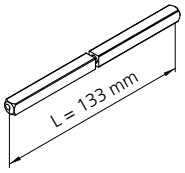
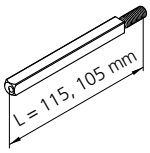
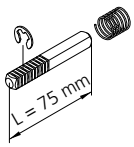
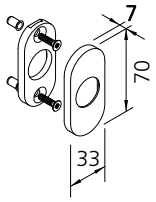
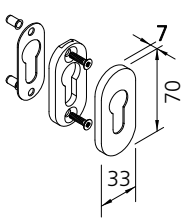
Fittings
Handle shafts / Rosettes

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
 EN 179 EN 1125 EN 179 EN 1125	Standard Drückerstift für Drückerpaar Carré de poignée standard pour paire de poignée Standard door handle shaft for pair of handles	1 Stk./pce	**907372**
  Dorn 9 mm carré de 9 mm nut spindle 9 mm	Anti-Panik Drückerstift für Drückerpaar und Drücker, Knopf mit Druckstange Carré de poignées anti panique pour paire de poignée et poignée, bouton avec pushbar anti-panique Door handle shaft anti-panic version for pair of panic door handles and handle, knob with panic pushbar	1 Stk./pce	**907373**
	Wechsel Drückerstift für Drücker, Druckstange und Knopf Changement carré de poignée pour poignée, pushbar anti-panique et bouton Door handle shaft for handle, anti-panic touch-bar and knob	1 Stk./pce	**907309**
	Drückerstift für einseitige Betätigung Carré de poignée pour actionnement d'un côté Handle shaft for one side actuation	1 Stk./pce	**907376**
RZ  EN 179 EN 1125 EN 179 EN 1125	Zylinderrosette für Ø 22 mm Rosace pour Ø 22 mm Rosette for Ø 22 mm		
	eckig / anguleux / angled	2 Stk./pcs **RZ**	**907336**
	rund / rond / round	2 Stk./pcs **RZ**	**907338**
	Zylinderrosette für Ø 17 mm Rosace pour Ø 17 mm Rosette for Ø 17 mm		
PZ 	eckig / angles vifs / angled	2 Stk./pcs **PZ**	**907335**
	rund / rond / round	2 Stk./pcs **PZ**	**907337**
	Edelstahl (matt geschliffen) 2 Stk. M5 x 20,24,30 mm Schrauben mit Einnietmutter acier inox (poli matt) 2 pces de M5 x 20,24,30 mm vis avec rivet taraudé stainless steel (polished mat finish) 2 units M5 x 20,24,30 mm screws with rivet nut		

Beschläge
Drückstifte / Rosetten

Ferrements
Carrés de poignées / rosaces

Fittings
Handle shafts / Rosettes

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
 EN 179 EN 1125 EN 179 EN 1125	Standard Drückerstift für Drückerpaar Carré de poignée standard pour paire de poignée Standard door handle shaft for pair of handles	1 Stk./pce	**907315**
  Dorn 9 mm carré de 9 mm nut spindle 9 mm	Anti-Panik Drückerstift für Drückerpaar und Drücker, Knopf mit Druckstange Carré de poignées anti panique pour paire de poignée et poignée, bouton avec pushbar anti-panique Door handle shaft anti-panic version for pair of panic door handles and handle, knob with panic pushbar	1 Stk./pce	**907319**
	Wechsel Drückerstift für Drücker und Knopf, L = 115 mm für Antipanik-Druckstange und Knopf, L = 105 mm Changement carré de poignée pour poignée et bouton, L = 115 mm pour pushbar anti-panique et bouton, L = 105 mm Door handle shaft for handle and knob, L = 115 mm for anti-panic touch-bar and knob, L = 105 mm	1 Stk./pce	**907339** (L = 115 mm) **907309** (L = 105 mm)
	Drückerstift für einseitige Betätigung Carré de poignée pour actionnement d'un côté Handle shaft for one side actuation	1 Stk./pce	**907376**
RZ EN 179 EN 1125 EN 179 EN 1125 	Zylinderrosette für Ø 22 mm Rosace pour Ø 22 mm Rosette for Ø 22 mm	2 Stk./pcs **RZ**	**907352**
	Zylinderrosette für Ø 17 mm Rosace pour Ø 17 mm Rosette for Ø 17 mm	2 Stk./pcs **PZ**	**907353**
PZ 	Edelstahl (matt geschliffen) 2 Stk. M5 x 20 mm Schrauben mit Einnietmutter acier inox (poli matt) 2 pces de M5 x 20 mm vis avec rivet taraudé stainless steel (polished mat finish) 2 units M5 x 20 mm screws with rivet nut		

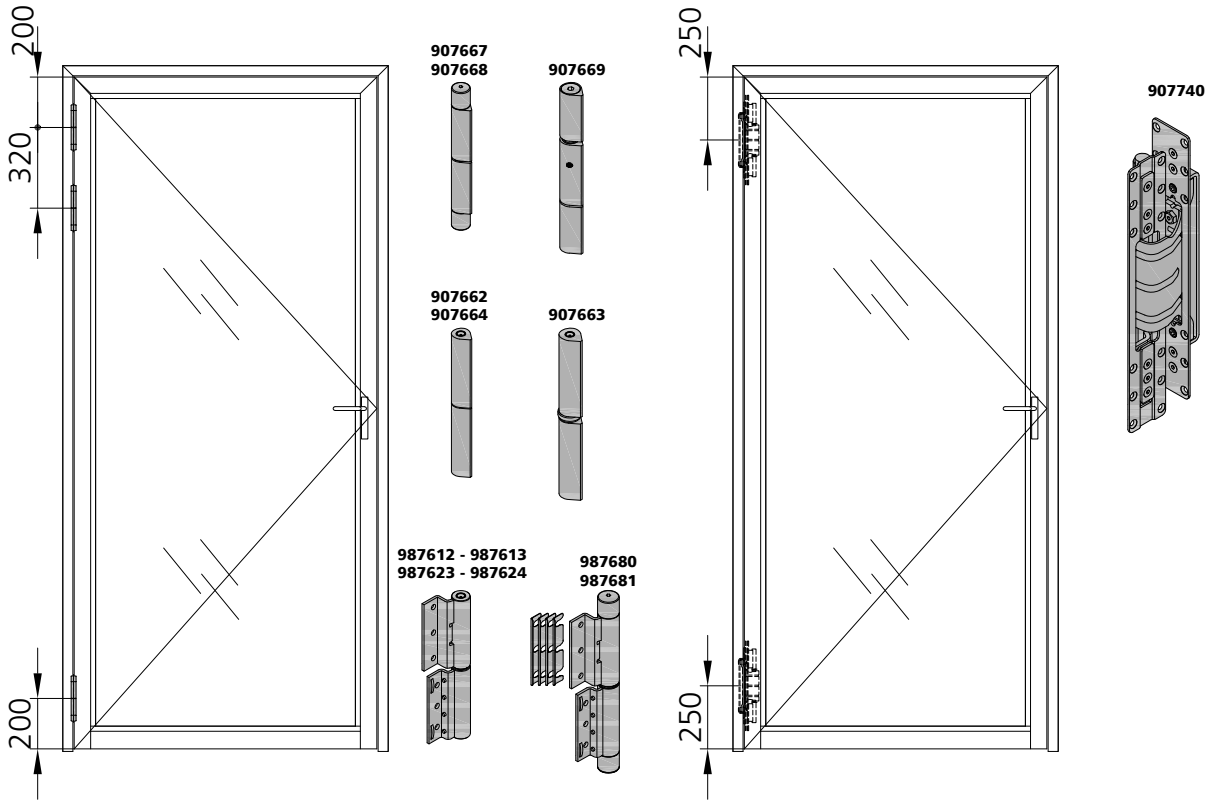
3

09/23

Beschläge
Montageabstände bei Türen mit 3 Bändern

Ferrements
Montage de la quincaillerie
Distance avec 3 paumelles

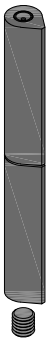
Fittings
Installation of the fittings
Distance 3 hinges



Beschläge
Aushängehöhe

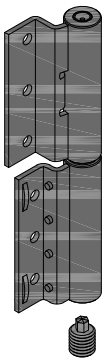
Quincaillerie
Hauteur de dégondage

Fittings
Distance for unhinge

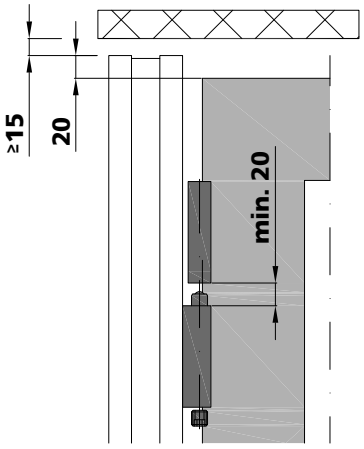


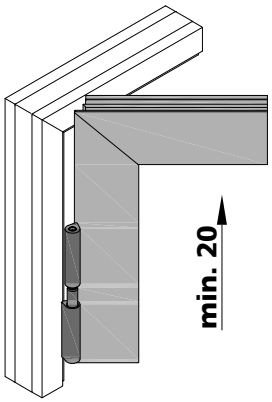
907662
907664

Dorn verstellbar
Axe réglable
en hauteur
Nut spindle height
adjustable



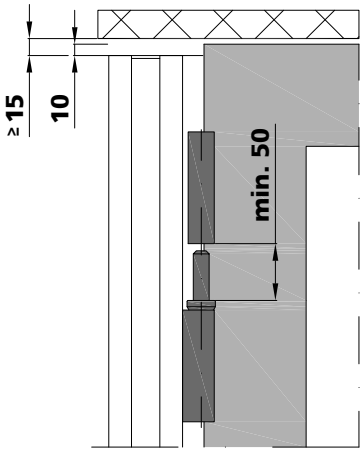
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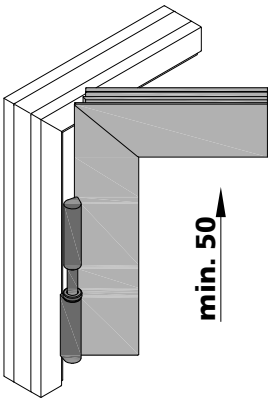






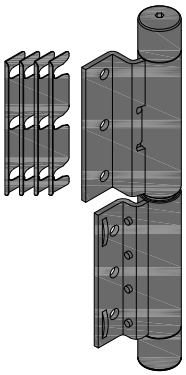
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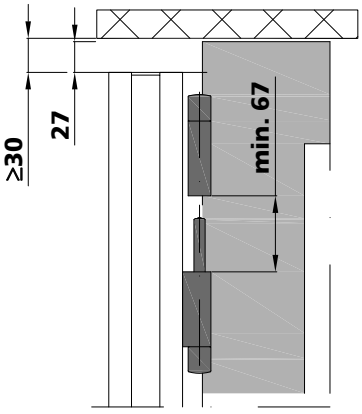


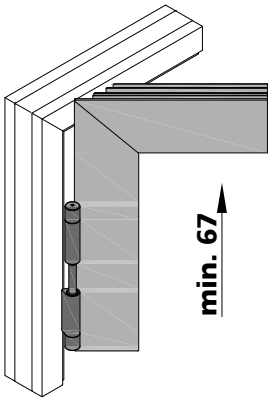


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987680
987681





3

Beschläge
Bänder Beständigkeitsklassen

Quincaillerie
Classes de résistance des paumelles

Fittings
Hinge resistance classes

Korrosionsbeständigkeit	**Einsatzbedingungen**
Klasse 0: Keine bestimmte Korrosionsbeständigkeit	Keine spezifischen Einsatzbedingungen, bei denen ein festgelegtes Korrosionsverhalten relevant ist
Klasse 1: Geringe Beständigkeit	Innenbereich in trockener Umgebung
Klasse 2: Moderate Beständigkeit	Innenbereich, in dem Kondensation auftreten kann
Klasse 3: Hohe Beständigkeit	Aussenbereich, in dem gelegentlich oder häufige Befeuchtung, Regen oder Tau auftreten kann
Klasse 4: Sehr hohe Beständigkeit	Aussenbereich mit sehr harten Bedingungen
Klasse 5: Aussergewöhnlich hohe Beständigkeit	Aussenbereich mit aussergewöhnlich harten Bedingungen, bei denen ein Langzeitschutz des Produktes erforderlich ist

Auszug aus Norm EN 1670 (Anhang A)

Résistance à la corrosion	**Conditions d'utilisation**
Classe 0: pas de résistance à la corrosion définie	Aucune condition d'utilisation spécifique lorsqu'il n'y a pas de résistance à la corrosion définie
Classe 1: faible résistance	Utilisation en intérieur dans une atmosphère sèche
Classe 2: résistance modérée	Utilisation en intérieur avec condensation possible
Classe 3: résistance élevée	Utilisation en extérieur avec pluie ou rosée occasionnelle ou fréquente
Classe 4: résistance très élevée	Utilisation en extérieur dans des conditions très sévères
Classe 5: résistance exceptionnellement élevée	Utilisation en extérieur dans des conditions exceptionnellement sévères nécessitant une protection à long terme du produit

Extrait de la norme EN 1670 (annexe A)

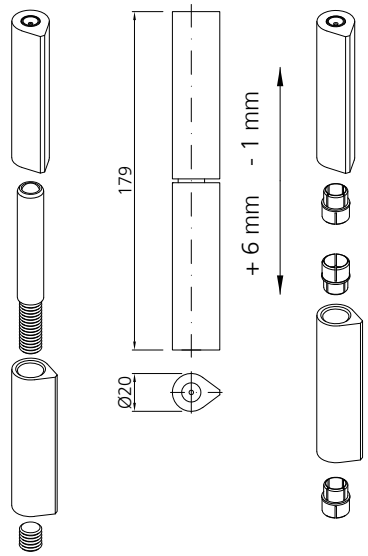
Corrosion resistance	**Service conditions**
Grade 0: no defined corrosion resistance	No specific service conditions where a defined corrosion resistance is not relevant
Grade 1: low corrosion resistance	Service indoors in warm dry atmospheres
Grade 2: moderate corrosion resistance	Service indoors where condensation may occur
Grade 3: high corrosion resistance	Service outdoors where occasional or frequent wetting by rain or dew may occur
Grade 4: very high corrosion resistance	Service outdoors in very severe conditions
Grade 5: exceptionally high corrosion resistance	Service outdoors in exceptionally severe conditions where long-term protection of the product is required

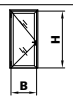
Extract from standard EN 1670 (annexe A)

Beschläge
Anschweissband
Höhenverstellbar

Quincaillerie
Paumelle à souder
Réglable en hauteur

Fittings
Weld-on hinge
Adjustable in height

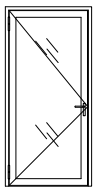
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	Stahl-Anschweissband höhenverstellbar, auf Kugel gelagert, mit Schmiernippel, Stahl blank, Korrosionsbeständigkeit Klasse 0 Paumelle à souder en acier réglables en hauteur, bille en acier trempé tournant sur une pastille en laiton, avec graisseur, acier brut, Résistance à la corrosion classe 0 Steel weld-on hinge adjustable in height, lying on a ball end, with lubrication nipple, steel blank, corrosion resistance class 0 Drehpunktabstand 15 mm / Axe de rotation 15 mm / Pivot spacing 15 mm	2 Stk./pcs	**907662**
	Edelstahl-Anschweissband höhenverstellbar, auf Kugel gelagert, mit Schmiernippel, Korrosionsbeständigkeit Klasse 4 Paumelle à souder en acier inox réglables en hauteur, bille en acier trempé tournant sur une pastille en laiton, avec graisseur, résistance à la corrosion classe 4 Stainless steel weld-on hinge adjustable in height, lying on a ball end, with lubrication nipple, corrosion resistance class 4 Drehpunktabstand 15 mm / Axe de rotation 15 mm / Pivot spacing 15 mm	2 Stk./pcs	**907664**



Zulässige Lasten der Türen in [kg]
Charges admissibles des portes en [kg]
Permissible loads of the doors in [kg]

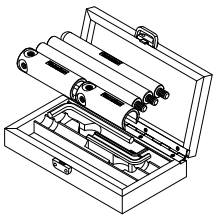
Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]	600	800	1000	1200	1400
3000	340	300	260	230	210
2800	330	290	250	220	200
2600	320	270	240	210	190
2400	300	250	220	190	170
2200	280	240	200	180	160
2000	280	230	200	170	150
1800	260	210	180	160	140

Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]



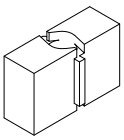
Bandrichteisen-Set
Kit outil de correction pour paumelles
Hinge adjusting set

909210



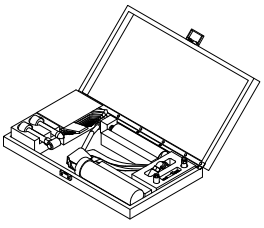
Anschweisslehre
Gabarit de soudage
Welding template

909029



Schmier-Set
Jeu de graissage
Lubrication set

909240



Abdeckkappe als Schutz für Farbbeschichtung einsetzen
Utiliser le bouchon comme protection peinture
Use cover cap to protect colour coating

907064



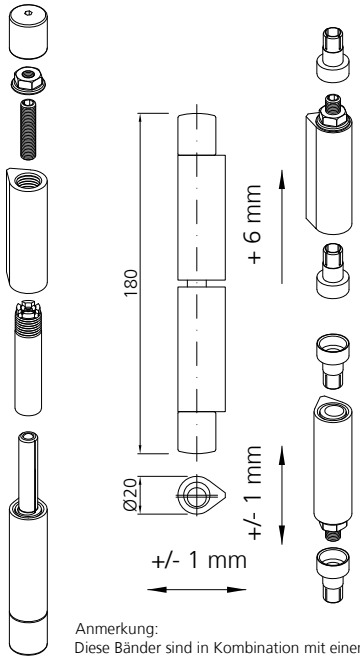
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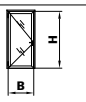
09/23

Beschläge
Anschweissband
Höhen- / seiten- / tiefenverstellbar

Quincaillerie
Paumelle à souder
Réglable en hauteur, latéralement et en profondeur

Fittings
Weld-on hinge
Adjustable in height, sideways and in depth

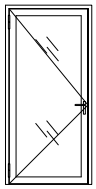
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
 Anmerkung: Diese Bänder sind in Kombination mit einem Drehflügelantrieb nicht geprüft. Remarque: Ces paumelles ne sont pas certifiées en combinaison avec un entraînement d'ouvrant à la française. Note: These hinges have not been tested in combination with door openers.	Stahl-Anschweissband höhen-, seiten-, und tiefenverstellbar, auf Kugel gelagert, mit Schmiernippel, Stahl blank, Korrosionsbeständigkeit Klasse 0 Paumelle à souder en acier réglables en hauteur, latéralement et en profondeur bille en acier trempé tournant sur une pastille en laiton avec graisseur, acier brut, résistance à la corrosion classe 0 Steel weld-on hinge adjustable in heightsideways and in depth, lying on a ball end, with lubrication nipple, steel blank, corrosion resistance class 0 Drehpunktabstand 15 mm / Axe de rotation de 15 mm / Pivot spacing 15 mm	2 Stk./pcs	**907667**
	Edelstahl-Anschweissband höhen-, seiten-, und tiefenverstellbar, auf Kugel gelagert, mit Schmiernippel, Korrosionsbeständigkeit Klasse 3 Paumelle à souder en acier inox réglables en hauteur, latéralement et en profondeur bille en acier trempé tournant sur une pastille en laiton avec graisseur, résistance à la corrosion classe 3 Stainless steel weld-on hinge adjustable in heightsideways and in depth lying on a ball end, with lubrication nipple, corrosion resistance class 3 Drehpunktabstand 15 mm / Axe de rotation de 15 mm / Pivot spacing 15 mm	2 Stk./pcs	**907668**



Zulässige Lasten der Türen in [kg]
Charges admissibles des portes en [kg]
Permissible loads of the doors in [kg]

Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]						
	3000	340	300	260	230	210
	2800	330	290	250	220	200
	2600	320	270	240	210	190
	2400	300	250	220	190	170
	2200	280	240	200	180	160
	2000	280	230	200	170	150
	1800	260	210	180	160	140
		600	**800**	**1000**	**1200**	**1400**

Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]



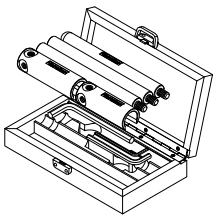
Einsatz zu Rätschenschlüssel
Outil pour clé à cliquet
Insert for rached spanner

909209



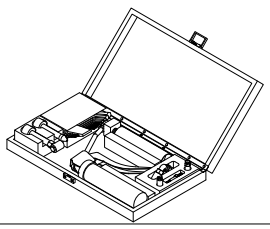
Bandrichteisen-Set
Kit outil de correction pour paumelles
Hinge adjusting set

909210



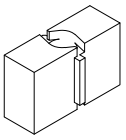
Schmier-Set
Jeu de graissage
Lubrication set

909240



Anschweisslehre
Gabarit de soudage
Welding template

909029



Schmieraufsatz
Chapiteau pour lubrification
Cap for lubrication

907058



Abdeckkappe als Schutz für Farbbeschichtung einsetzen
Utiliser le bouchon comme protection peinture
Use cover cap to protect colour coating

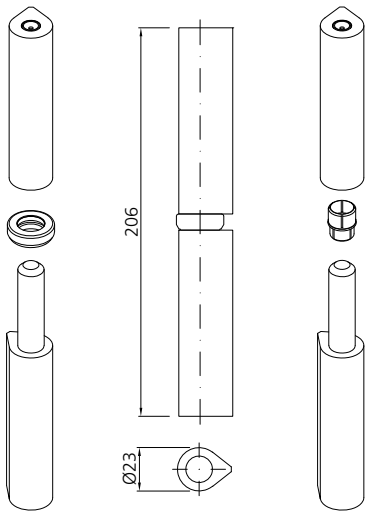
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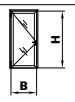


Beschläge
Anschweissband

Quincaillerie
Paumelle à souder

Fittings
Weld-on hinge

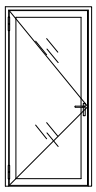
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	Stahl-Anschweissband mit Axialkugellager, Stahl blank, mit Schmiernippel, Korrosionsbeständigkeit Klasse 0 Paumelle à souder en acier avec roulement à billes axial, acier brut, avec graisseur, résistance à la corrosion classe 0 Steel weld-on hinge with axial ball bearing, steel blank, with lubrication, corrosion resistance class 0 Drehpunktabstand 17 mm Axe de rotation 17 mm Pivot spacing 17 mm	1 Stk./pce	**907663**



Zulässige Lasten der Türen in [kg]
Charges admissibles des portes en [kg]
Permissible loads of the doors in [kg]

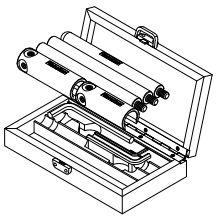
Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]						
3000	370	360	350	340	320
2800	370	360	350	340	320
2600	360	350	340	330	320
2400	360	340	330	320	310
2200	360	340	320	320	310
2000	350	340	320	310	300
1800	350	330	320	300	290
	600	**800**	**1000**	**1200**	**1400**

Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]



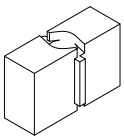
Bandrichteisen-Set
Kit outil de correction pour paumelles
Hinge adjusting set

909210



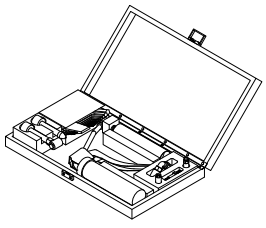
Anschweisslehre
Gabarit de soudage
Welding template

909030



Schmier-Set
Jeu de graissage
Lubrication set

909240



Abdeckkappe: als Schutz für Farbbeschichtung einsetzen
Utiliser le bouchon comme protection peinture
Use cover cap to protect colour coating

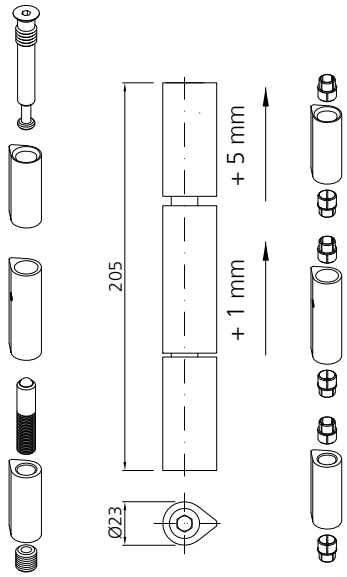
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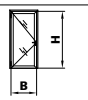


Beschläge
Anschweissband
Höhenverstellbar

Quincaillerie
Paumelle à souder
Régable en hauteur

Fittings
Weld-on hinge
Adjustable in height

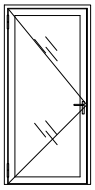
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	Stahl-Anschweissband höhenverstellbar, auf Kugel gelagert, Stahl blank, mit Schmiernippel, Korrosionsbeständigkeit Klasse 0 Paumelle à souder en acier réglables en hauteur, bille en acier trempé tournant sur une pastille en laiton, acier brut, avec graisseur, résistance à la corrosion classe 0 Steel weld-on hinge adjustable in height, lying on a ball end, steel blank, with lubrication, corrosion resistance class 0 Drehpunktabstand 17 mm Axe de rotation 17 mm Pivot spacing 17 mm	1 Stk./pce	**907669**



Zulässige Lasten der Türen in [kg]
Charges admissibles des portes en [kg]
Permissible loads of the doors in [kg]

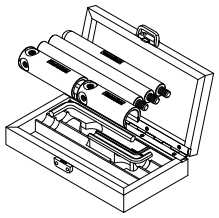
Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]	600	800	1000	1200	1400
3000	410	400	390	380	370
2800	410	400	390	380	370
2600	400	390	380	370	360
2400	400	380	370	360	350
2200	400	380	370	360	350
2000	390	380	360	350	340
1800	390	370	360	340	330

Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]



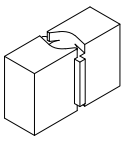
Bandrichteisen-Set
Kit outil de correction pour paumelles
Hinge adjusting set

909210



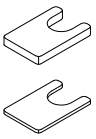
Anschweisslehre
Gabarit de soudage
Welding template

909030



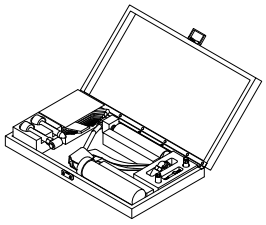
Distanzhalter
Distanceurs
Distance pieces

909028



Schmier-Set
Jeu de graissage
Lubrication set

909240



Abdeckkappe als Schutz für Farbbeschichtung einsetzen
Utiliser le bouchon comme protection peinture
Use cover cap to protect colour coating

907064

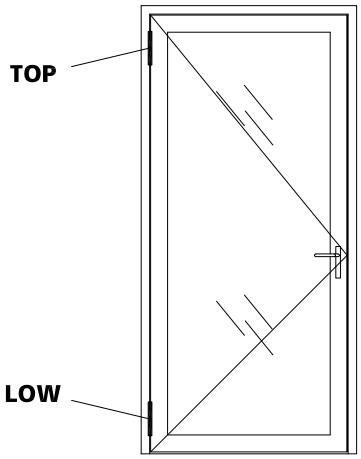


Beschläge
Falzanschraubband
Höhenverstellbar

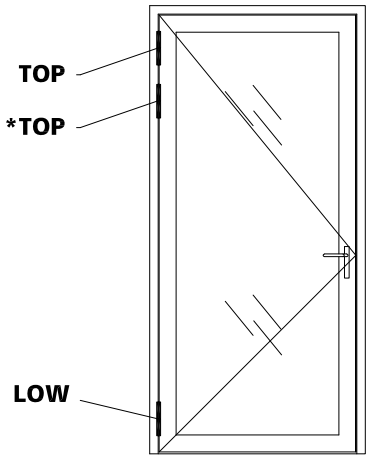
Quincaillerie
Paumelle à visser
Réglable en hauteur

Fittings
Screw-on hinge
Adjustable in height

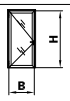
2 Bänder
2 paumelles
2 hinges



3 Bänder
3 paumelles
3 hinges



*3. Band wahlweise
3. paumelle au choix
3. hinge if required



Zulässige Lasten pro Türflügel in [kg]
Charges admissibles des portes en [kg]
Permissible loades of the doors in [kg]

Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]	600	800	1000	1200	1400
3000	340	300	260	230	210
2800	330	290	250	220	200
2600	320	270	240	210	190
2400	300	250	220	190	170
2200	280	240	200	180	160
2000	280	230	200	170	150
1800	260	210	180	160	140

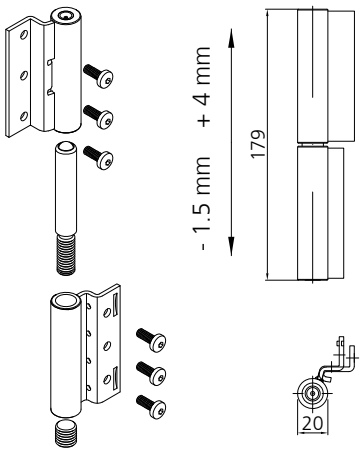
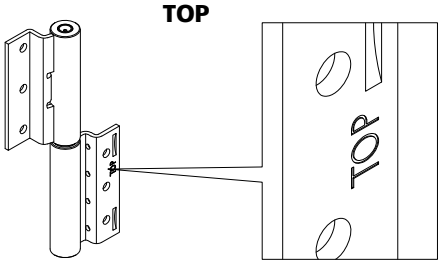
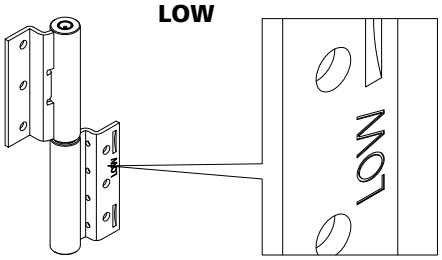
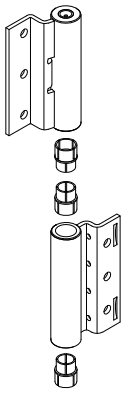
Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]

Anmerkung:
Diese Bänder sind in Kombination mit einem Drehflügelantrieb nicht geprüft.
Remarque:
Ces paumelles ne sont pas certifiées en combinaison avec un entraînement d'ouvrant à la française
Note:
These hinges have not been tested in combination with door openers.

Beschläge
Falzanschraubband
Höhenverstellbar

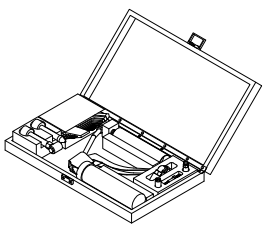
Ferrements
Paumelle à visser
Réglable en hauteur

Fittings
Screw-on hinge
Adjustable in height

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	Falzanschraubband höhenverstellbar, auf Kugel gelagert, mit Schmiernippel, Korrosionsbeständigkeit Klasse 4 Paumelle à visser réglables en hauteur, logée sur billes, avec graisseur, résistance à la corrosion classe 4 Screw-on hinge adjustable in height, lying on a ball end, with lubrication nipple, corrosion resistance class 4		
	Band TOP (oben), Paumelle TOP (en haut), Hinge TOP (top)		
	Edelstahl, acier inox, stainless steel		
	DIN rechts, DIN droite, DIN right	1 Stk./pce	**987612**
	DIN links, DIN gauche, DIN left	1 Stk./pce	**987613**
TOP 	**Band LOW (unten), Paumelle LOW (basse), Hinge LOW (low)**		
	Edelstahl, acier inox, stainless steel		
	DIN rechts, DIN droite, DIN right	1 Stk./pce	**987624**
	DIN links, DIN gauche, DIN left	1 Stk./pce	**987623**
LOW 			
	 **907064** Abdeckkappe als Schutz für Farbbeschichtung einsetzen Utiliser le bouchon comme protection peinture Use cover cap to protect colour coating		

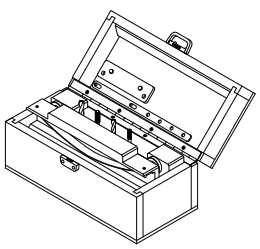
Schmierset
Jeu de graissage
Lubrication set

909240



Bohrlehre inklusiv Bohrer und Gewindeformer
Gabarit de perçage mèche et taraud y inclus
Drilling template bit and tapper included

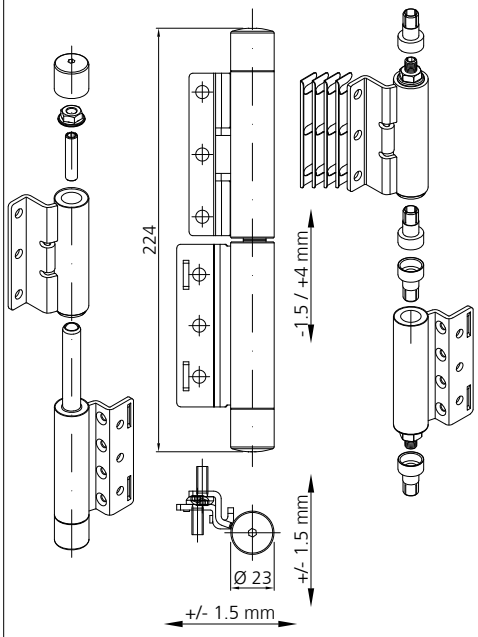
909110



Beschläge
Falzanschraubband
Höhen- / seiten- / tiefenverstellbar

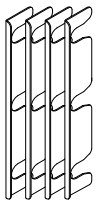
Quincaillerie
Paumelle à visser
Réglable en hauteur, latéralement et en profondeur

Fittings
Screw-on hinge
Adjustable in height, sideways and in depth

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	3D-Falzanschraubband höhen-, seiten-, und tiefenverstellbar, auf Kugel gelagert, mit Schmiernippel, Korrosionsbeständigkeit Klasse 4 3D-Paumelle à visser réglables en hauteur, latéralement et en profondeur bille en acier trempé tournant sur une pastille en laiton avec graisseur, résistance à la corrosion classe 4 3D-Screw-on hinge adjustable in height, sideways and in depth lying on a ball end, with lubrication nipple, corrosion resistance class 4 **Edelstahl, acier inox, stainless steel** DIN rechts, DIN droite, DIN right DIN links, DIN gauche, DIN left	 1 Stk./pce 1 Stk./pce	 **987680** **987681**

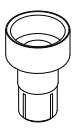
Für Ersatz
Pour remplacement
For reserves

907027



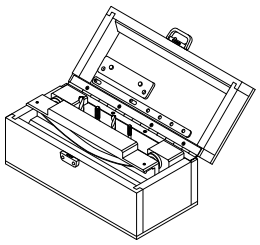
Abdeckkappe als Schutz für Farbbeschichtung einsetzen
Utiliser le bouchon comme protection peinture
Use cover cap to protect colour coating

900265



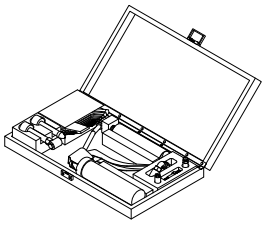
Bohrlehre inklusiv Bohrer und Gewindeformer
Gabarit de perçage mèche et taraud y inclus
Drilling template bit and tapper included

909110



Schmierset
Jeu de graissage
Lubrication set

909240

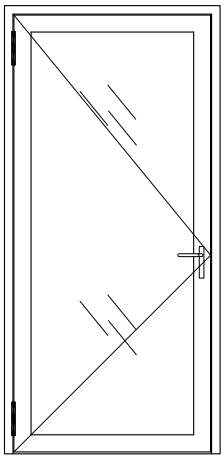


Beschläge
Falzanschraubband
Höhen- / seiten- / tiefenverstellbar

Quincaillerie
Paumelle à visser
Réglable en hauteur, latéralement et en profondeur

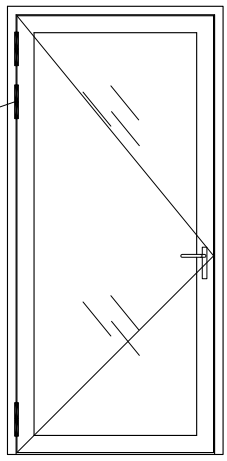
Fittings
Screw-on hinge
Adjustable in height, sideways and in depth

2 Bänder
2 paumelles
2 hinges



Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]	Zulässige Lasten der Türen in [kg] / Charges admissibles des portes en [kg] / Permissible loads of the doors in [kg]				2 Bänder / 2 paumelles / 2 hinges
3000	320	300	300	260	210
2800	310	290	280	240	200
2600	305	280	260	220	190
2400	300	270	240	200	170
2200	290	260	210	180	150
2000	280	240	190	160	140
1800	270	210	160	140	120
	600	**800**	**1000**	**1200**	**1400**
	Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]				

3 Bänder
3 paumelles
3 hinges



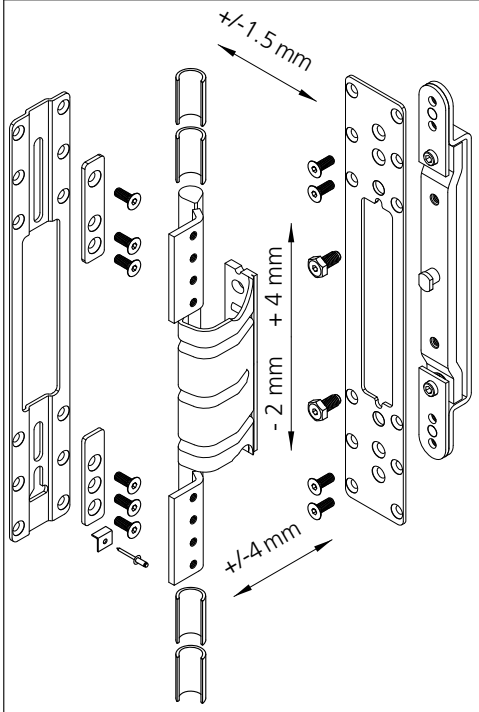
* 3. Band wahlweise
3. paumelle au choix
3. hinge if required

Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]	Zulässige Lasten der Türen in [kg] / Charges admissibles des portes en [kg] / Permissible loads of the doors in [kg]				3 Bänder / 3 paumelles / 3 hinges
3000	360	340	320	280	240
2800	340	320	310	260	230
2600	330	300	300	240	210
2400	320	290	260	220	190
2200	310	280	240	200	170
2000	300	260	210	180	150
1800	290	230	190	160	130
	600	**800**	**1000**	**1200**	**1400**
	Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]				

Beschläge
Verdecktliegendes Band
Höhen- / seiten- / und tiefenverstellbar

Ferrements
Paumelle cachée
Réglable en hauteur, latéralement et en profondeur

Fittings
Concealed hinge
Adjustable in height, sideways and in depth

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art.Nr. art. no. art. no.
	**Verdecktliegendes Band, Stahl** höhen-, seiten-, und tiefenverstellbar, DIN links und rechts verwendbar, ausgeliefert DIN links, umbaubar auf DIN rechts gemäss mitgelieferter Umbauanleitung, Stulp Edelstahl und Stahl verzinkt blau, Korrosionsbeständigkeit Klasse 4 **Paumelle caché, acier** réglables en hauteur, latéralement et en profondeur, utilisable DIN gauche et droite, livrée DIN gauche, modifiable à DIN droite selon instruction de montage inclue, têtière acier inox et acier zingué-bleu, résistance à la corrosion classe 4 **Concealed hinge, steel** adjustable in heightsideways and in depth, usable DIN left and right, delivered DIN left, convertable to DIN right according to included assembly instructions, front plate stainless steel and galvanized-blue steel, corrosion resistance class 4	1 Stk./pce	**907740**

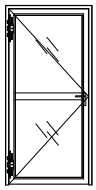
max. Öffnungswinkel 105°
angle d'ouverture max. 105°
max. opening angle 105°



Zulässige Lasten der Türen in [kg]
Charges admissibles des portes en [kg]
Permissible loads of the doors in [kg]

Flügelhöhe H in [mm] / Hauteur de vantail H en [mm] / Leaf height H in [mm]	600	800	1000	1200	1400
3000	370	365	355	350	340
2800	370	360	355	345	335
2600	365	360	350	340	325
2400	365	355	345	330	315
2200	360	350	335	320	305
2000	355	340	325	305	300
1800	350	335	320	300	295

Flügelbreite B in [mm] / largeur de vantail B en [mm] / Leaf width B in [mm]



Hebeschlüssel
Clé de réglage
Hoist-key

909211



Platz für Notizen

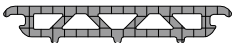
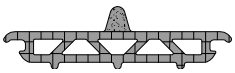
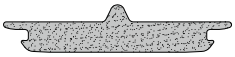
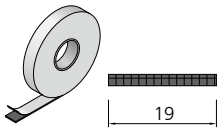
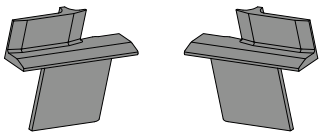
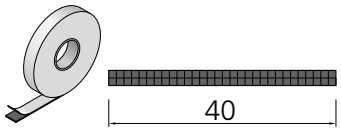
Espace pour les notes

Space for memos

Zubehör
Dichtungen

Accessoires
Joints

Accessories
Weatherstrippings

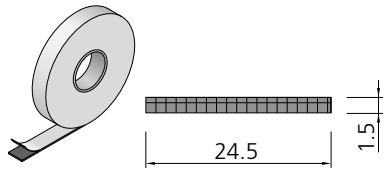
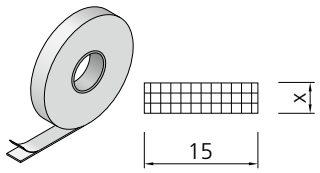
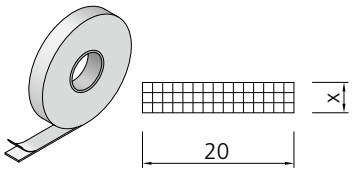
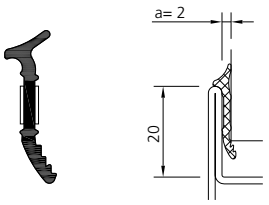
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Falzabdeckung aus CR schwarz Recouvrement de feuillure en CR noir Rebate cover CR black	100 m	**985704**
	Falzabdeckung aus CR schwarz Recouvrement de feuillure en CR noir Rebate cover CR black	100 m	**985705**
	Falzabdeckung Hi aus PE grau Recouvrement de feuillure Hi en PE gris Rebate cover Hi PE gray Einsatz Glasfalz Utilisation feuillure verre Use glass rebate	100 m	**985315**
	Falzdichtband Ruban d'étanchéité de feuillure Rebate sealing tape 19 × 1.5 mm	60 m (1 Rolle à 60 m) (1 rouleau à 60 m) (1 roll à 60 m)	**988051**
	Anschlagdichtung Tür CR, mit Gleitlack, schwarz Joint de butée porte CR, avec laque lubrifiante, noir Door weatherstripping CR, with anti-friction coating, black	75 m	**985701**
	Dichtstück für Standflügel CR, schwarz links gauche left Pièce d'étanchéité pour vantail semi-fixe CR, noir Sealing piece for fixed leaf CR, black rechts droite right	10 Stk./pcs 10 Stk./pcs	**985731** **985732**
	Brandschutzstreifen Einsatz Glasfalz, einseitig klebend Bande intumescente pour feuillure du verre, collant d'un côté Intumescent strip for glass rebate, one side self adhesive	25 m	**988030**

3

Zubehör
Dichtungen

Accessoires
Joints

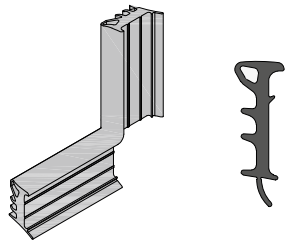
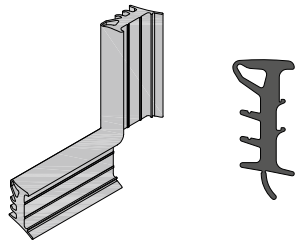
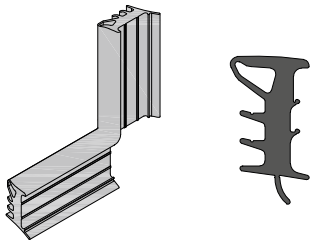
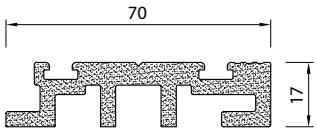
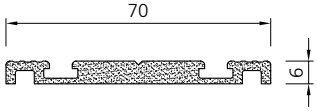
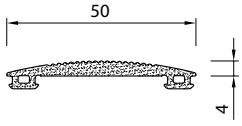
Accessories
Weatherstrippings

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Brandschutzstreifen (grau) Einsatz Glasfalz, einseitig klebend Bande intumescente (gris) pour feuillure du verre, collant d'un côté Intumescent strip (grey) for glass rebate, one side self adhesive	25 m	**948000**
	Brandschutz-Verglasungsband 15 mm einseitig selbstklebend, keramikfaserfrei, weiss Bandes de vitrage résistant au feu 15 mm autocollant 1 face, sans fibre céramique, blanc Fire resistant glazing tape 15 mm unilateral self-adhesive, ceramic fibre free, white x = 3 mm x = 4 mm x = 5 mm x = 6 mm	 20 m 20 m 20 m 20 m	 **948003** **948004** **948005** **948006**
	Brandschutz-Verglasungsband 20 mm einseitig selbstklebend, keramikfaserfrei, weiss Bandes de vitrage résistant au feu 20 mm autocollant 1 face, sans fibre céramique, blanc Fire resistant glazing tape 20 mm unilateral self-adhesive, ceramic fibre free, white x = 3 mm x = 4 mm x = 5 mm x = 6 mm	 20 m 20 m 20 m 20 m	 **948007** **948008** **948009** **948010**
	Verglasungsdichtung aussen CR, schwarz, selbstklebend, Fugenbreite 2 mm Joint de vitrage extérieur CR, noir, auto adhésif, largeur de joint 2 mm Glazing seals outside CR, black, self-adhesive, joint widths 2 mm	100 m	**905712**
	Verglasungsdichtung aussen CR, schwarz, selbstklebend, Fugenbreite 5 mm Joint de vitrage extérieur CR, noir, auto adhésif, largeur de joint 5 mm Glazing seals outside CR, black, self-adhesive, joint widths 5 mm	100 m	**985702**

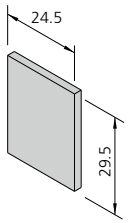
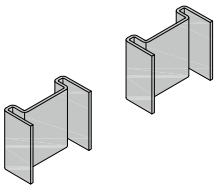
Zubehör
Dichtungen
Isolierte Schwelle

Accessoires
Joints
Seuils isolés

Accessories
Weatherstrippings
Insulated thresholds

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Verglasungsdichtung innen CR, schwarz, für Fugenbreite 3 und 4 mm mit Gleitlack, silikonfrei Joint de vitrage intérieur CR, noir, largeur de joint de 3 et 4 mm avec laque lubrifiante, sans silicone Inner glazing seal CR, black, for joint widths of 3 and 4 mm antifriction coating, silicon free	100 m	**905784**
	Verglasungsdichtung innen CR, schwarz, für Fugenbreite 5 und 6 mm mit Gleitlack, silikonfrei Joint de vitrage intérieur CR, noir, largeur de joint de 5 et 6 mm avec laque lubrifiante, sans silicone Inner glazing seal CR, black, for joint widths of 5 and 6 mm antifriction coating, silicon free	100 m	**905785**
	Verglasungsdichtung innen CR, schwarz, für Fugenbreite 7 und 8 mm mit Gleitlack, silikonfrei Joint de vitrage intérieur CR, noir, largeur de joint de 7 et 8 mm avec laque lubrifiante, sans silicone Inner glazing seal CR, black, for joint widths of 7 and 8 mm antifriction coating, silicon free	75 m	**905786**
	Aufsatzprofil Anschlag BS ABS 30% GF, schwarz Profilé d'applique butée BS ABS 30% GF, noir Buffer attachment profile BS ABS 30% GF, black	3 m	**984850**
	Aufsatzprofil flach BS ABS 30% GF, schwarz Profilé d'applique plat BS ABS 30% GF, noir Attachment profile plane BS ABS 30% GF, black	3 m	**984851**
	Aufsatzprofilabdeckung CR, schwarz Recouvrement du profilé d'applique CR, noir Cover for attachment profile CR, black	3 m	**985721**

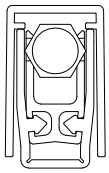
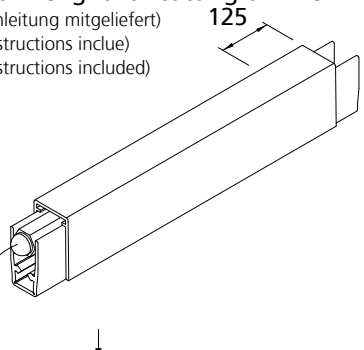
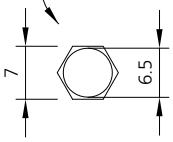
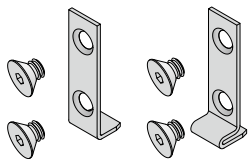
Zubehör | Accessoires | Accessories

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Einschweissblech 2.5 mm dick Plaque à souder 2.5 mm d'épaisseur Weld-in plate 2.5 mm thick		
	Stahl, acier, steel	10 Stk. / pcs	**947026**
	Edelstahl, acier inox, stainless steel	10 Stk. / pcs	**947025**
	Set Einschweissteile, Edelstahl, zur Befestigung der Bodenschliesshülse Kit pièces de soudage, acier inox, pour fixation de douille de fermeture au sol Set welding parts, stainless steel, for guide floor covering bush	2 Stk. / pcs	**987041**

Zubehör
Senkdichtungen

Accessoires
Joints de seuil

Accessories
Floor seals

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
 905021 Montageset / set fixation / set fastening  Ablängbereich max. 125 mm Zone à découper max. 125 mm Max. lenght for cutting off 125 mm (Anleitung mitgeliefert) (Instructions inclue) (Instructions included)   Auslösekopf aus Edelstahl Bouton de déclenchement en inox Release button on stainless steel	Absenkbare Bodendichtung inkl. Montageset 905021 Joint seuil automatique incl. set fixation 905021 Drop floor seal incl. set fastening 905021 * 233 - 358 mm * 359 - 483 mm * 484 - 608 mm * 609 - 733 mm * 734 - 858 mm 859 - 983 mm 984 - 1108 mm 1109 - 1233 mm 1234 - 1358 mm 1359 - 1483 mm *auf Anfrage sur demande on request Zuschnitt über Bestellformular Coupe en longueur via formulaire de commande For pre-cutting, use order form	1 Stk./pce	**905010** **905011** **905012** **905013** **905014** **905015** **905016** **905017** **905018** **905019**
	Montageset für Ersatz Set de fixation pour remplacement Fastening Set for reserves	1 Stk./pce	**905021**

3

Senkdichtung Bestellformular Sonderlängen

Joint de seuil automatique Formulaire de commande pour longueurs spéciales

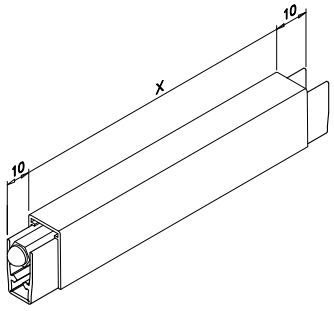
Automatic drop seal Order form for seals cut to lenght

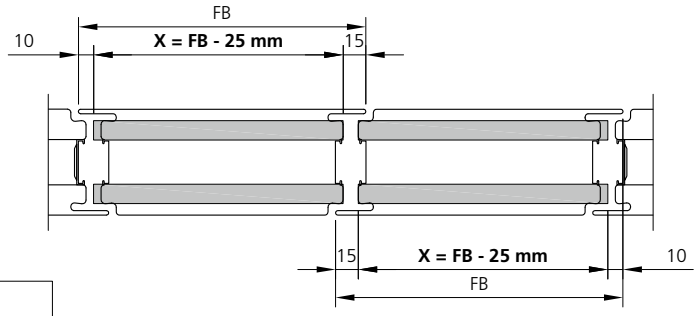
☐ Bestellung**: 905002**
Commande**: 905002**
Order**: 905002**

Kunde:
Client:
Customer: _____

Kontaktperson:
Responsable de projet:
Project responsibility: _____

Objekt:
Projet:
Project: _____

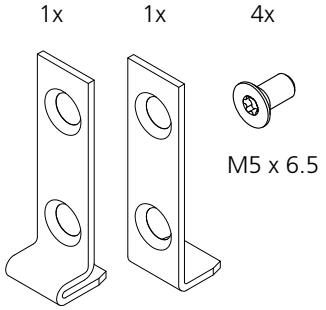




FB = Flügelbreite
Largeur de vantail
Leaf width

Anwendungsbereich **Domaine d`application** **Application area**	**Stück** **Qté.** **Piece**	**Länge X** **Longueur X** **Lenght X**
FB = 233 - 358 mm		
FB = 359 - 483 mm		
FB = 484 - 608 mm		
FB = 609 - 733 mm		
FB = 734 - 858 mm		
FB = 859 - 983 mm		
FB = 984 - 1108 mm		
FB = 1109 - 1233 mm		
FB = 1234 - 1358 mm		
FB = 1359 - 1483 mm		

inkl. Montageset 905021
avec kit de montage 905021
incl. installation set 905021

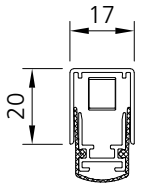
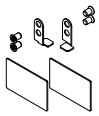
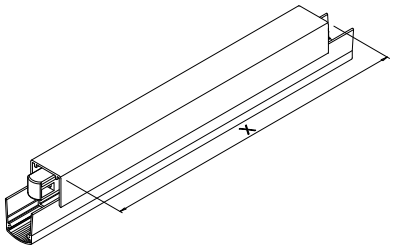
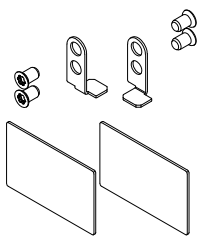


09/23

Zubehör
Senkdichtungen

Accessoires
Joints de seuil

Accessories
Floor seals

Abbildung Figure Figure	Bezeichnung Désignation Designation		Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
 915938 Montageset Set de fixation / Fastening Set 	Absenkbare Bodendichtung Joint seuil automatique Drop floor seal			
	Länge x Longueur x Lenght x	Flügelbreite FB Largeur du vantail FB Leaf width FB		
	600 mm	536 - 631 mm	1 Stk./pce	**905921**
	750 mm	632 - 781 mm		**905922**
	900 mm	782 - 931 mm		**905923**
	1050 mm	932 - 1081 mm		**905924**
	1200 mm	1082 - 1231 mm		**905925**
	1350 mm	1232 - 1381 mm		**905926**
	1500 mm	1382 - 1531 mm		**905927**
	xxx mm	Sonderlänge / Longueur spéciale / Special length		**905920**
 Zuschnitt über Bestellformular Coupe en longueur via formulaire de commande For pre-cutting, use order form	Absenkbare Bodendichtung mit Verzögerung Joint seuil automatique avec décalage Drop floor seal with delay			
	750 mm	686 - 781 mm	1 Stk./pce	**905932**
	900 mm	782 - 931 mm		**905933**
	1050 mm	932 - 1081 mm		**905934**
	1200 mm	1082 - 1231 mm		**905935**
	1350 mm	1232 - 1381 mm		**905936**
	1500 mm	1382 - 1531 mm		**905937**
	xxx mm	Sonderlänge / Longueur spéciale / Special length		**905930**
zusätzlich bestellen à commander en supplément to be ordered in addition				
	Montageset für eine absenkbare Bodendichtung Set de fixation pour un joint seuil automatique Fastening Set for a drop floor seal		1 Stk./pce	**915938**

Senkdichtung
Joint de seuil automatique
Automatic drop seal

Bestellformular
Formulaire de commande
Order form

Sonderlängen
pour longueurs spéciales
for seals cut to lenght

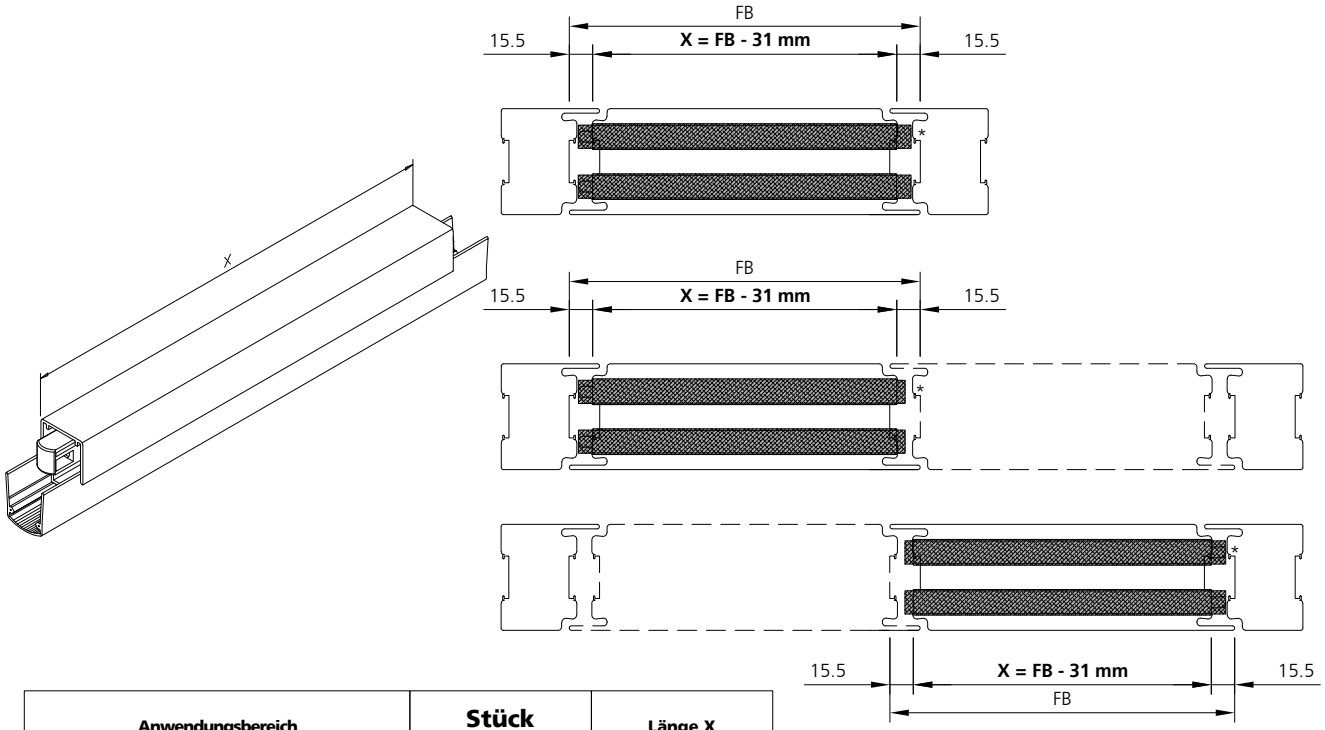
☐ Bestellung: **905920**
Commande: **905920**
Order: **905920**

☐ Bestellung: **905930**
Commande: **905930**
Order: **905930**

Kunde:
Client:
Customer: _____

Kontaktperson:
Responsable de projet:
Project responsibility: _____

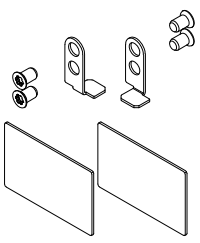
Objekt:
Projet:
Project: _____



Anwendungsbereich domaine d'application specifide area of application	Stück Qté. Piece	Länge X longueur X lenght X
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905930 FB = min. 666 - max. 1631 mm		

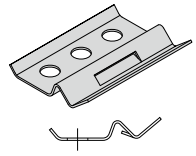
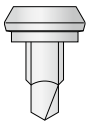
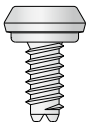
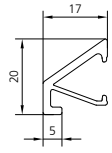
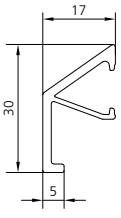
FB = Flügelbreite
Largeur de vantail
Leaf width

Variante:
* Wird nur eine Senkdichtung verwendet,
so ist der Einbau auf der Türinnenseite vorzunehmen.
F-Text
E-Text

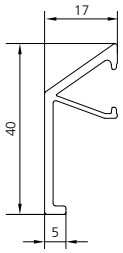
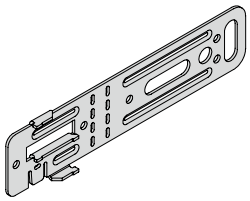
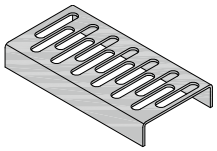
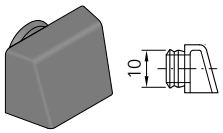
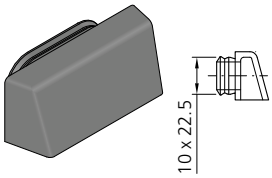
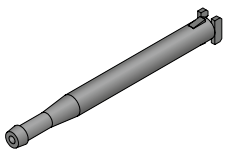
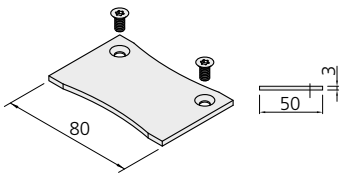


915938 Montageset zusätzlich bestellen
915938 Set de fixation à commander en supplément
915938 Fastening Set to be ordered in addition

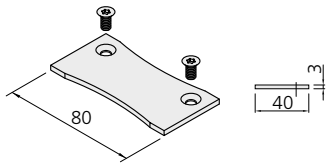
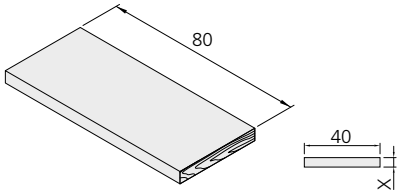
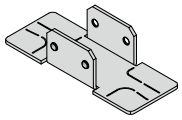
Zubehör — Accessoires — Accessories

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Feder für Glashalteleisten mit Haltehaken, Edelstahl Ressort pour parcloses avec crochet de retenue, acier inox Spring for glazing beads with retaining clamp, stainless steel Hinweis: keine zerstörungsfreie Demontage der Glashalteleiste möglich Remarque: pas de démontage possible des parcloses sans destruction Notice: non-destructive removing of glazing beads not possible	100 Stk./pcs	**906421**
	Klemmknopf-Niet Edelstahl 1.4567 Bouton de fixation rivet pop acier inox 1.4567 Stud fastener, pop-rivet stainless steel 1.4567	100 Stk./pcs	**906574**
	Klemmknopfschraube selbstbohrend für Glashalteleisten, Stahl chromatiert Bouton de fixation autoforeur pour parcloses, acier chromaté Stud fastener self drilling for glazing beads, chromated steel	100 Stk./pcs 1000 Stk./pcs Mag. 200 Stk./pcs	**906577** **906578** **906579**
	Klemmknopfschraube selbstfurchend Edelstahl 1.4404 Bouton de fixation autotaraudeur acier inox 1.4404 Stud fastener self-tapping stainless steel 1.4404	100 Stk./pcs	**906583**
	Wetterschenkel Höhe 20 mm, Aluminium roh Renvoi d'eau Hauteur 20 mm, aluminium brut Weatherbord Height 20 mm, mill finished aluminium	6 m	**903300**
	Wetterschenkel Höhe 30 mm, Aluminium roh Renvoi d'eau Hauteur 30 mm, aluminium brut Weatherbord Height 30 mm, mill finished aluminium	6 m	**903301**

Zubehör — Accessoires — Accessories

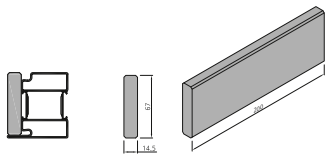
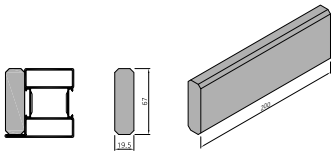
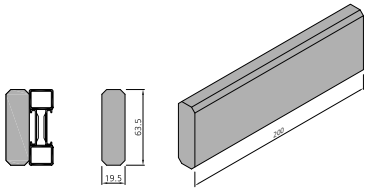
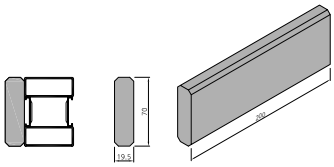
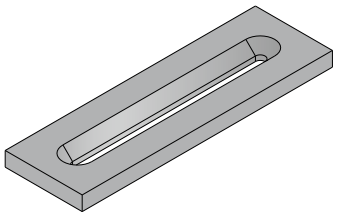
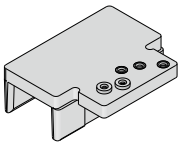
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Wetterschenkel Höhe 40 mm, Aluminium roh Renvoi d'eau Hauteur 40 mm, aluminium brut Weatherbord Height 40 mm, mill finished aluminium	6 m	**903302**
	Eindrehanker Stahl bandverzinkt Ancre à tourner Acier galvanisé en continu Turn in anchor Steel continuously galvanized	50 Stk./pcs	**987073**
	Paneelverbinder Raccord de panneaux Panel connector	12 Stk./pce	**907008**
	Wasserablauftülle PA 6 schwarz Douille d'écoulement PA 6 noir Draining pipe PA 6 black	10 Stk./pcs	**900100**
	Wasserablauftülle PA 6 schwarz Douille d'écoulement PA 6 noir Draining pipe PA 6 black Stanzwerkzeug Art.Nr. 909360 Outil de poinçonnage, art. no. 909360 Punching die, art. no. 909360	10 Stk./pcs	**900103**
	Entspannungs- und Entwässerungsröhrchen für verdeckte Entspannung und Entwässerung TPE, schwarz Tubulure invisible de décompression et d'évacuation d'eau TPE, noir Decompression and drainage pipe for hidden decompression and drainage TPE, black	10 Stk./pcs	**980101**
	Glasfalzbrücke, breit, 50 mm Pont feuillure du verre, large, 50 mm Glass rebate bridge, wide, 50 mm	5 Stk./pcs	**986705**

Zubehör | Accessoires | Accessories

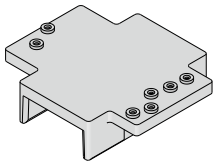
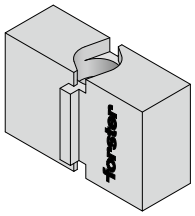
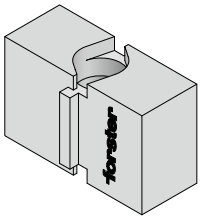
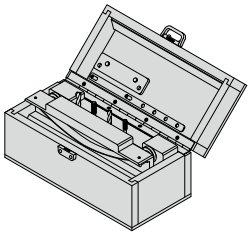
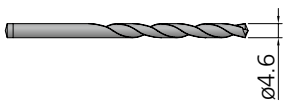
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Glasfalzbrücke, breit, 40 mm Pont feuillure du verre, large, 40 mm Glass rebate bridge, wide, 40 mm	5 Stk./pcs	**986706**
	Set Distanzstücke Hartholz Kit distanceurs Bois dur Set distance pieces Hardwood X = 1 mm 16 Stk./pcs X = 3 mm 16 Stk./pcs X = 5 mm 16 Stk./pcs	1 Stk./pce	**980401**
	Einschweissblech für Profilende (90°) CrNi Plaque à souder en bout de profilé (90°) acier inox Weld-in plate for profile end (90°) CrNi	10 Stk./pcs	**906300**

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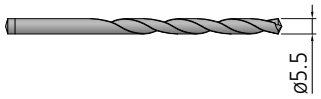
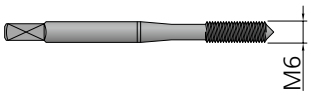
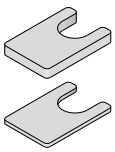
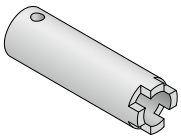
Verarbeitungshilfen Aides à la mise en œuvre Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Sägehilfe für Türprofile Kunststoff (POM) Cale de débitage pour profilés de porte Matière plastique (POM) Sawing aid for door profiles Plastics (POM)	2 Stk./pcs	**988010**
	Sägehilfe für Rahmenprofile Kunststoff (POM) Cale de débitage pour profilés de cadre Matière plastique (POM) Sawing aid for frame profile Plastics (POM)	2 Stk./pcs	**988011**
	Sägehilfe für Blechprofile Kunststoff (POM) Cale de débitage pour profilés avec tôle Matière plastique (POM) Sawing aid for steel sheet profile Plastics (POM)	2 Stk./pcs	**988014**
	Sägehilfe für Rahmenprofile Kunststoff (POM) Cale de débitage pour profilés de cadre Matière plastique (POM) Sawing aid for frame profile Plastics (POM)	2 Stk./pcs	**988015**
	Schweisshilfe für Edelstahl Kupfer Aide de soudage pour acier inox cuivre Welding template for stainless steel copper	1 Stk/pce	**909025**
	Bohrlehre Gabarit de perçage Drilling template Befestigungsfeder, Art.Nr. 906420/906421 Klemmknopf, Art. Nr. 906583 Klemmniete, Art. Nr. 906574 ressort de fixation, art. no. 906420/906421 bouton-pression, art. no. 906583 rivet de serrage, art. no. 906574 fastening spring, art. no. 906420/906421 stud fastener, art. no. 906583 clamping rivet, art. no. 906574	1 Stk./pce	**909105**

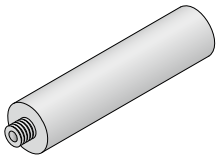
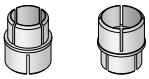
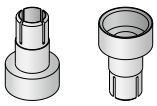
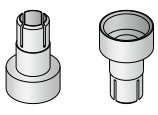
Verarbeitungshilfen Aides à la mise en œuvre Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Bohrlehre Gabarit de perçage Drilling template Klemmknopf, Art. Nr. 906577/906578 Befestigungsfeder, Art.Nr. 906420/906421 bouton-pression, art. no. 906577/906578 ressort de fixation, art. no. 906420/906421 stud fastener, art. no. 906577/906578 fastening spring, art. no. 906420/906421	1 Stk./pce	**909104**
	Anschweisslehre Gabarit de soudage Welding template Anschweissband 2-teilig, Art. Nr. 907662/907664 3D, Art. Nr. 907667/907668 Paumelle à souder à 2 branches, art. no. 907662/907664 à 3D, art. no. 907667/907668 Weld-on hinge in 2 parts, art. no. 907662/907664 in 3D, art. no. 907667/907668	2 Stk/pcs	**909029**
	Anschweisslehre Gabarit de soudage Welding template Anschweissband 2-teilig, Art. Nr. 907663 3-teilig, Art. Nr. 907669 Paumelle à souder à 2 branches, art. no. 907663 à 3 branches, art. no. 907669 Weld-on hinge in 2 parts, art. no. 907663 in 3 parts, art. no. 907669	2 Stk/pcs	**909030**
	Bohrlehre zu Falzanschraubbänder 987612-13, 987623-24, 987680-81 inklusiv Bohrer 909219, 909220 und Gewindeformer 909221, 909222 Gabarit de perçage pour paumelles à visser 987612-13, 987623-24, 987680-81 mèche 909219, 909220 et taraud 909221, 909222 inclus Drilling template for screw-on hinges 987612-13, 987623-24, 987680-81 bit 909219, 909220 and tapper 909221, 909222 included	1 Stk/pce	**909110**
	Ersatz Bohrer zu Bohrlehre Art. Nr. 909110 Mèche de rechange pour gabarit de perçage art. no. 909110 Replacement bit for drilling template art. no. 909110	2 Stk./pcs	**909219**

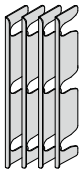
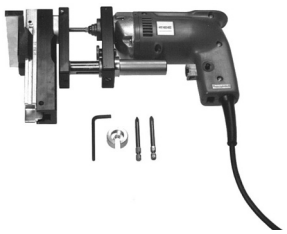
Verarbeitungshilfen — Aides à la mise en œuvre — Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Ersatz Bohrer zu Bohrlehre Art. Nr. 909110 Mèche de rechange pour gabarit de perçage art. no. 909110 Replacement bit for drilling template art. no. 909110	2 Stk./pcs	**909220**
	Ersatz Gewindeformer M6 zu Bohrlehre Art. Nr. 909110 Taraud de rechange M6 pour gabarit de perçage art. no. 909110 Replacement tapper M6 for drilling template art. no. 909110	1 Stk./pce	**909221**
	Distanzhalter zu Anschweissband Art. Nr. 907669 Distanceurs pour paumelle à souder art. no. 907669 Distance pieces for weld-on hinge art. no. 907669	1 Stk./pce	**909028**
	Einsatz zu Rätschenschlüssel für 3D Anschweissband Outil pour clé à cliquet pour paumelles 3D Insert for rached spanner for 3D welding hinges	1 Stk/pce	**909209**
	Richtwerkzeug-Set für Anschweissbänder Kit outil de réglage pour paumelles à souder Adjusting set for weld-on hinges Anschweissband 2-teilig, Art. Nr. 907662/907664/907663 3D, Art. Nr. 907667/907668 3-teilig, Art. Nr. 907669 Paumelle à souder à 2 branches, art. no. 907662/907664/907663 à 3D, art. no. 907667/907668 à 3 branches, art. no. 907669 Weld-on hinge in 2 parts, art. no. 907662/907664/907663 in 3D, art. no. 907667/907668 in 3 parts, art. no. 907669	1 Stk/pce	**909210**
	Schmierset für Anschweissbandrollen und Falzanschraubband Kit de graissage pour paumelles à souder et à visser Lubrication set for hinges	1 Stk./pce	**909240**

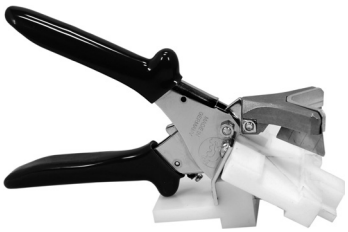
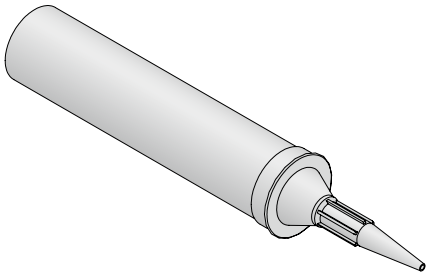
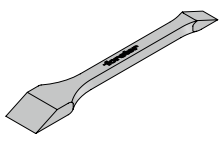
Verarbeitungshilfen Aides à la mise en œuvre Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Schmieraufsatz für Bänder 907667/907668 Chapiteau pour graisseur pour paumelles 907667/907668 Cap for lubrication for hinges 907667/907668	1 Stk./pce	**907058**
	Fettkartusche Ersatz, 125 g, für Schmierset 909240 Cartouche de graisse remplacement, 125 g, pour kit de graissage 909240 Grease cartridge replacement, 125 g, for lubrication set 909240	5 Stk./pcs	**908007**
	Starter-Kit für Gehrungsschleifen von CrNi-Profilen Appareils et matériels de ponçage pour profilés en acier inox Toolings and materials for stainless steel profiles	1 Stk./pce	**909005**
	Abdeckkappen für Anschweissbänder und Falzanschraubbänder Lackierschutz, wiederverwendbar Bouchon de protection pour paumelles à souder et paumelles à visser Protection pour laquage réutilisable Cover cap for weld-on hinges and screw-on hinges Coat-protective, reusable	60 Stk./pcs	**907064**
	Abdeckkappen für Anschweissband Art. Nr. 907667, 907668 Lackierschutz, wiederverwendbar Bouchon de protection pour paumelles à souder art. no. 907667, 907668 Protection pour laquage réutilisable Cover cap for weld-on hinge art. no. 907667, 907668 Coat-protective, reusable	60 Stk./pcs	**907065**
	Abdeckkappen für Anschraubbänder Art. Nr. 987680, 987681 Lackierschutz, wiederverwendbar Bouchons de protection pour paumelles à visser art. no. 987680, 987681 Protection pour laquage, réutilisable Cover caps for weld-on hinges art. no. 987680, 987681 Coat-protective, re-usable	50 Stk./pcs	**900265**

Verarbeitungshilfen Aides à la mise en œuvre Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Hebeschlüssel für verdeckt liegendes Band, Art. Nr. 907740 Clé de réglage pour paumelle cachée, art. no. 907740 Hoist-key to adjust concealed hinge, art. no. 907740	1 Stk/pce	**909211**
	Distanzplatten für Falzanschraubbänder 987680/987681, Ersatz Plaques de distance pour paumelles à visser 987680/987681, remplacement Distance plates for screw-on hinges 987680/987681, replacement	4 Stk./pcs	**907027**
	Bohrschrauben-Setzgerät (230 V) komplett, inklusive Koffer Appareil à poser les vis autoforeuses (230 V) complet, avec coffret Power driver for self-cutting screws (230 V) complete incl. case	1 Stk./pce	**909203**
	Schrauben-Vorsatzgerät (Ersatz) Adaptateur pour tournevis (rechange) Power driver adapter (replacement)	1 Stk./pce	**909204**
	Schrauben-Einsatz (passend zu Art. Nr. 909203) Jeu de tournevis (pour art. no. 909203) Screwdriver bit (fitting art. no. 909203)	2 Stk./pcs	**909205**
	Einrollwerkzeug für Dichtung Art. Nr. 985704, 985705 Rouleau pour joint art. no. 985704, 985705 Rolling tool for seal art. no. 985704, 985705	1 Stk./pce	**989000**

Verarbeitungshilfen Aides à la mise en œuvre Processing aids

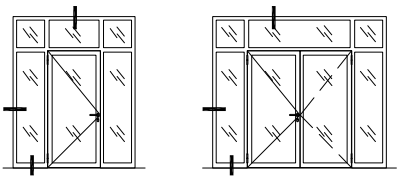
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Einrollwerkzeug für Dichtung Art. Nr. 905784, 905785, 905786, 985701 Rouleau pour joint art. no. 905784, 905785, 905786, 985701 Rolling tool for seal art. no. 905784, 905785, 905786, 985701	1 Stk./pce	**909007**
	Zuschnittwerkzeug Anschlagdichtung Art. Nr. 985701, Outil de découpe pour joint de butée porte art. no. 985701 Cutting tool for door buffer seal art. no. 985701	1 Stk./pce	**989415**
	Ersatzklingen Lames de rechange Replacement blades	2 Stk./pcs	**989416**
	Zuschnittwerkzeug Entwässerung Outil de découpe pour évacuation d'eau Cutting tool drainage	1 Stk./pce	**989411**
	Ersatz Lochklingen Lames de rechange Replacement blades	4 Stk./pcs	**989413**
	Primer für Glas und Aluminium-Profil Dose à 236 ml Primer pour verre et profilé en aluminium Boîte de 236 ml Primer for glass and aluminium profile Can at 236 ml	1 Stk/pce	**908205**
	Dichtungsmasse für Dichtungsüberlappungen zum Abdichten der Kreuzpunkte, auf Hybridpolymerbasis schwarz Inhalt Kartusche 290 ml Mastic pour chevauchements de joints, destiné à l'étanchéité des croisements, à base de polymère hybride, noir, contenance de cartouche 290 ml Sealing compound for weatherstripping overlapping to seal the crossing points based on hybridpolymere black content cartridge 290 ml	12 Kartuschen Cartouches Cartridges 1 Kartusche Cartouche Cartridge	**908001** **908005**
	Glaskelle Levier en bois pour vitrage Wooden glazing wedge	1 Stk./pce	**909218**

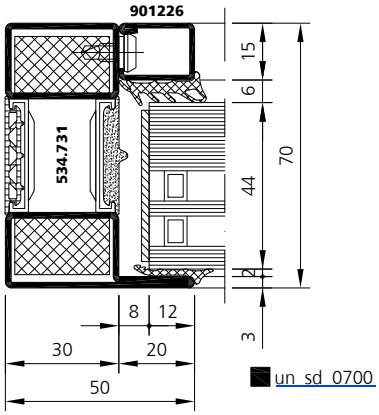
Platz für Notizen

Espace pour les notes

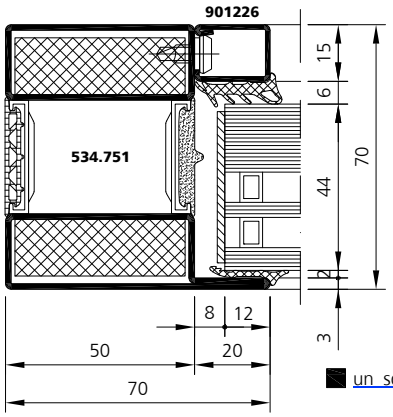
Space for memos

Systemschnitte | Coupes du système | System sections

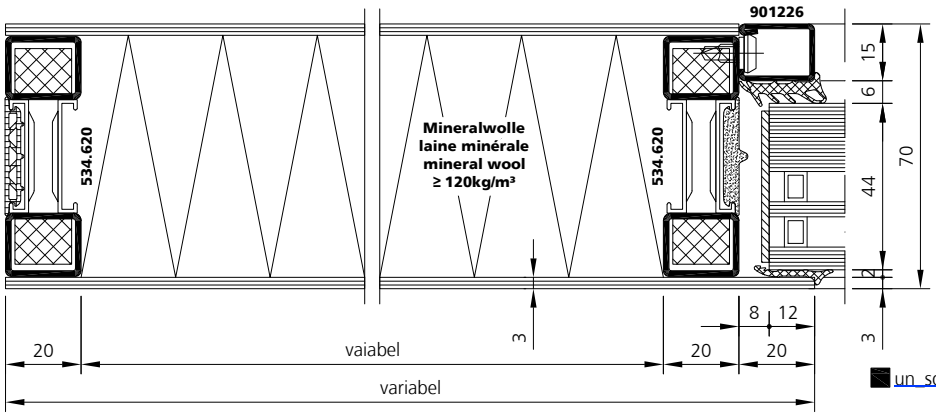




un_sd_0700



un_sd_0701



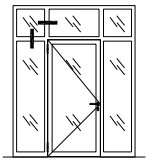
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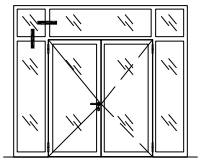
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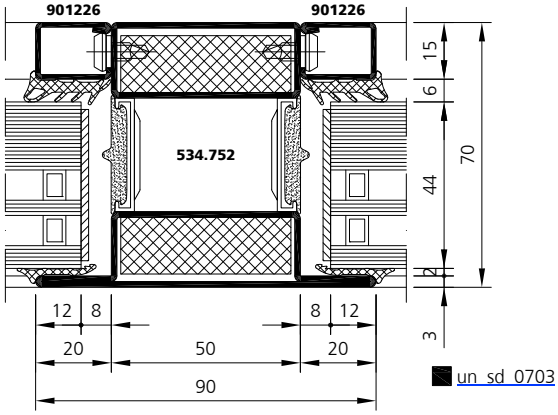
Systemschnitte

Coupes du système

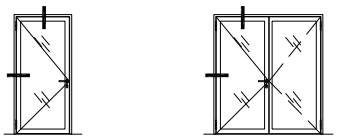
System sections

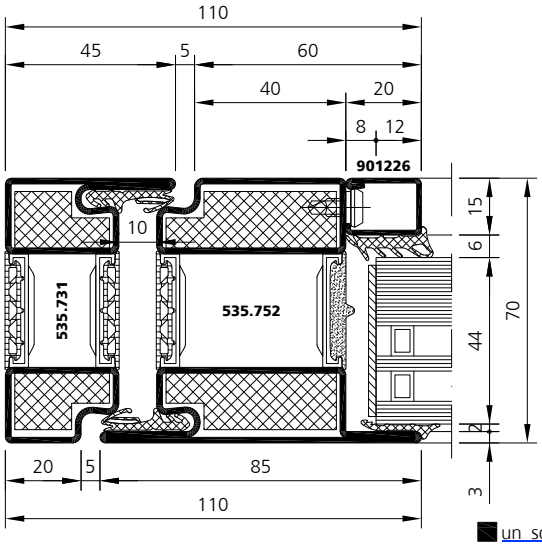




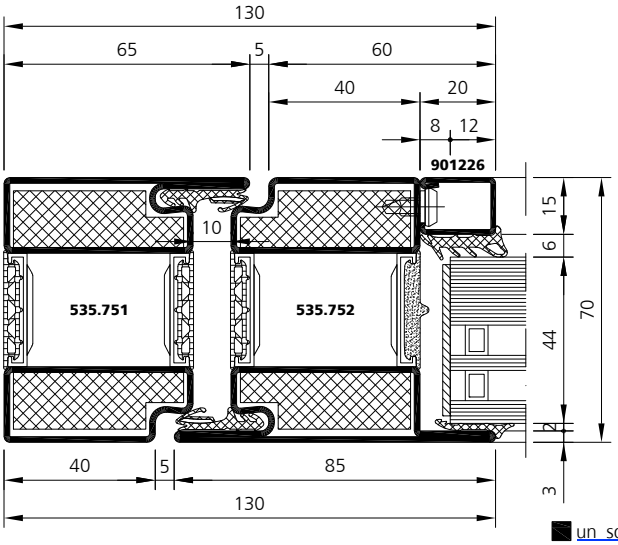


Systemschnitte | Coupes du système | System sections

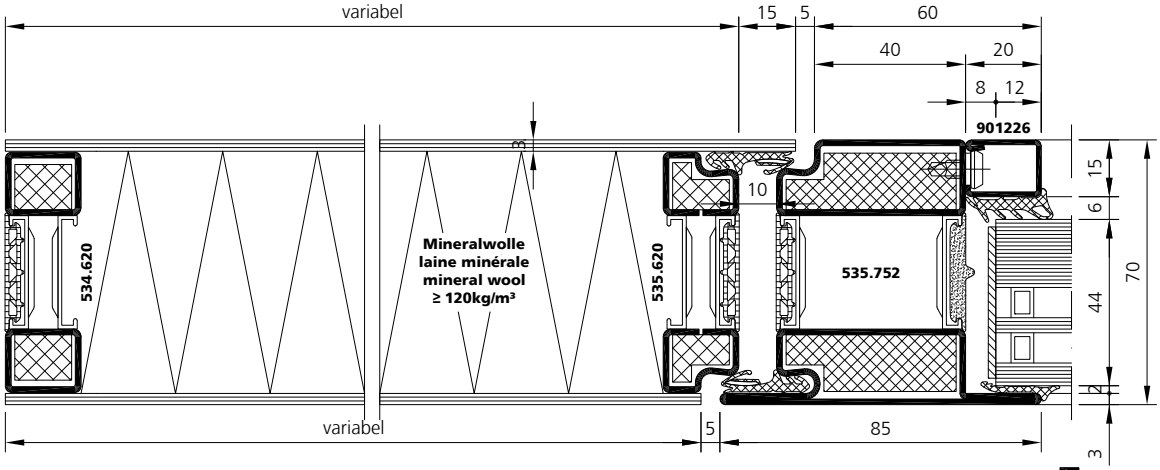




un_sd_0704



un_sd_0705



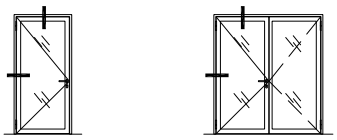
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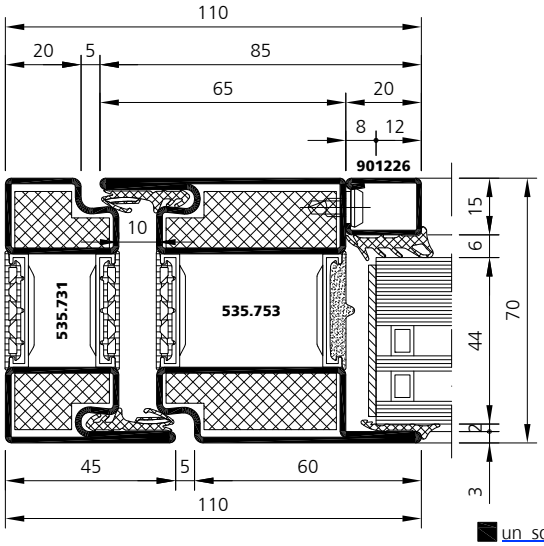
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3

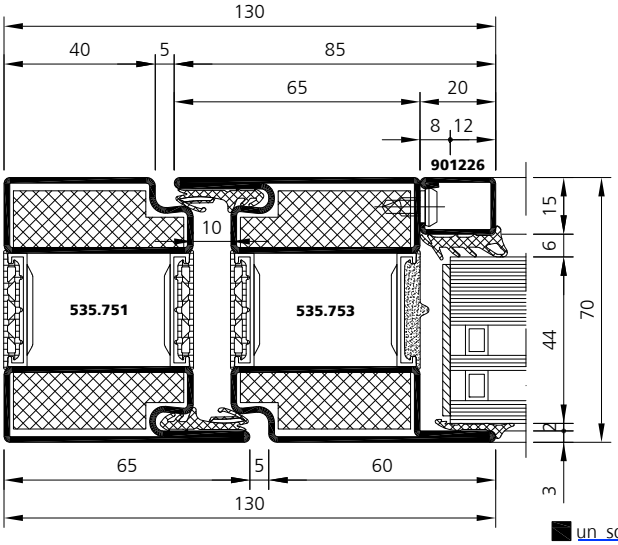
09/23

Systemschnitte | Coupes du système | System sections

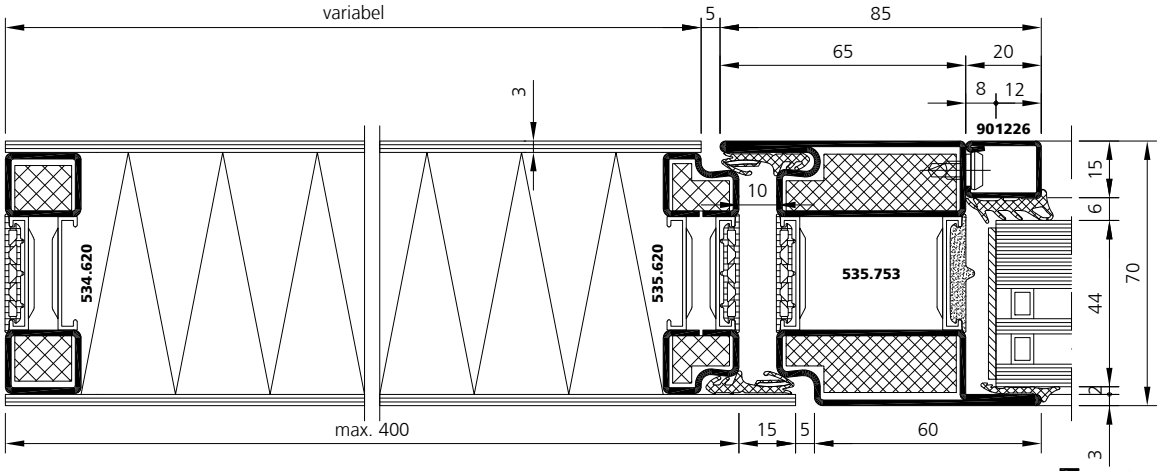




un_sd_0706



un_sd_0707

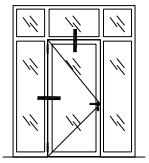


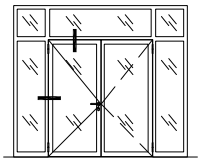
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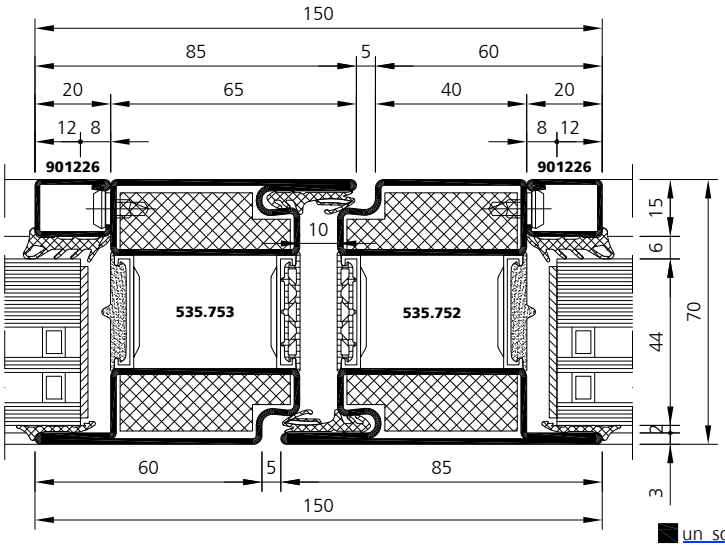
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09/23

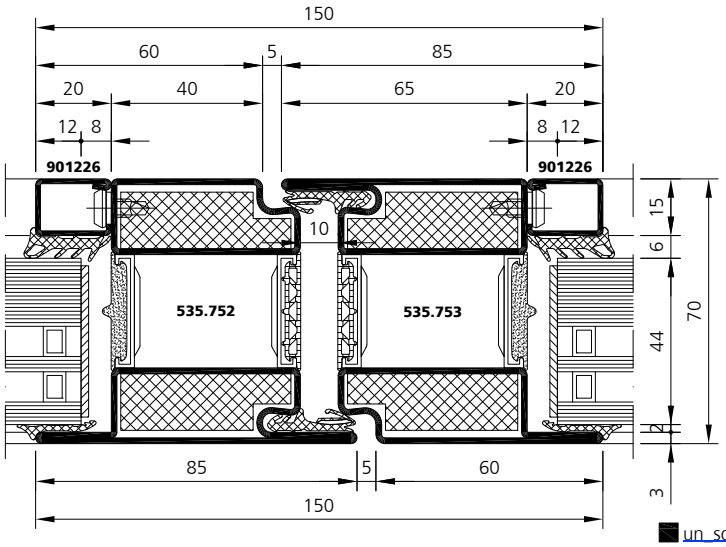
Systemschnitte | Coupes du système | System sections







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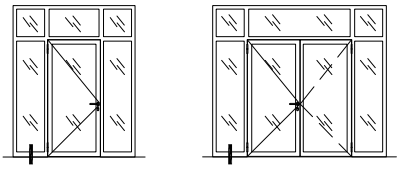


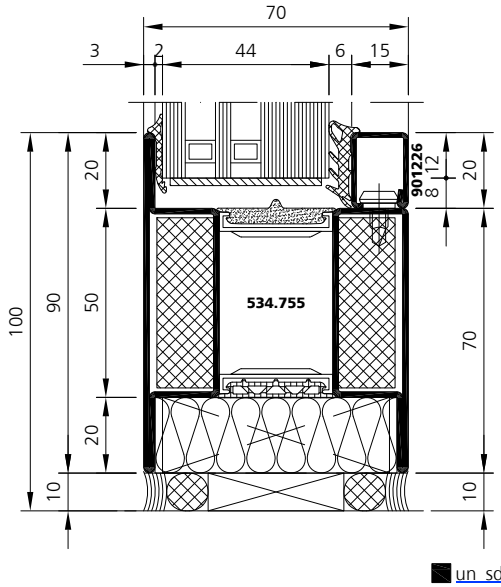
un_sd_0709

Systemschnitte

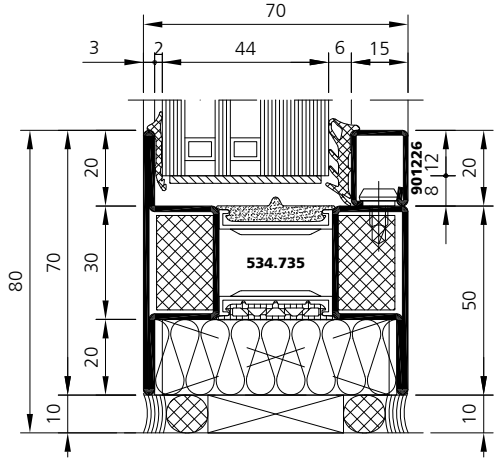
Coupes du système

System sections



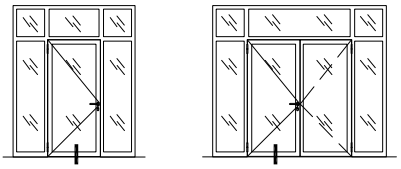


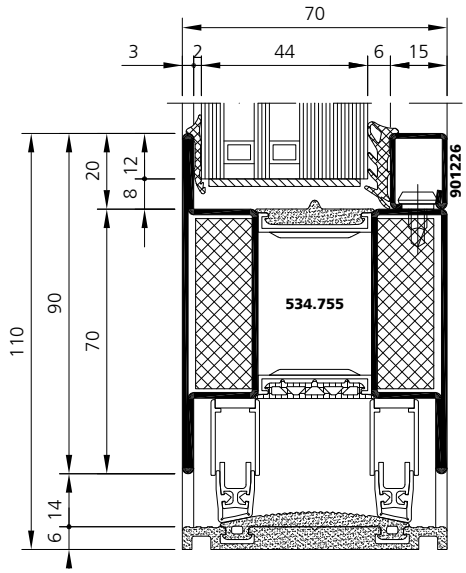
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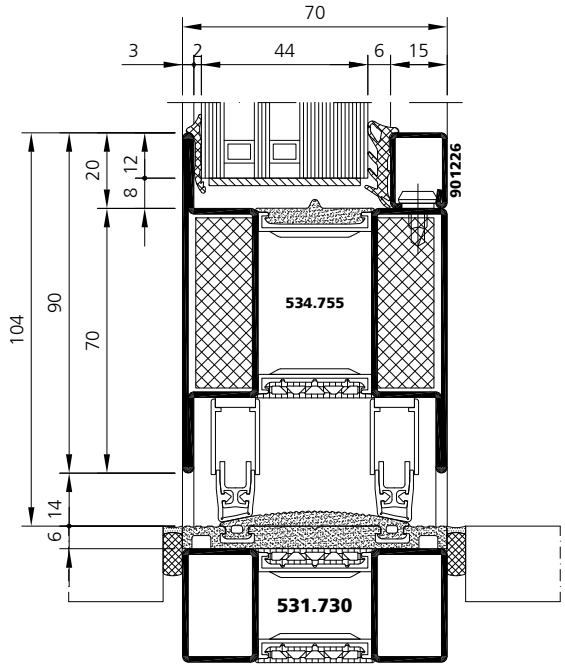
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Systemschnitte | Coupes du système | System sections

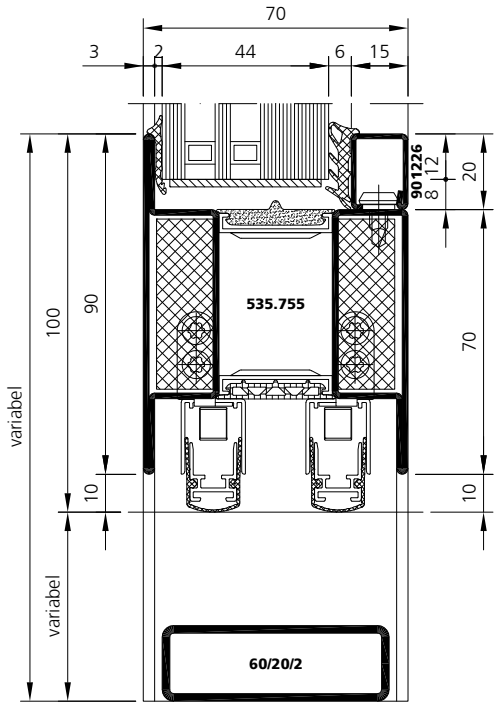




un_sd_0728



un_sd_0730

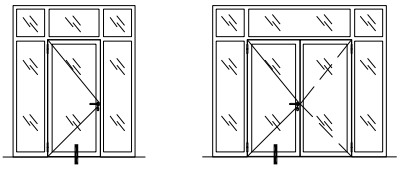


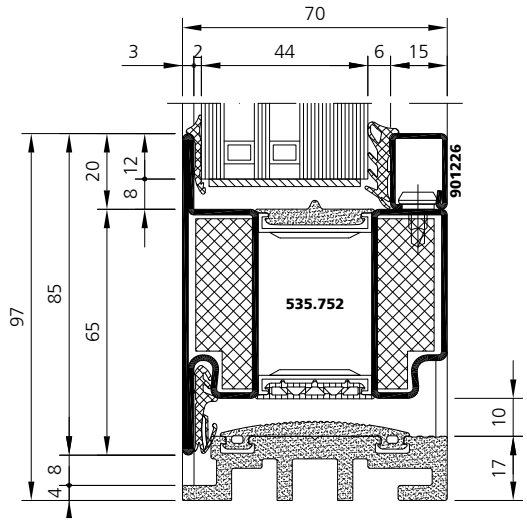
un_sd_0711

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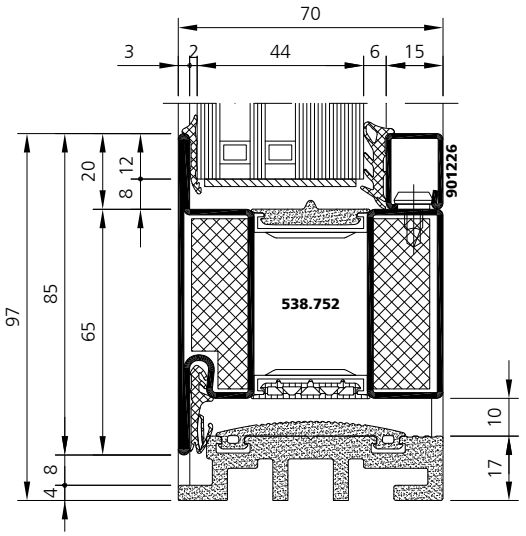
09/23

Systemschnitte | Coupes du système | System sections

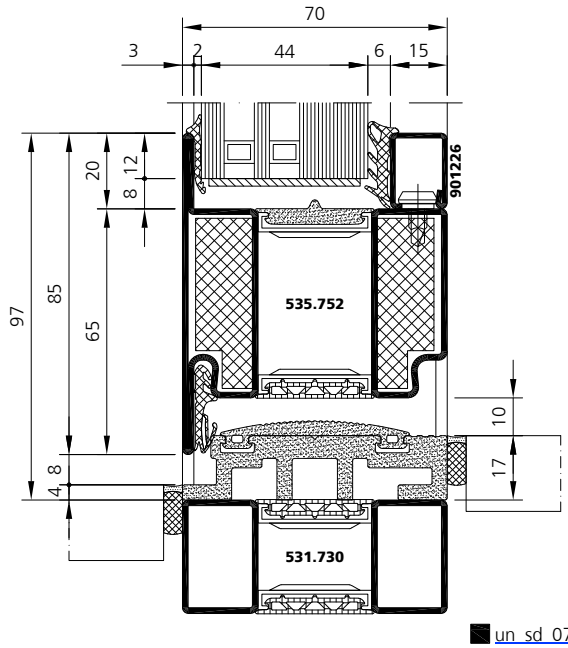




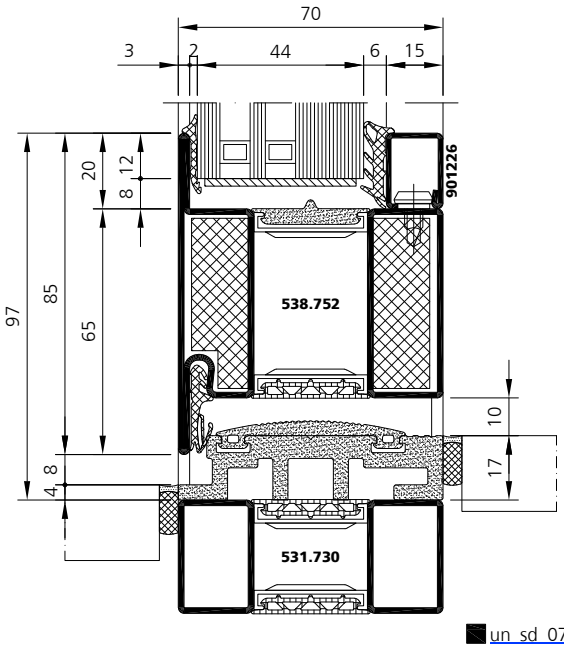
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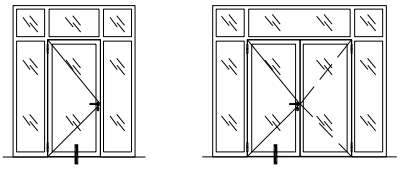


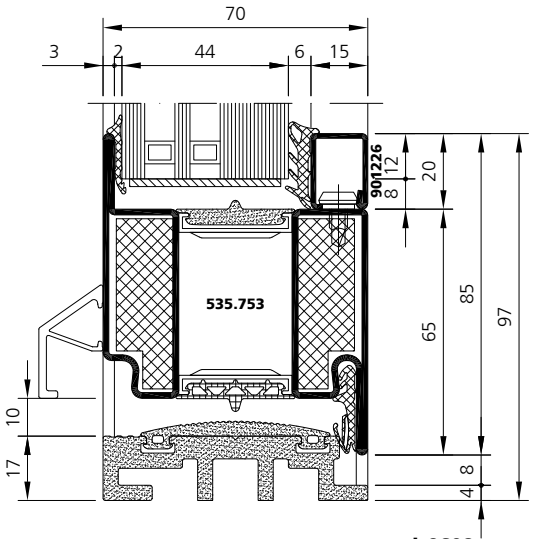
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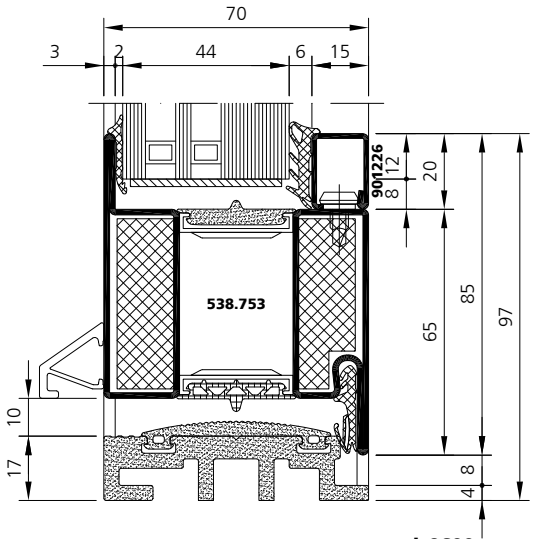
un_sd_0724

Systemschnitte | Coupes du système | System sections

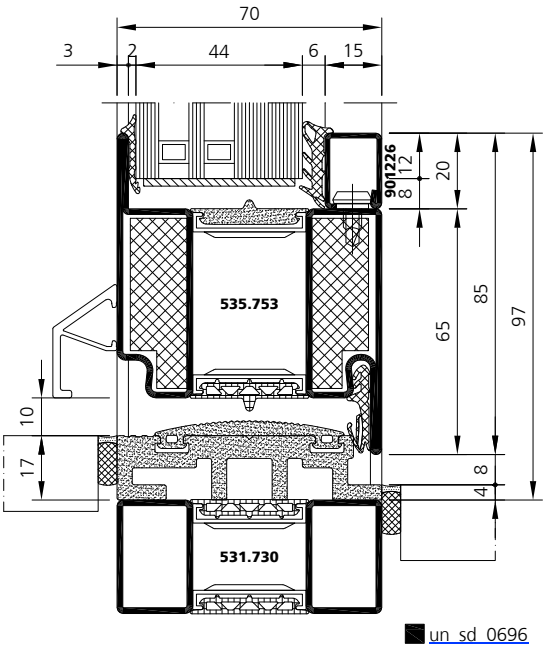




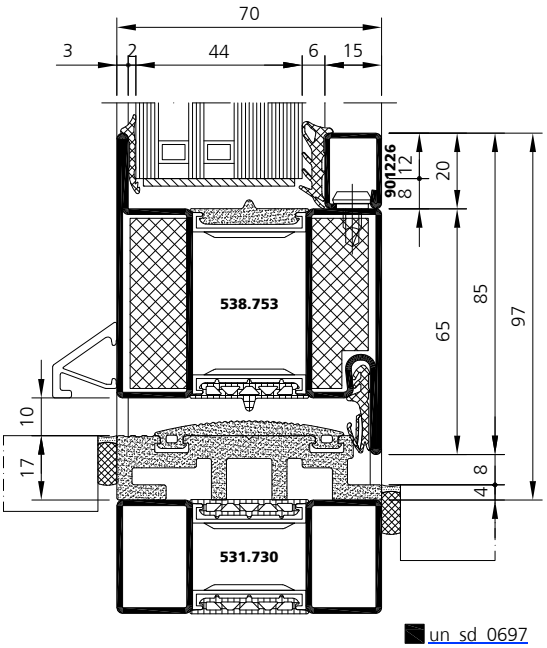
un_sd_0698



un_sd_0699



un_sd_0696



un_sd_0697

Übersicht Systempläne

1	einflügelige Tür
2	• mit Seitenteil
3	• mit zwei Seitenteilen
4	• mit Oberlicht
5	• mit Oberlicht und Seitenteil
6	• mit Oberlicht und zwei Seitenteilen
7	zweiflügelige Tür
8	• mit Seitenteil
9	• mit zwei Seitenteilen
10	• mit Oberlicht
11	• mit Oberlicht und Seitenteil
12	• mit Oberlicht und zwei Seitenteilen

Tableau des plans du système

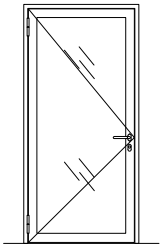
porte à un vantail
• avec partie latérale fixe
• avec deux parties latérales fixes
• avec imposte
• avec imposte et partie latérale fixe
• avec imposte et deux parties latérales fixes
porte à deux vantaux
• avec partie latérale fixe
• avec deux parties latérales fixes
• avec imposte
• avec imposte et partie latérale fixe
• avec imposte et deux parties latérales fixes

Synopsis of system plans

single-leaved door
• with screen abutment
• with 2 screen abutments
• with fanlight
• with fanlight and screen abutment
• with fanlight and 2 screen abutments
double-leaved door
• with screen abutment
• with 2 screen abutments
• with fanlight
• with fanlight and screen abutment
• with fanlight and 2 screen abutments

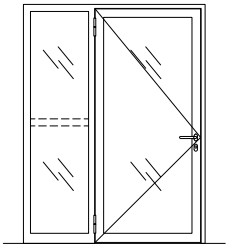
Stahl / Acier / steel

1



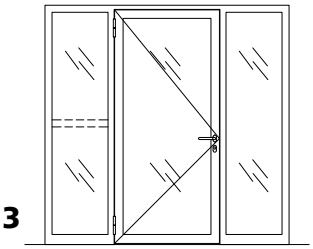
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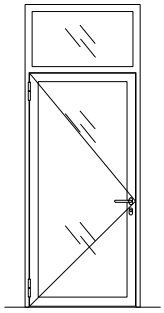
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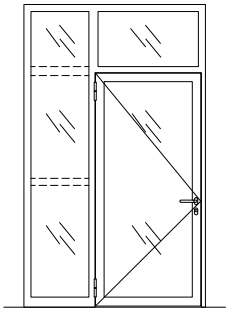
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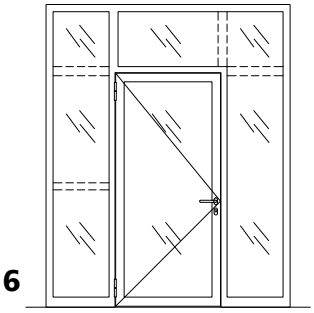
un_sp_0433

5



un_sp_0434

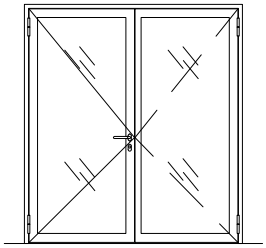
6



un_sp_0435

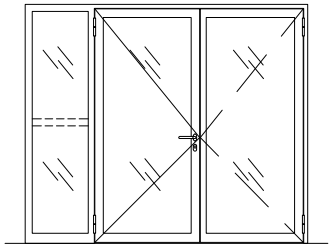
Übersicht Systempläne | Tableau des plans du système | Synopsis of system plans

7



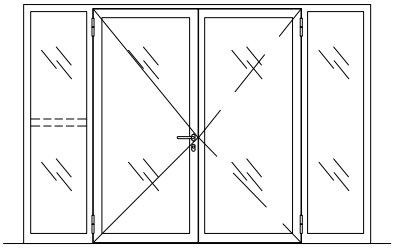
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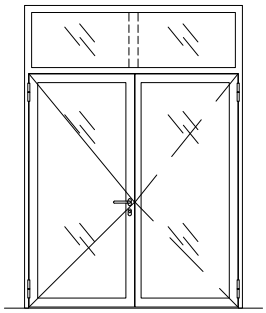
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9



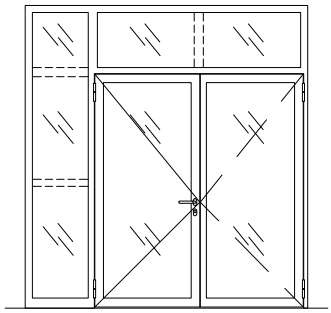
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10



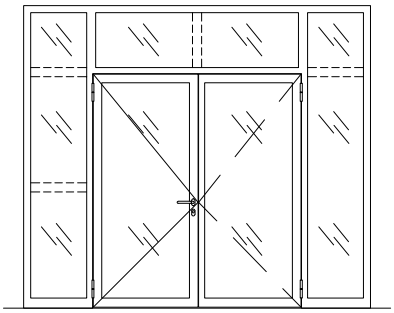
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11



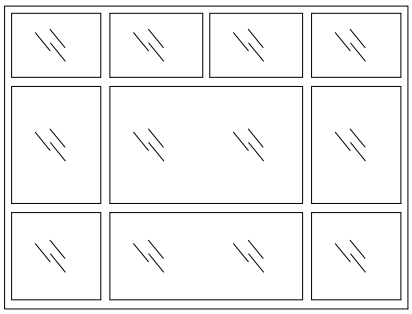
un_sp_0440

12



un_sp_0441

13



un_sp_0442

Für Festverglasung gelten nationale Zulasungen
Pour le vitrage fixe, des homologations nationales sont applicables
National approvals apply for fixed glazing

auf nachfolgenden Seiten dargestellt
présenté dans les pages suivantes
shown on the following pages

BIM-Modelle
für Revit und ArchiCAD unter
www.forster-profile.ch/Downloads

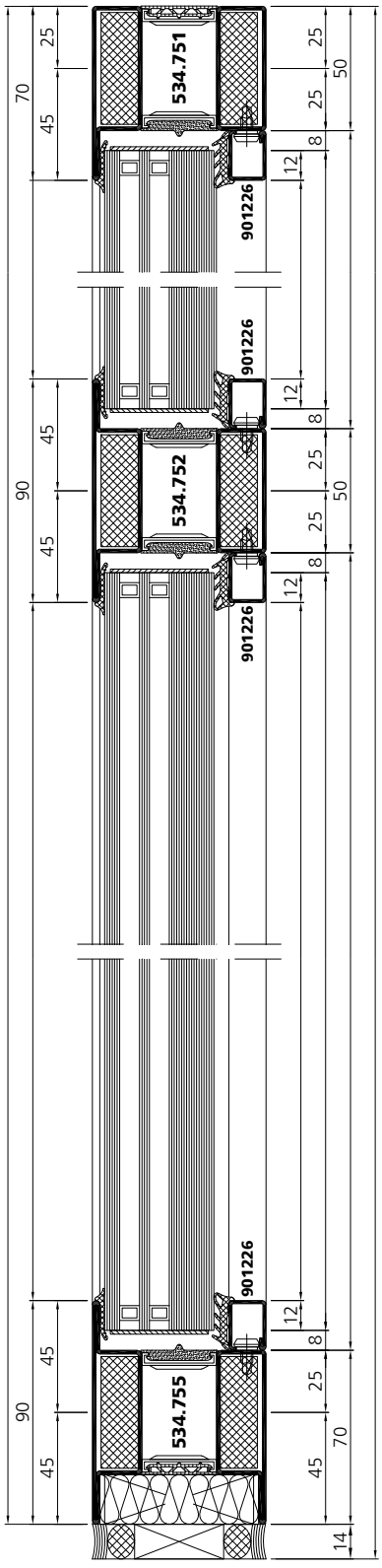
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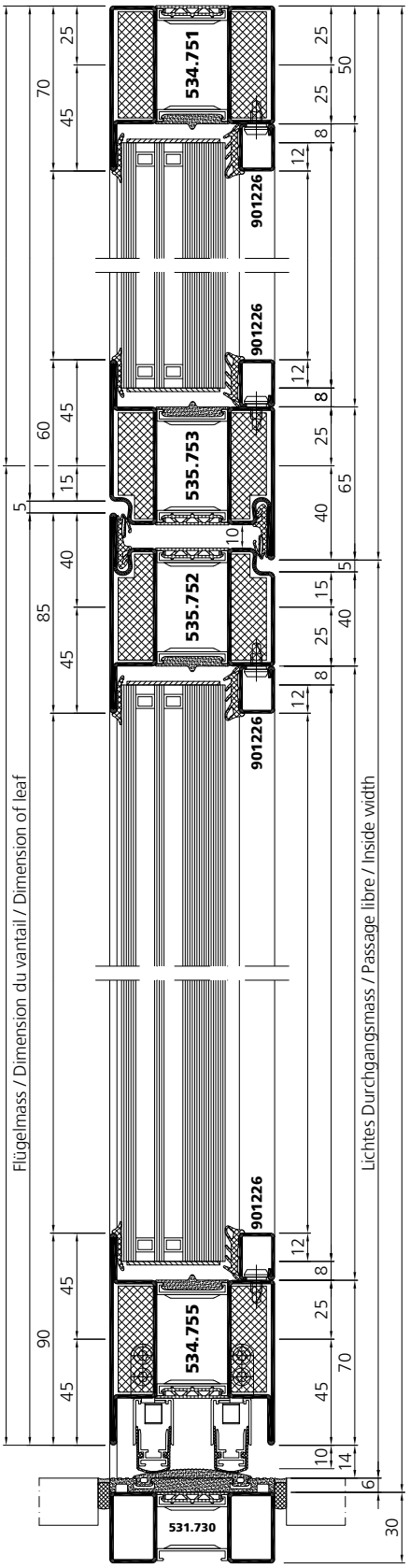
Systempläne | Plans du système | System plans

un_sp_0434

A - A

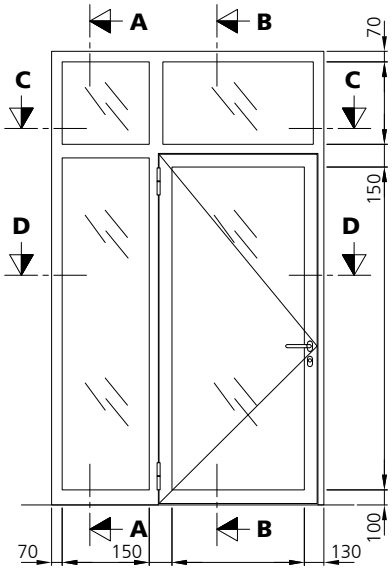


B - B

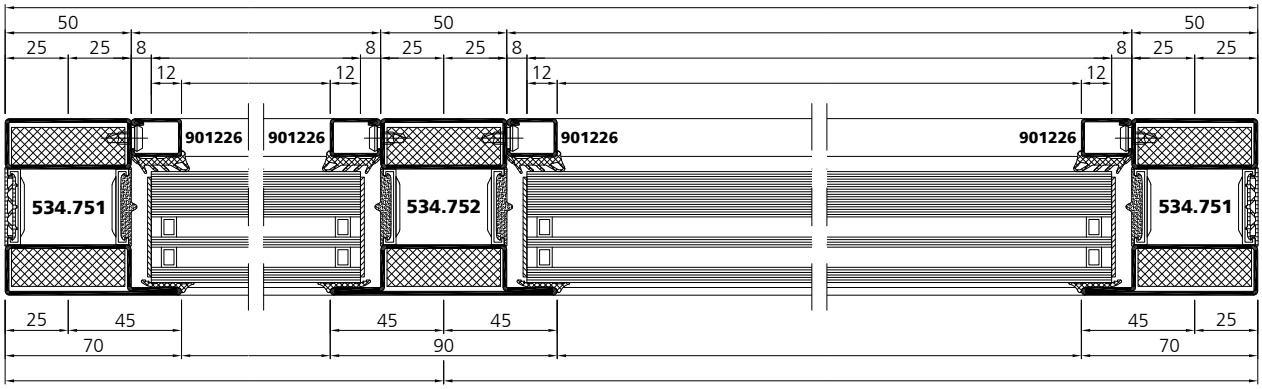


Systempläne | Plans du système | System plans

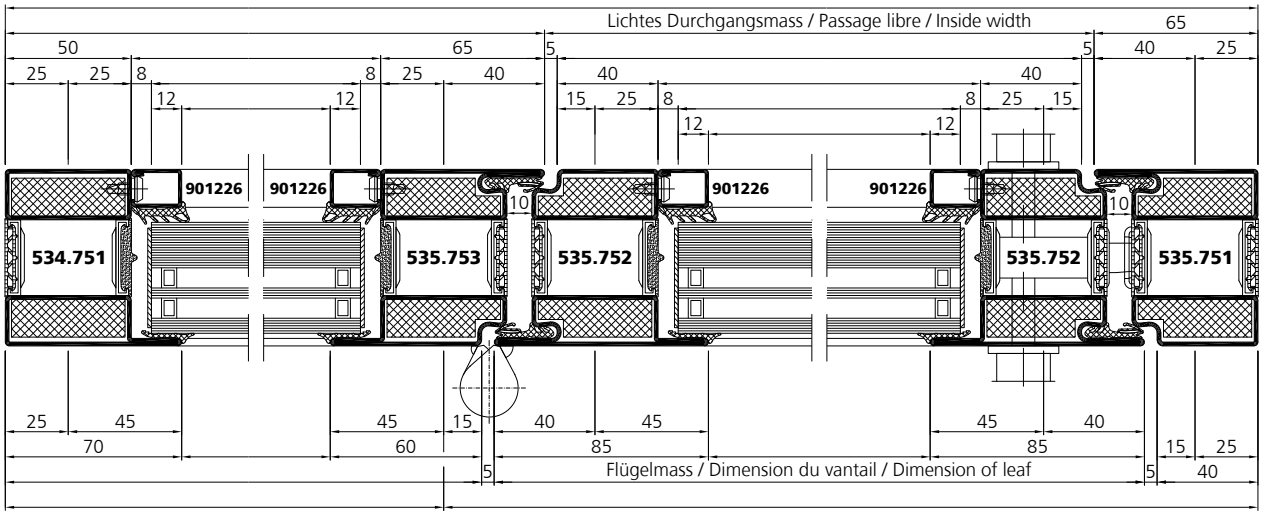
un_sp_0434



C - C



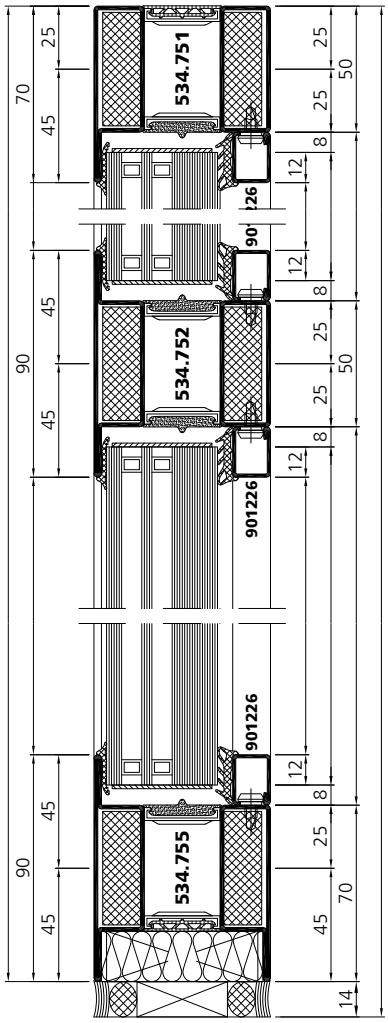
D - D



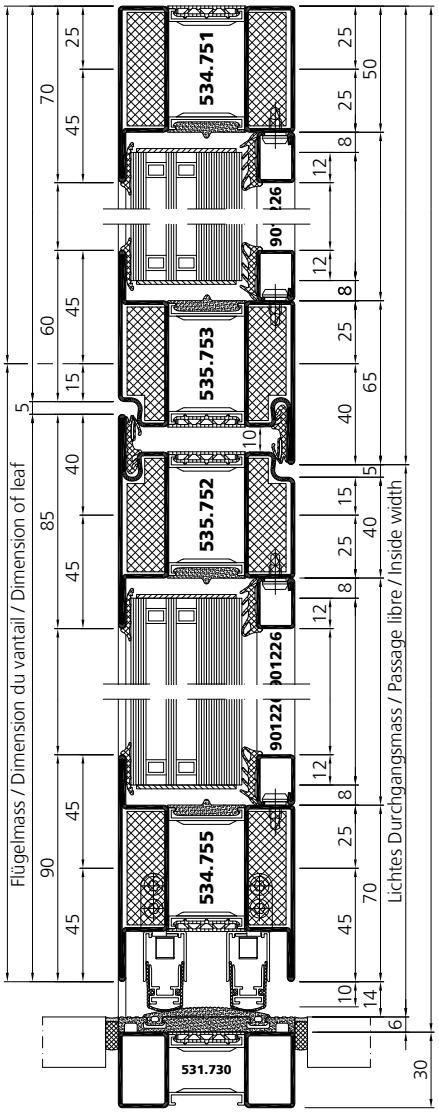
Systempläne | Plans du système | System plans

un_sp_0440

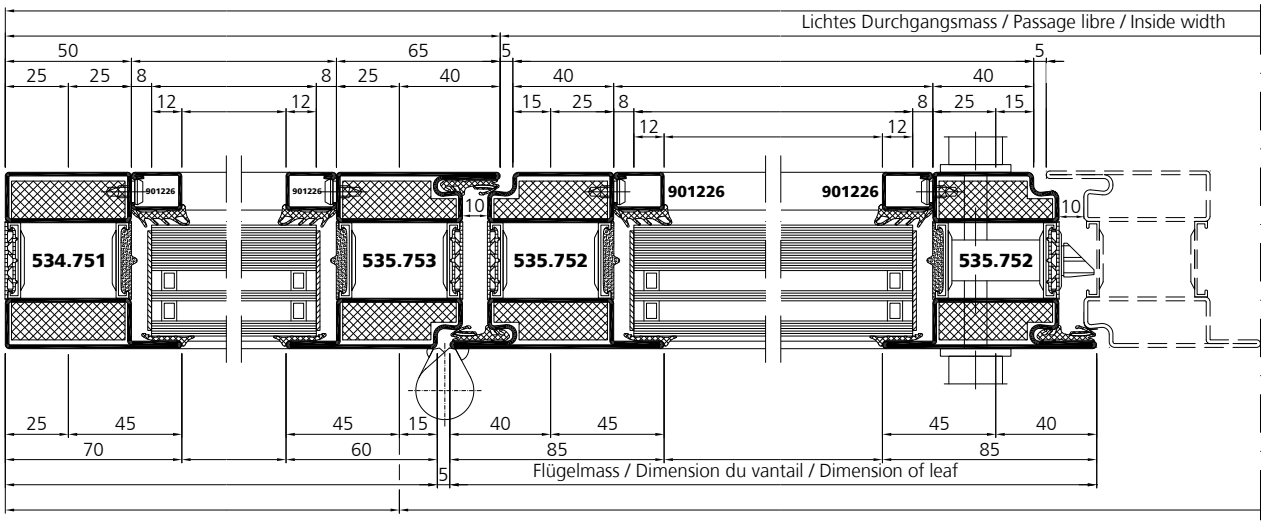
A - A



B - B

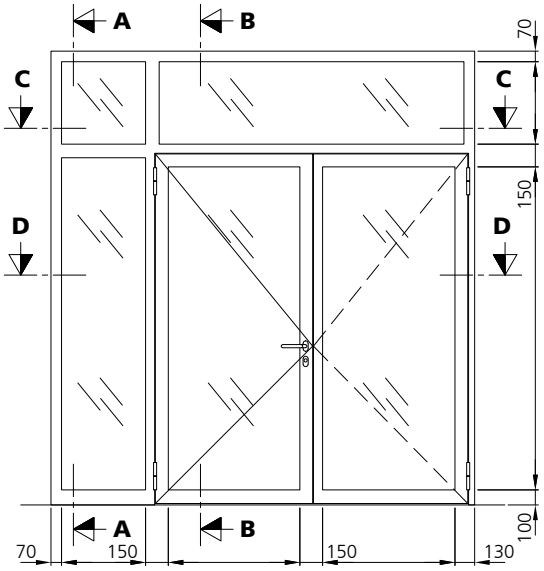


D - D

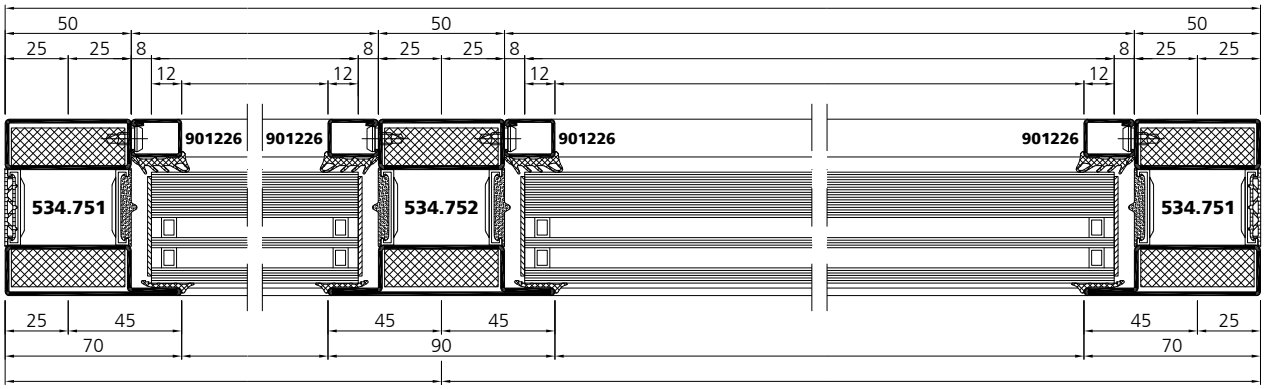


Systempläne | Plans du système | System plans

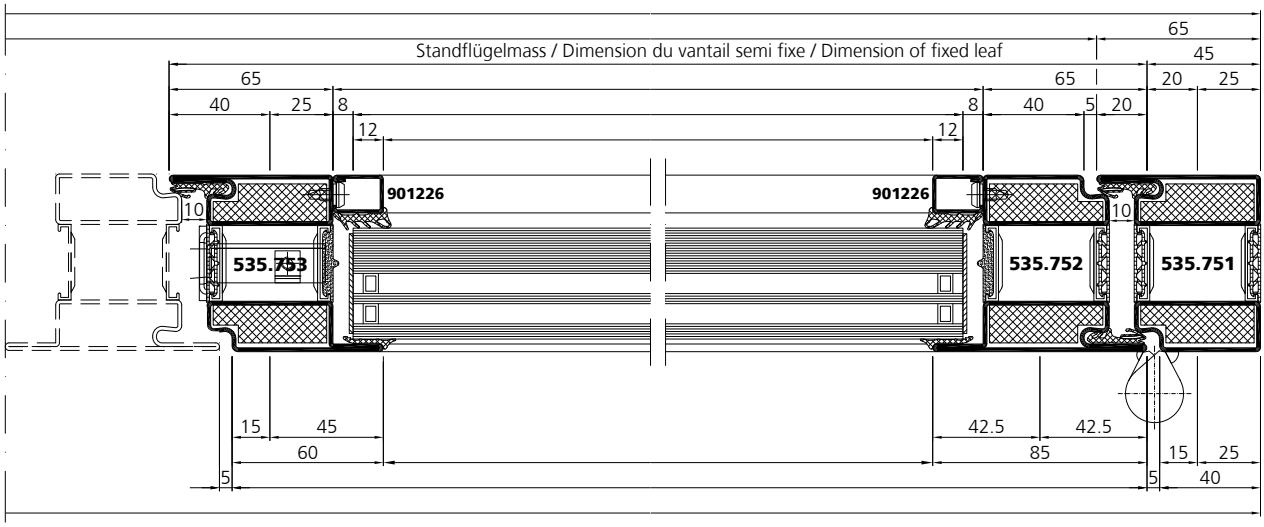
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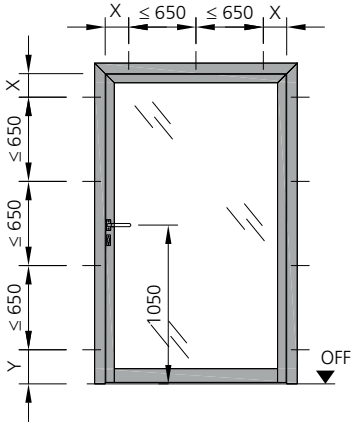
C - C

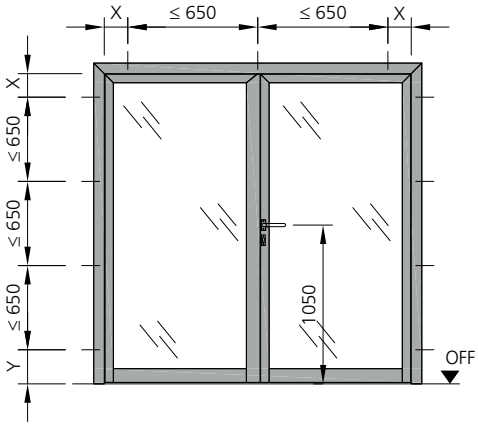


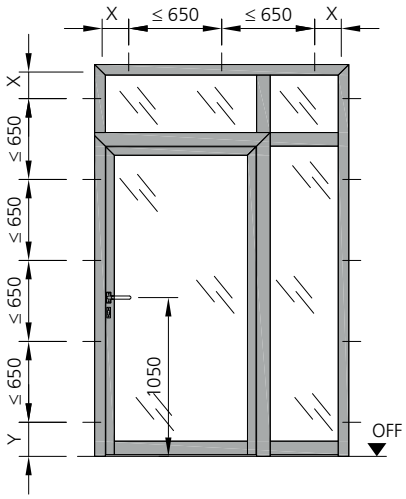
D - D

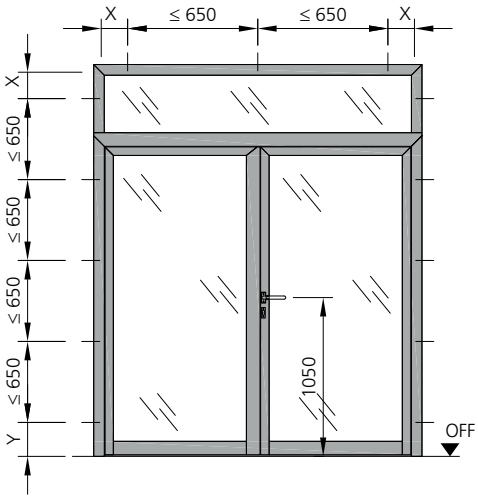


Befestigungspunkte — Points de fixation — Fixing points

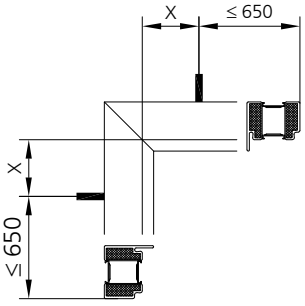




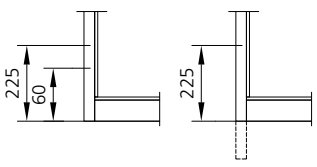




Mass X
Dimension X
Dimension X = 75 ±20

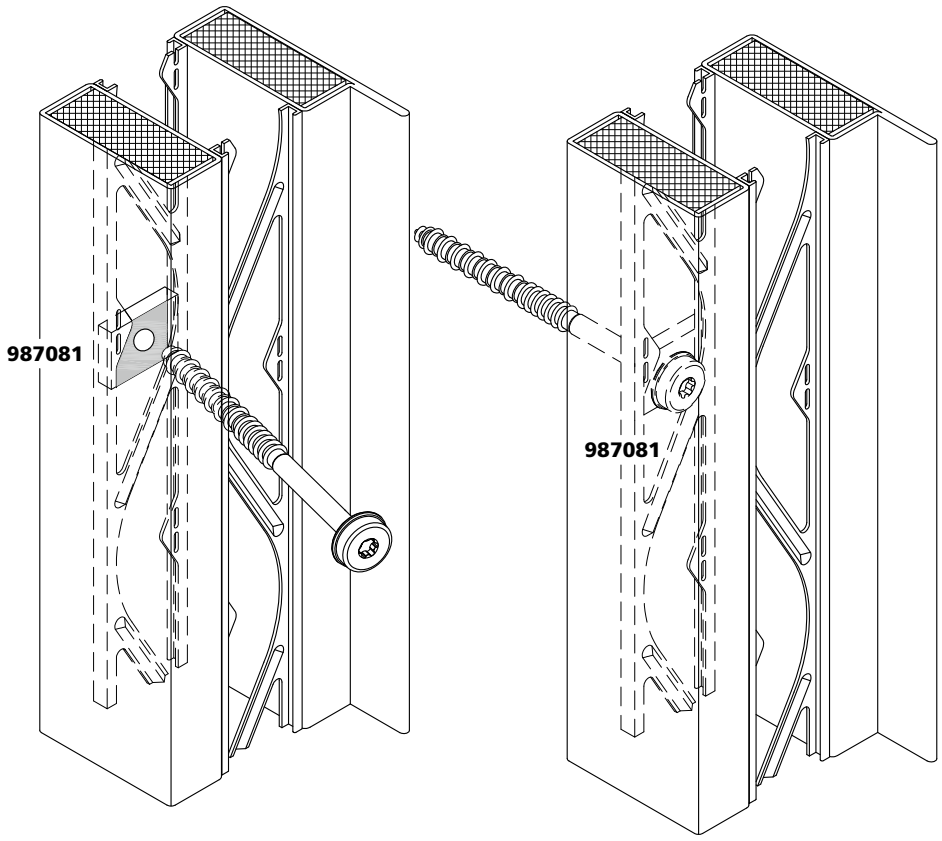


Mass Y
Dimension Y
Dimension Y = 225 / 60 ±20



09/23

Wandbefestigung | Fixation murale | Wall mounts



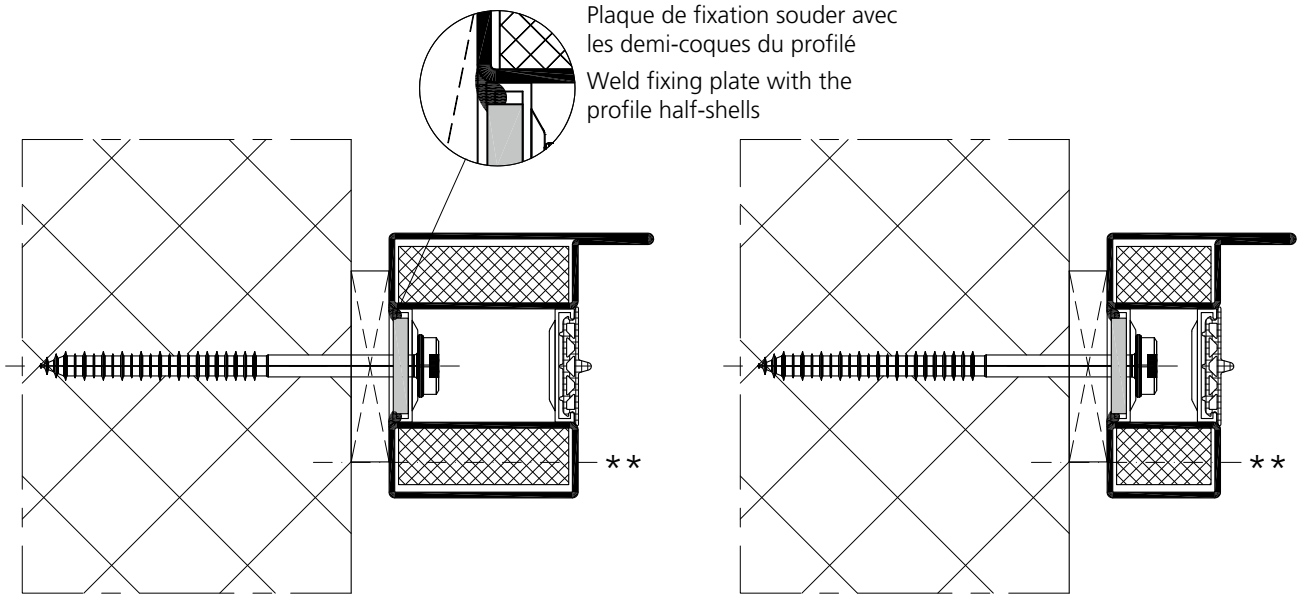
987081
Gewinde M5*
filetage M5*
thread M5*

*Aufbohren
auf 10.5 mm
Pergage
jusqu'a 10.5 mm
Drillout
up to 10.5 mm

Befestigungsplatte mit Profilhalbschalen verschweissen

Plaque de fixation souder avec les demi-coques du profilé

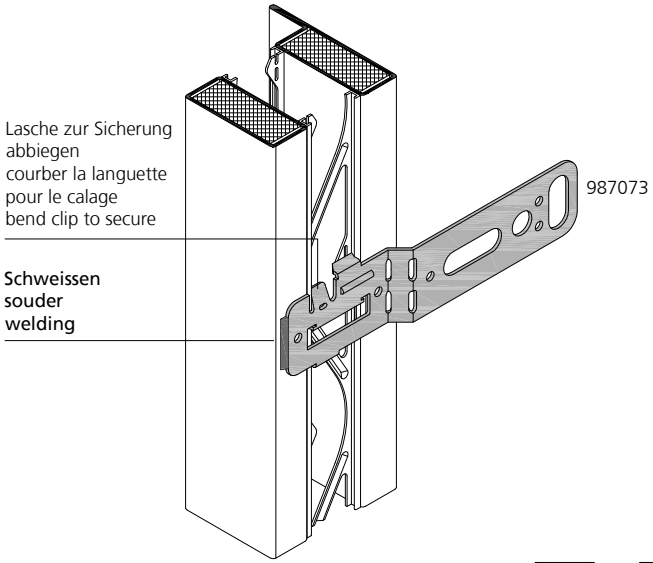
Weld fixing plate with the profile half-shells



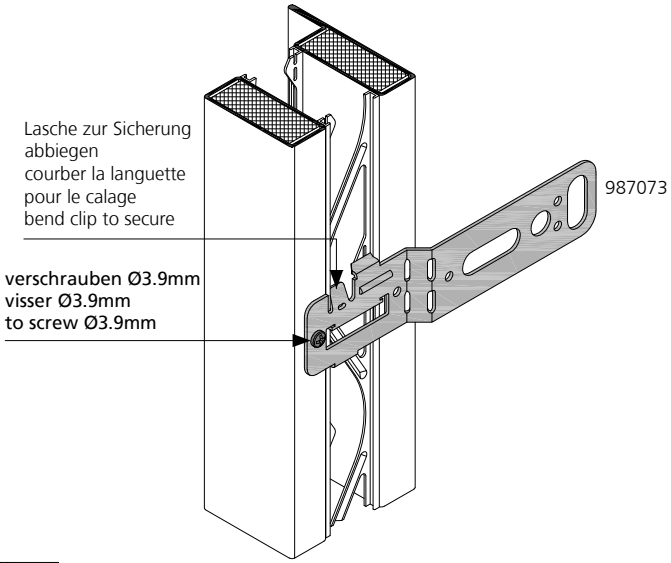
** wahlweise durch Profilschale befestigt
à choix fixation à travers le profilé
fixing optionally through the profile

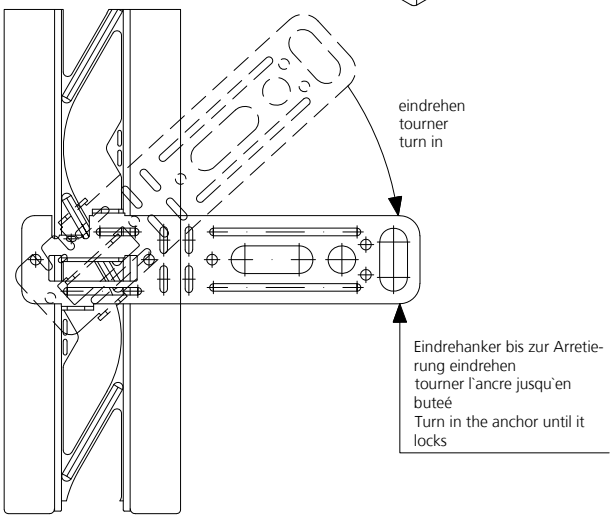
Wandbefestigung Fixation murale Wall mounts

Variante 1 / Variante 1 / Variant 1



Variante 2 / Variante 2 / Variant 2





Wandanschlüsse
Nummernschlüssel

Raccords muraux
Légende

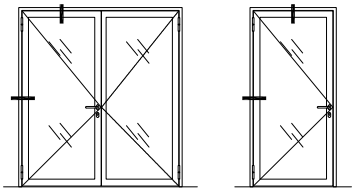
Wall abutments
Legend

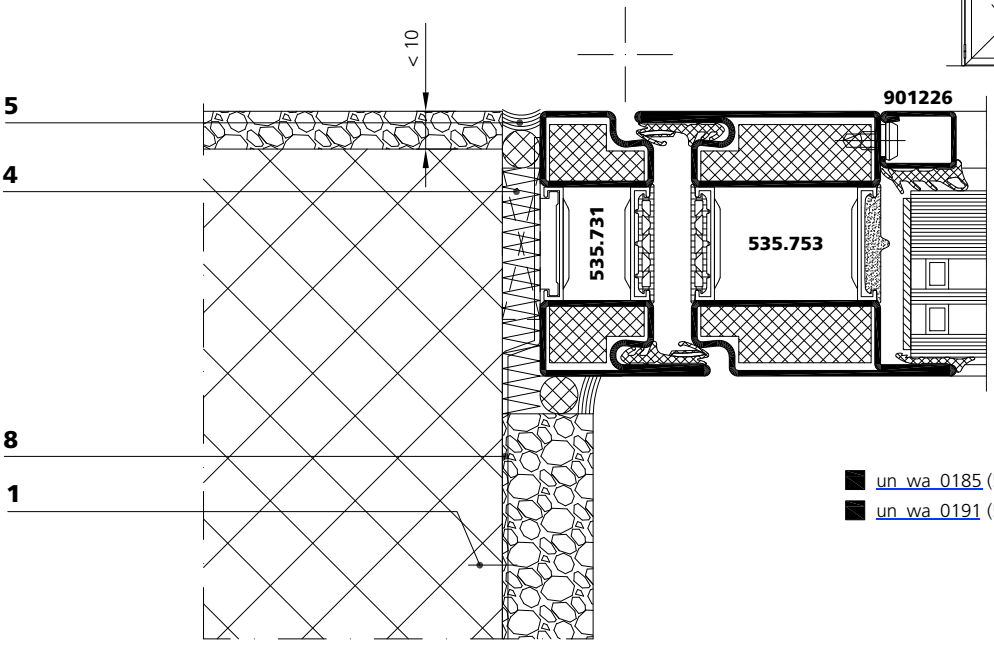
1	**Befestigungsmittel** (an Massivbauteile z.B. Mauerwerk, Beton) Wahlweise: • zugelassener KS/St-Dübel ø 10 mm mit dazugehörender Stahlschraube • Universalschraube 'HILTI HUS', Ø 7.5 mm • Heco Multi Monti	**Elément de fixation** (support massif, par ex. maçonnerie, béton) Au choix: • Cheville en acier/KS homologuée ø 10 mm avec vis en acier correspondante • Vis universelle 'HILTI HUS', Ø 7.5 mm • Heco Multi Monti	**Means or fastening** (to solid components e.g. masonry, concrete) Either: • Approved KS/St plug ø 10 mm with related steel screw • Universal screw 'HILTI HUS', Ø 7.5 mm • Heco Multi Monti
4	**Füllmaterial** Anschlüsse/Hohlräume mit nichtbrennbarem Material hinterfüttern (z.B. Steinwolle, Mörtel, "Promatec H" oder mittels Brandschutz-Fugenschnur)	**Produit de remplissage** Charger les raccords/cavités de produit ininflammable (par ex. laine minérale, mortier, "Promatec H" ou un bouche-joint anti-feu)	**Filling material** Fill joints/cavities with fire-proof material (e.g. mineral wool, mortar, "Promatec H" or using fire protection joint cord)
5	**Dichtmaterial** Wahlweise Standard-Silikon, Acryl oder PU	**Produit d'étanchéité** Au choix silicone standard, PU ou acrylique	**Sealing material** Either standard-silicone, acrylic or PU
6	**Folie** Dampfdiffusionsoffen Henkel Terofol SD3, Verklebung mit Henkel Terotech KDS	**Film d'étanchéité** Perméabilité à la diffusion de vapeur Henkel Terofol SD3, coller avec Henkel Terotech KDS	**Film** Open to steam diffusion Henkel Terofol SD3, glue with Henkel Terotech KDS
8	**EIndrehanker 987073** aus Stahl bandverzinkt, Materialstärke min. 5 mm (wahlweise geschraubt oder geschweisst)	**Ancre à tourner 987073** en acier galvanisé en continu, épaisseur min. 5 mm (au choix vissées ou soudées)	**Turn in anchor 987073** Made of steel continuously galvanized, material thickness min. 5 mm (either screw fastened or welded)

Wandanschlüsse
An Massivbauteile

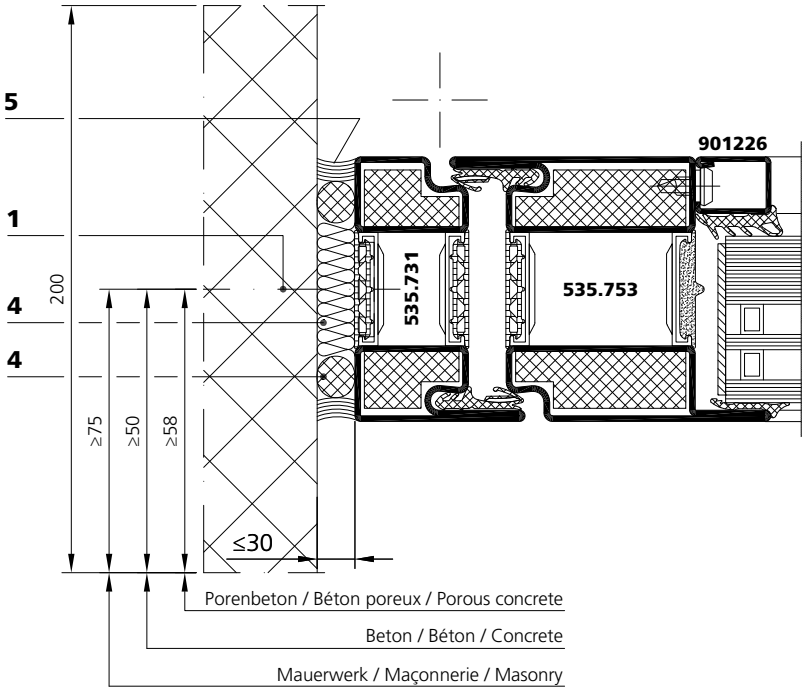
Raccords muraux
Sur pièces massives

Wall abutments
On massive components





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un_wa_0191 (535.751)

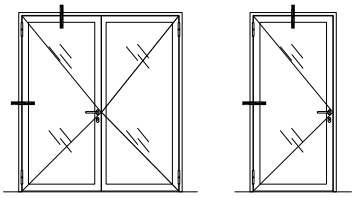


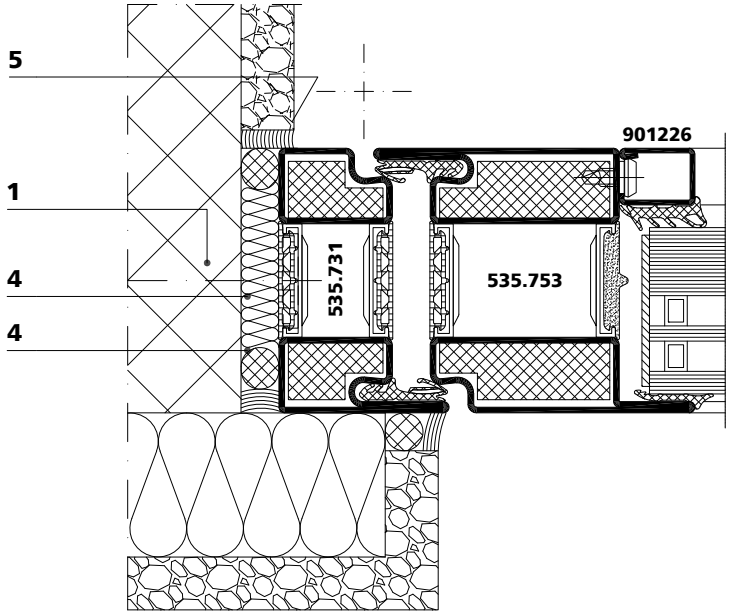
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Wandanschlüsse
An Massivbauteile

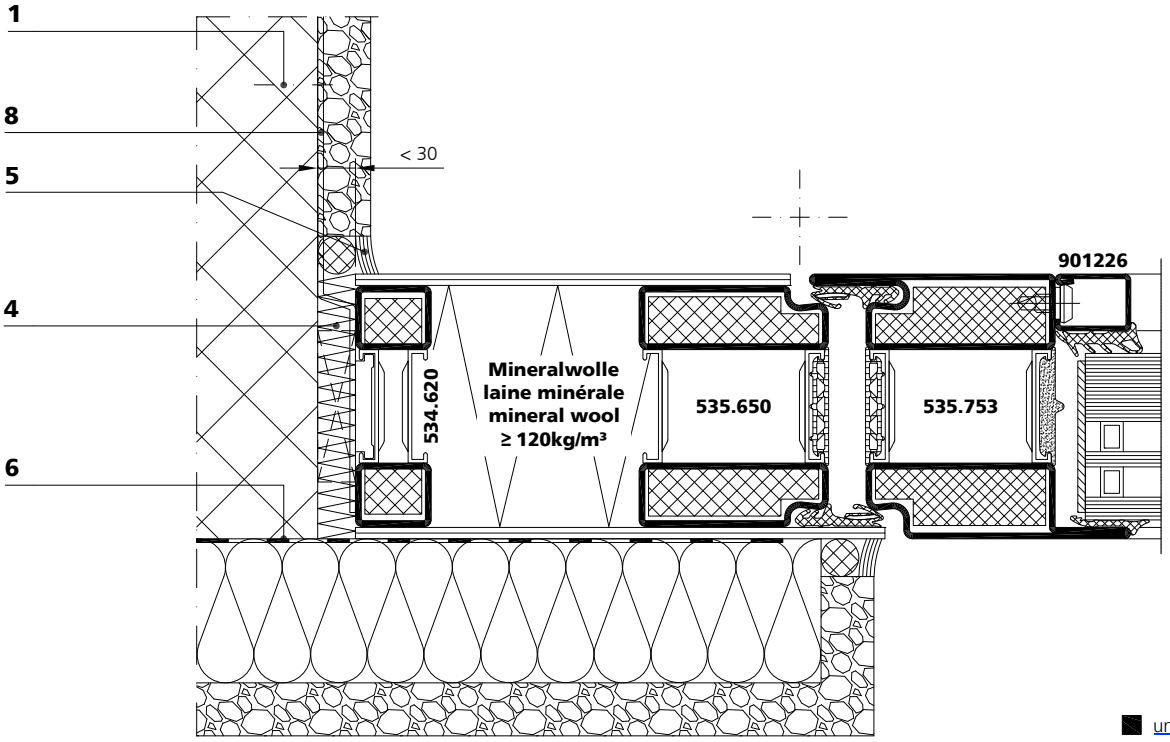
Raccords muraux
Sur pièces massives

Wall abutments
On massive components





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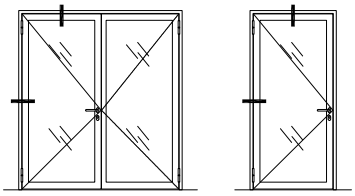
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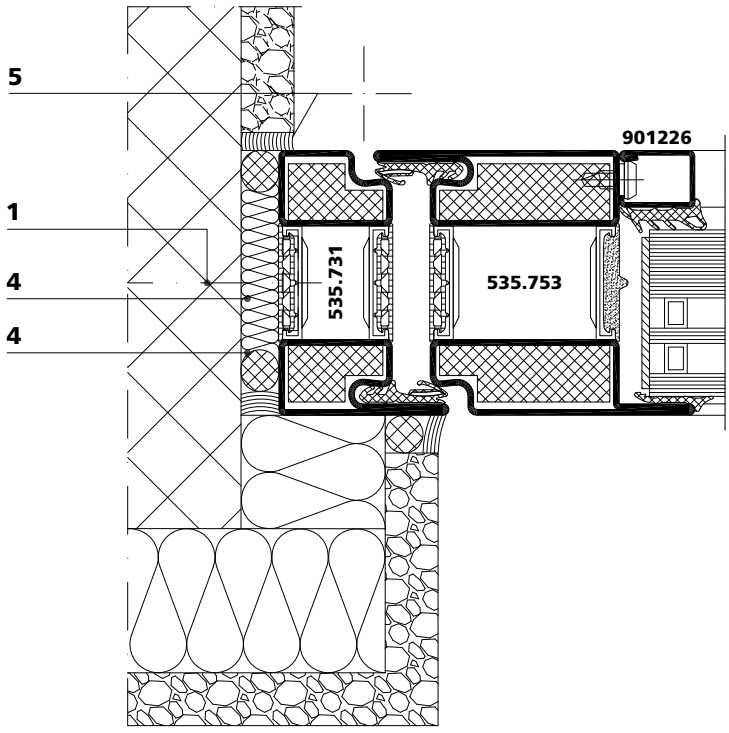
3

Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components



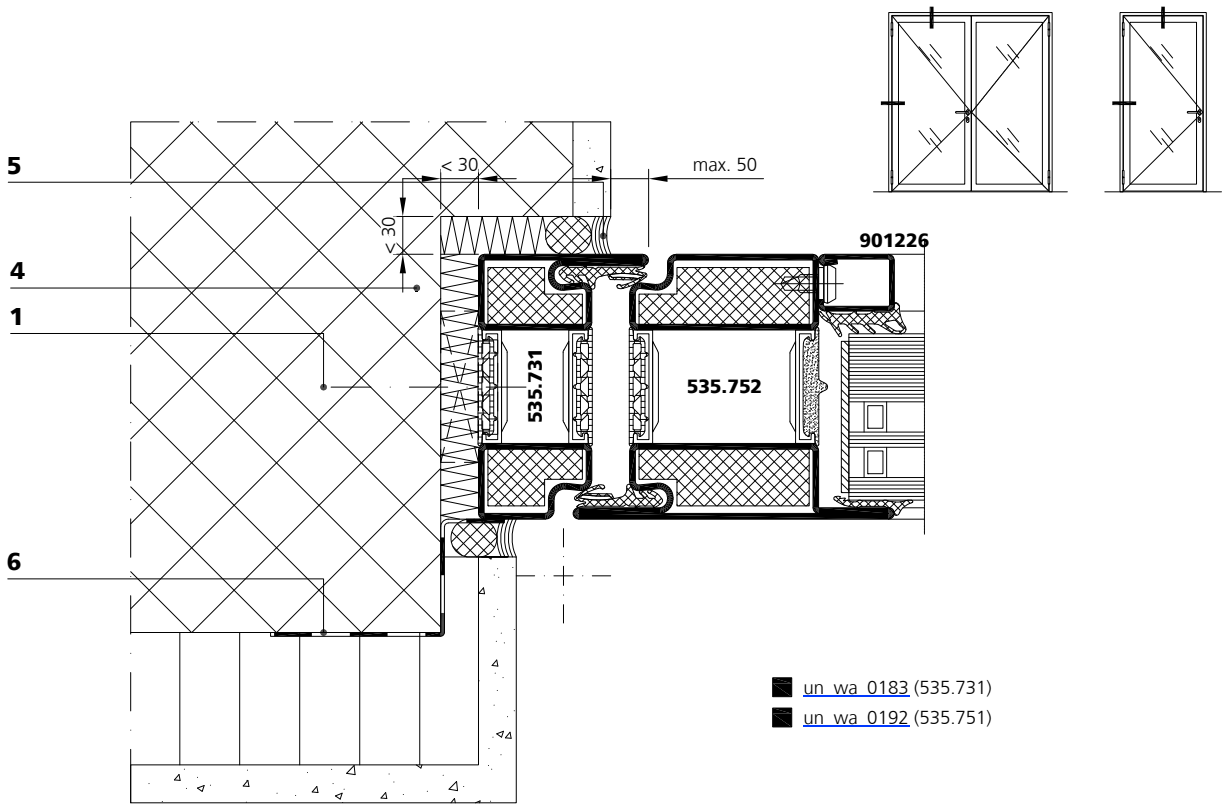


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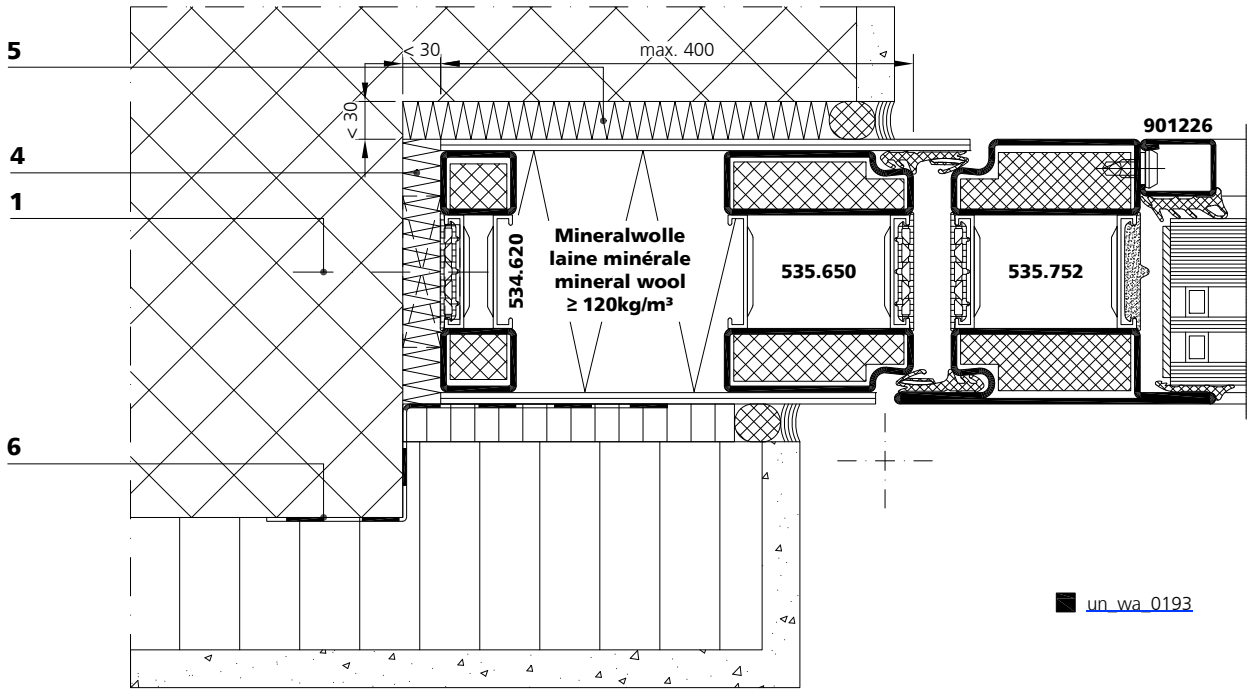
Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components



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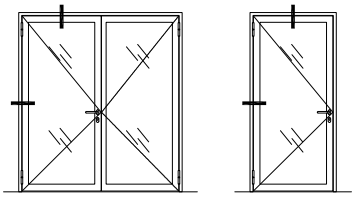
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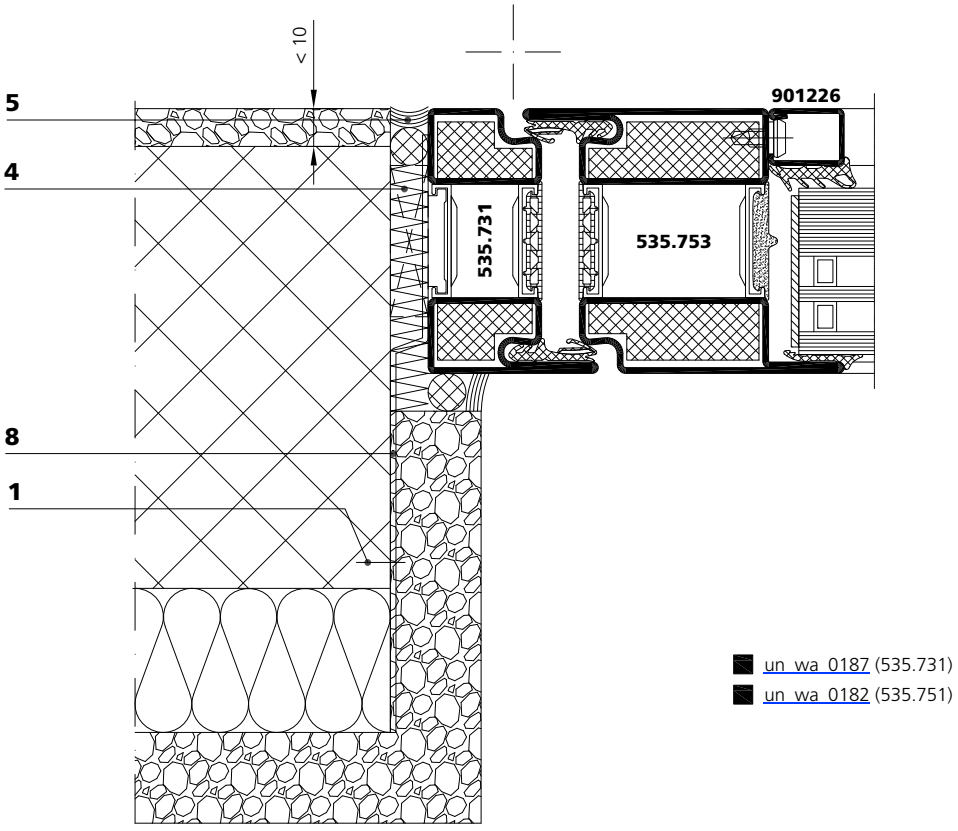
3

Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components



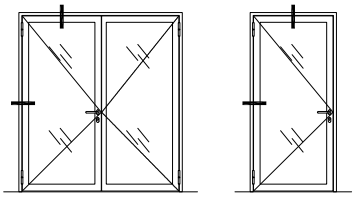


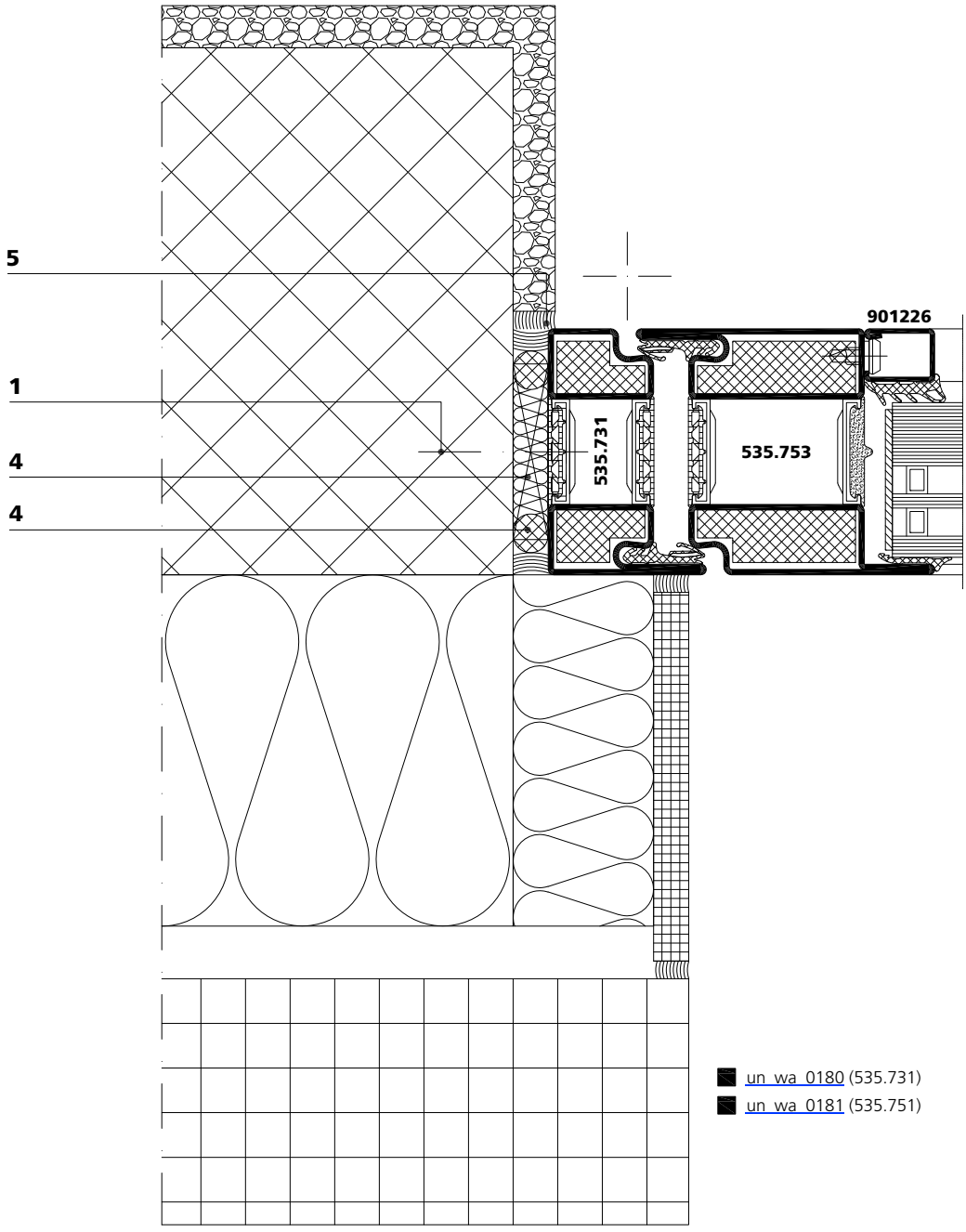
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un_wa_0182 (535.751)

Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components

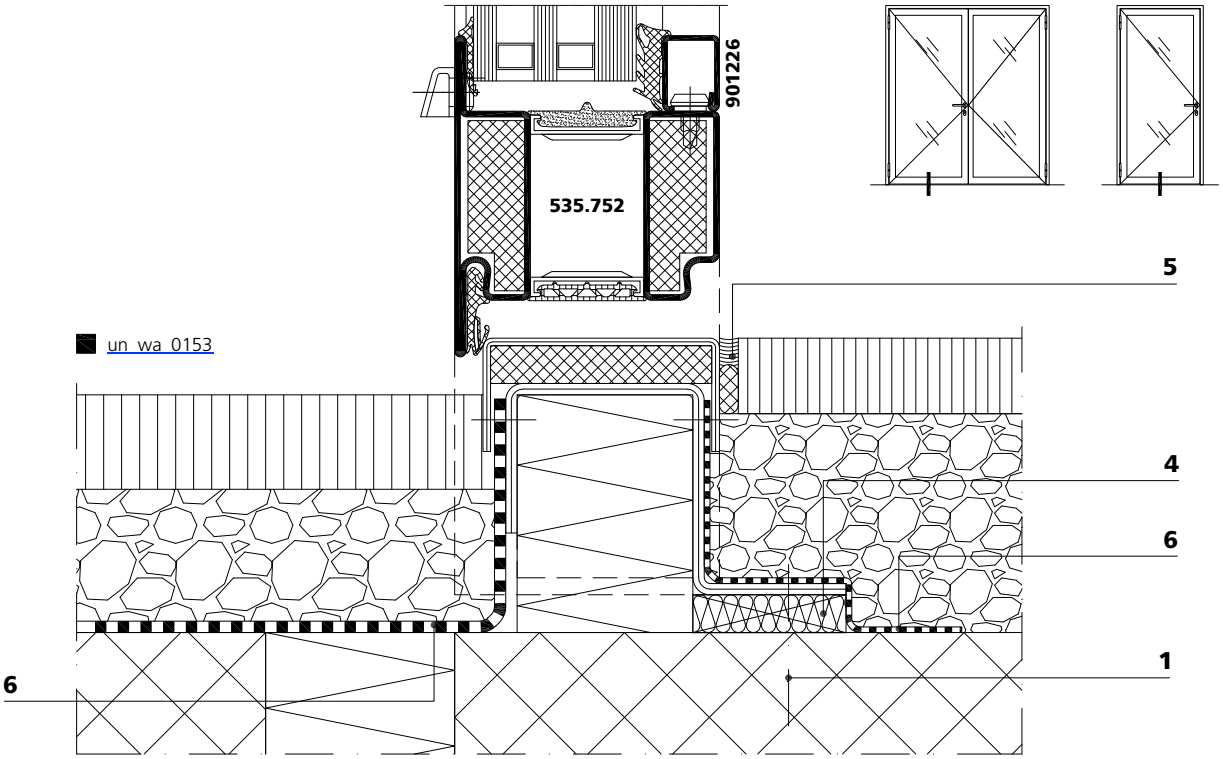


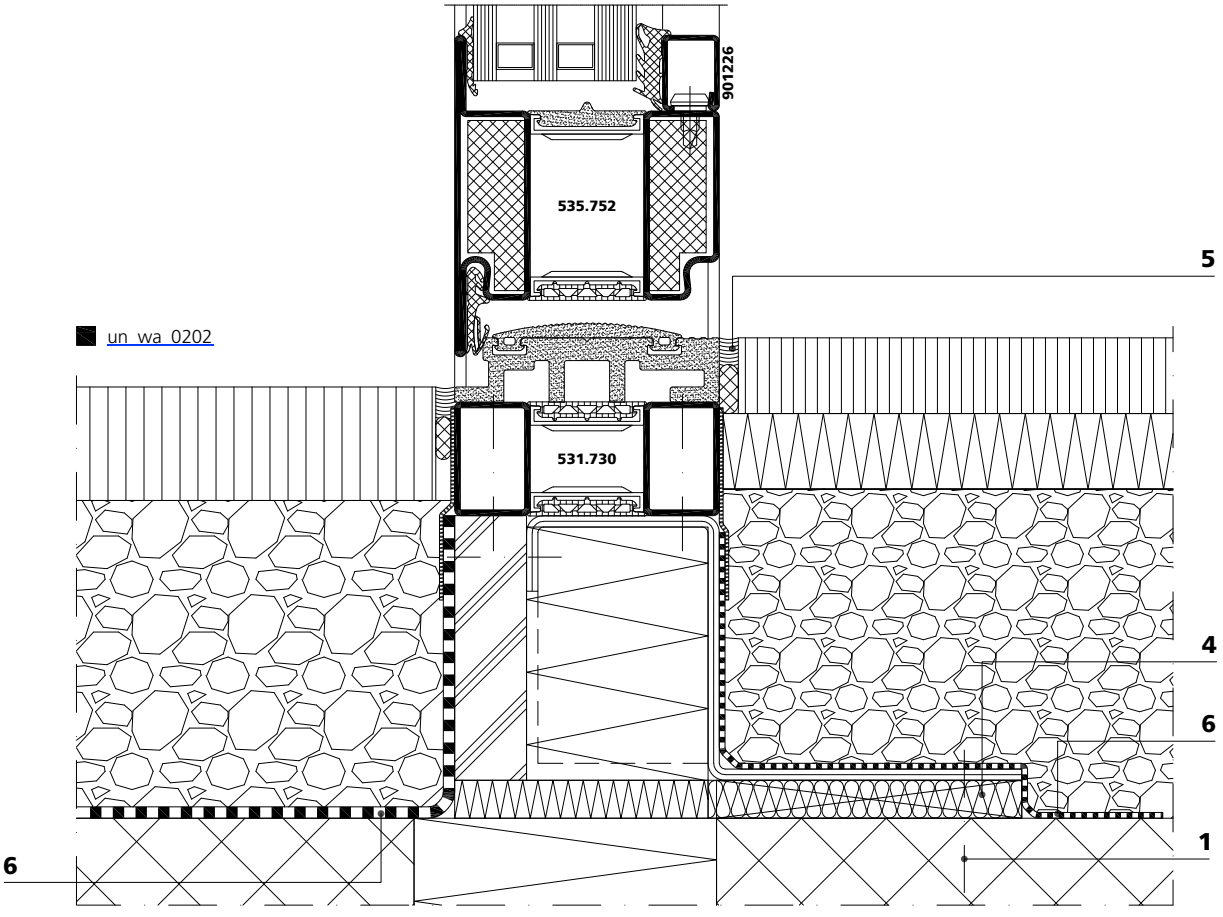


Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components

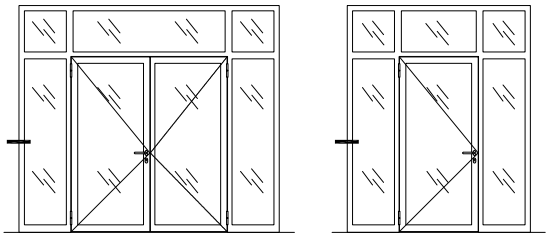


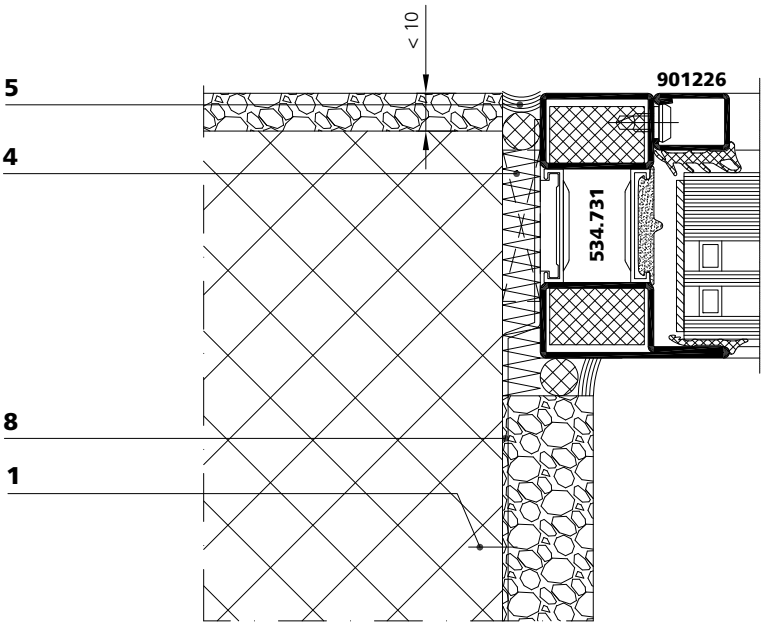


Wandanschlüsse
An Massivbauteile

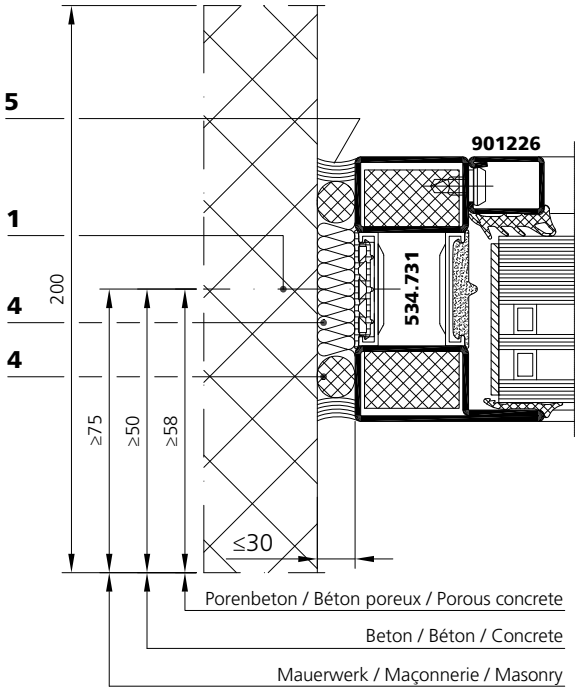
Raccords muraux
Sur pièces massives

Wall abutments
On massive components





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- un_wa_0209 (534.751)

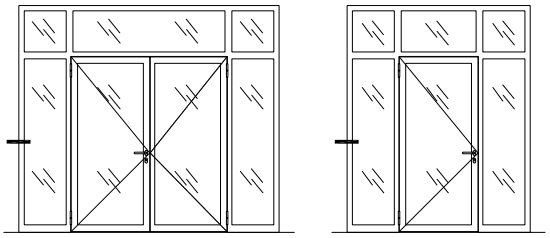


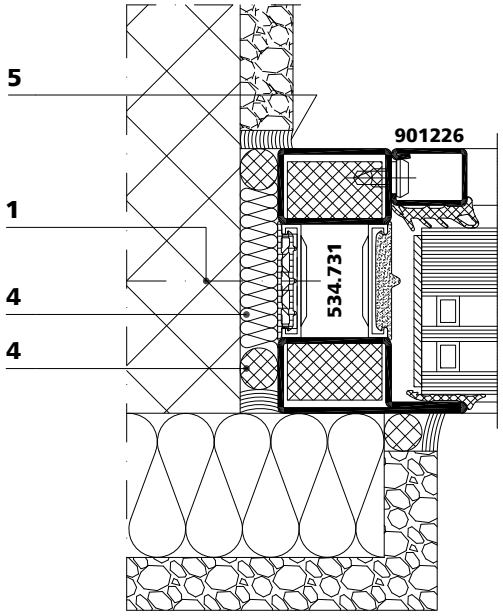
- un_wa_0151 (534.731)
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Wandanschlüsse
An Massivbauteile

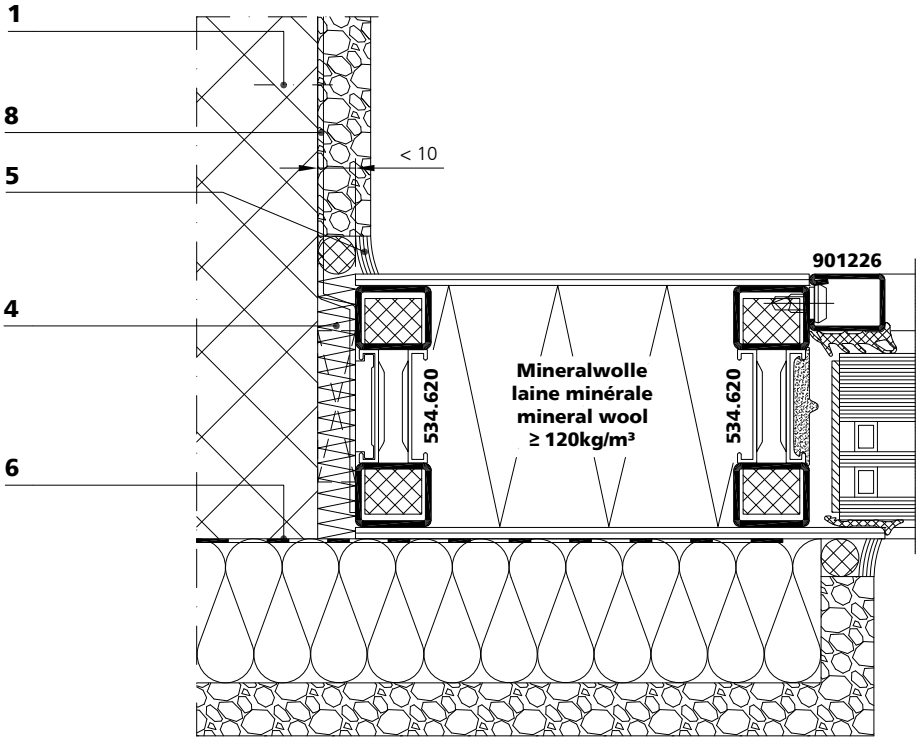
Raccords muraux
Sur pièces massives

Wall abutments
On massive components





un_wa_0154 (534.731)
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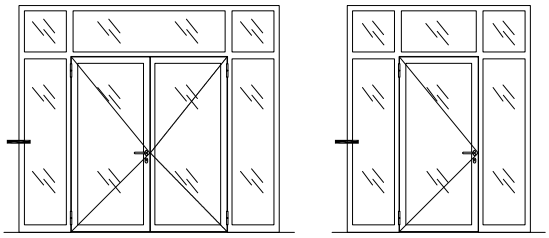


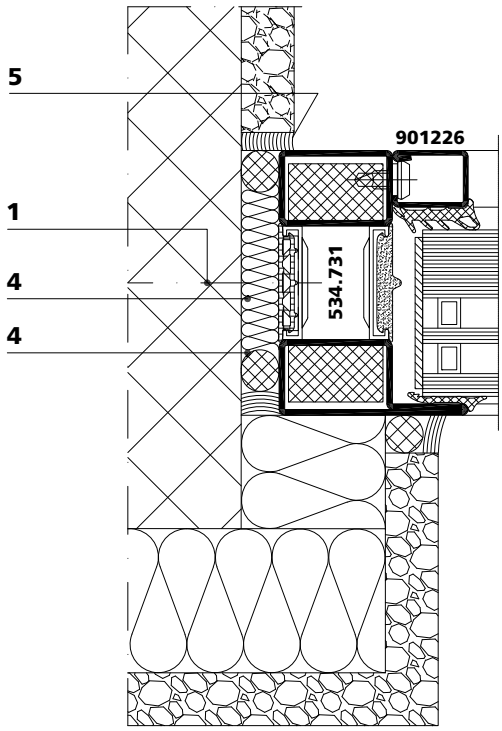
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Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components



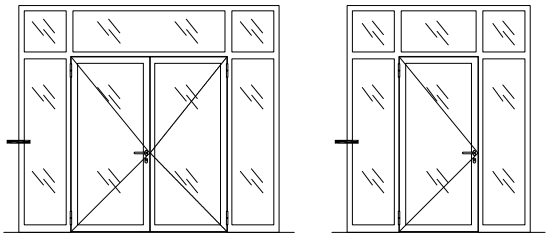


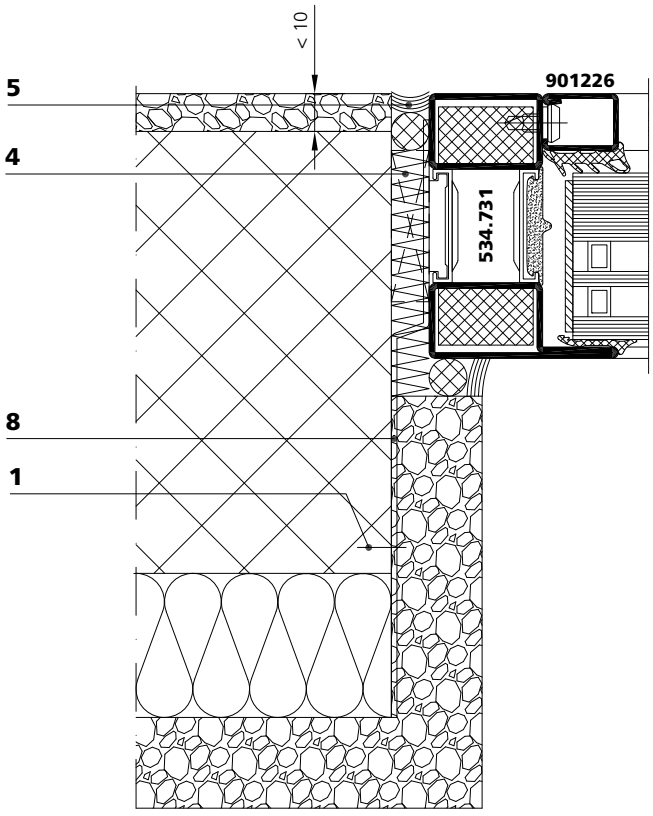
un_wa_0156 (534.731)
un_wa_0155 (534.751)

Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components



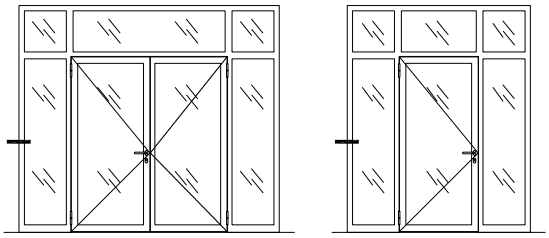


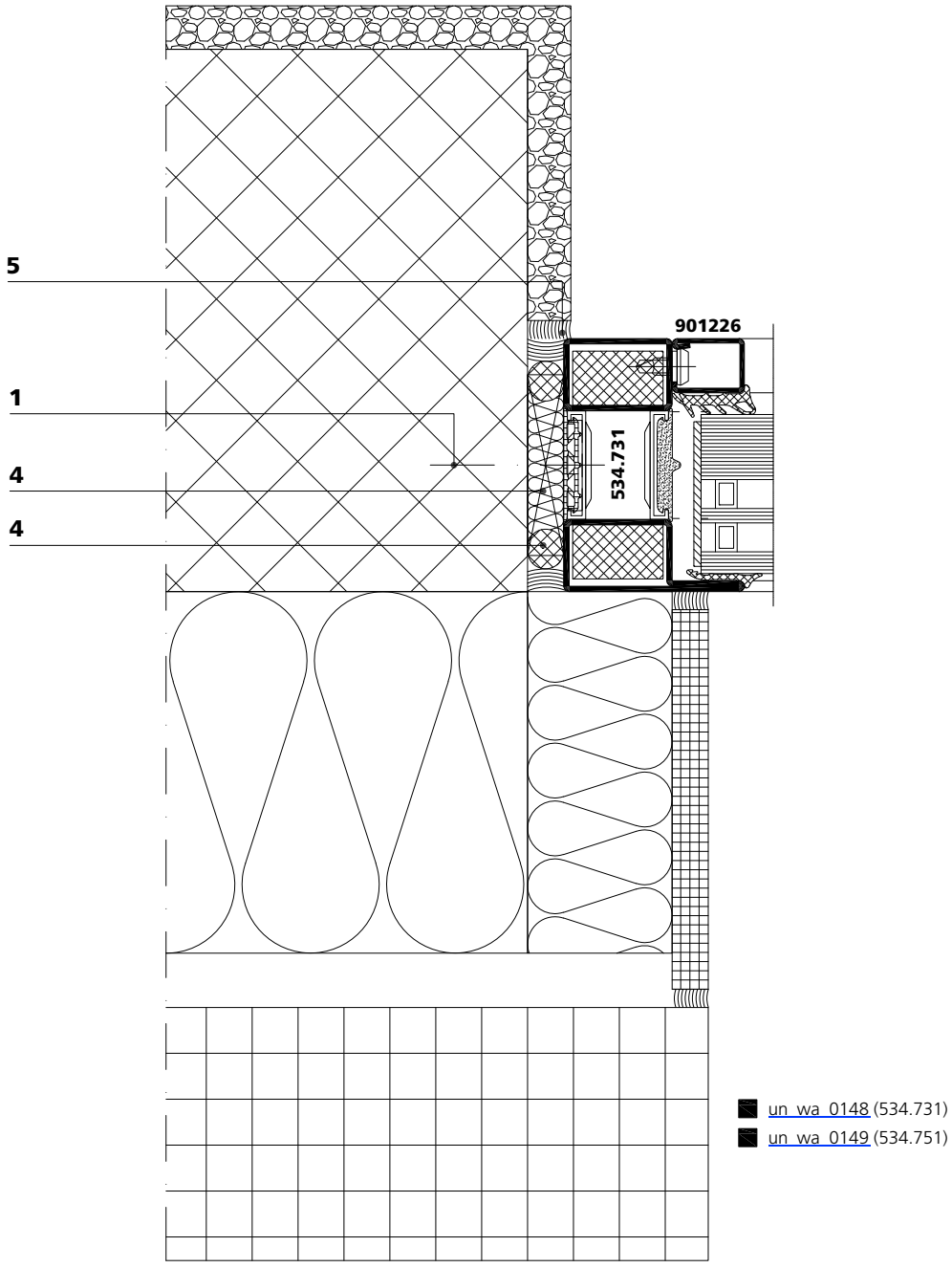
un_wa_0157 (534.731)
un_wa_0179 (534.751)

Wandanschlüsse
An Massivbauteile

Raccords muraux
Sur pièces massives

Wall abutments
On massive components





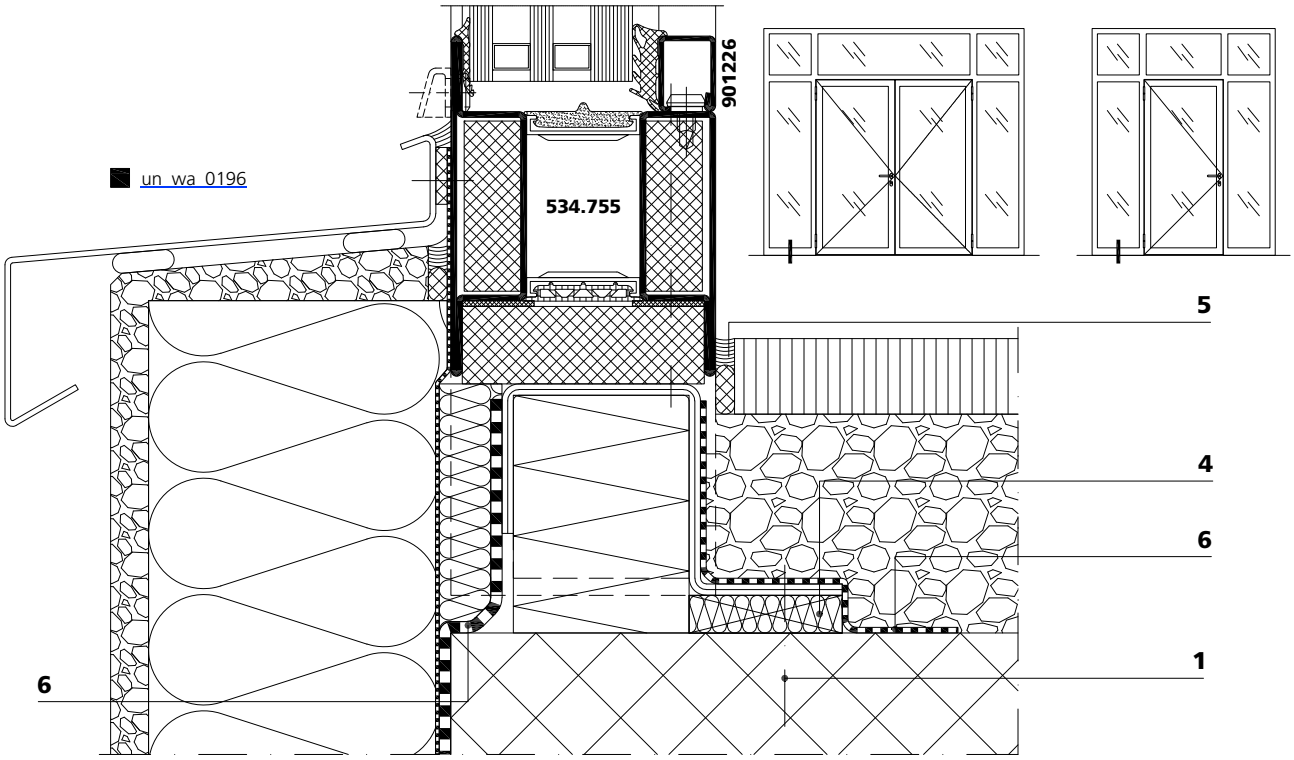
un_wa_0148 (534.731)
un_wa_0149 (534.751)

Wandanschlüsse
An Massivbauteile

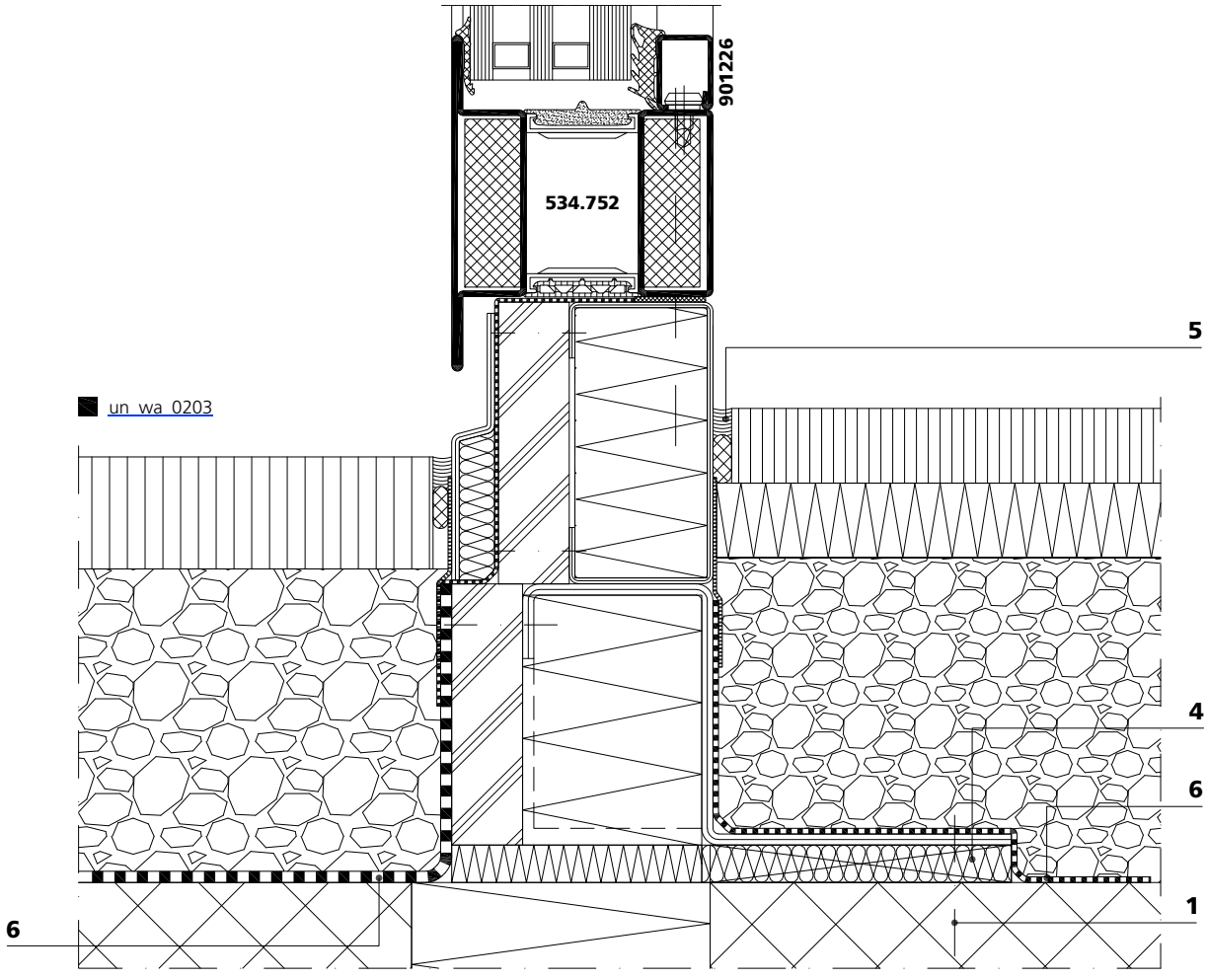
Raccords muraux
Sur pièces massives

Wall abutments
On massive components

un_wa_0196



un_wa_0203

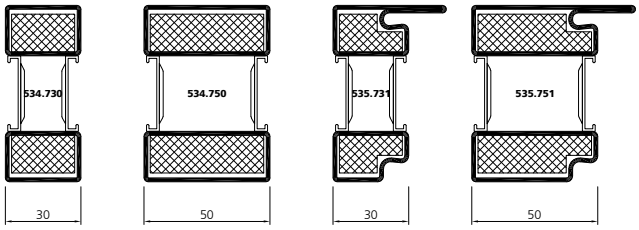


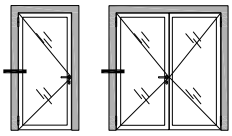
09/23

Profilaufdopplung
Tür

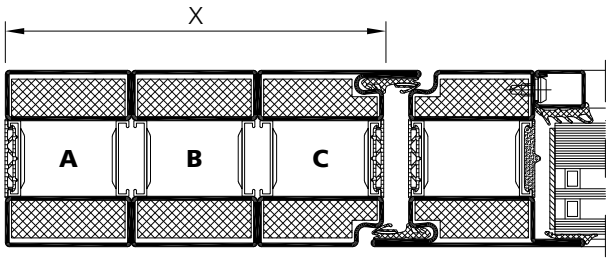
Doublage du profilé
Porte

Profile doubling
Door





Im grauen Bereich sind Profilaufdoppelungen möglich.
Des doublages de profilé sont possibles dans la partie grise.
In the grey area, profile doubling is possible.

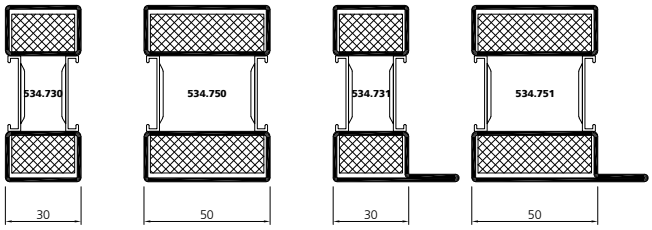


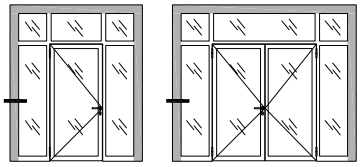
Mass X	Profil Typ A	Profil Typ B	Profil Typ C
60 mm	-	534.730	535.731
80 mm	-	534.750	535.731
80 mm	-	534.730	535.751
90 mm	534.730	534.730	535.731
100 mm	-	534.750	535.751
110 mm	534.750	534.730	535.731
110 mm	534.730	534.750	535.731
110 mm	534.730	534.730	535.751
130 mm	534.750	534.750	535.731
130 mm	534.730	534.750	535.751
130 mm	534.750	534.730	535.751
150 mm	534.750	534.750	535.751

Profilaufdopplung
Seitenteil und Oberlicht

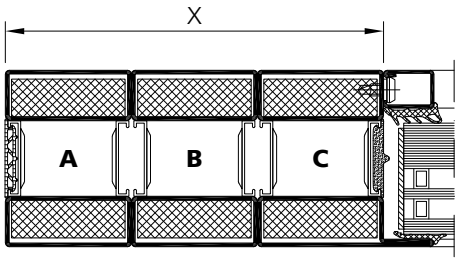
Doublage du profilé
Partie latérale fixe et imposte

Profile doubling
Screen abutment and fanlight





Im grauen Bereich sind Profilaufdoppelungen möglich.
Des doublages de profilé sont possibles dans la partie grise.
In the grey area, profile doubling is possible.

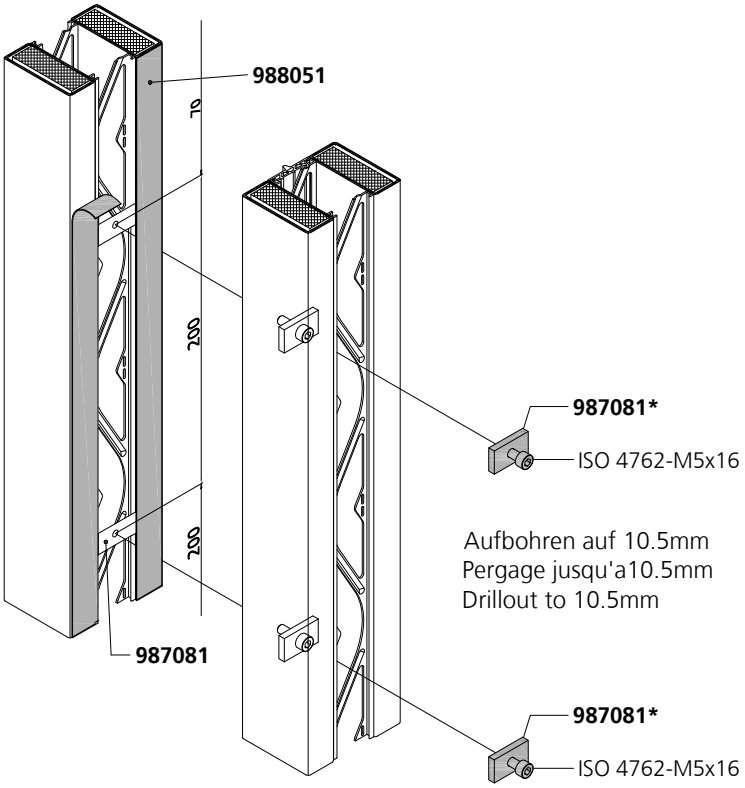


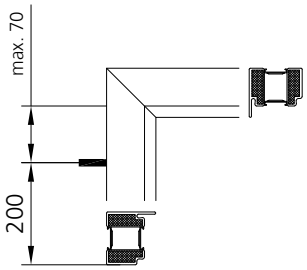
Mass X	Profil Typ A	Profil Typ B	Profil Typ C
60 mm	-	534.730	534.731
80 mm	-	534.750	534.731
80 mm	-	534.730	534.751
90 mm	534.730	534.730	534.731
100 mm	-	534.750	534.751
110 mm	534.750	534.730	534.731
110 mm	534.730	534.750	534.731
110 mm	534.730	534.730	534.751
130 mm	534.750	534.750	534.731
130 mm	534.730	534.750	534.751
130 mm	534.750	534.730	534.751
150 mm	534.750	534.750	534.751

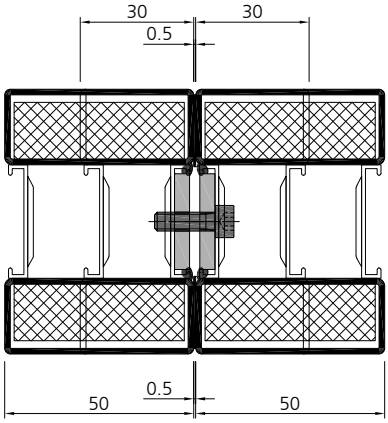
Profilaufdopplung

Doublage du profilé

Profile doubling







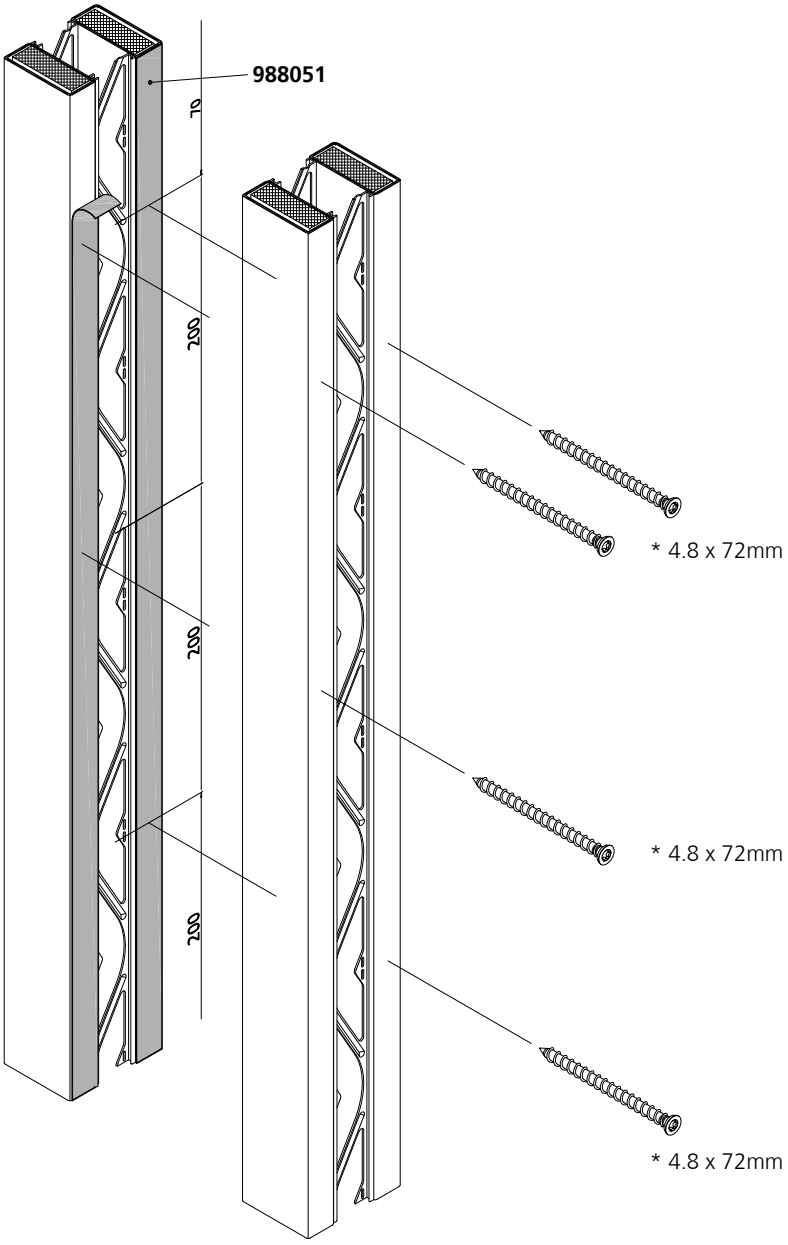
***Befestigungsplatte mit Profilhalbschale verschweissen**

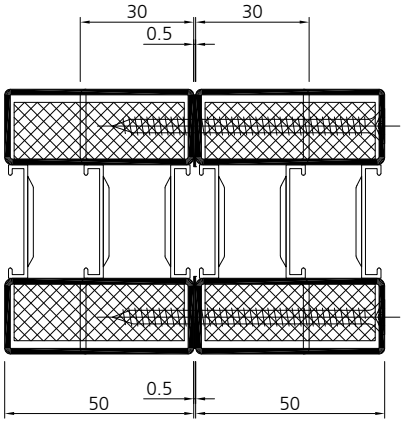
Plate de fixation souder avec les demi-coques du profilé

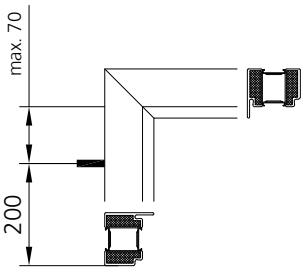
Weld fixing plate with the profile half-shells

3

Profilaufdopplung — Doublage du profilé — Profile doubling







*** 100 mm aus der Ecke (2x) und dann alle 200 mm wechselseitig. Die Länge der Schraube ist anzupassen.**

100 mm depuis l'angle (2 fois), puis tous les 200 mm en changeant de côté. La longueur des vis doit être ajustée.

100 mm from the corner (2x) and then every 200 mm on alternating sides. The length of the screw must be adjusted accordingly.

Zuschnitt
Schneidehilfen

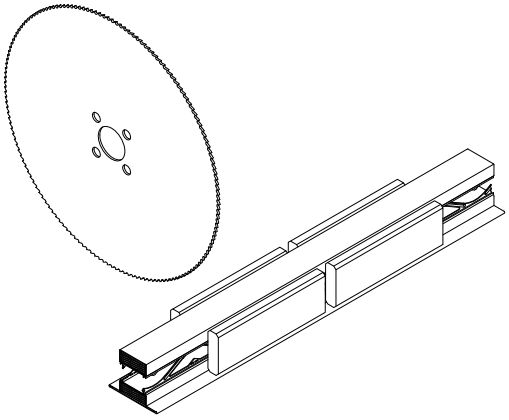
Débitage
Cales de débitage

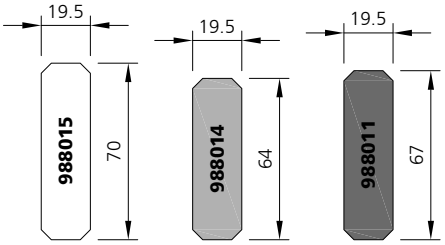
Cutting
Cutting aids

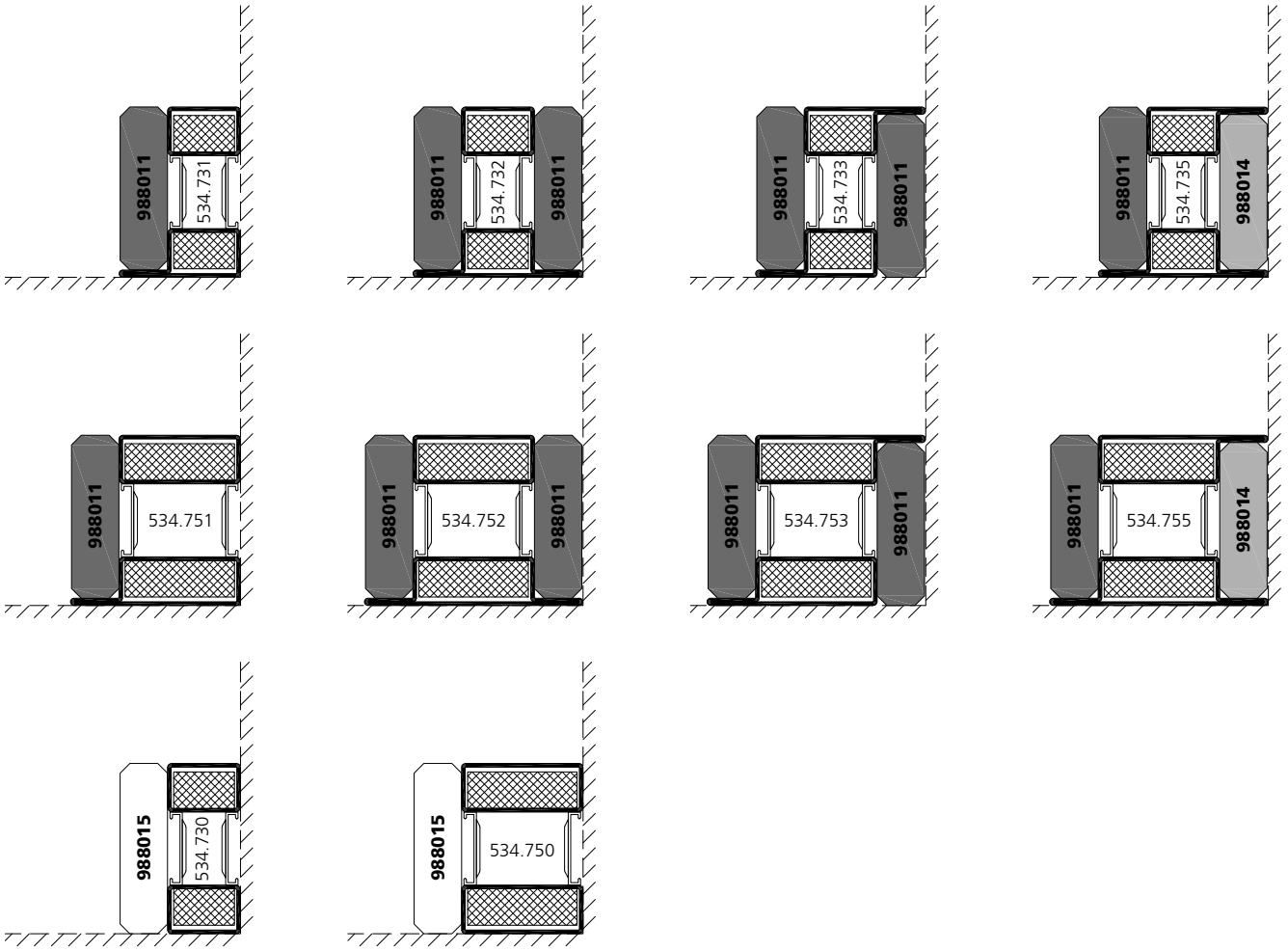
Übersicht Rahmenprofile

Tableau des profilés pour cadre

Overview of frame profiles







Zuschnitt
Schneidehilfen

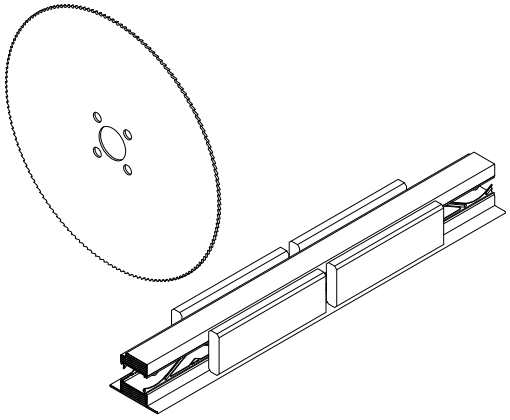
Débitage
Cales de débitage

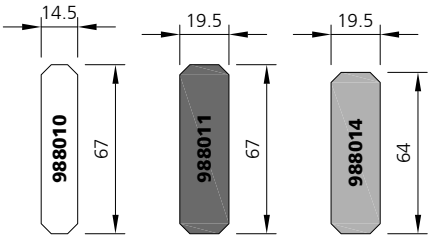
Cutting
Cutting aids

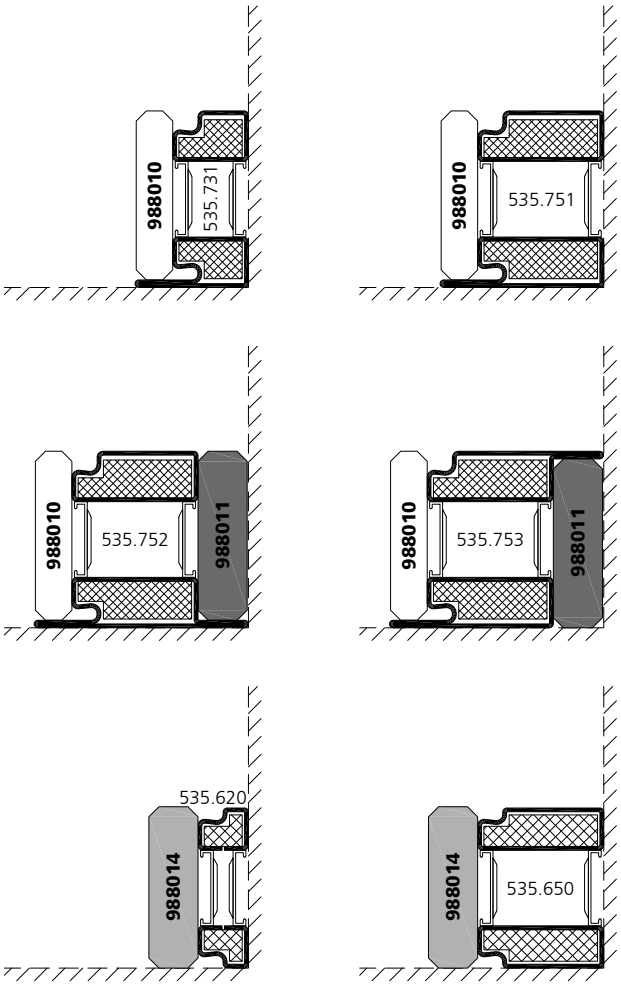
Übersicht Rahmen- und Flügelprofile

Tableau des profilés pour cadre et vantaux

Overview of frame and leaf profiles





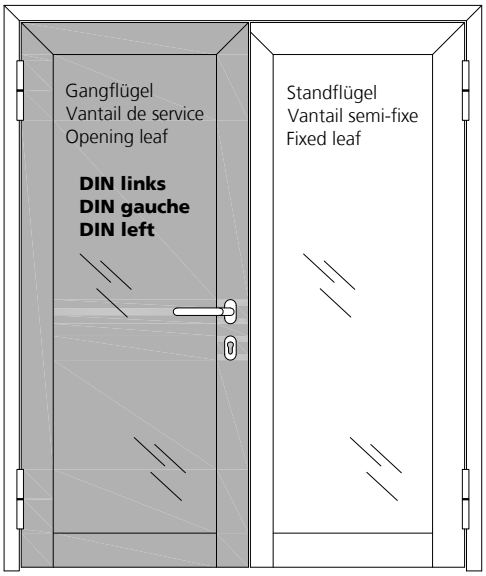


Platz für Notizen

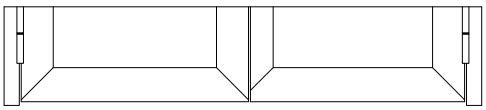
Espace pour les notes

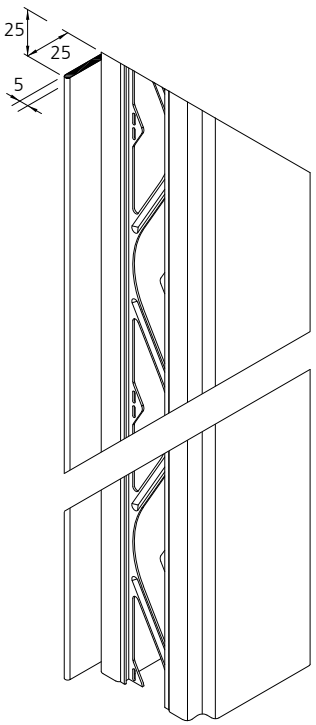
Space for memos

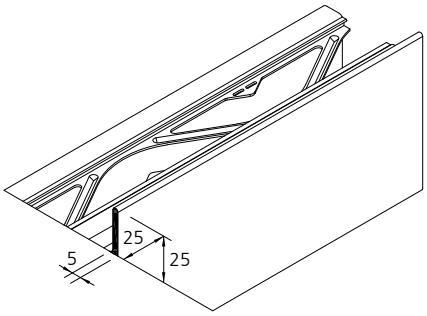
Zuschnitt Profile — Coupe de profilés — Cutting profiles

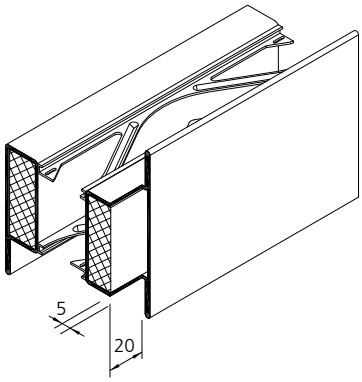


alternativ bei Gehrungsschnitt
alternative pour la coupe de l'onglet
alternative with mitred cut

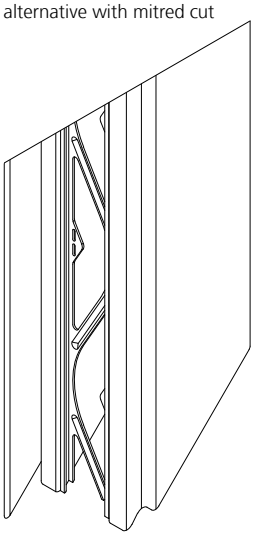


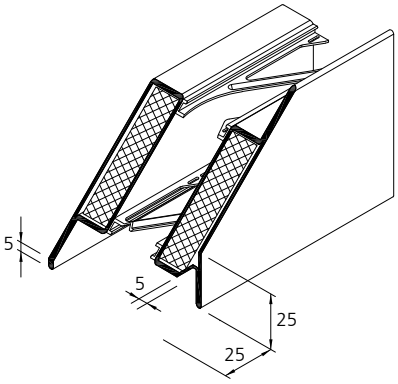




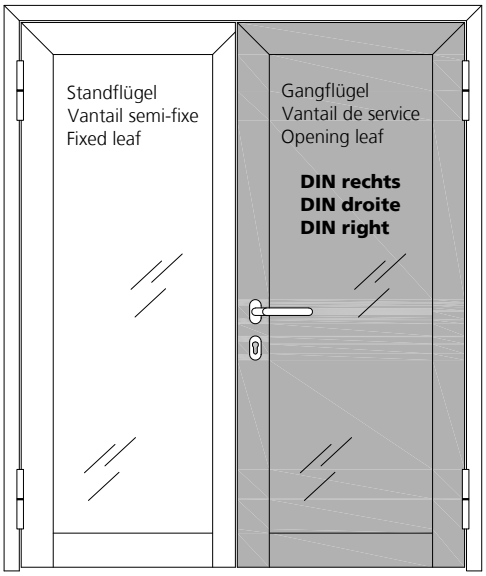


alternativ bei Gehrungsschnitt
alternative pour la coupe de l'onglet
alternative with mitred cut

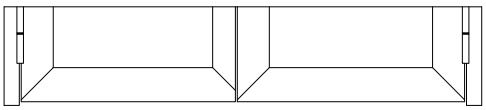


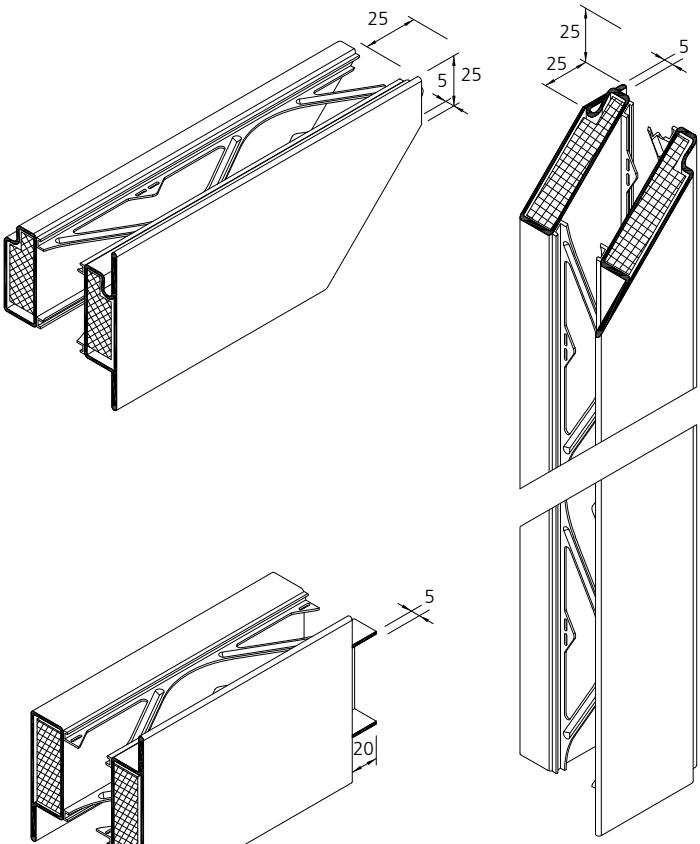


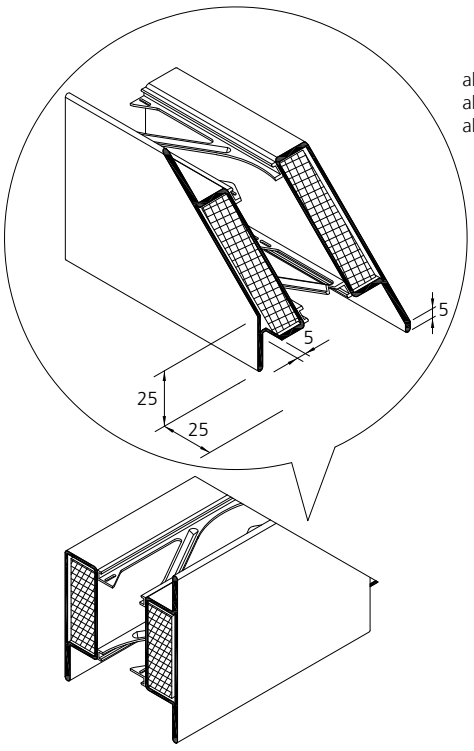
Zuschnitt Profile — Coupe de profilés — Cutting profiles



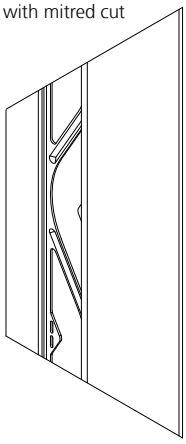
alternativ bei Gehrungsschnitt
alternative pour la coupe de l'onglet
alternative with mitred cut







alternativ bei Gehrungsschnitt
alternative pour la coupe de l'onglet
alternative with mitred cut

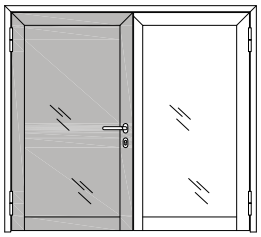


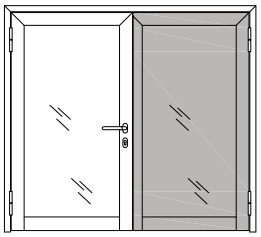
Zuschnitt Schwellenprofil
stumpf

Coupe de profilé seuil
droites

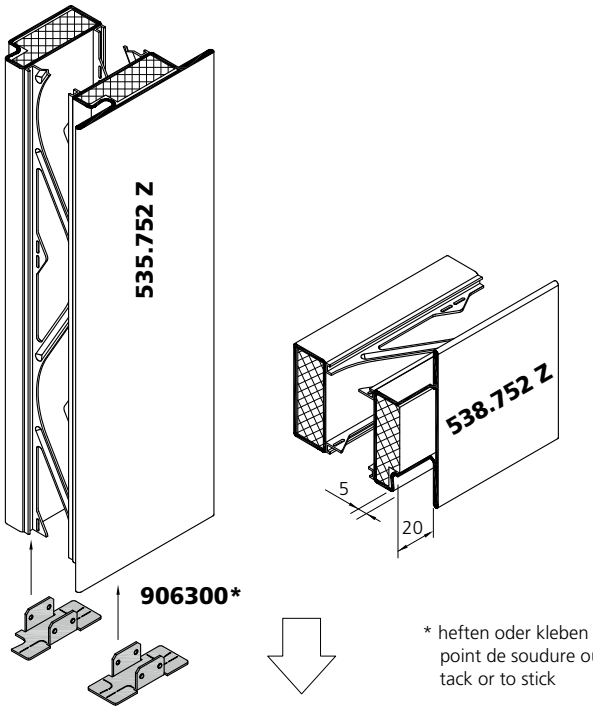
Cutting threshold profile
butt

Gangflügel
Vantail de service
Opening leaf

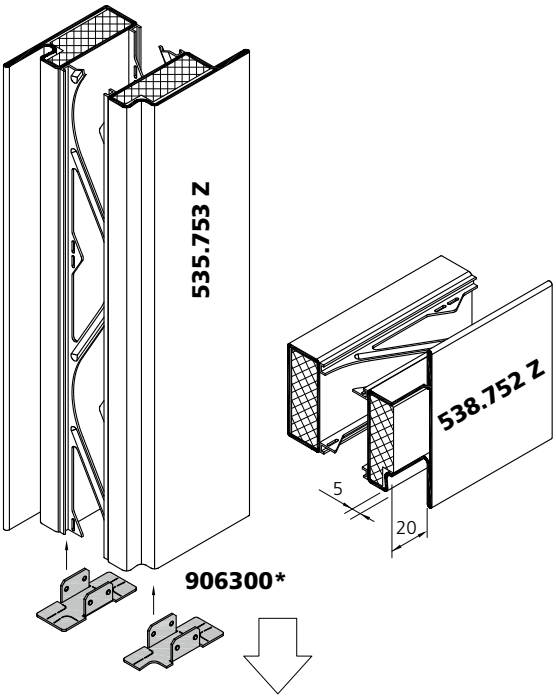


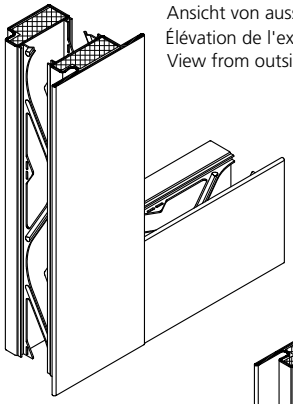


Standflügel
Vantail semi-fixe
Fixed leaf

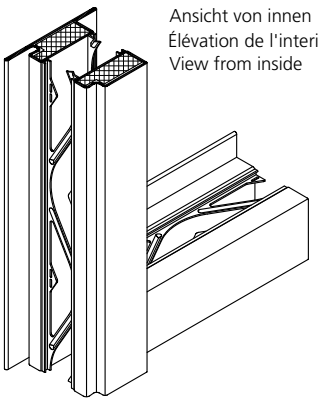


* heften oder kleben
point de soudure ou coller
tack or to stick

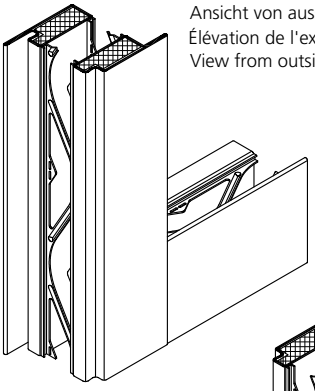




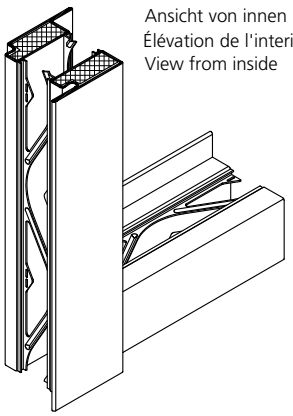
Ansicht von aussen
Élévation de l'extérieur
View from outside



Ansicht von innen
Élévation de l'interieur
View from inside



Ansicht von aussen
Élévation de l'extérieur
View from outside

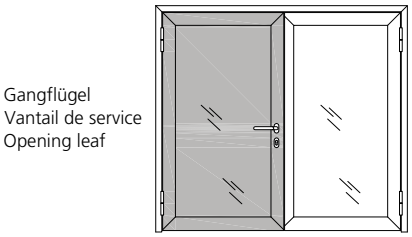


Ansicht von innen
Élévation de l'interieur
View from inside

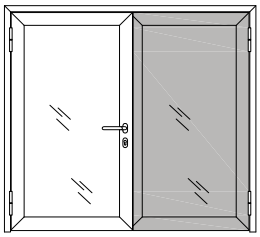
Zuschnitt Schwellenprofil
Gehrung

Coupe de profilé seuil
à l'onglet

Cutting threshold profile
mitred

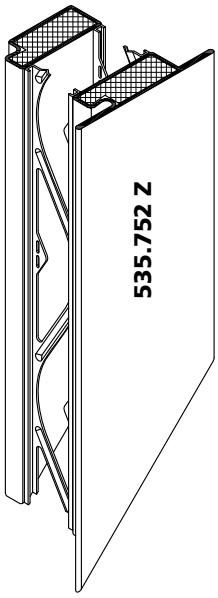


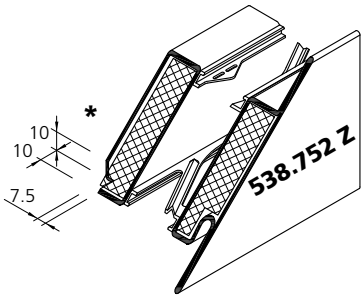
Gangflügel
Vantail de service
Opening leaf

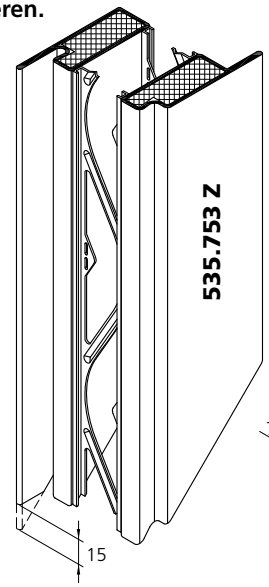


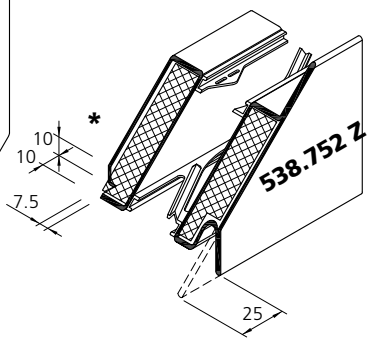
Standflügel
Vantail semi-fixe
Fixed leaf

! Befestigungsschiene vorgängig montieren.
Monter la barre de fixation à l'avance.
Install the fastening rail in advance.

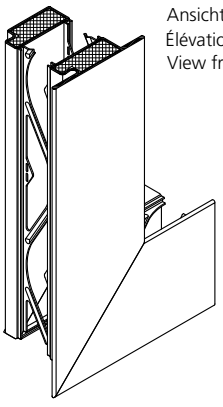




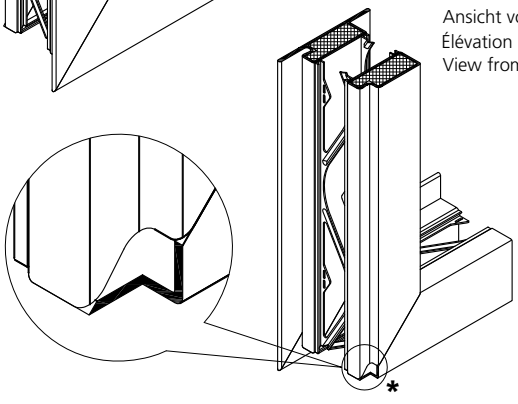




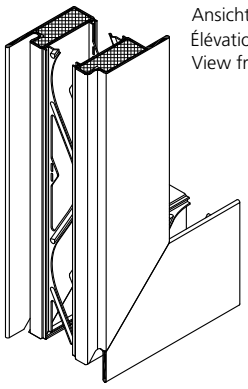
***** Klinkung schliessen,
z.B. durch zuschweissen
und verputzen
Fermer l'encoche,
p.ex. par soudage et
meulage
Close notching, e.g. by
welding and grinding



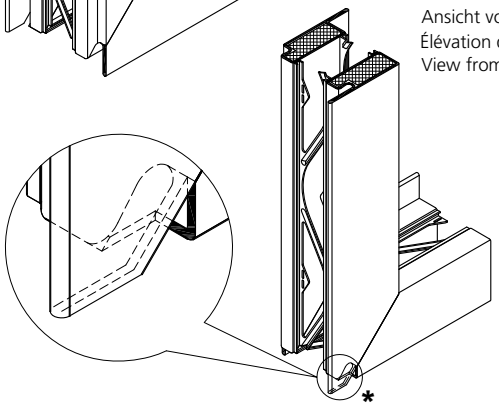
Ansicht von aussen
Élévation de l'extérieur
View from outside



Ansicht von innen
Élévation de l'interieur
View from inside



Ansicht von aussen
Élévation de l'extérieur
View from outside



Ansicht von innen
Élévation de l'interieur
View from inside

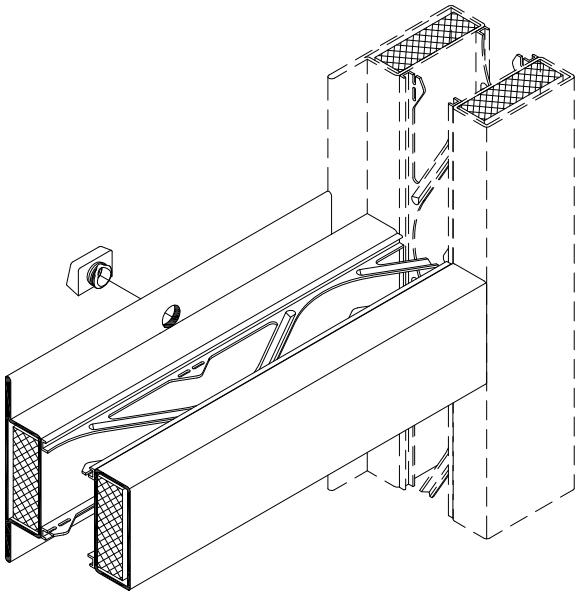
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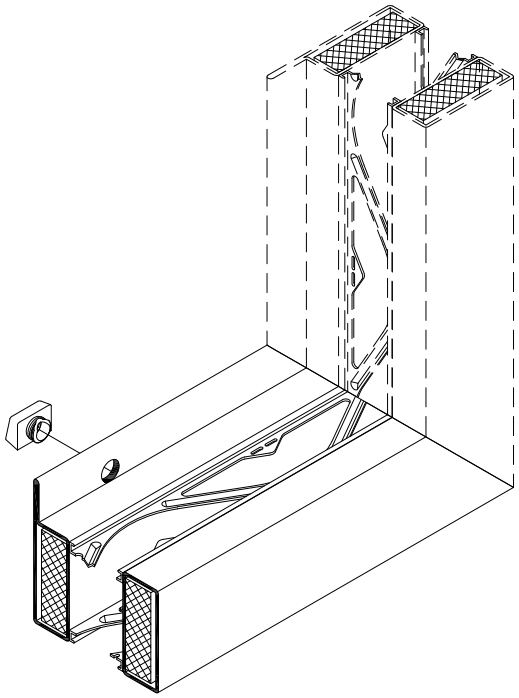
09/23

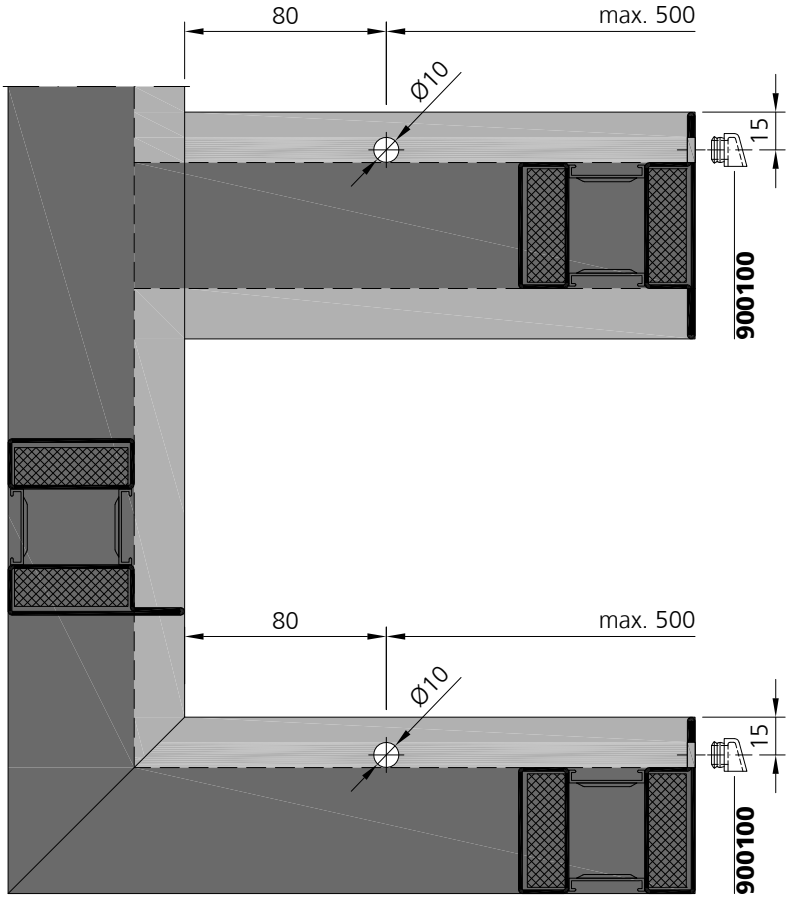
Profilbearbeitung
Einbau direkte Entwässerung
Rahmen / Sprosse

Mise en œuvre des profilés
Montage d'une évacuation d'eau directe
Cadre / traverse

Profile processing
Installation of direct drainage
Frame / transom



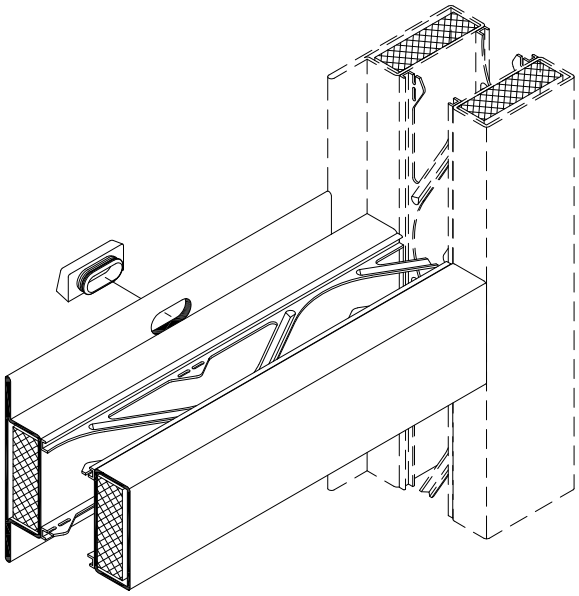


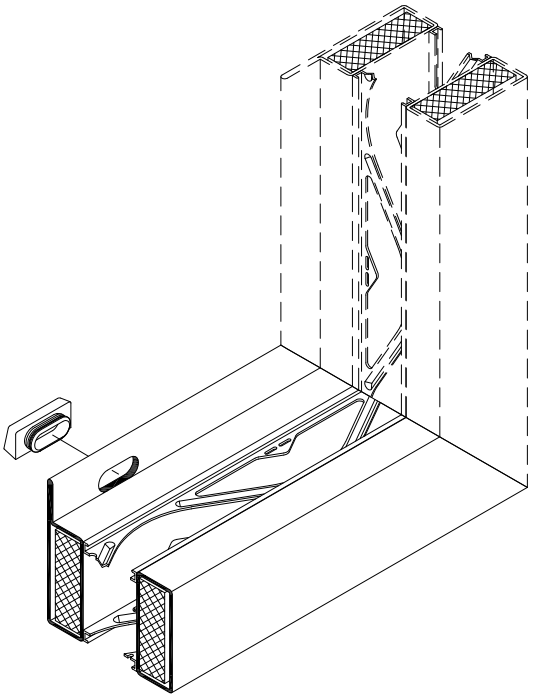


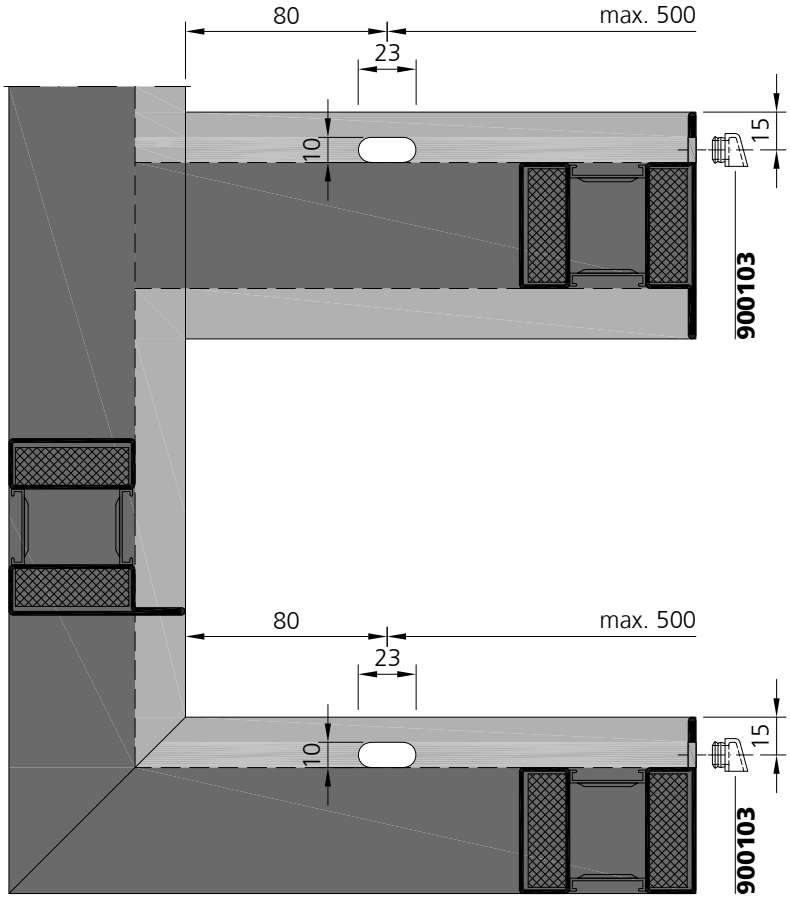
Profilbearbeitung
Einbau direkte Entwässerung
Rahmen / Sprosse

Mise en œuvre des profilés
Montage d'une évacuation d'eau directe
Cadre / traverse

Profile processing
Installation of direct drainage
Frame / transom



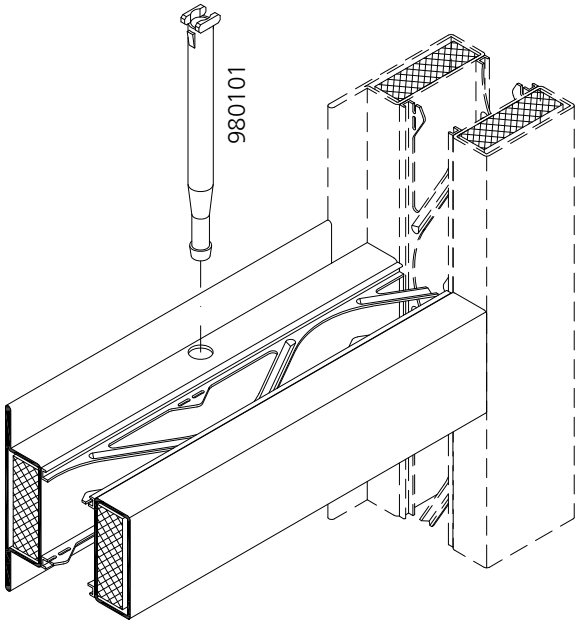


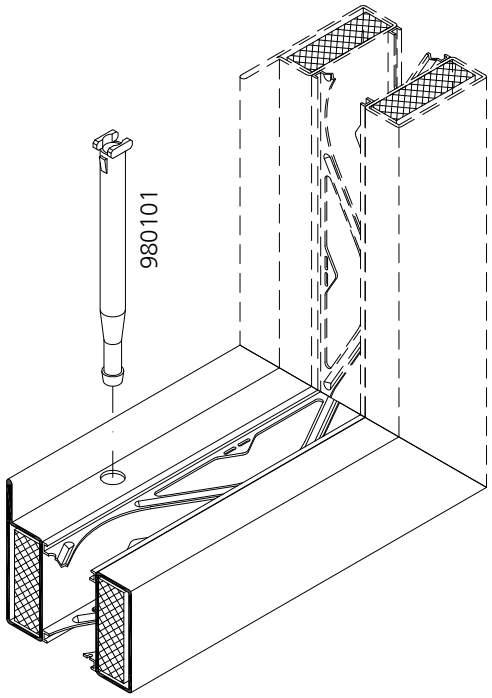


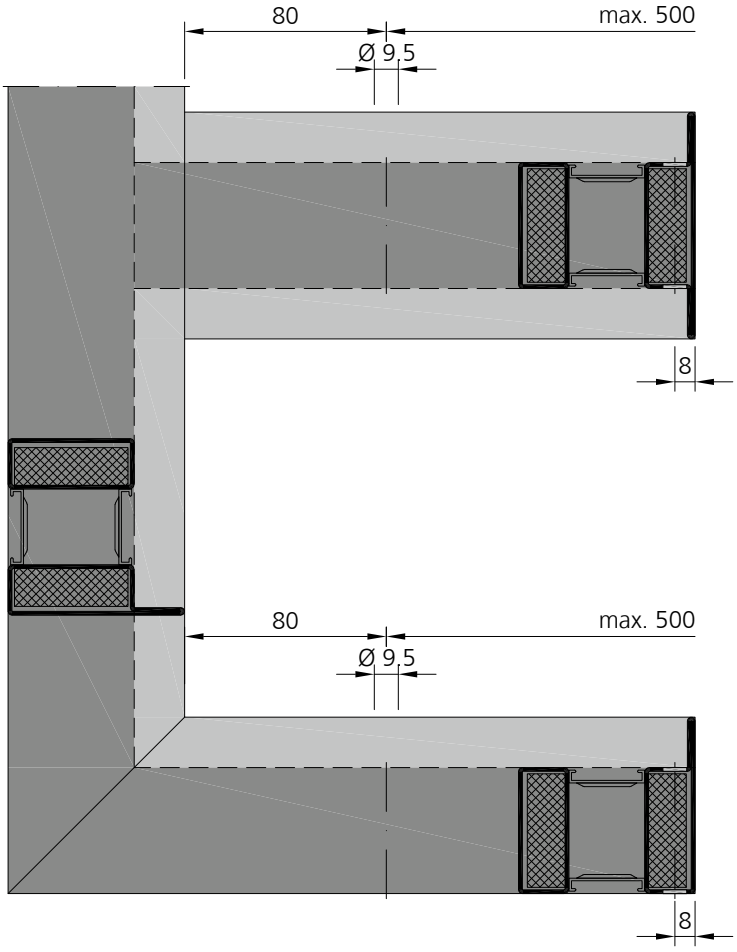
Profilbearbeitung
Einbau indirekte Entwässerung
Rahmen / Sprosse

Mise en œuvre des profilés
Montage d'une évacuation d'eau indirecte
Cadre / traverse

Profile processing
Installation of indirect drainage
Frame / transom



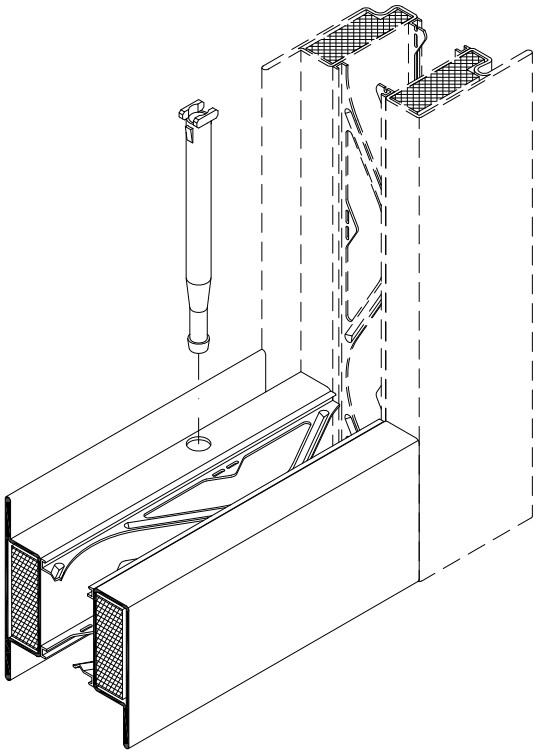


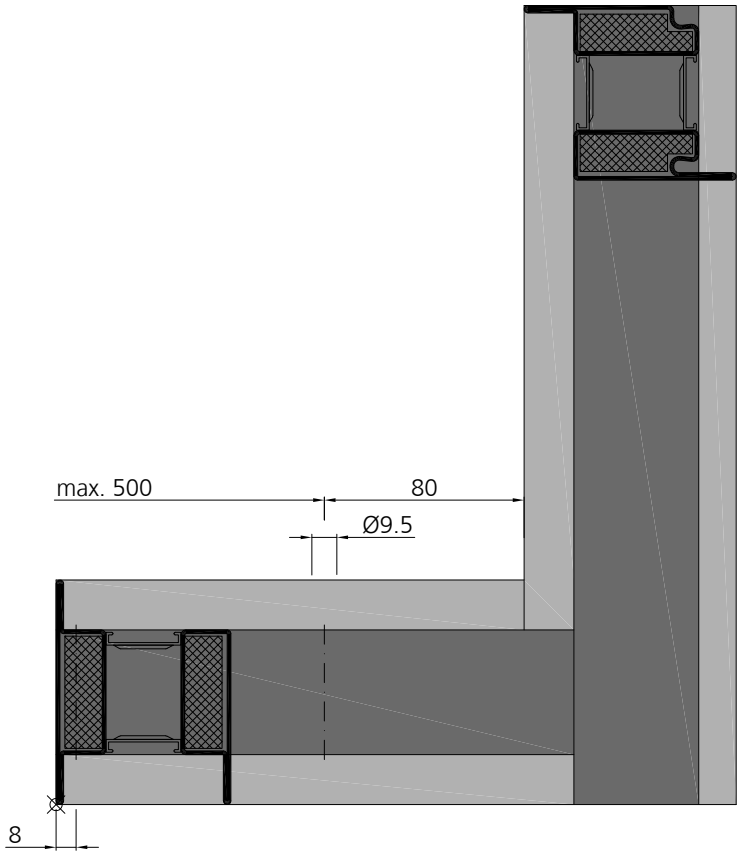


Profilbearbeitung
Einbau indirekte Entwässerung Sockel

Mise en œuvre des profilés
Montage d'une évacuation d'eau indirecte socle

Profile processing
Installation of indirect drainage base

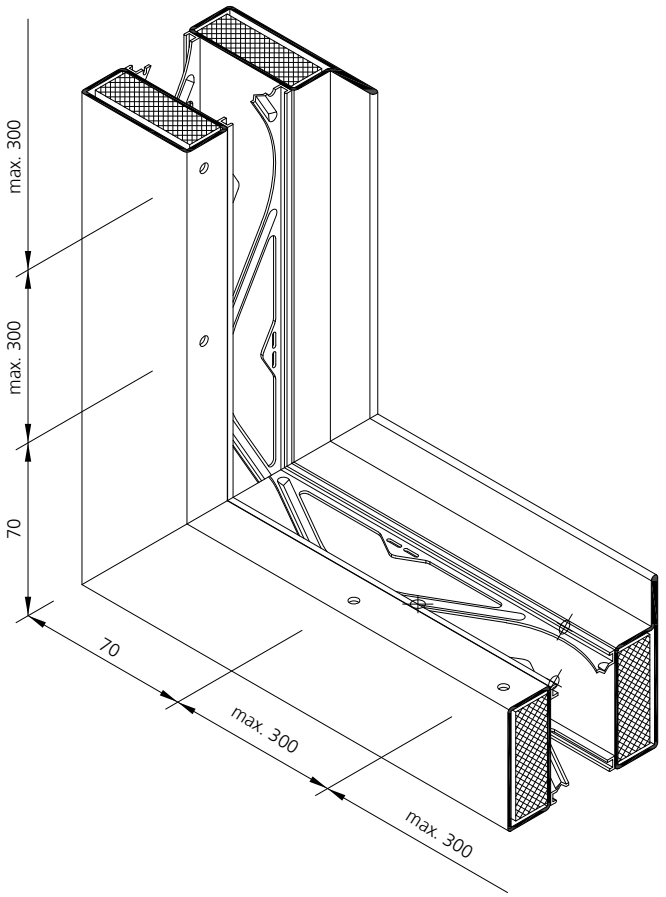


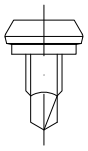


Anordnung Klemmknöpfe
Glashalteleisten

Pose des boutons de serrage
Parcloses

Setting studs
Glazing beads





906577 (VE/100 Stk./pcs)
906578 (VE/1000 Stk./pcs)
906579 (VE/Mag. 200 Stk./pcs)

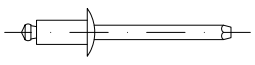
Klemmknöpfe
Bohrschraubensetzgerät Art. Nr. 909203 alternativ Bohrlehre Art. Nr. 909104, Bohrdurchmesser 3.5 mm

Boutons en acier
Appareil à poser les vis art no 909203 alternatif gabarit de perçage art. no. 909104, diamètre de perçage 3.5 mm

Steel studs
Power driver for screws art. no. 909203 alternative drilling template art. no. 909104, drilling diametre 3.5 mm



906421



Ø 3.2 x 1.5 - 3 mm

Feder
Bohrlehre Art.Nr. 909105, Bohrdurchmesser 3.3 mm Befestigung mit handelsüblichem Blindniet aus Stahl verzinkt, Ø 3.2 mm- Klemmlänge 1.5 - 3 mm

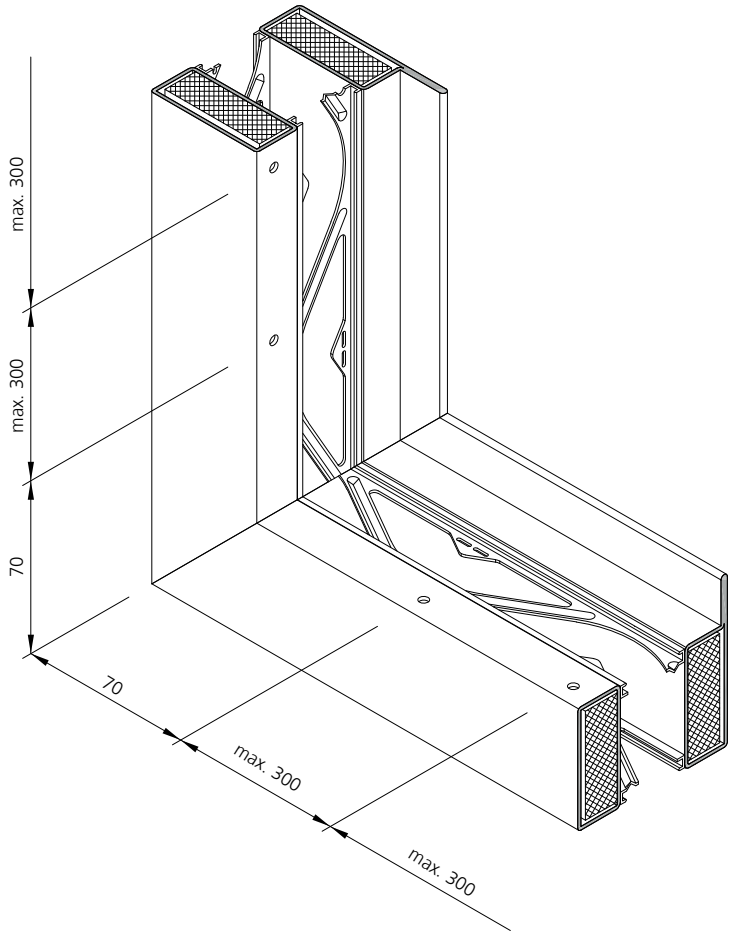
Ressort
Gabarit de percage art no 909105, diamètre de perçage 3.3 mm fixation avec rivet borgne du commerce en acier galvanisé, Ø 3.2 mm, longueur de serrage 1.5 - 3 mm

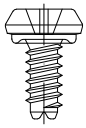
Spring
Drilling template art.no. 909105, drilling diametre 3.3 mm assembly with commercial blind rivets galvanized steel Ø 3.2 mm clamping length 1.5 - 3 mm

Anordnung Klemmknöpfe
Glashalteleisten

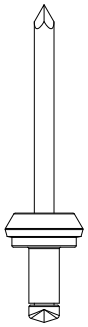
Pose des boutons de serrage
Parcloses

Setting studs
Glazing beads





906583 (VE/100 Stk./pcs)
CrNi 1.4404



906574 (VE/100 Stk./pcs)
CrNi 1.4567
für Profile CrNi 1.4301
pour profilés en acier inox 1.4301
for profiles in stainless steel 1.4301

Bohrung Klemmknopf-Schraube und Klemmknopf-Niet
Bohrschraubensetzgerät Art.Nr. 909203 und Set Spiralbohrer Art.Nr. 909216 alternativ mit Bohrlehre Art.Nr. 909105, Bohrdurchmesser 4.1 mm

Forage des boutons de fixation à vis et des boutons de fixation
Appareil à poser les vis art no 909203 et kit mèche hélicoidal art no 909216, alternative avec gabarit de perçage art no 909105, diamètre percé 4.1 mm

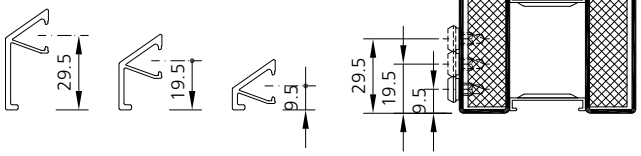
Drilling of stud fastener screw, stud fastener pop rivet
Power driver for screws art.no. 909203 and spiral bit set art.no. 909216, alternatively with drilling template art. no. 909105, drilling diametre 4.1 mm

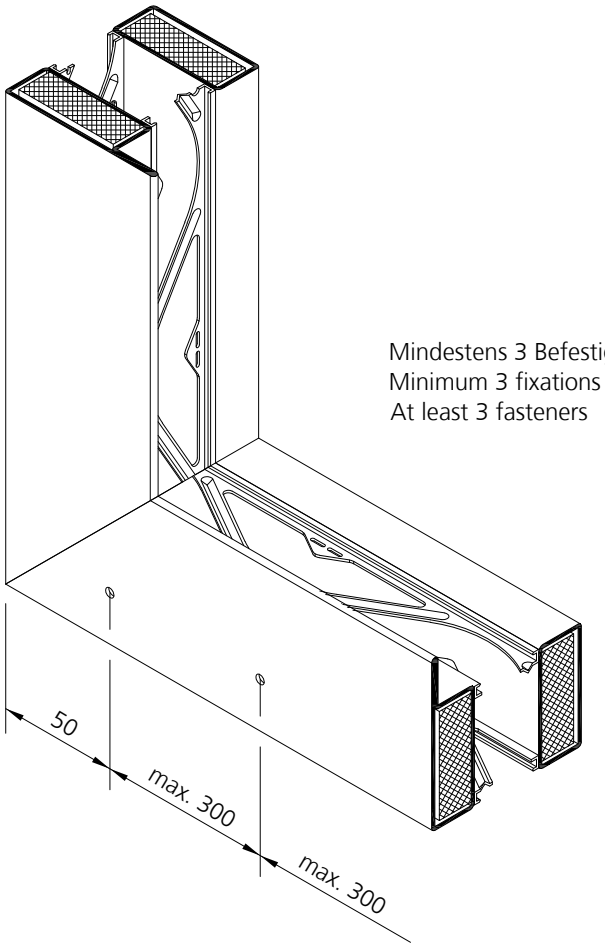
Anordnung Klemmknöpfe
Wetterschenkel

Pose des boutons de serrage
Renvoi d'eau

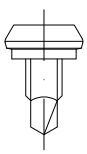
Setting Studs
Weatherbord

903302 903301 903300





Mindestens 3 Befestigungen
Minimum 3 fixations
At least 3 fasteners



906577 (VE/100 Stk./pcs)
906578 (VE/1000 Stk./pcs)
906579 (VE/Mag. 200 Stk./pcs)

Klemmknöpfe
Bohrschraubensetzgerät Art.Nr. 909203

Boutons en acier
Appareil à poser les vis art no 909203

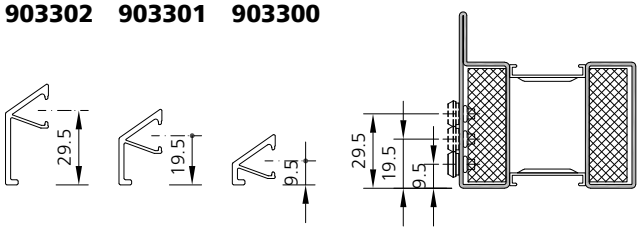
Steel studs
Power driver for screws art.no. 909203

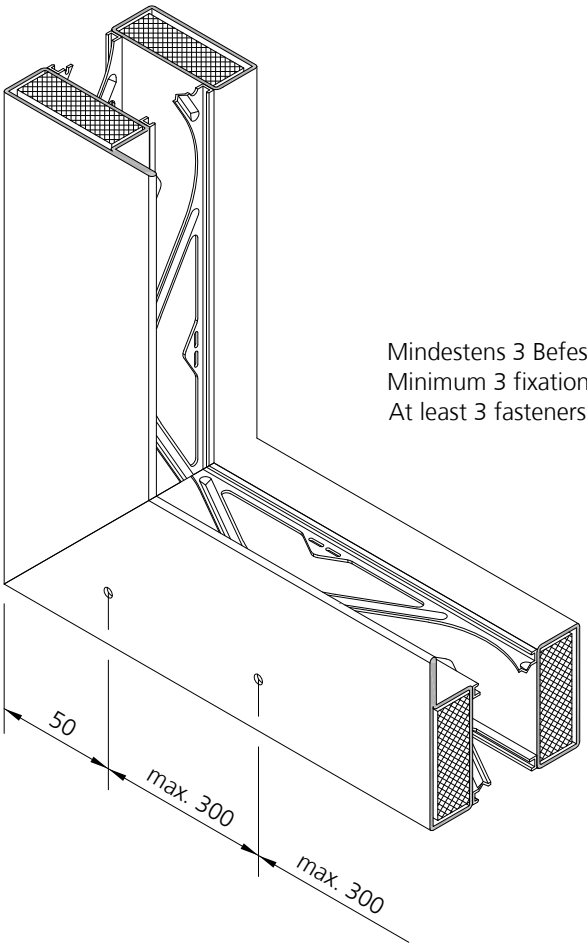
Anordnung Klemmknöpfe
Wetterschenkel

Pose des boutons de serrage
Renvoi d'eau

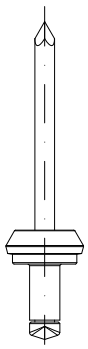
Setting Studs
Weatherbord

903302 903301 903300



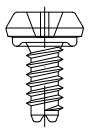


Mindestens 3 Befestigungen
Minimum 3 fixations
At least 3 fasteners



Empfohlen
Recommandé
Recommanded

906574 (VE/100 Stk./pcs)
CrNi 1.4567
für Profile CrNi 1.4301
pour profilés en acier inox 1.4301
for profiles in stainless steel 1.4301



Alternativ
Alternatives
Alternative

906583 (VE/100 Stk./pcs)
CrNi 1.4404

Bohrung Klemmknopf-Niet
Bohrdurchmesser 4.1 mm

Bohrung Klemmknopf-Schraube
Bohrschraubensetzgerät Art.Nr. 909203
und Set Spiralbohrer Art.Nr. 909216

Forage des boutons de fixation
diamètre percé 4.1 mm

Forage des boutons de fixation à vis
Appareil à poser les vis art no 909203
et kit mèche hélicoidal art no 909216,

Drilling of stud fastener pop rivet
drilling diameter 4.1 mm

Drilling of stud fastener screw
Power driver for screws art.no. 909203
and spiral bit set art.no. 909216,

Zuschnitt
Wetterschenkel

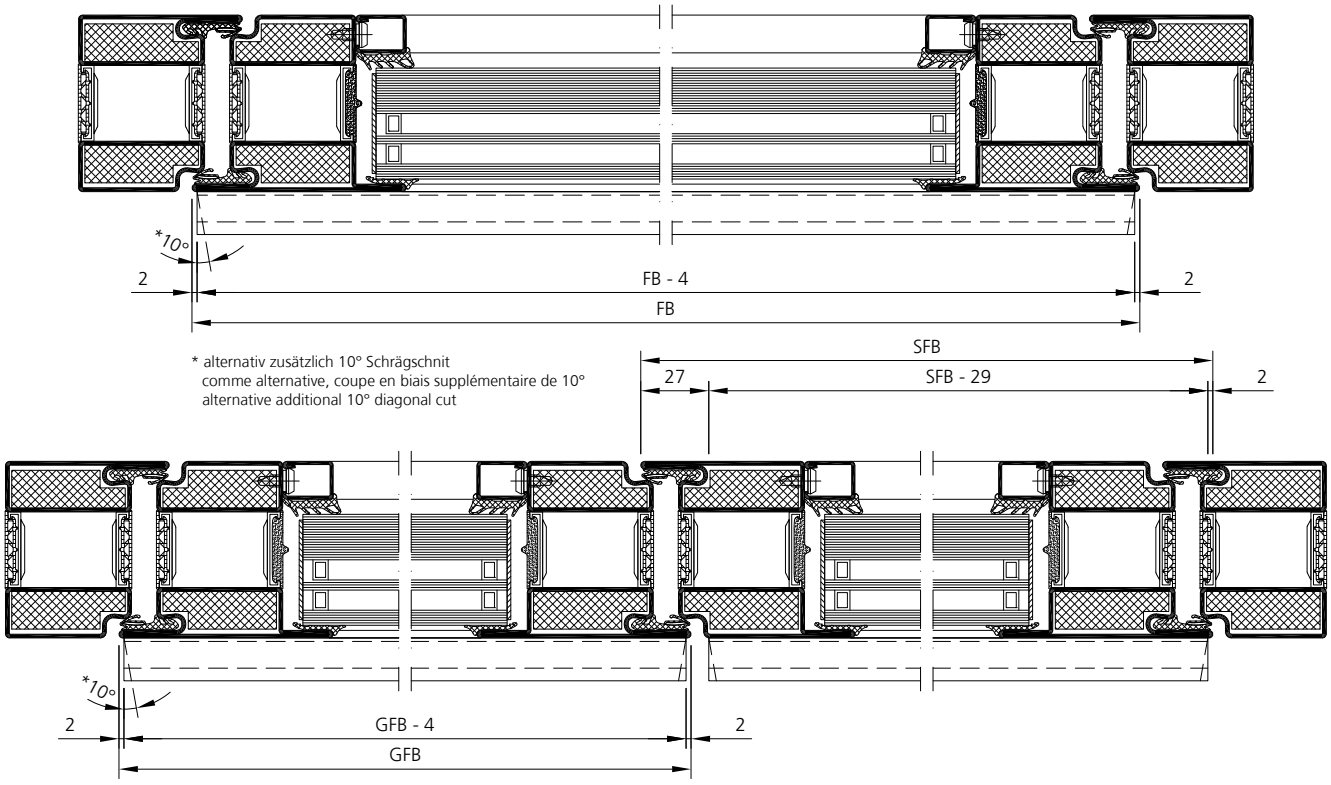
Débitage
Renvoi d'eau

Processing instructions
Weatherbord

Zuschnitt Wetterschenkel
Tür, auswärts öffnend

Débitage Renvoi d'eau
Porte, ouvrant vers l'extérieur

Processing instructions Weatherbord
Door, opening outwards

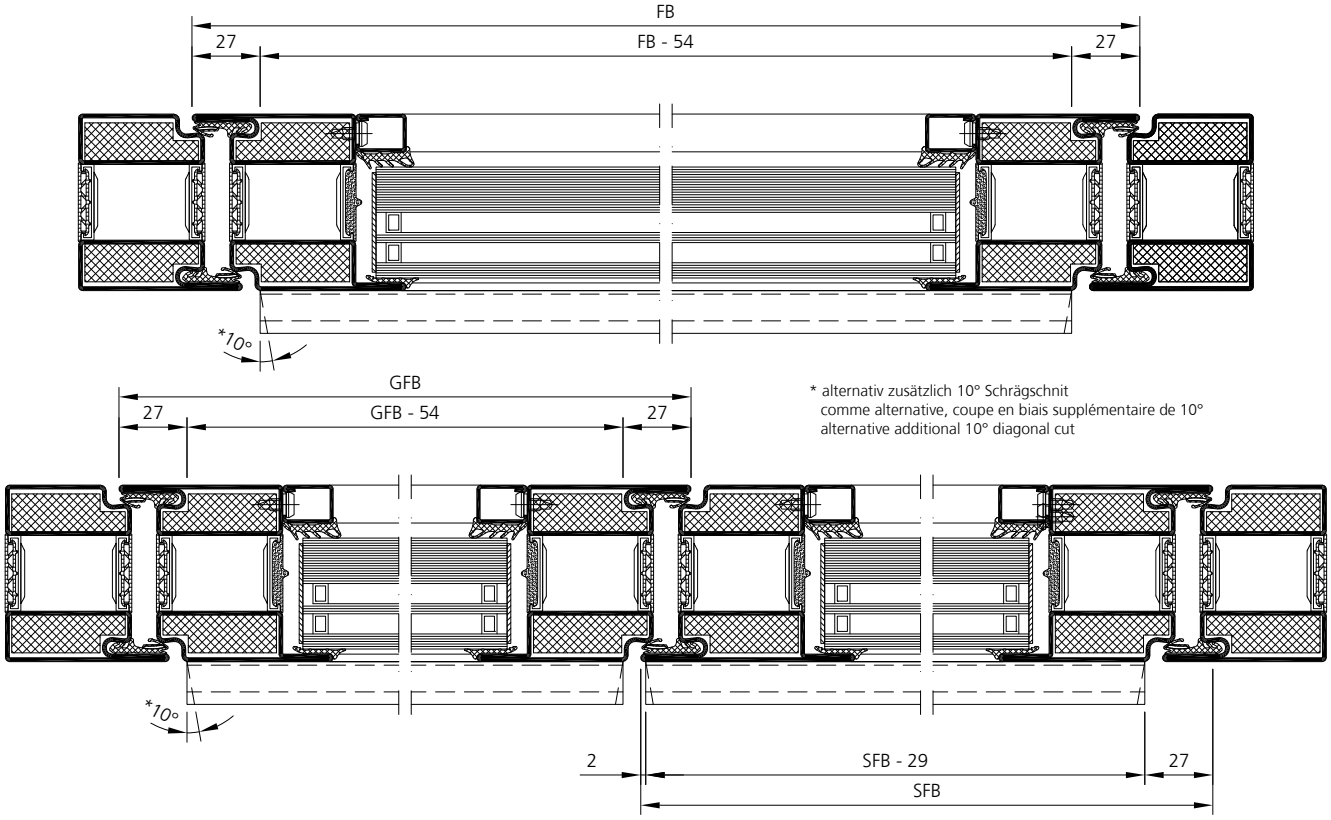


* alternativ zusätzlich 10° Schrägschnitt
comme alternative, coupe en biais supplémentaire de 10°
alternative additional 10° diagonal cut

Zuschnitt Wetterschenkel
Tür, einwärts öffnend

Débitage Renvoi d'eau
Porte, ouvrant vers l'intérieur

Processing instructions Weatherbord
Door, opening inwards



* alternativ zusätzlich 10° Schrägschnitt
comme alternative, coupe en biais supplémentaire de 10°
alternative additional 10° diagonal cut

Schweissempfehlung

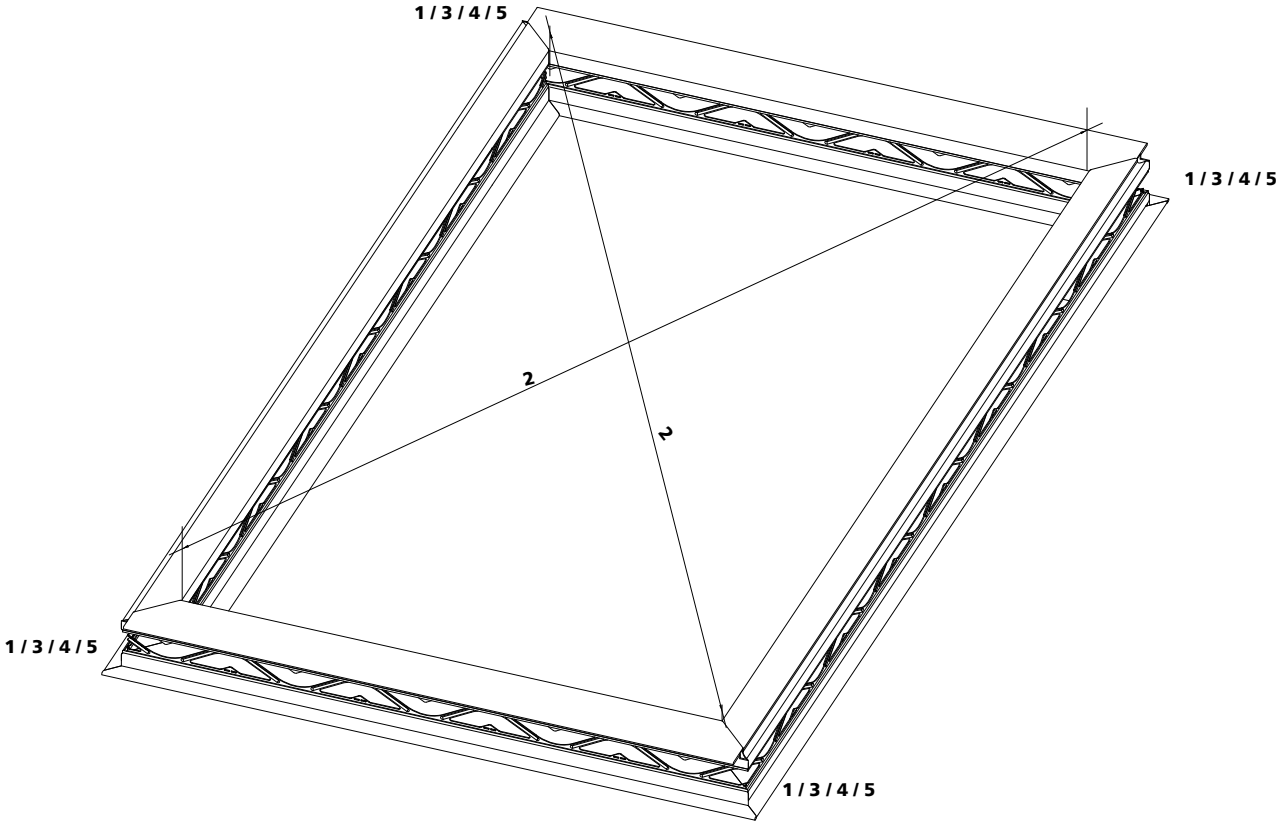
1 Ecken Haftschweissen
2 Diagonalen messen
3 Sichtflächen heften
4 Ecken schweissen
5 Sichtflächen schweissen

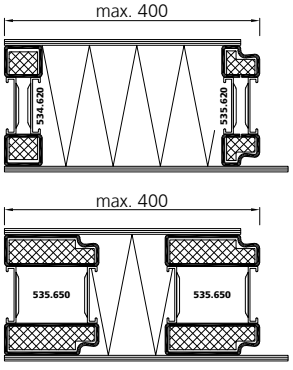
Soudage

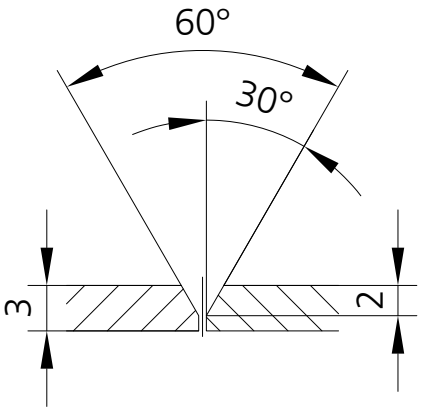
1 Souder les angles par points
2 Mesurer les diagonales
3 Attacher les surfaces visibles
4 Souder les angles
5 Souder les surfaces visibles

Welding procedure

1 Tack weld the corners
2 Measure diagonals
3 Tack visible parts
4 Weld corners
5 Weld visible parts



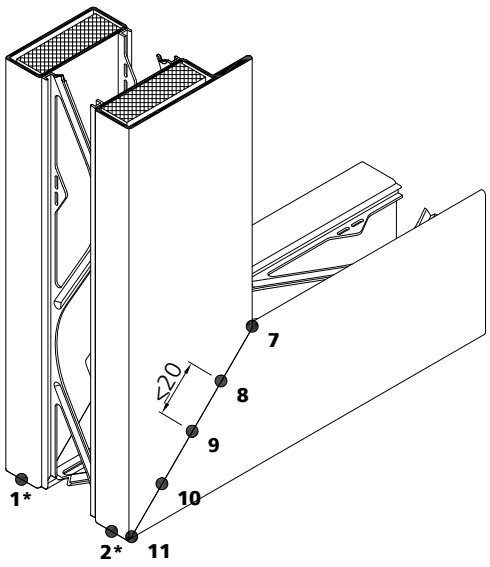


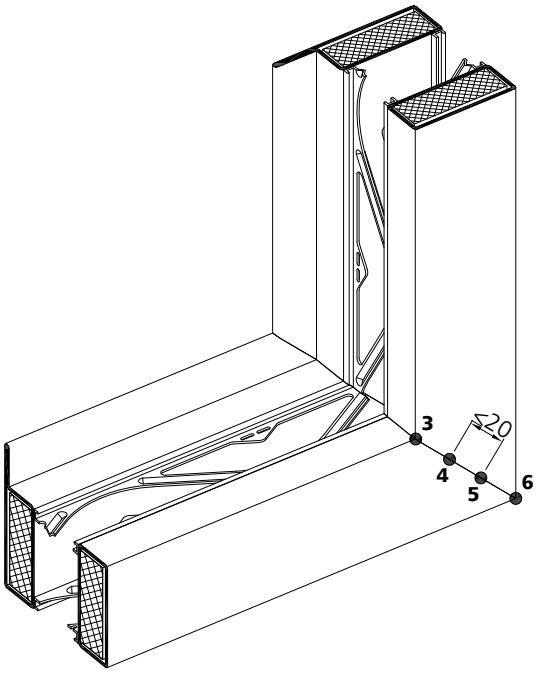


Schweissempfehlung / Soudage / Welding procedure

Rahmen / Cadre / Frame

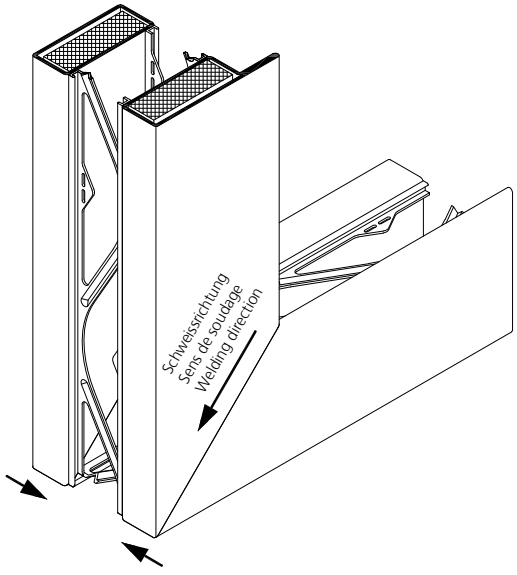
Haftpunkte / Points d'adhérence / Tacking points

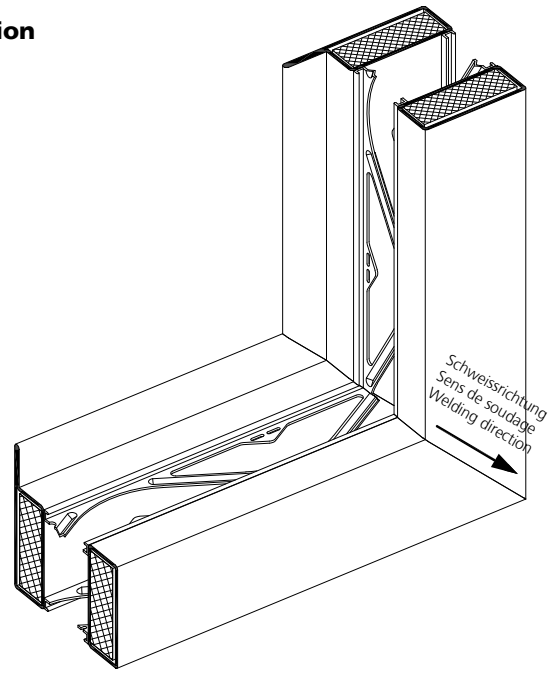




*** anschliessend Diagonale kontrollieren**
contrôler ensuite la diagonale
then check the diagonal

Schweissrichtung / Sens de soudage / Welding direction



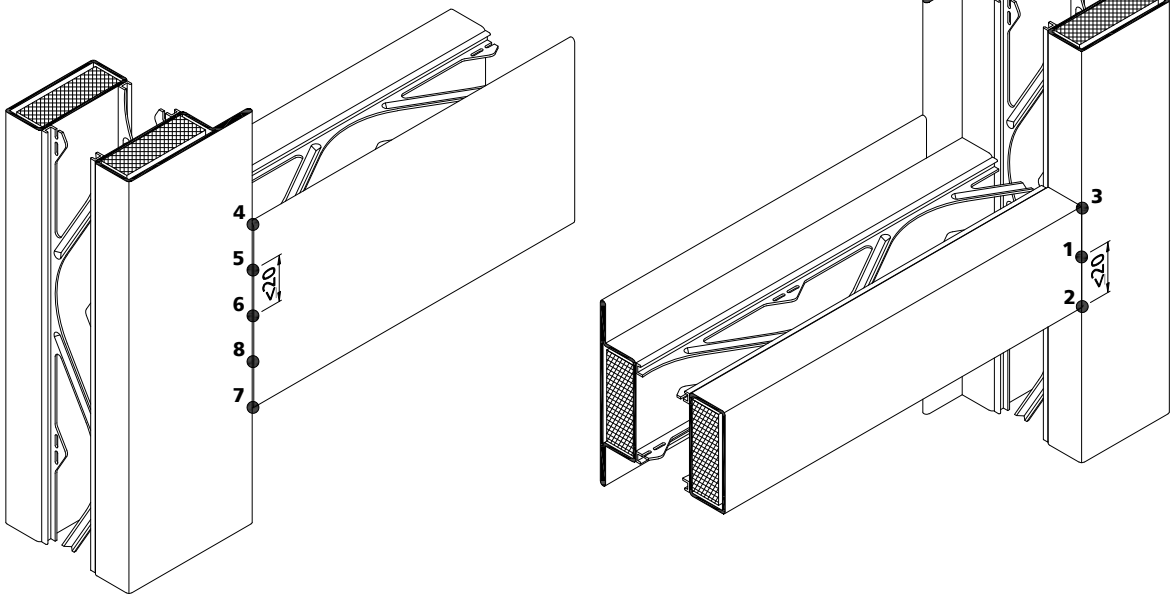


Schweissempfehlung
Sprosse

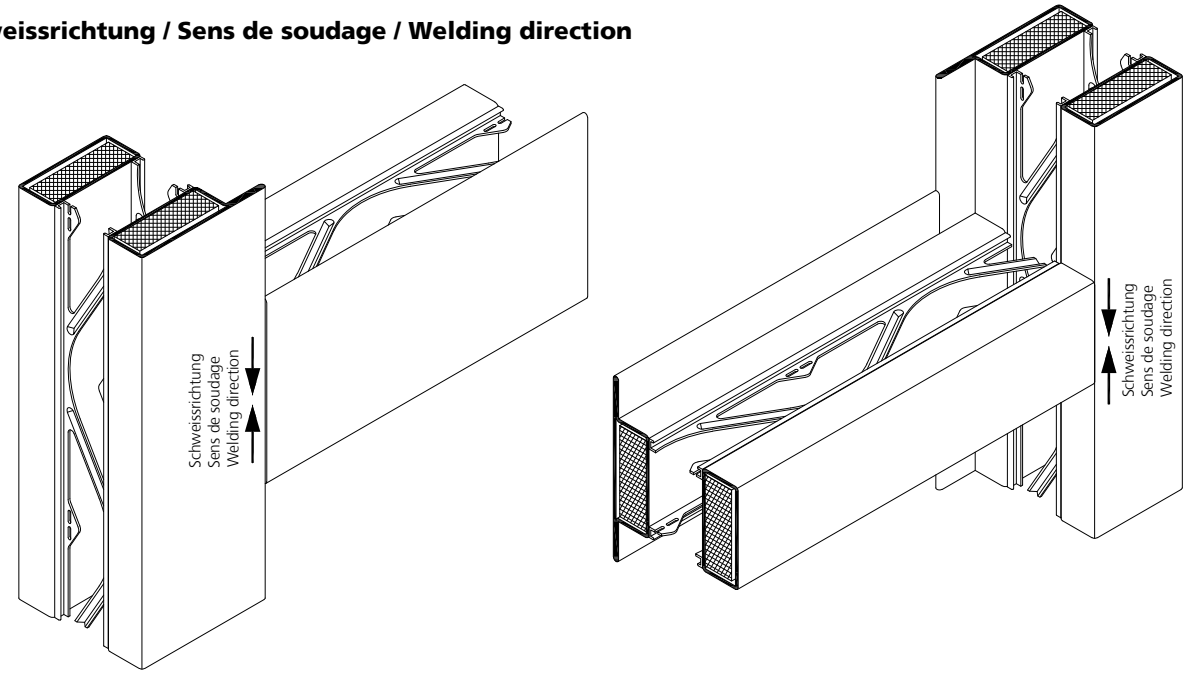
Soudage
Traverse

Welding procedure
Transom

Haftpunkte / Points d'adhérence / Tacking points



Schweissrichtung / Sens de soudage / Welding direction



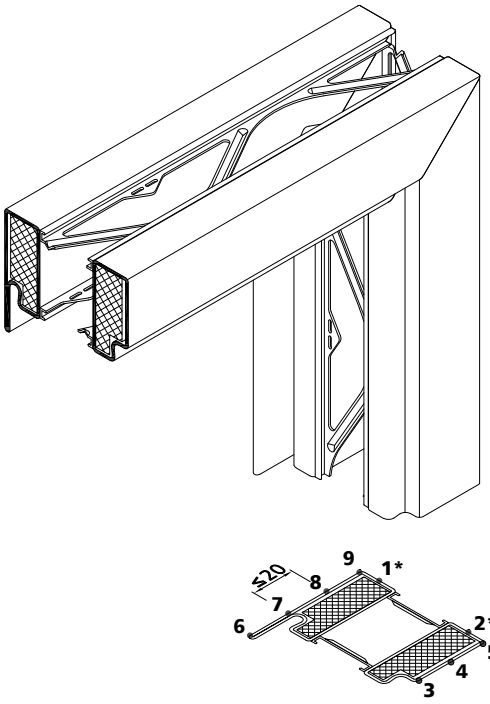
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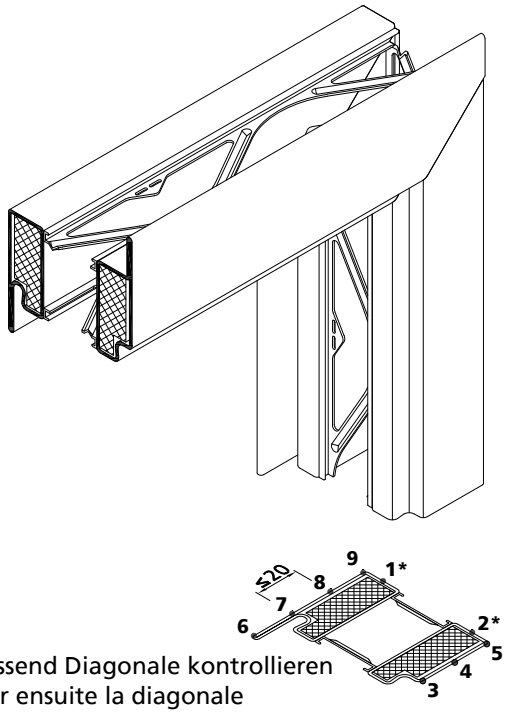
Schweissempfehlung
Flügel

Soudage
Vantail

Welding procedure
Leaf

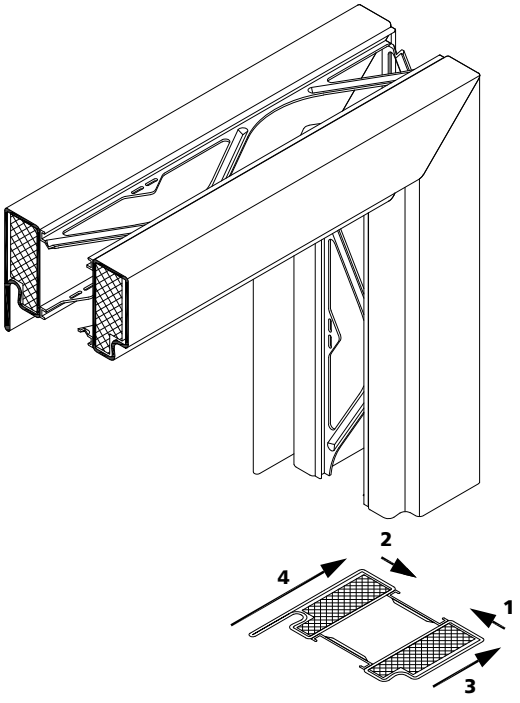
Haftpunkte / Points d'adhérence / Tacking points

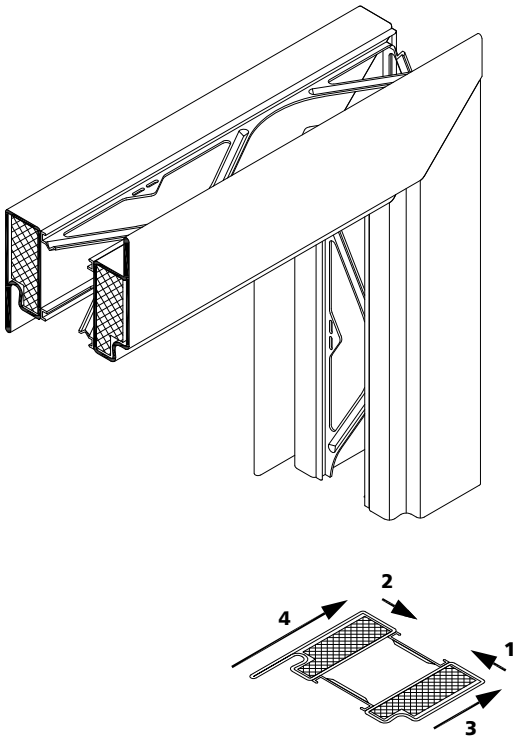




* anschliessend Diagonale kontrollieren
contrôler ensuite la diagonale
then check the diagonal

Schweissrichtung / Sens de soudage / Welding direction





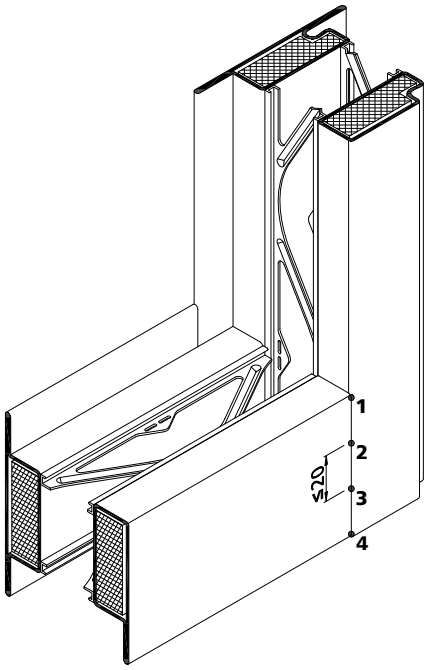
09/23

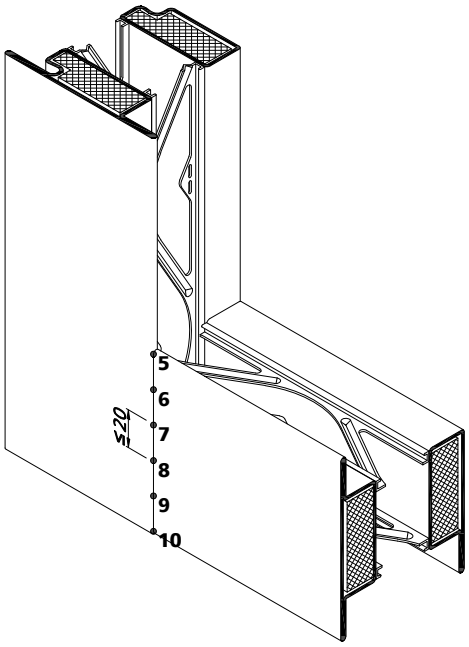
Schweissempfehlung
Flügel

Soudage
Vantail

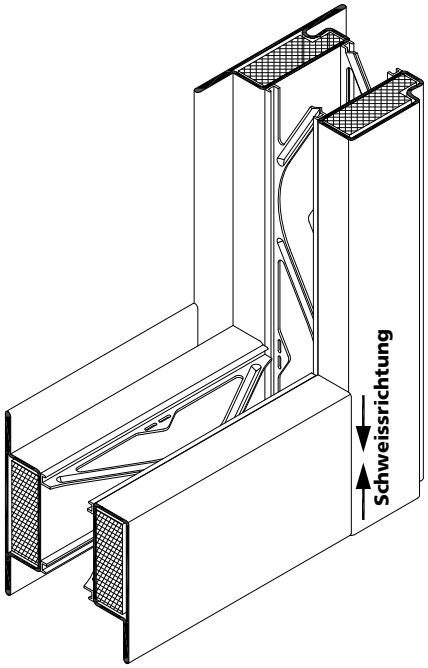
Welding procedure
Leaf

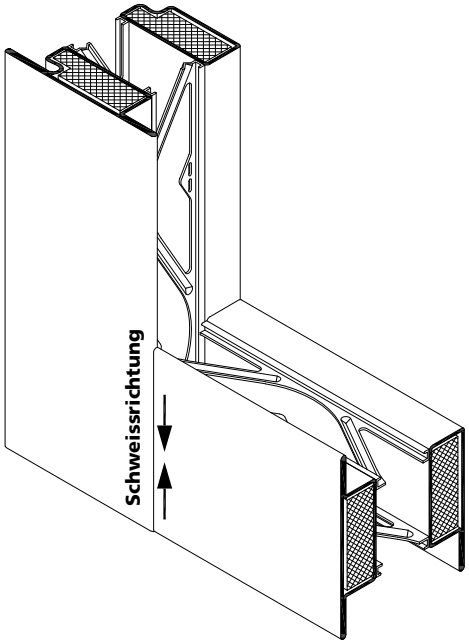
Haftpunkte / Points d'adhérence / Tacking points





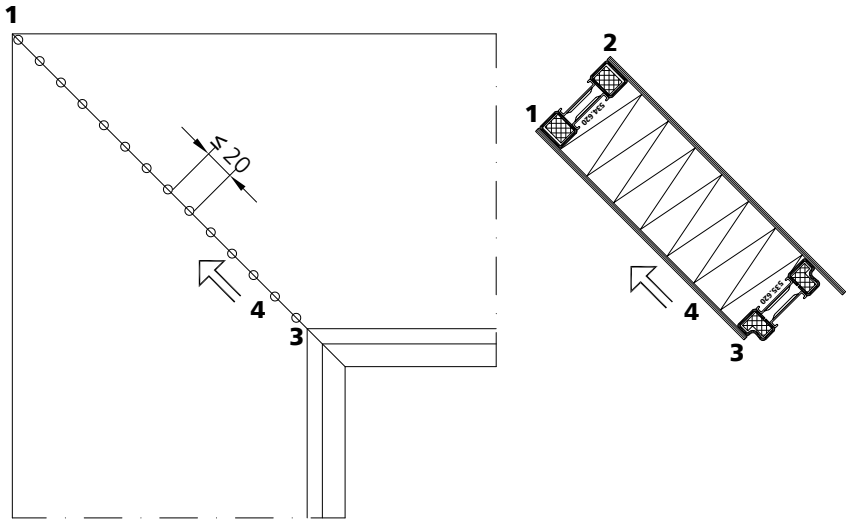
Schweissrichtung / Sens de soudage / Welding direction



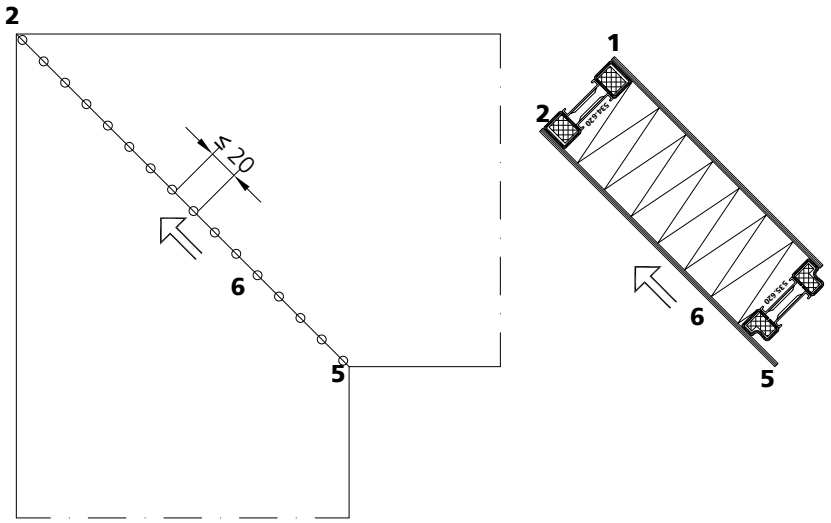


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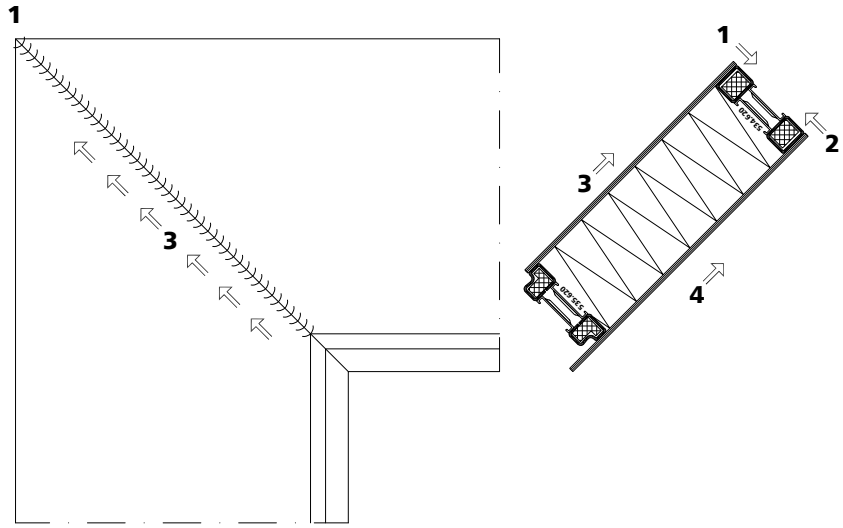
Schweissempfehlung | Soudage | Welding procedure



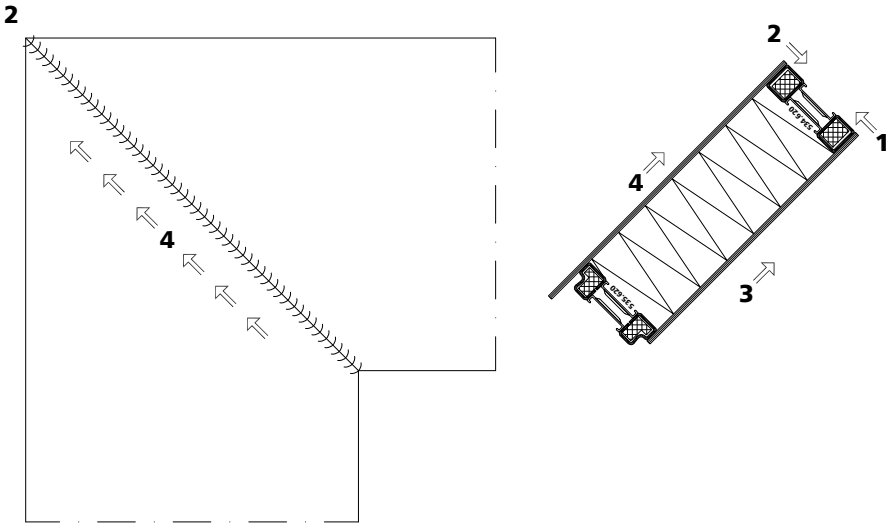
1+2	Stirnseite aussen heften anschliessend Diagonale kontrollieren	1+2	Attacher la face à l'extérieur, ensuite contrôler les diagonales	1+2	Tack outer face side, then control diagonals
3	Innere Ecke heften	3	Attacher l'angle intérieur	3	Tack inner corner
4	Von innen nach aussen heften	4	Attacher de l'intérieur à l'extérieur	4	Tack from inside to outside
5	Innere Ecke heften	5	Attacher l'angle intérieur	5	Tack inner corner
6	Von innen nach aussen heften	6	Attacher de l'intérieur à l'extérieur	6	Tack from inside to outside



Schweissempfehlung | Soudage | Welding procedure



1+2	Stirnseite aussen schweissen	1+2	Souder la face à l'extérieur	1+2	Weld outer face side
3	Von innen nach aussen schweissen Rahmen wenden	3	Souder de l'intérieur à l'extérieur, tourner le cadre	3	Weld from inside to outside, turn the frame
4	Von innen nach aussen schweissen	4	Souder de l'intérieur à l'extérieur	4	Weld from inside to outside

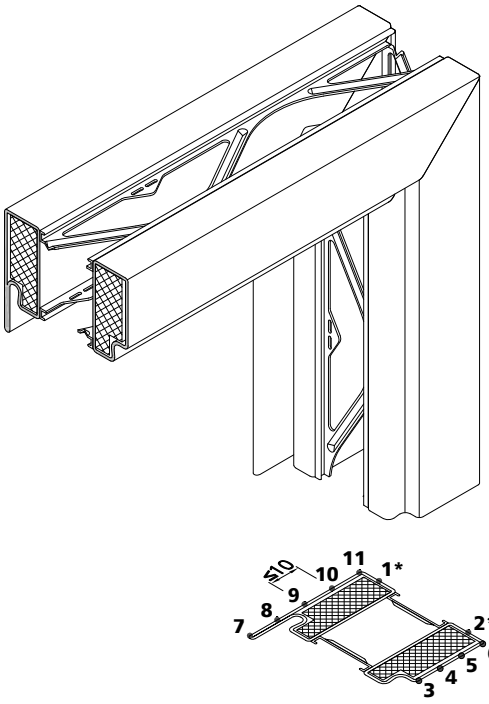


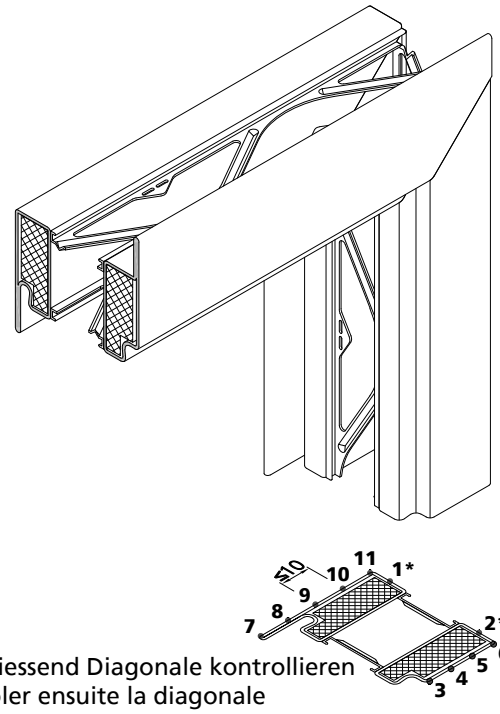
Schweissempfehlung
Flügel

Soudage
Vantail

Welding procedure
Leaf

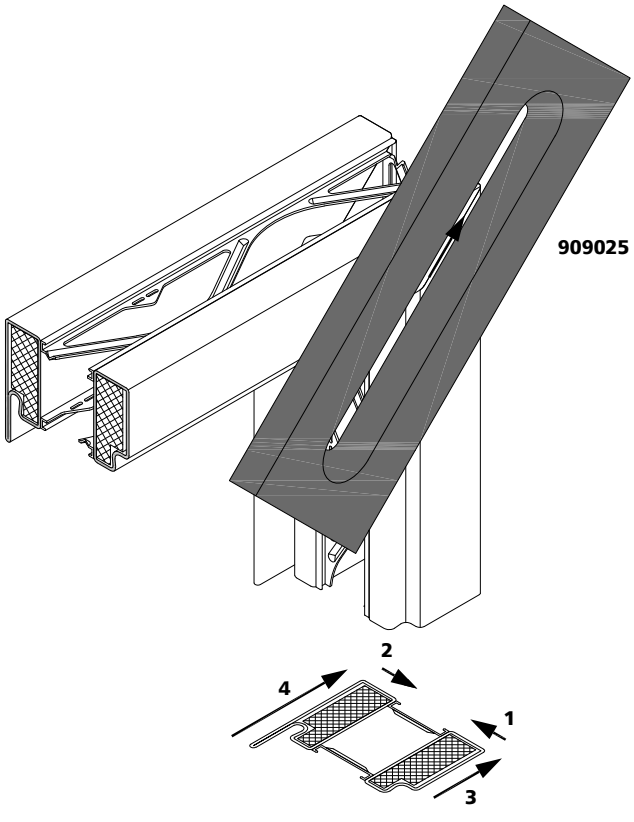
Haftpunkte / Points d'adhérence / Tacking points

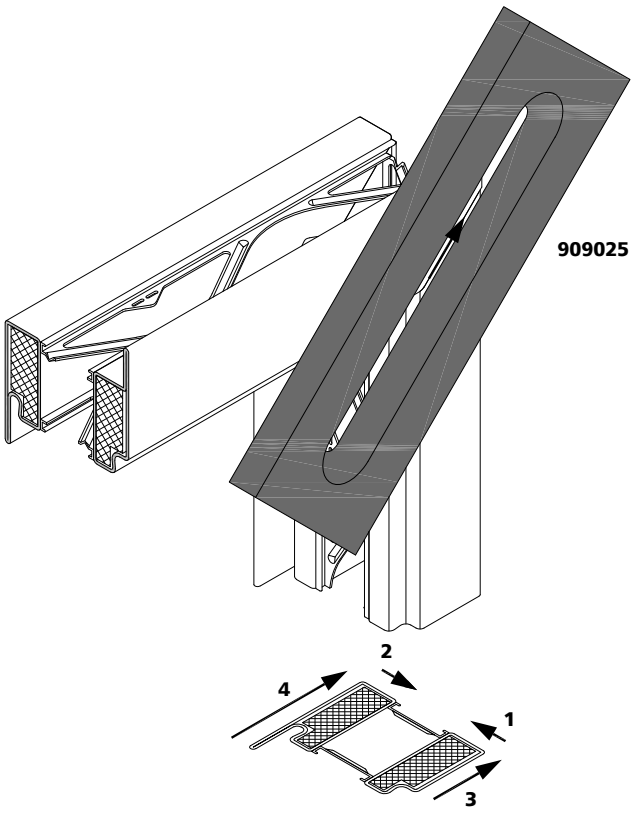




* anschliessend Diagonale kontrollieren
contrôler ensuite la diagonale
then check the diagonal

Schweissrichtung / Sens de soudage / Welding direction



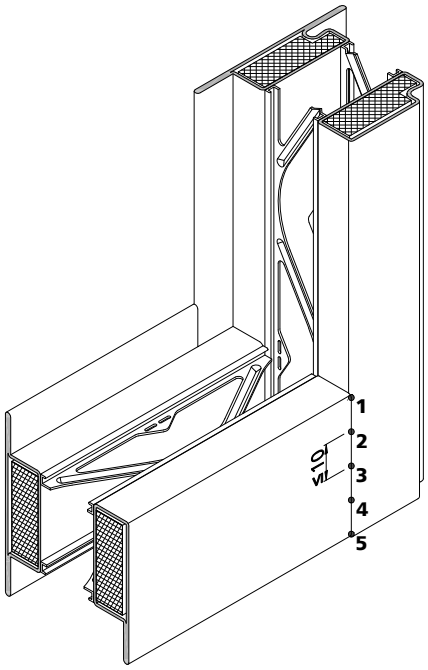


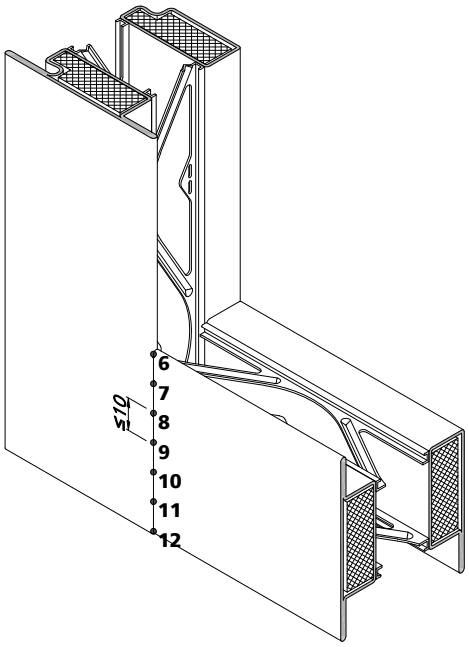
Schweissempfehlung
Flügel

Soudage
Vantail

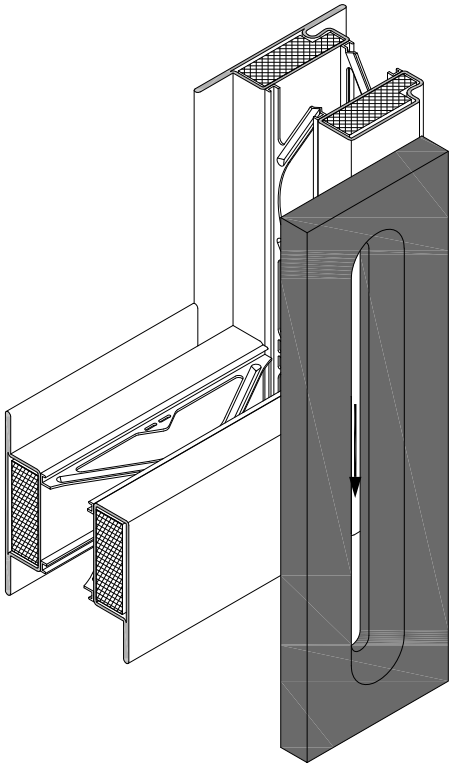
Welding procedure
Leaf

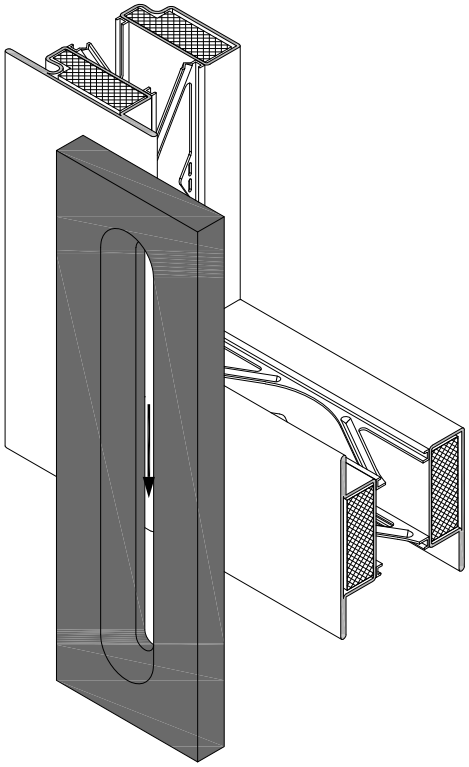
Haftpunkte / Points d'adhérence / Tacking points





Schweissrichtung / Sens de soudage / Welding direction

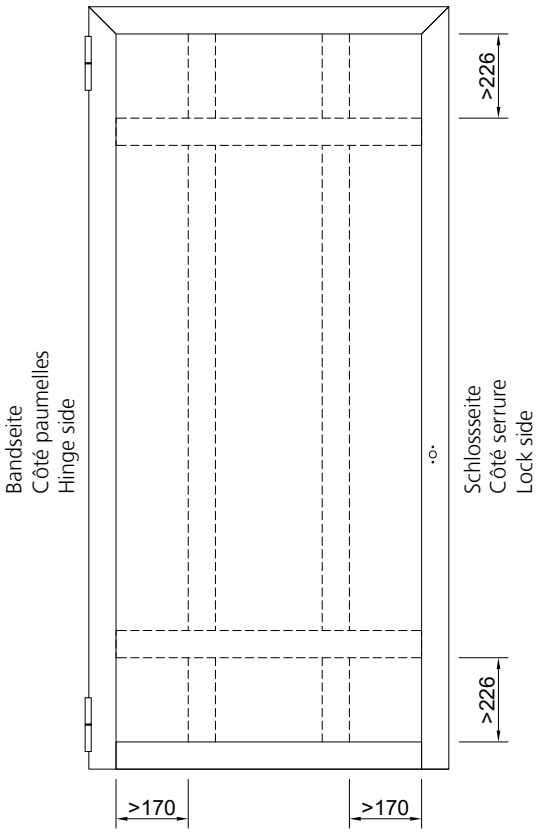




Sprossen
Gang -und Standflügel

Traverses
Vantail de service et semi-fix

Transoms
Opening and fixed leaf



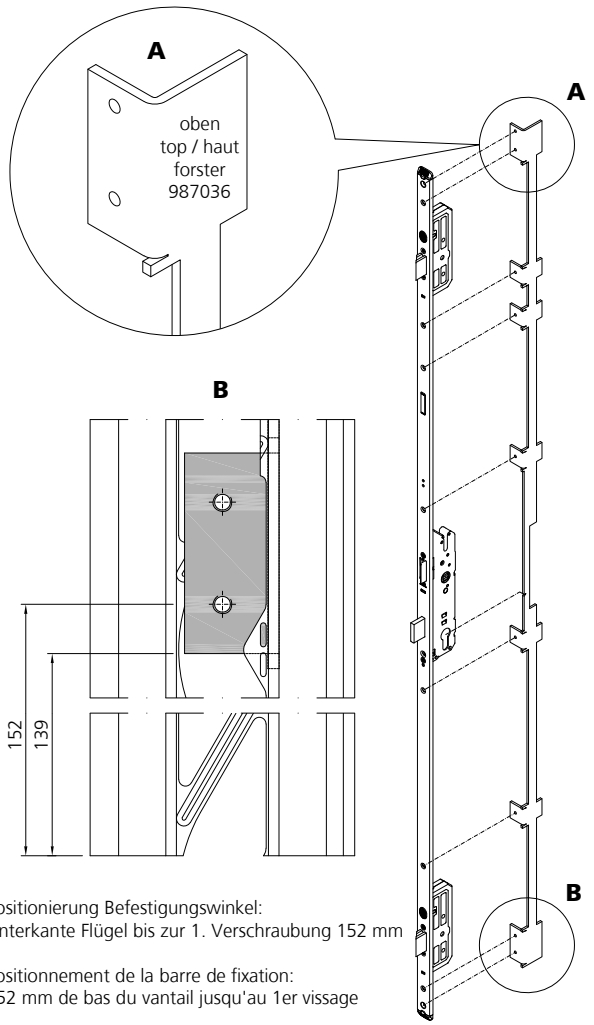
Schlosseinbau
Befestigungsschiene

Montage serrure
Barre de fixation

Lock installation
Fastening rail

Befestigungswinkel
L'angle de fixation
Fixing angle

987036 (1935 - 2134 mm)
987037 (2135 - 2335 mm)



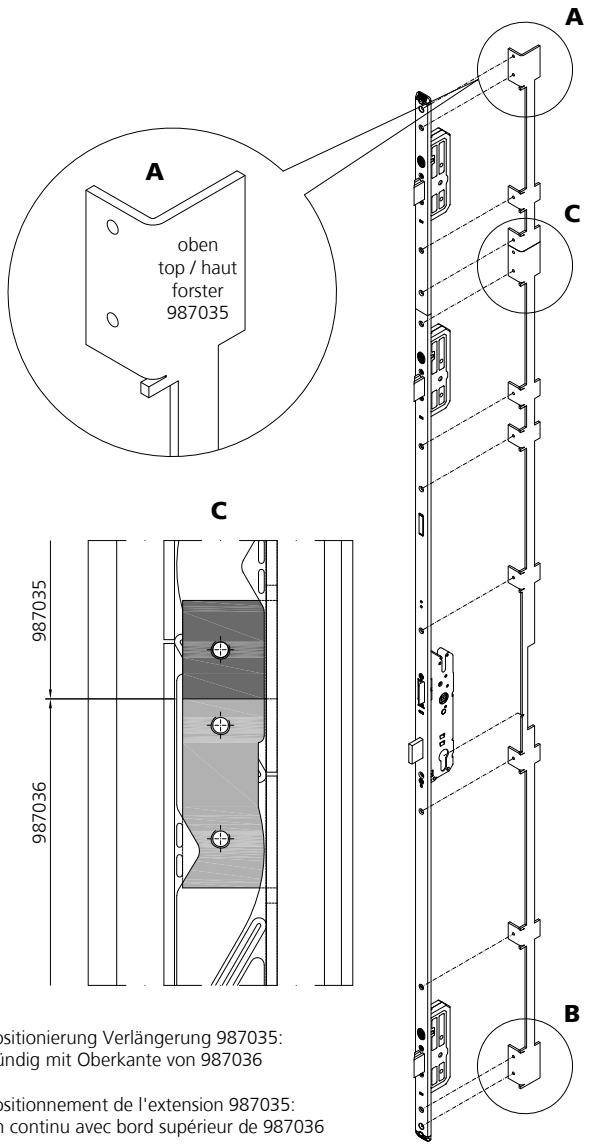
Positionierung Befestigungswinkel:
Unterkante Flügel bis zur 1. Verschraubung 152 mm

Positionnement de la barre de fixation:
152 mm de bas du vantail jusqu'au 1er vissage

Positioning of the fastening rail:
152 mm from bottom of leaf to the 1st screwing

Befestigungswinkel
L'angle de fixation
Fixing angle

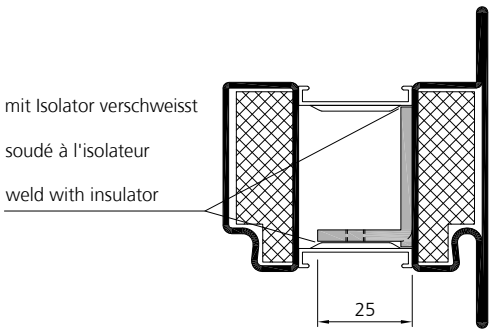
987036 mit / avec / con
987035 (2336 - 3020 mm)



Positionierung Verlängerung 987035:
Bündig mit Oberkante von 987036

Positionnement de l'extension 987035:
en continu avec bord supérieur de 987036

Positioning of the extension 987035:
flush mounted with top of 987036



Schlosseinbau
Befestigungsgarnitur
987039 / 987040

Montage serrure
Garniture de fixation
987039 / 987040

Lock installation
Fastening set
987039 / 987040

Befestigungsgarnitur
Garniture de fixation
Set fastening

1-flügelig
1 vantail
Single-leaved **987039**



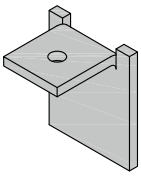
2-flügelig
2 vantaux
Double-leaved **987040**

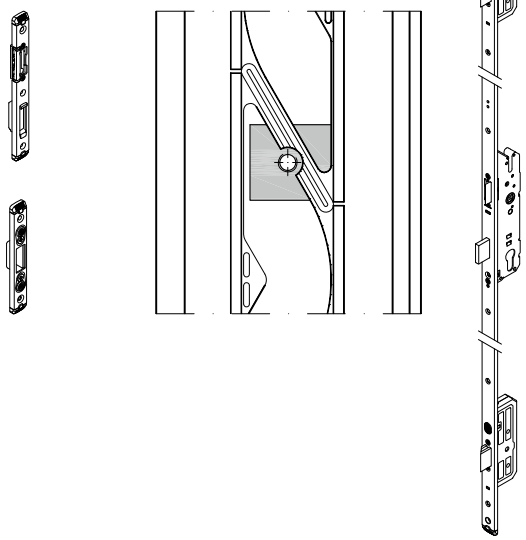


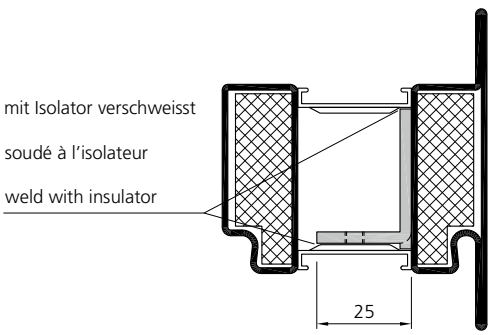


Schloss und Schliessblech
Serrure et gâche
Lock and keep

Einschweisswinkel mit Gewinde M5
Angle à souder avec taraudage M5
Angle to weld with tap M5

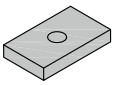


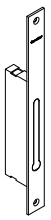


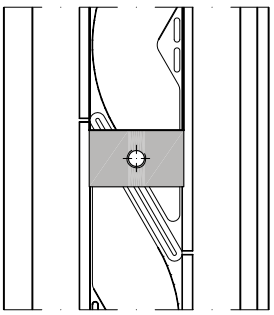


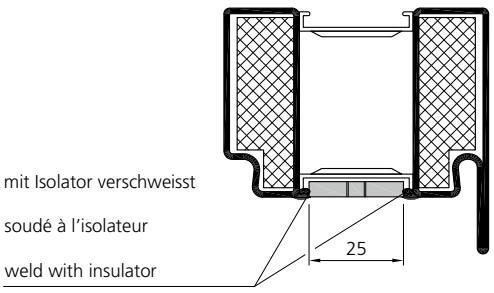
Verriegelung Standflügel
Verrouillage du vantail semi-fixe
Locking of fixed leaf

Einschweissplatte mit Gewinde M5
Plaque à souder avec taraudage M5
Plate to weld with tap M5





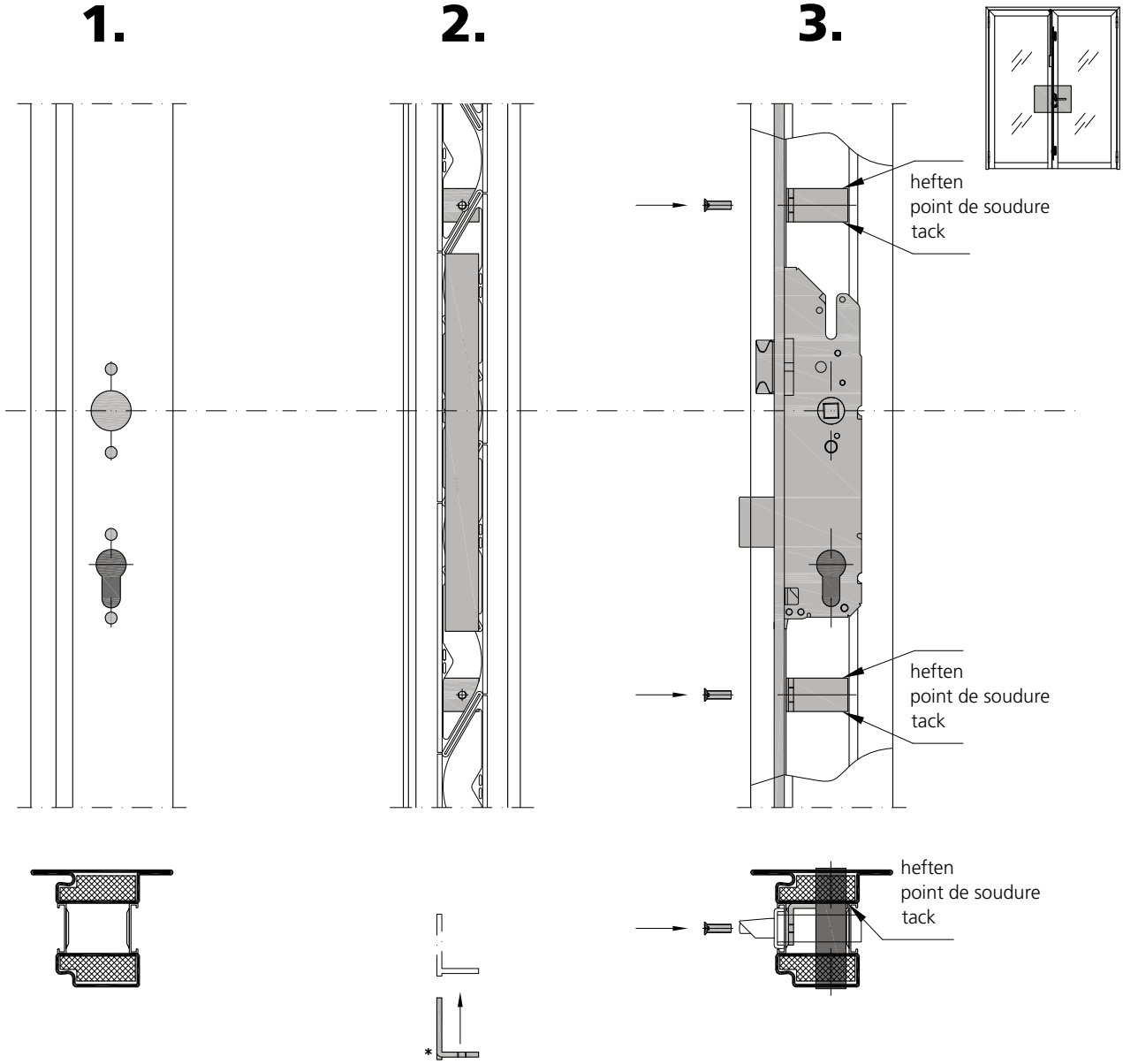




Schlosseinbau
Befestigungsgarnitur
987039 / 987040

Montage serrure
Garniture de fixation
987039 / 987040

Lock installation
Fastening set
987039 / 987040



Drücker und Zylinder-ausschnitt ausnehmen

Fraiser pour poignée et cylindre

Cut-out for handle and cylinder

- Ausschnitt in Isolator für Schloss schneiden.
- Befestigungswinkel einführen.

** sind in Garnitur 987039 + 987040 enthalten*

- Fraiser dans l'isolateur pour la serrure
- insérer l'angle de fixation

**inclus dans garniture 987039 + 987040*

- Cut-out the insulator for the lock
- insert the fixing angle

**included in the set 987039 + 987040*

- Schloss einsetzen
- Winkel befestigen mit Schraube M5x16 A2
- Zylinder einbauen
- Befestigungswinkel heften

- insérer la serrure
- fixer l'angle avec vis M5x16 A2
- monter le cylindre
- pointer l'angle de fixation

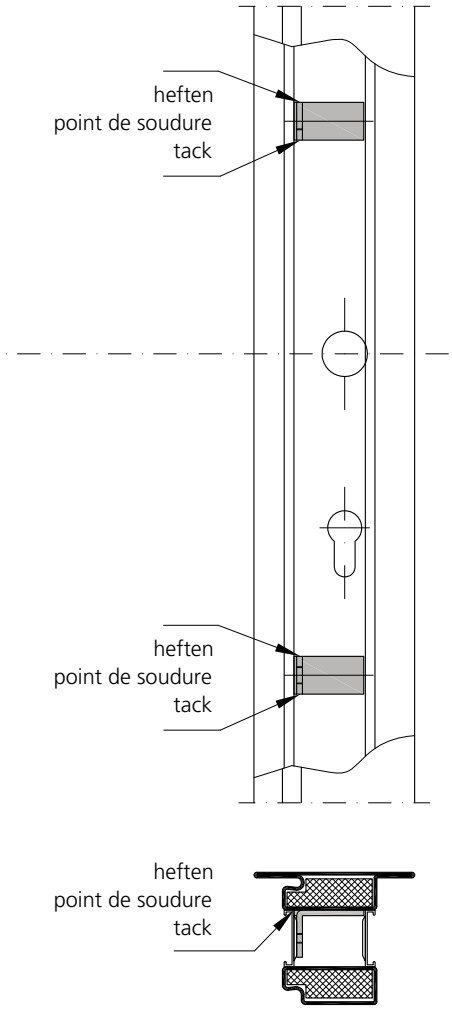
- insert the lock
- fix the fixing angle with screw M5x16 A2
- mount the cylinder
- tack the fixing angle

Schlosseinbau
Befestigungsgarnitur
987039 / 987040

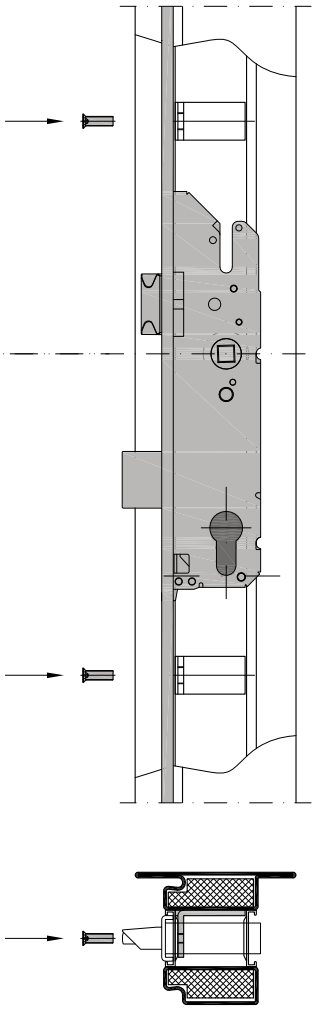
Montage serrure
Garniture de fixation
987039 / 987040

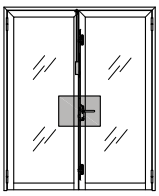
Lock installation
Fastening set
987039 / 987040

4.



5.





- Schloss demontieren
- Befestigungswinkel auf der gegenüberliegenden Seite heften

Schloss einbauen

- démonter la serrure
- point de soudure sur l'angle de fixation au côté opposé

Monter la serrure

- dissassembly the lock
- tack the fixing angle on the opposite side

Mount the lock

Schlosseinbau
Verlängerung

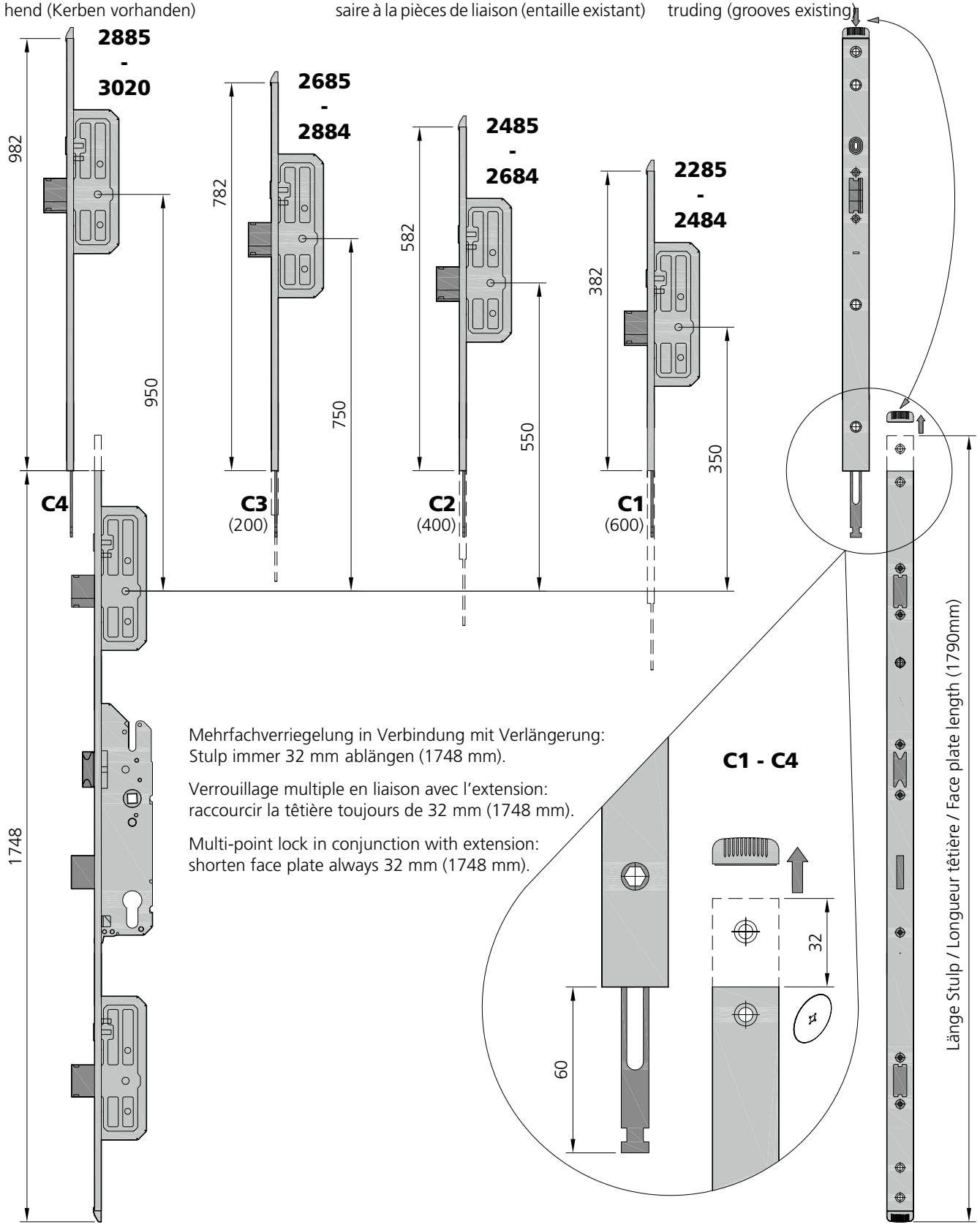
Montage serrure
Extension

Lock installation
Extension

Stulp und Verbindungsteil bei der Verlängerung ablängen (C1– C3).
Achtung: Verbindungsteil 60 mm überstehend (Kerben vorhanden)

Raccourcir la têtière et la pièce de liaison de l'extension (C1-C3).
Attention. une saillie de 60 mm est nécessaire à la pièces de liaison (entaille existant)

Shorten face plate and connection piece (C1– C3) at the extension.
Attention: connection piece 60 mm protruding (grooves existing)



Mehrfachverriegelung in Verbindung mit Verlängerung:
Stulp immer 32 mm ablängen (1748 mm).

Verrouillage multiple en liaison avec l'extension:
raccourcir la têtière toujours de 32 mm (1748 mm).

Multi-point lock in conjunction with extension:
shorten face plate always 32 mm (1748 mm).

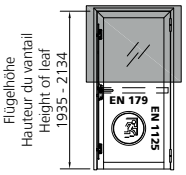
Schlosseinbau
3-Punkt-Verriegelung
Flügelhöhe 1935 - 2134 mm

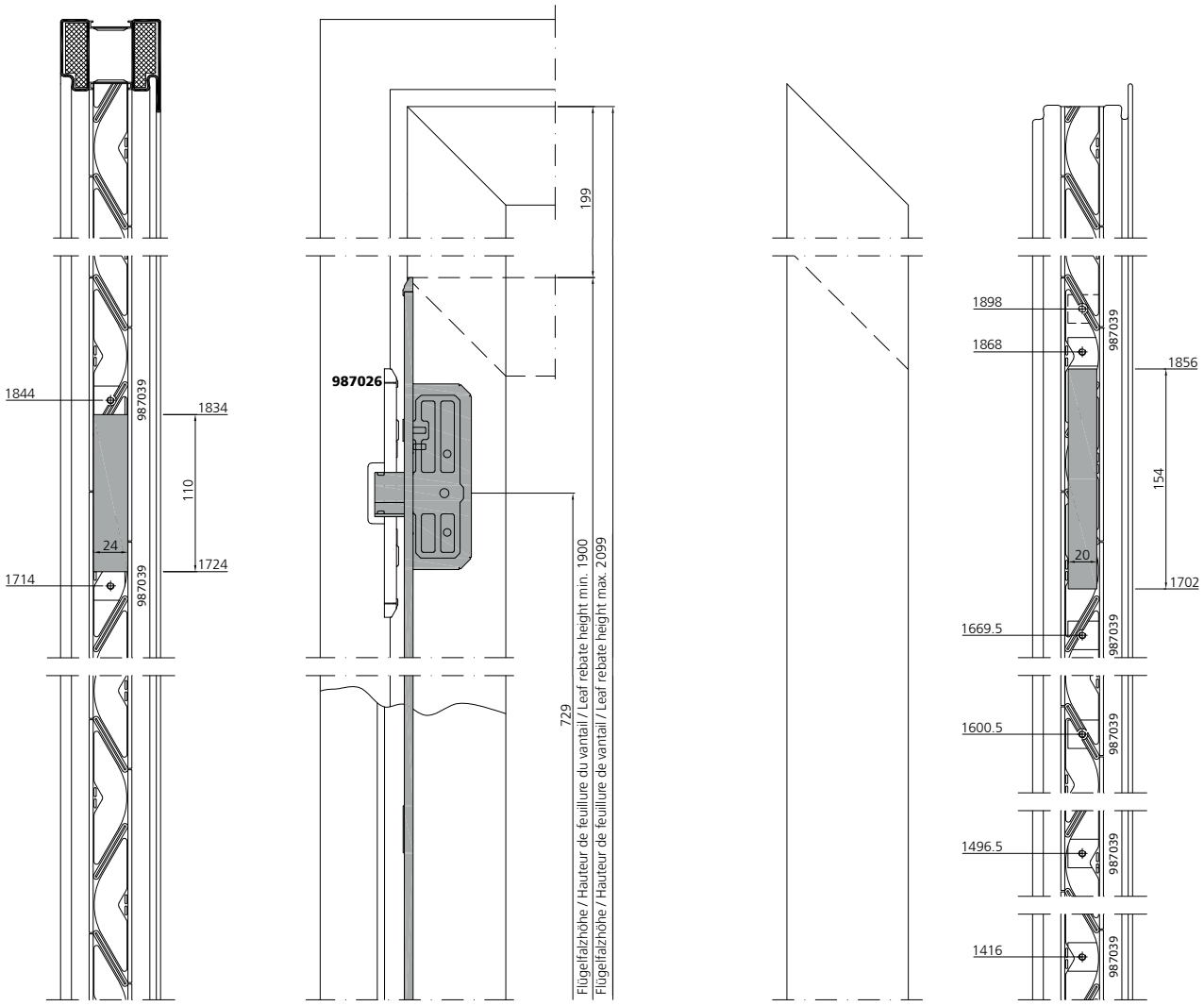
Montage serrure
Verrouillage 3 points
Hauteur du vantail 1935 - 2134 mm

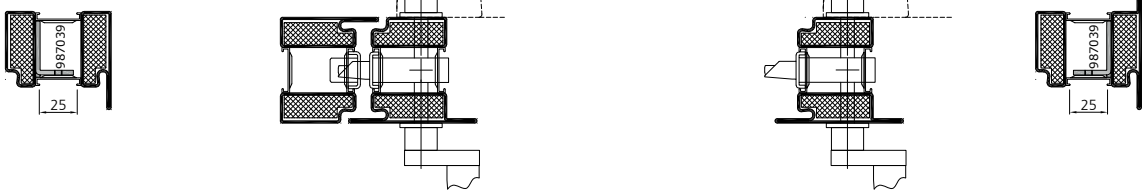
Lock installation
3 point locking
Leaf height 1935 - 2134 mm



un_ep_0430







Schlosseinbau
3-Punkt-Verriegelung
Flügelhöhe 1935 - 2134 mm

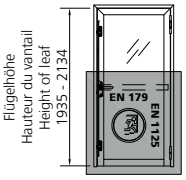
Montage serrure
Verrouillage 3 points
Hauteur du vantail 1935 - 2134 mm

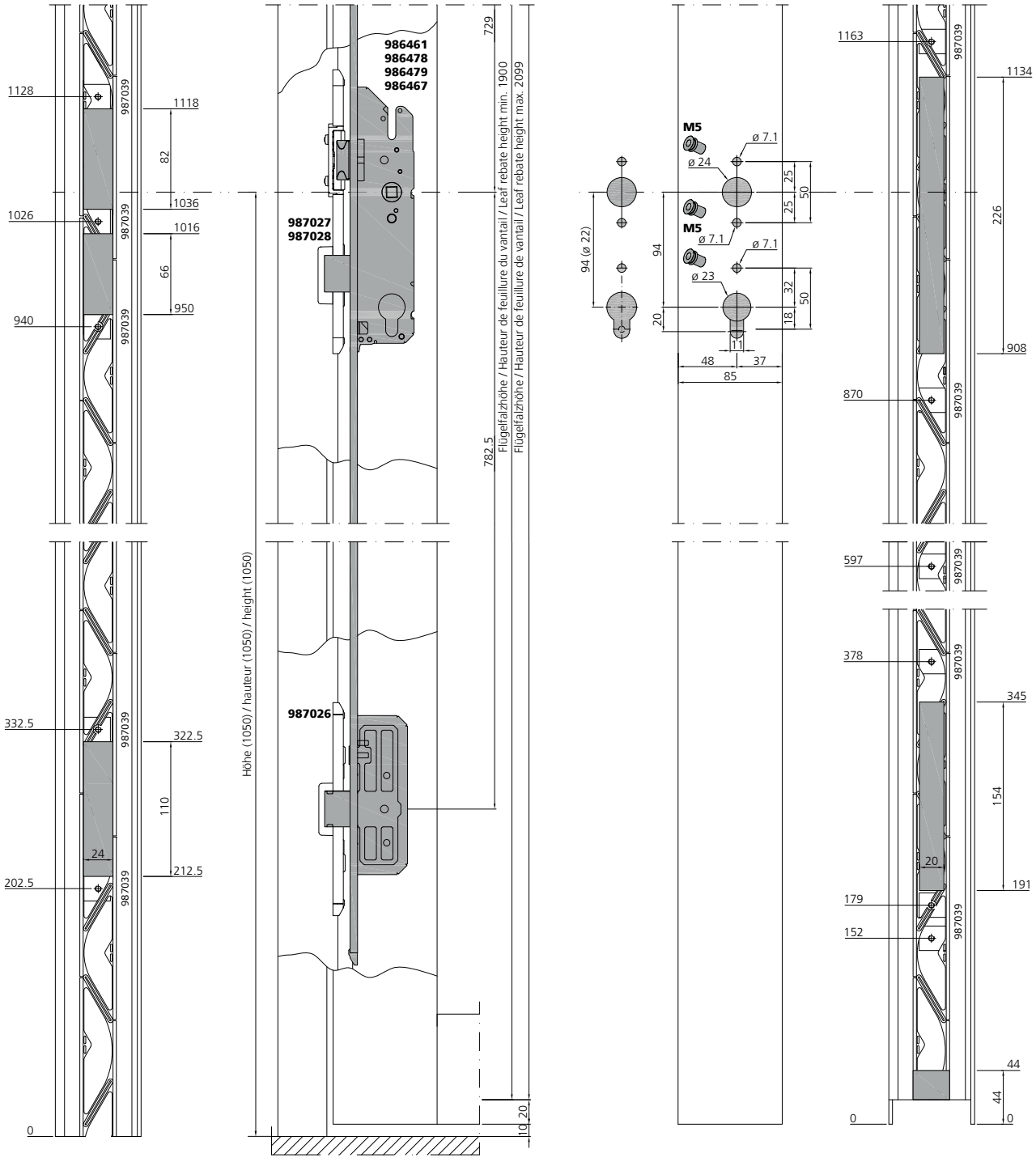
Lock installation
3 point locking
Leaf height 1935 - 2134 mm



RZ

un_ep_0430

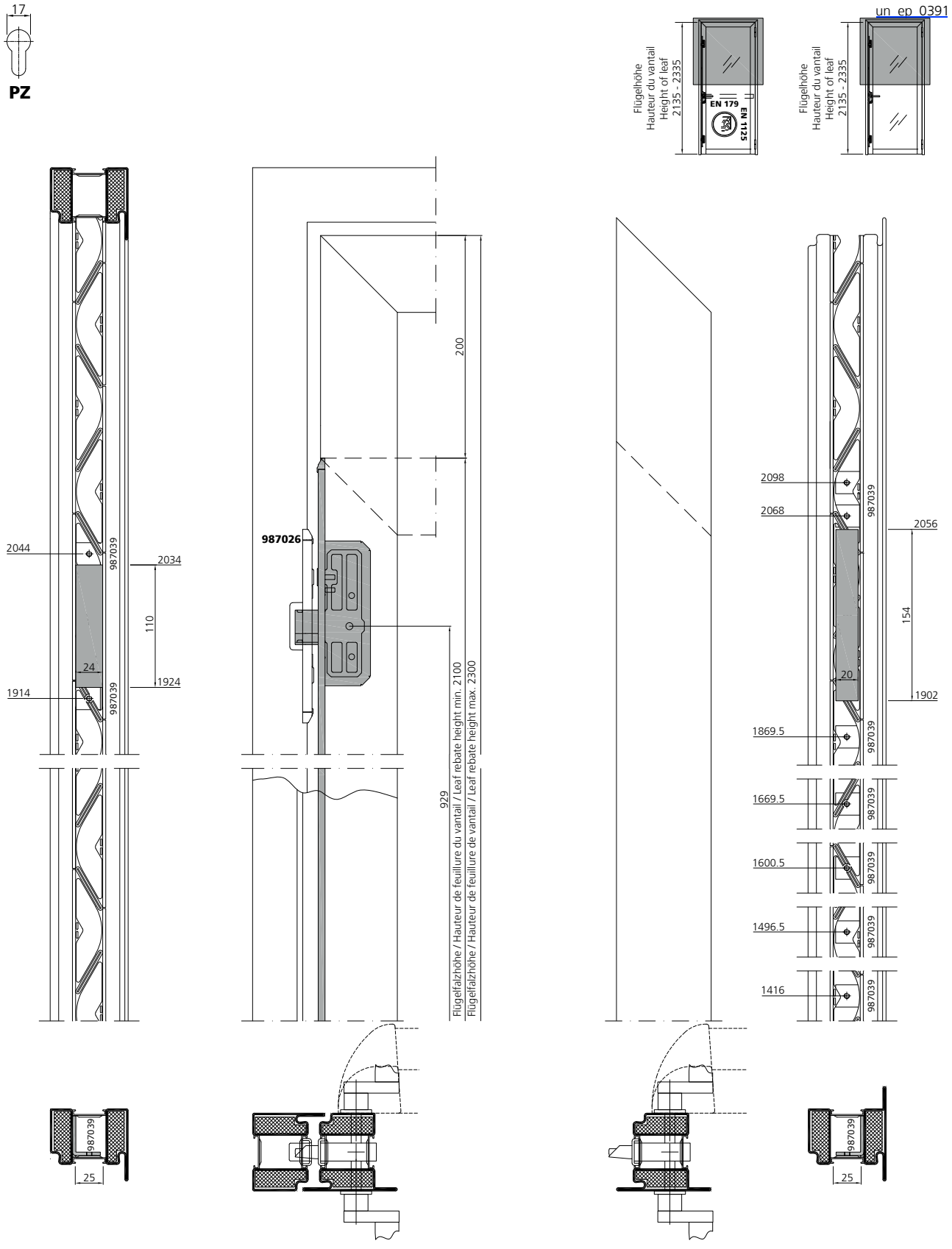




Schlosseinbau
3-Punkt-Verriegelung
Flügelhöhe 2135 - 2335 mm

Montage serrure
Verrouillage 3 points
Hauteur du vantail 2135 - 2335 mm

Lock installation
3 point locking
Leaf height 2135 - 2335 mm



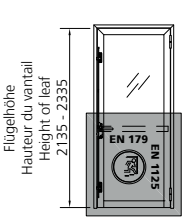
Schlosseinbau
3-Punkt-Verriegelung
Flügelhöhe 2135 - 2335 mm

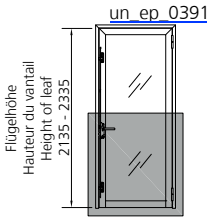
Montage serrure
Verrouillage 3 points
Hauteur du vantail 2135 - 2335 mm

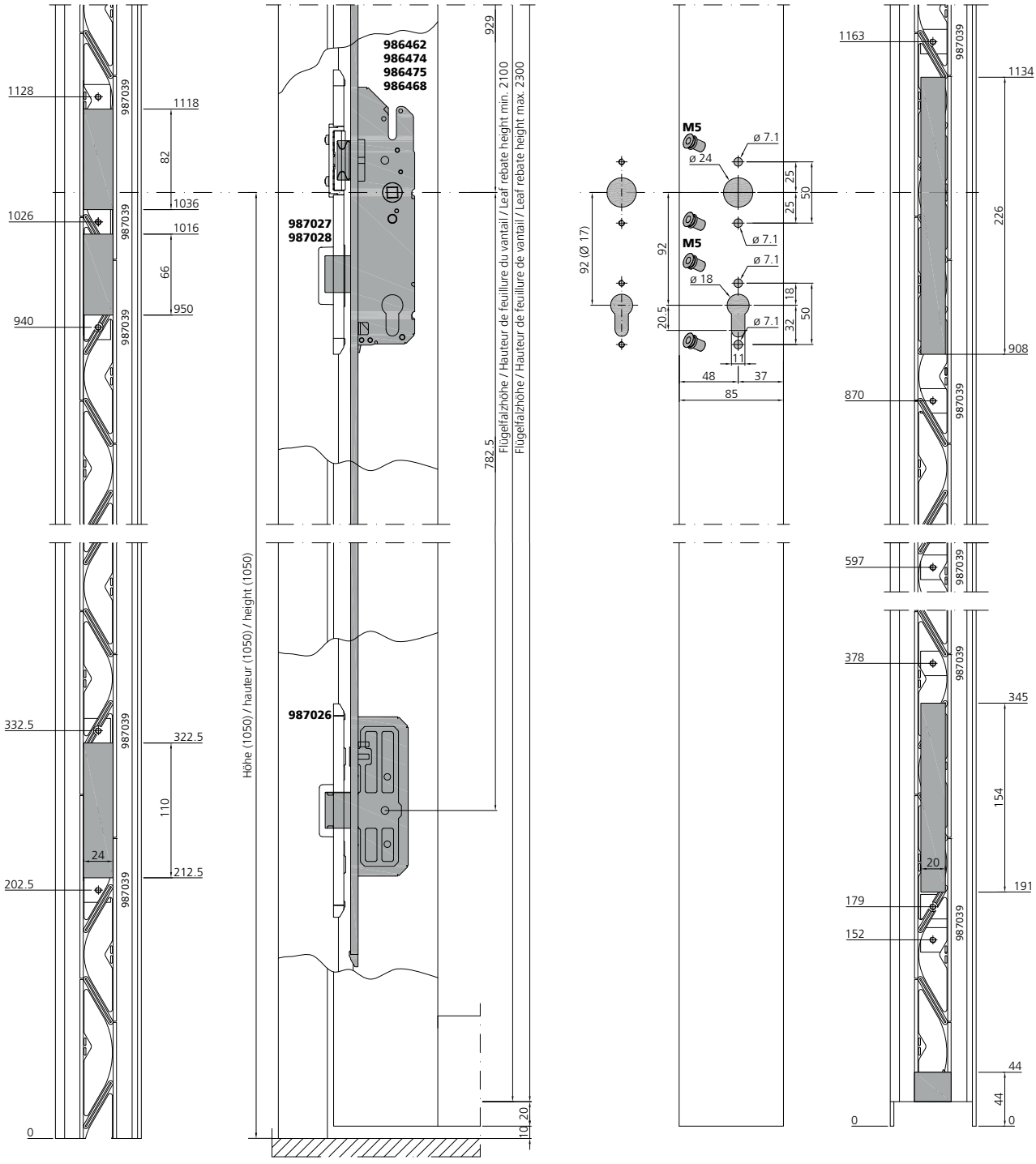
Lock installation
3 point locking
Leaf height 2135 - 2335 mm



PZ



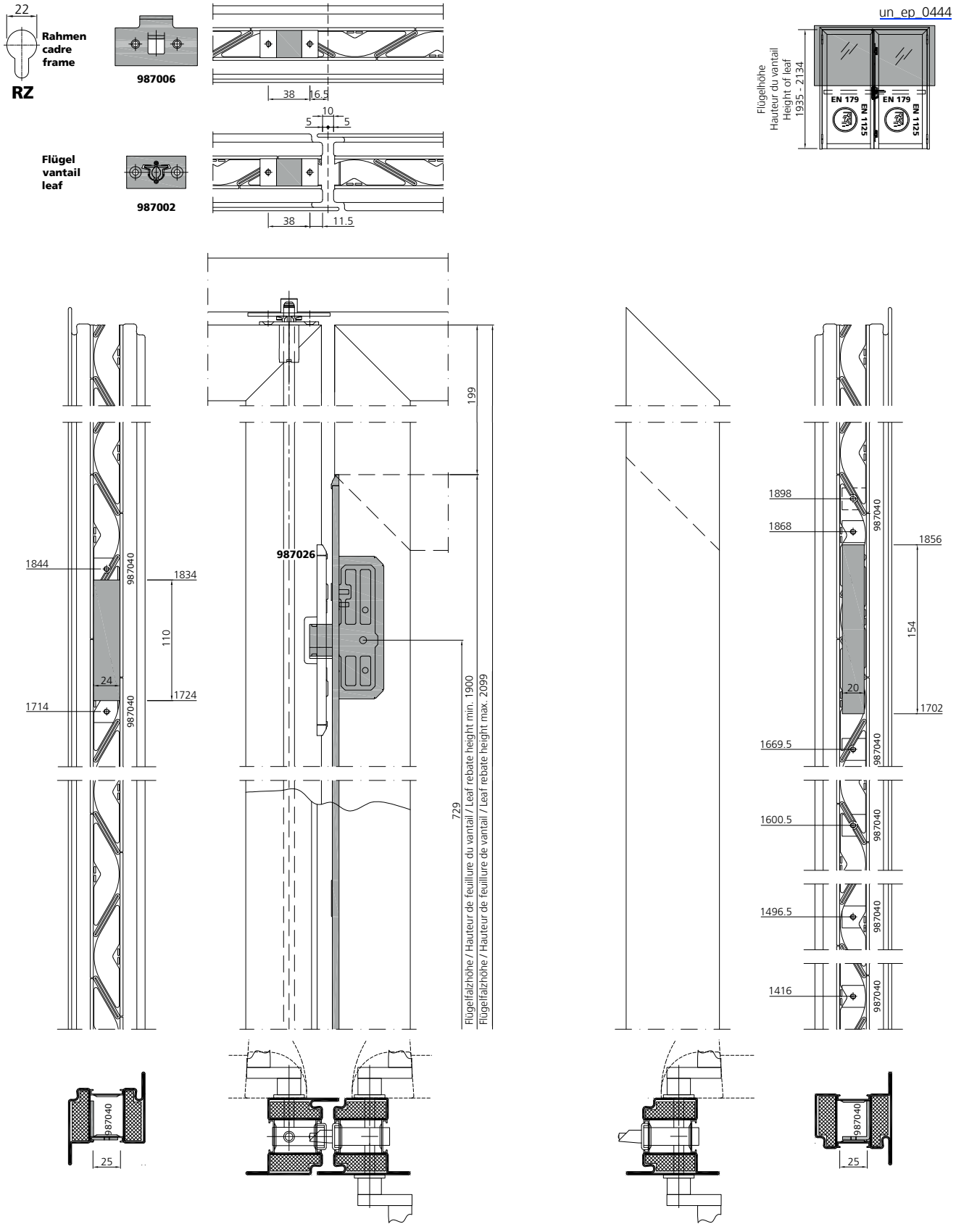




Schlosseinbau
3-Punkt-Verriegelung
Flügelhöhe 1935 - 2134 mm
Antipanik-Gegenkasten

Montage serrure
Verrouillage 3 points
Hauteur du vantail 1935 - 2134 mm
Crémone anti-panique

Lock installation
3 point locking
Leaf height 1935 - 2134 mm
Anti-panic opposite lock



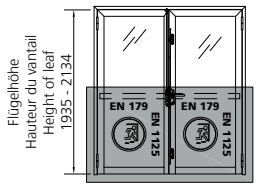
Schlosseinbau
3-Punkt-Verriegelung
Flügelhöhe 1935 - 2134 mm
Antipanik-Gegenkasten

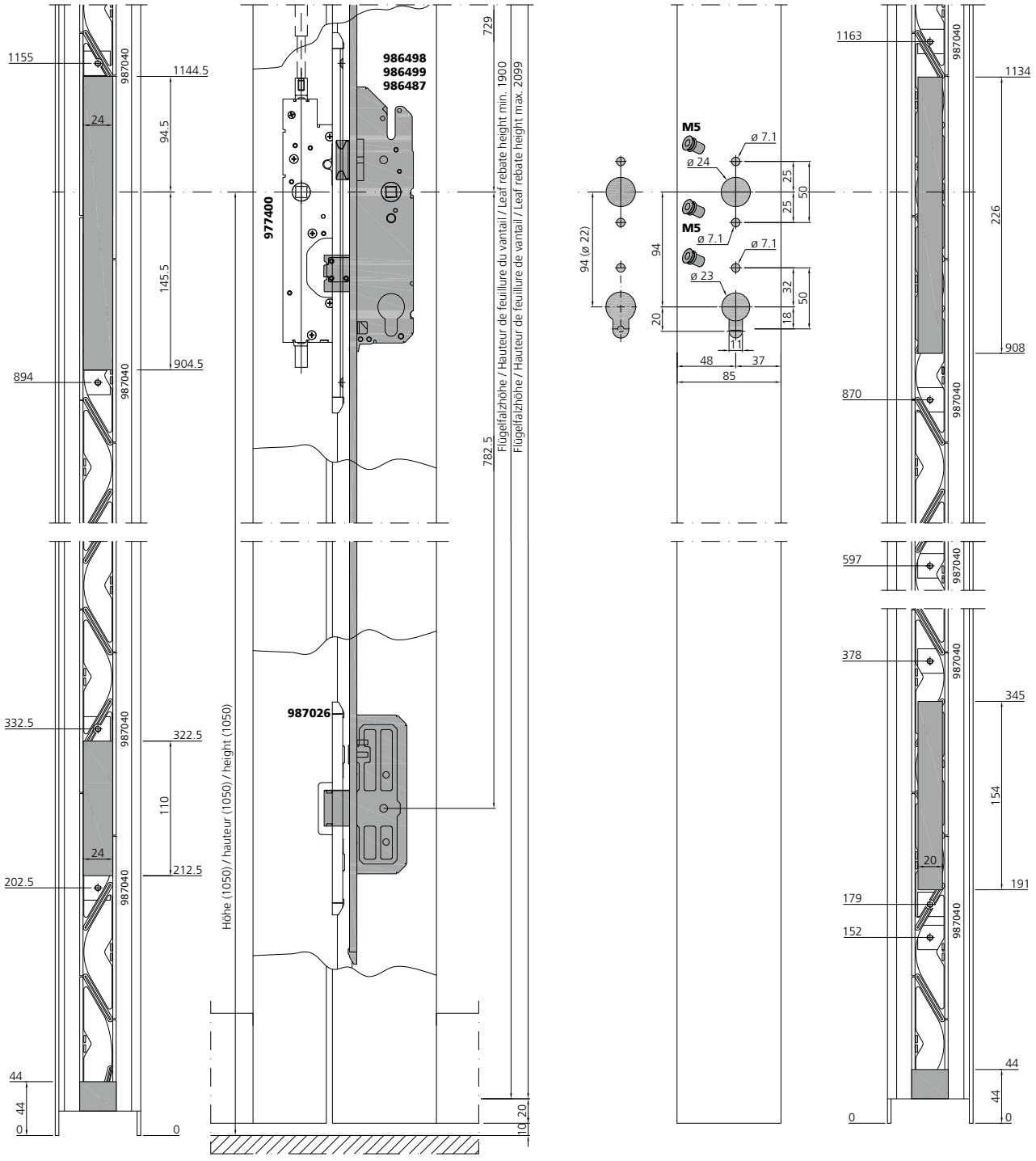
Montage serrure
Verrouillage 3 points
Hauteur du vantail 1935 - 2134 mm
Crémone anti-panique

Lock installation
3 point locking
Leaf height 1935 - 2134 mm
Anti-panic opposite lock



un_ep_0444

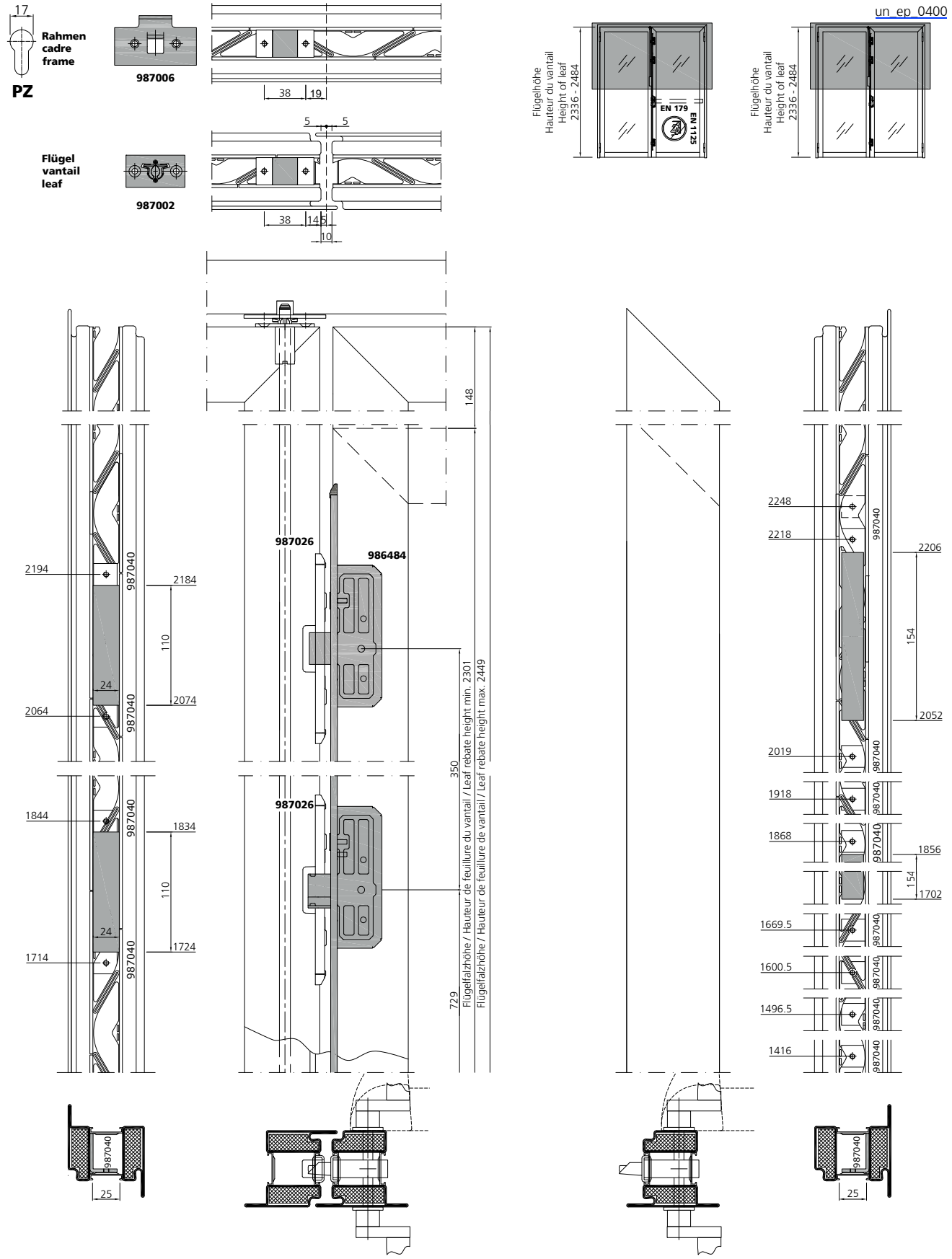




Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2336 - 2484 mm

Montage serrure
Verrouillage 4 points
Hauteur du vantail 2336 - 2484 mm

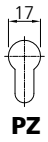
Lock installation
4 point locking
Leaf height 2336 - 2484 mm



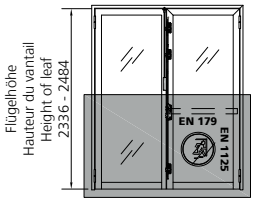
Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2336 - 2484 mm

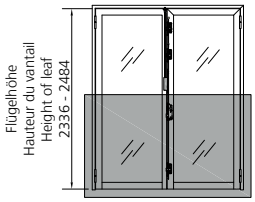
Montage serrure
Verrouillage 4 points
Hauteur du vantail 2336 - 2484 mm

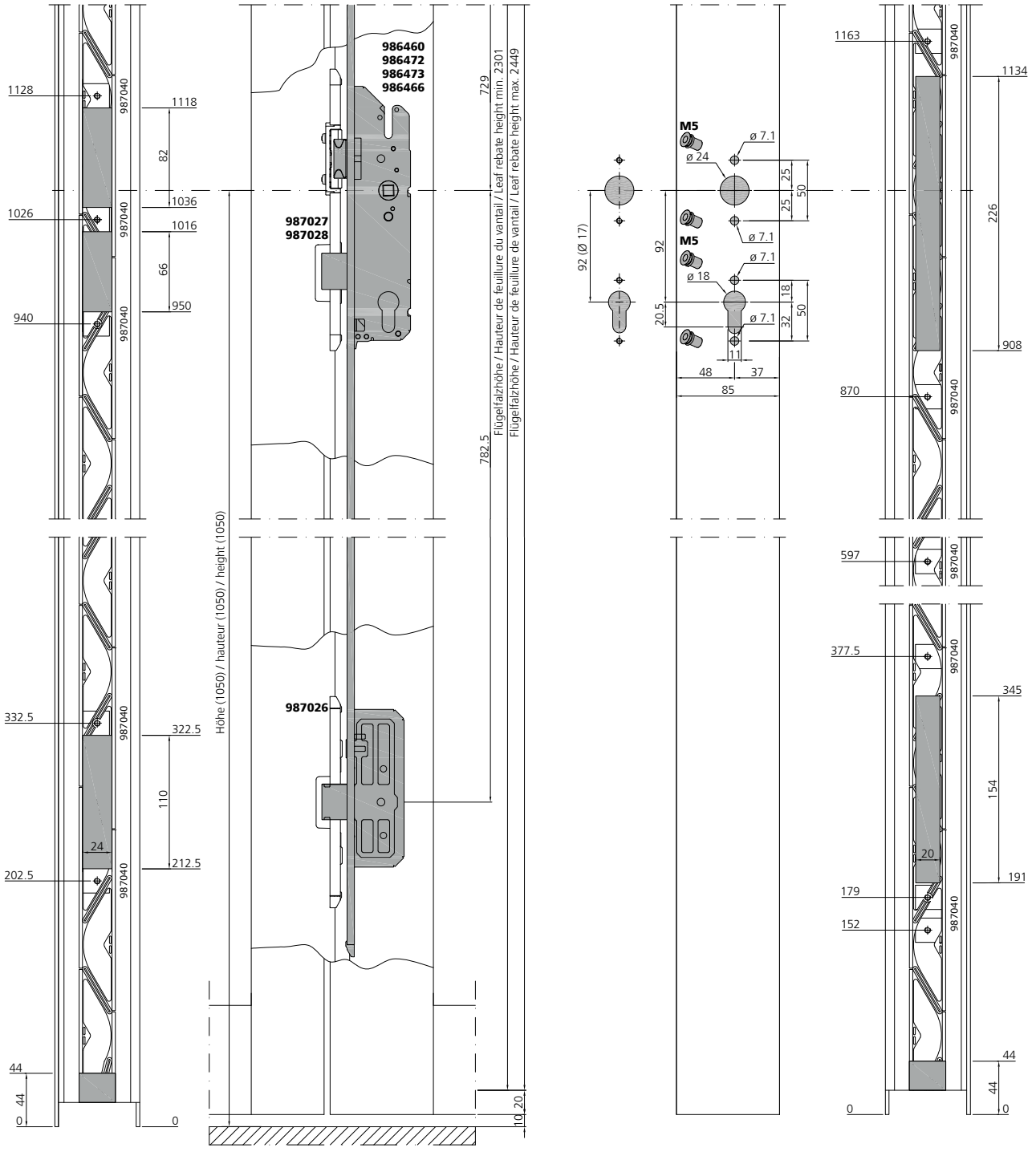
Lock installation
4 point locking
Leaf height 2336 - 2484 mm



un_ep_0400



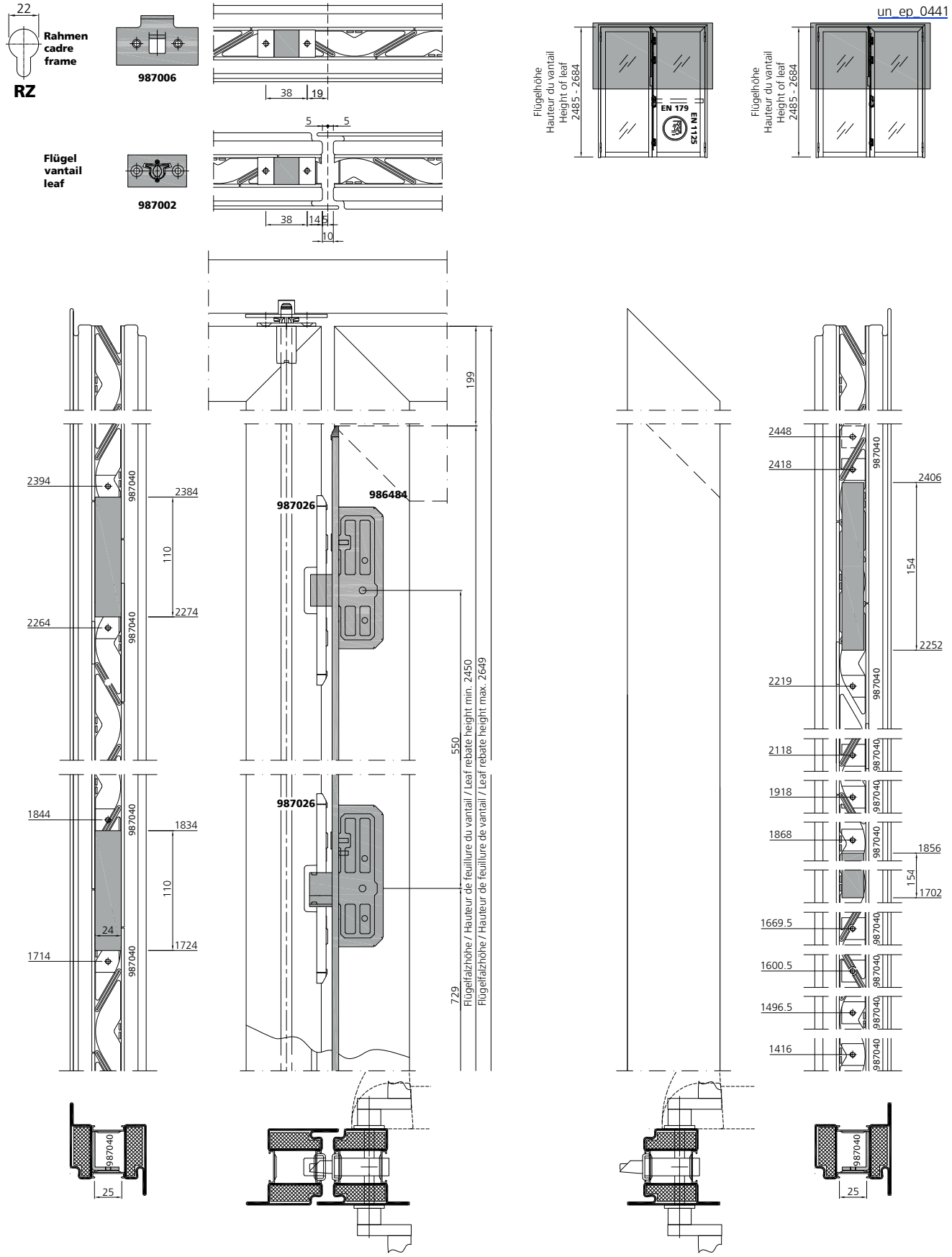




Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2485 - 2684 mm

Montage serrure
Verrouillage 4 points
Hauteur du vantail 2485 - 2684 mm

Lock installation
4 point locking
Leaf height 2485 - 2684 mm



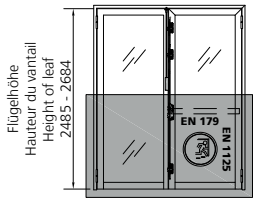
Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2485 - 2684 mm

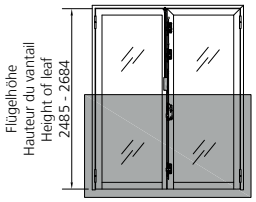
Montage serrure
Verrouillage 4 points
Hauteur du vantail 2485 - 2684 mm

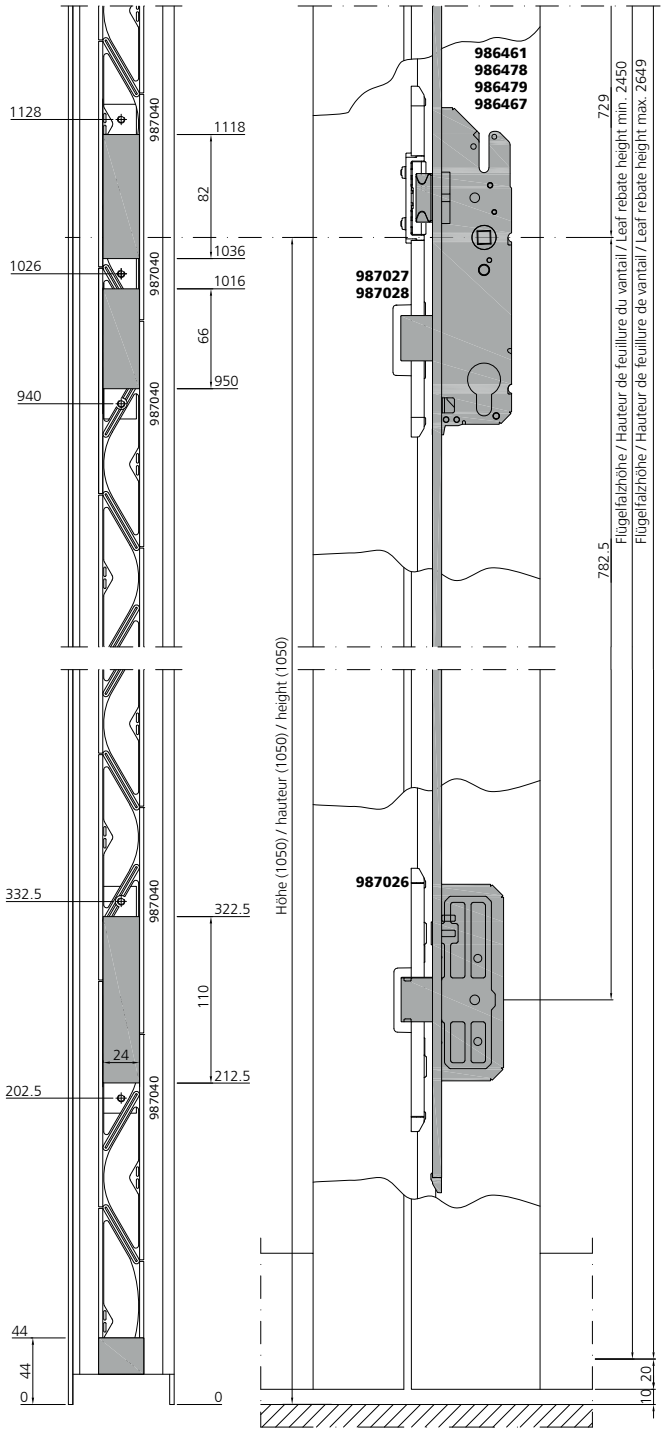
Lock installation
4 point locking
Leaf height 2485 - 2684 mm

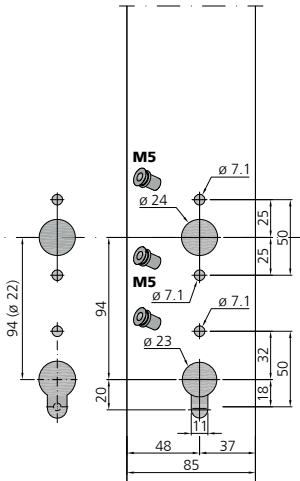


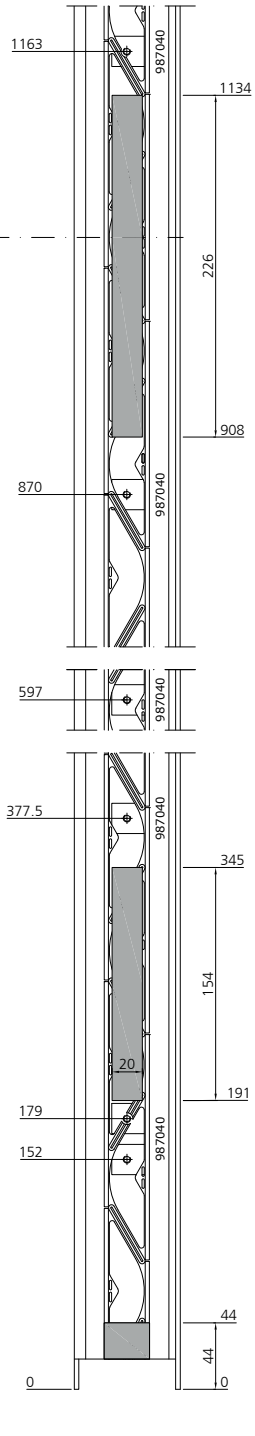
un_ep_0441







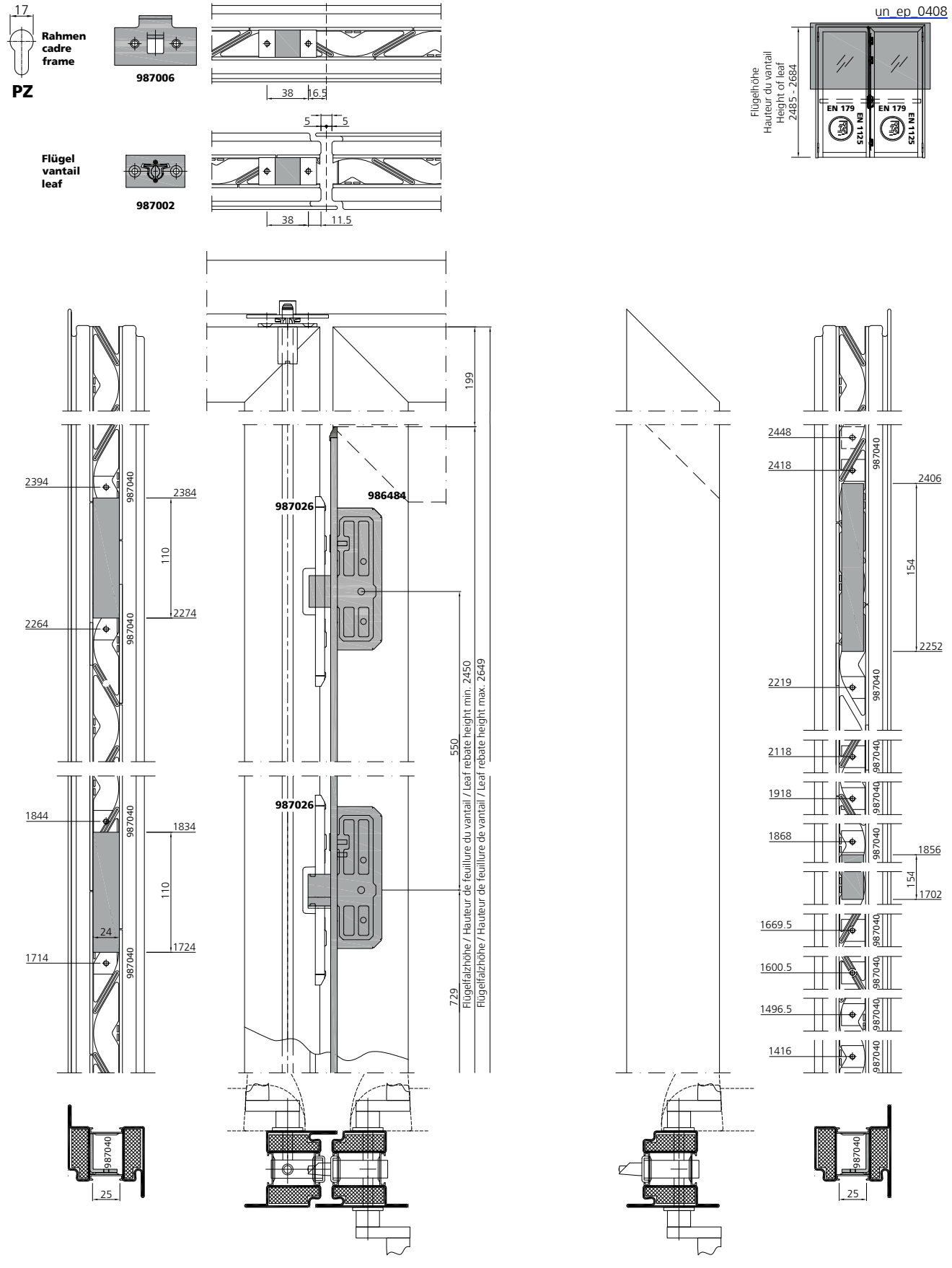




Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2485 - 2684 mm
Antipanik-Gegenkasten

Montage serrure
Verrouillage 4 points
Hauteur du vantail 2485 - 2684 mm
Crémone anti-panique

Lock installation
4 point locking
Leaf height 2485 - 2684 mm
Anti-panic opposite lock



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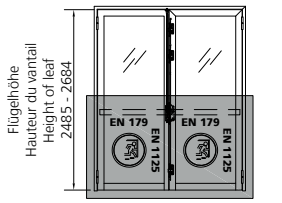
Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2485 - 2684 mm
Antipanik-Gegenkasten

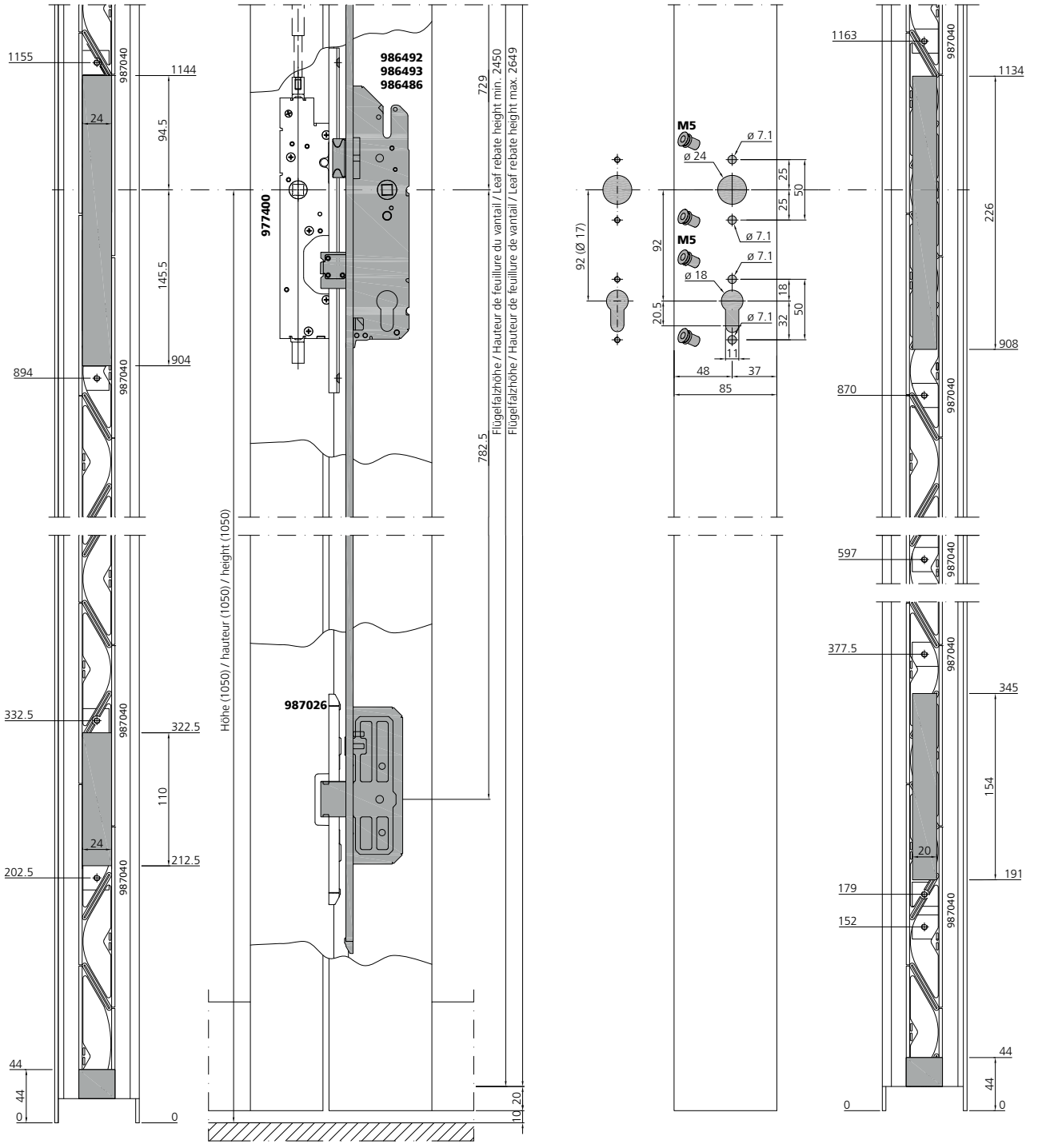
Montage serrure
Verrouillage 4 points
Hauteur du vantail 2485 - 2684 mm
Crémone anti-panique

Lock installation
4 point locking
Leaf height 2485 - 2684 mm
Anti-panic opposite lock



un_ep_0408

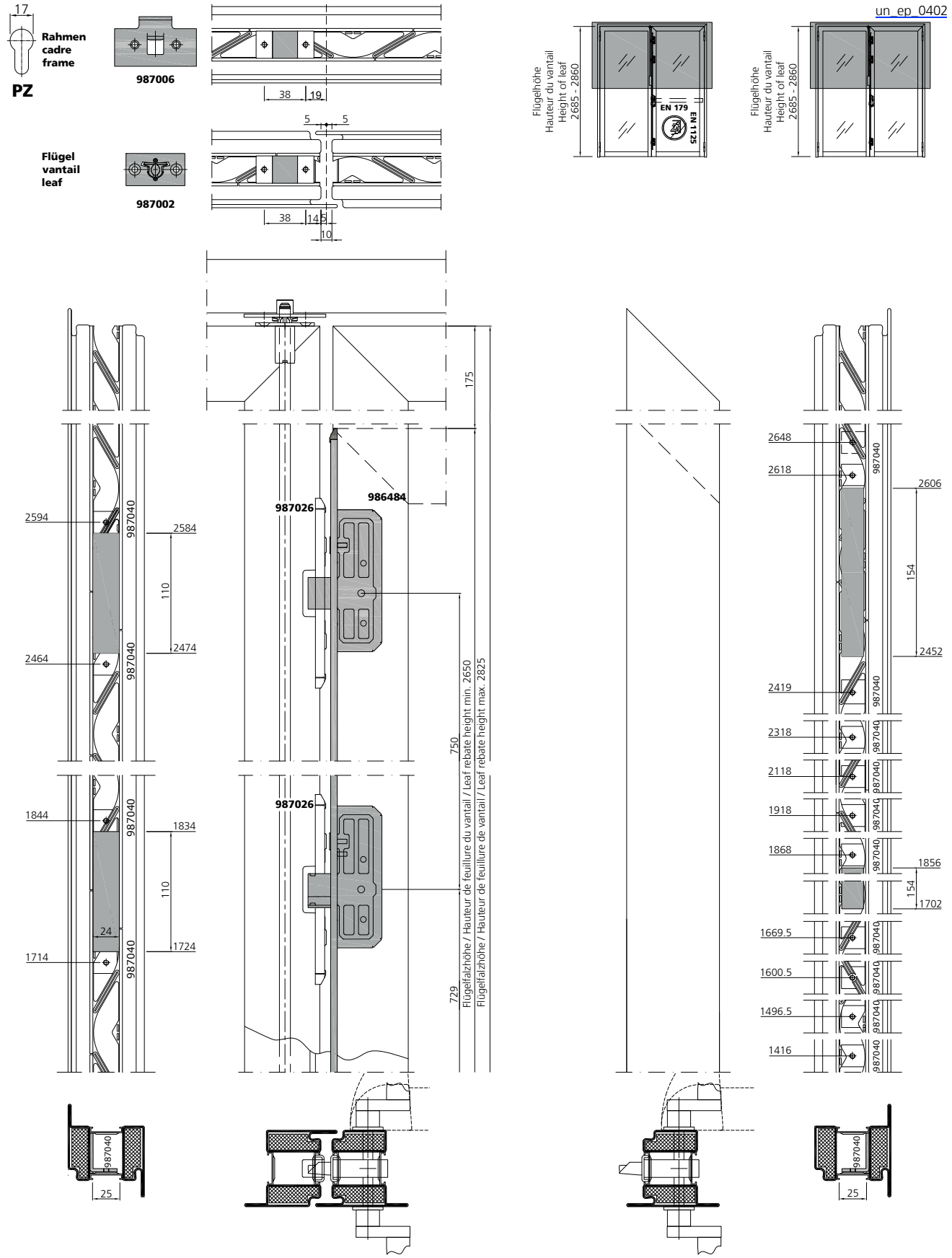




Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2685 - 2860 mm

Montage serrure
Verrouillage 4 points
Hauteur du vantail 2685 - 2860 mm

Lock installation
4 point locking
Leaf height 2685 - 2860 mm



Schlosseinbau
4-Punkt-Verriegelung
Flügelhöhe 2685 - 2860 mm

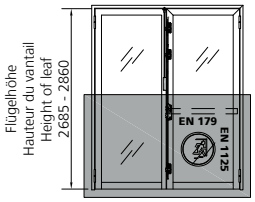
Montage serrure
Verrouillage 4 points
Hauteur du vantail 2685 - 2860 mm

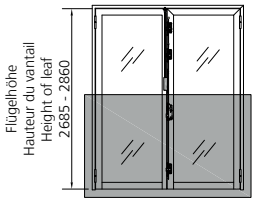
Lock installation
4 point locking
Leaf height 2685 - 2860 mm

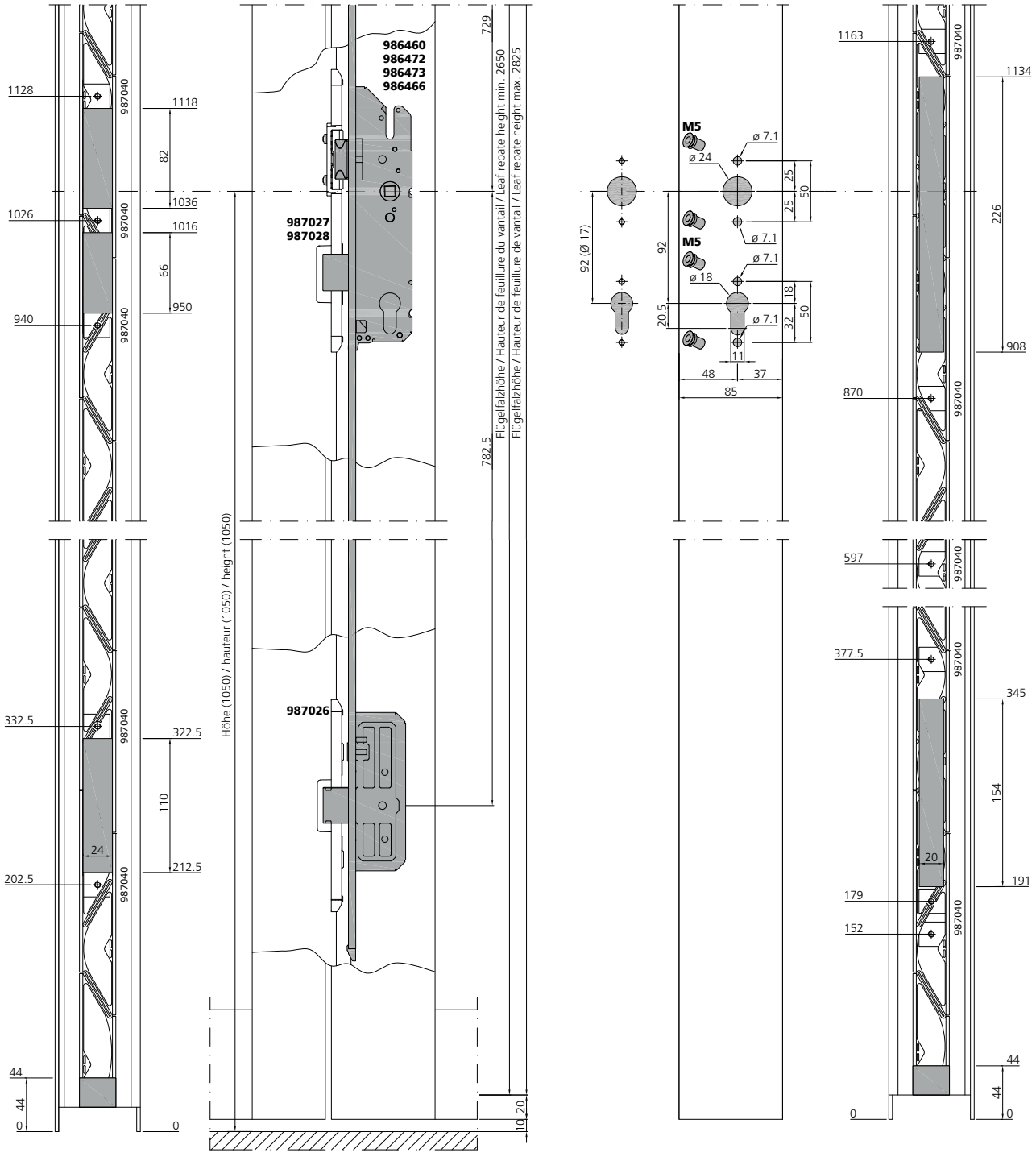


PZ

un_ep_0402





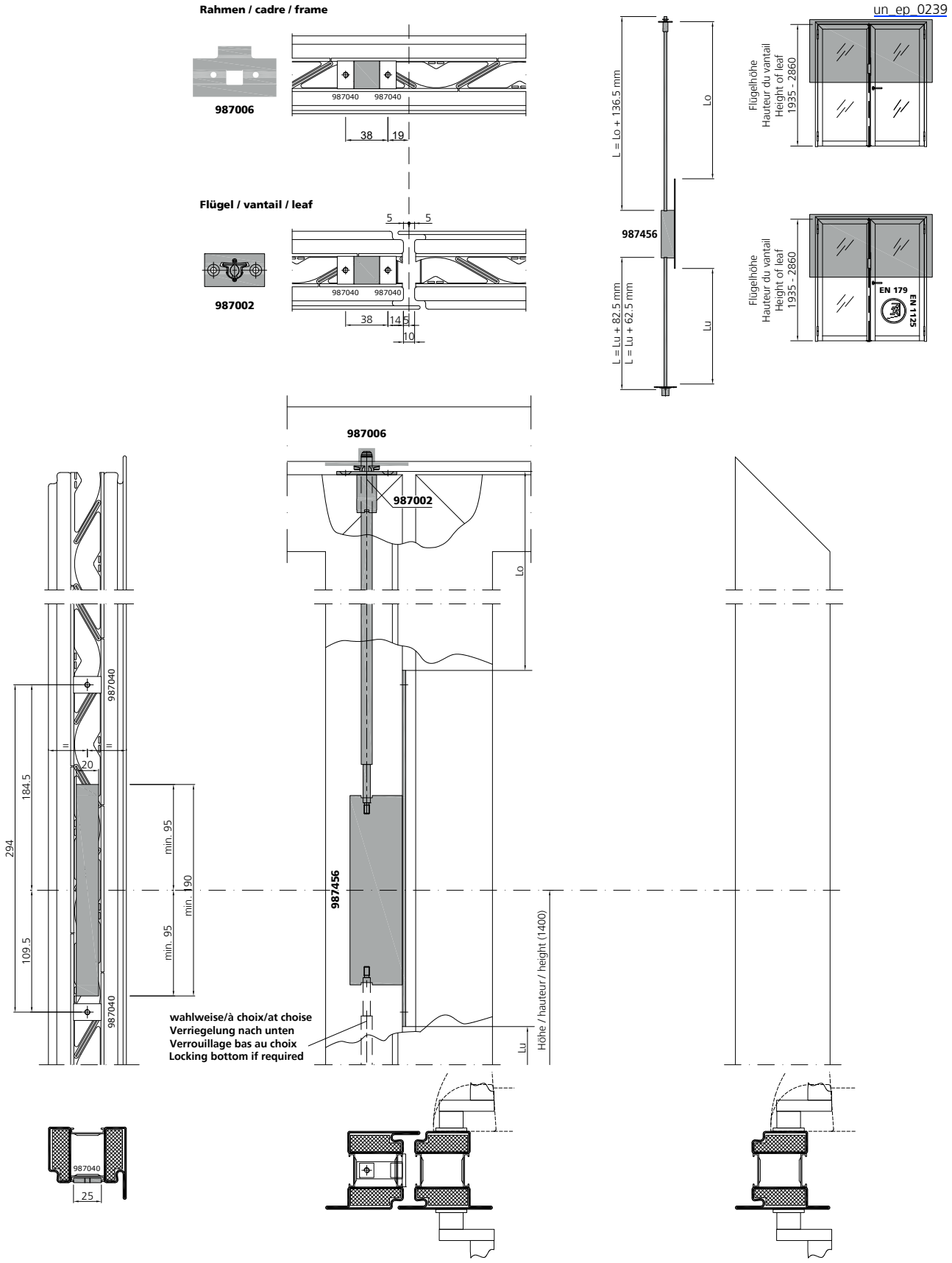


Schlosseinbau
Falztreibriegel
Flügelhöhe 1935 - 2860 mm

Montage serrure
Crémone à levier
Hauteur du vantail 1935 - 2860 mm

Lock installation
2 leaves
Leaf height 1935 - 2860 mm

un_ep_0239

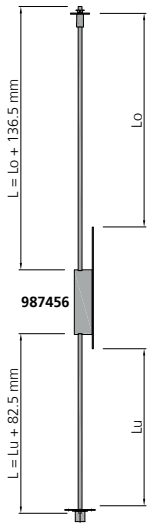


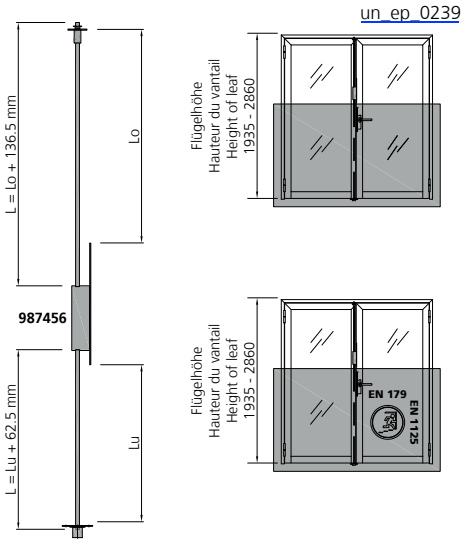
09/23

Schlosseinbau
Falztreibriegel
Flügelhöhe 1935 - 2860 mm

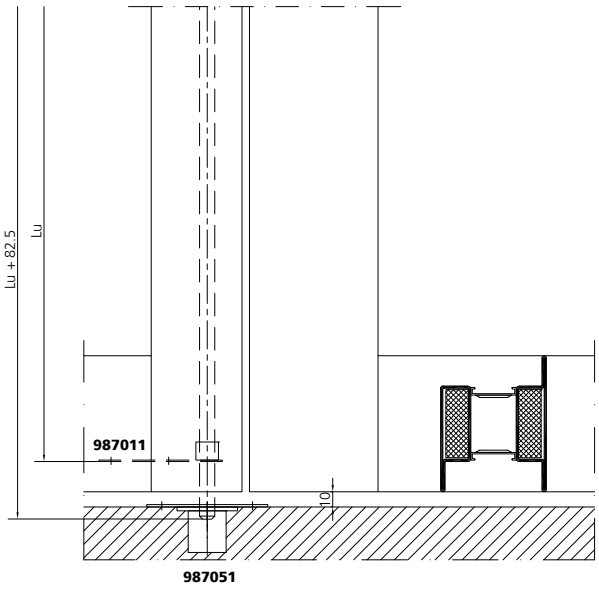
Montage serrure
Crémone à levier
Hauteur du vantail 1935 - 2860 mm

Lock installation
2 leaves
Leaf height 1935 - 2860 mm

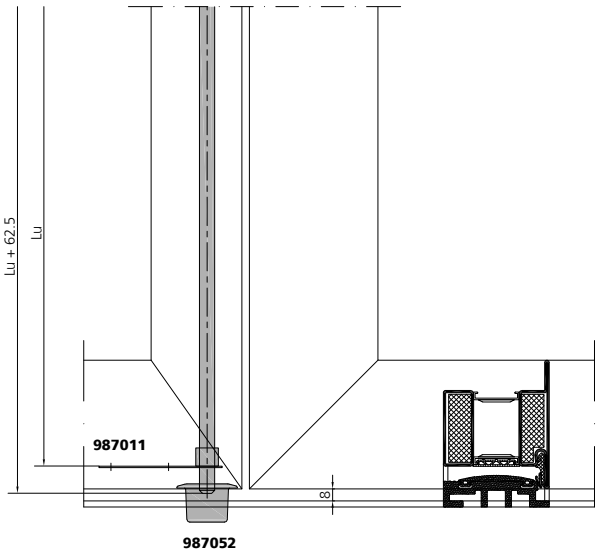


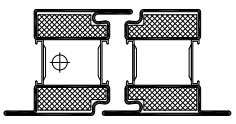


wahlweise/à choix/at choise
Verriegelung nach unten
Verrouillage bas au choix
Locking bottom if required



zwingend/obligatoire/mandatory
Verriegelung nach unten
Verrouillage bas au choix
Locking bottom if required



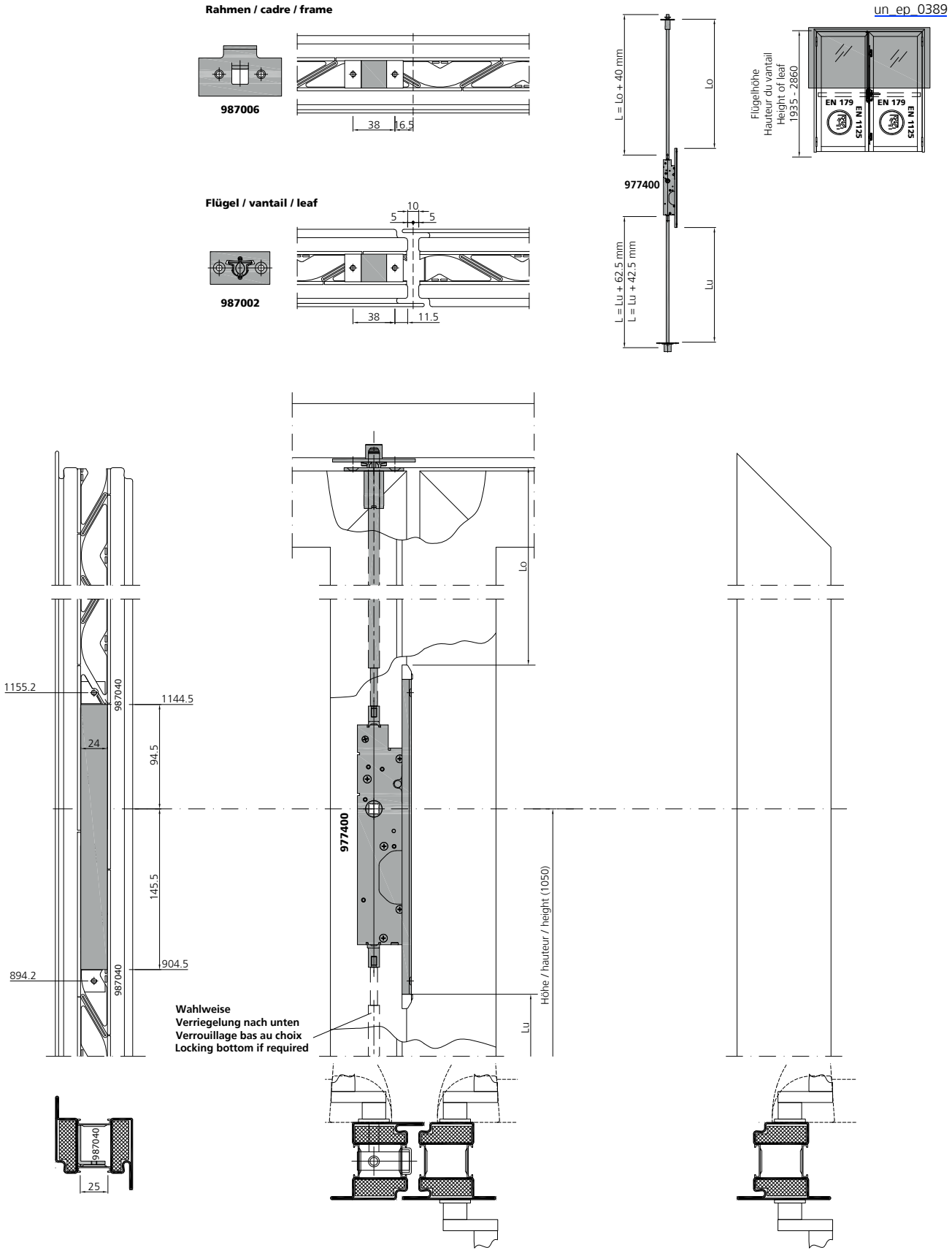


Schlosseinbau
Antipanik-Gegenkasten
Flügelhöhe 1935 - 2860 mm

Montage serrure
Crémone anti-panique
Hauteur du vantail 1935 - 2860 mm

Lock installation
Anti-panic opposite lock
Leaf height 1935 - 2860 mm

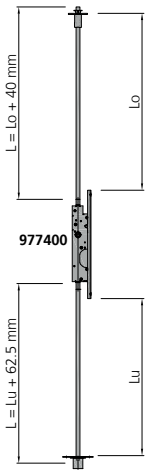
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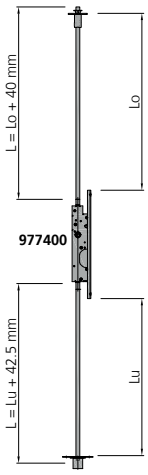


Schlosseinbau
Antipanik-Gegenkasten
Flügelhöhe 1935 - 2860 mm

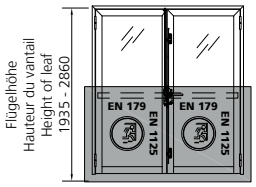
Montage serrure
Crémone anti-panique
Hauteur du vantail 1935 - 2860 mm

Lock installation
Anti-panic opposite lock
Leaf height 1935 - 2860 mm

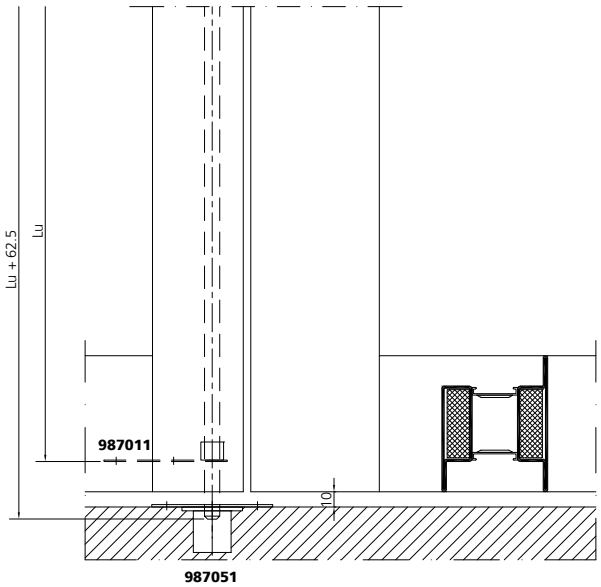




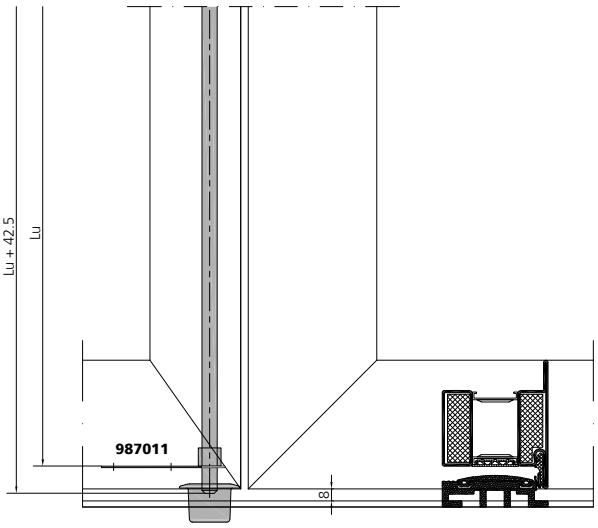
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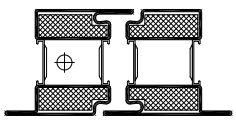


wahlweise/à choix/at choise
Verriegelung nach unten
Verrouillage bas au choix
Locking bottom if required



zwingend/obligatoire/mandatory
Verriegelung nach unten
Verrouillage bas au choix
Locking bottom if required

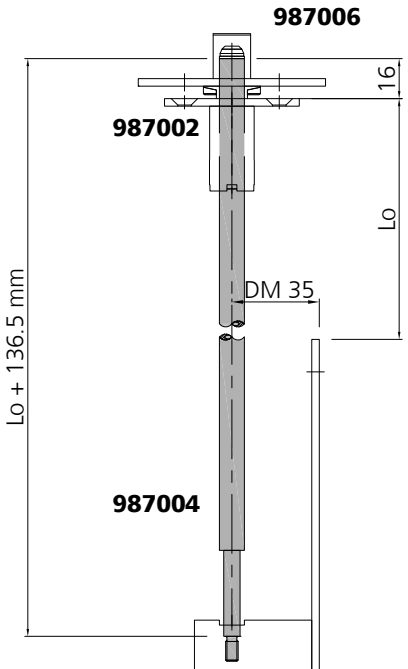


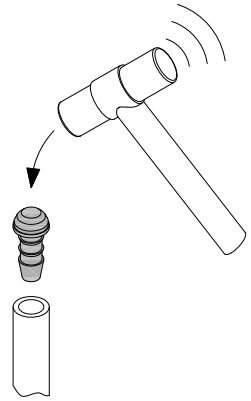


Zuschnitt für Standflügelverriegelung

Débit pour verrouillage de vantail semi-fixe

Cutting for locking of fixed leaf



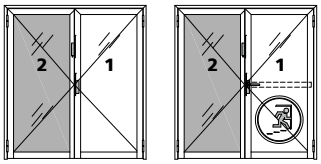


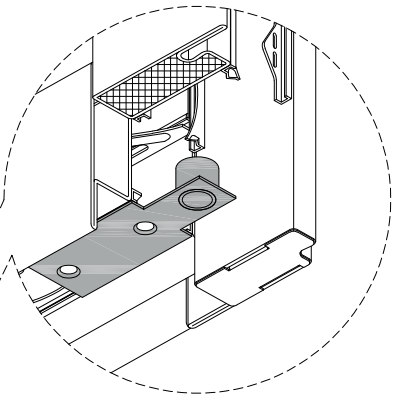
Einschlagen des Gleitstopfens nur im "nichtmontierten" Zustand
Gewinde am Stangenende nicht beschädigen!

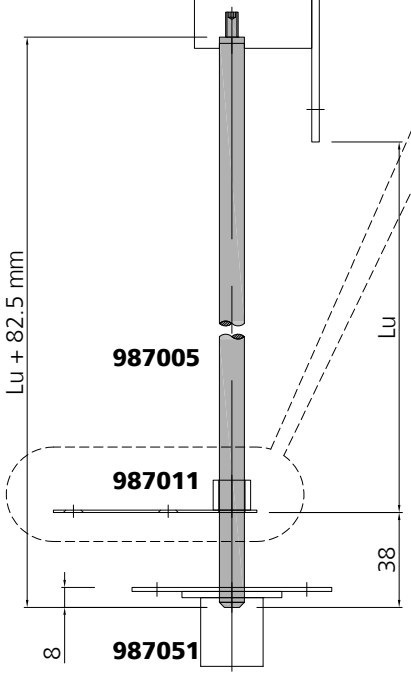
Pose de l`arrêt anti-friction "non monté"
Ne pas abîmer le filetage sur l`etrémité de la tige!

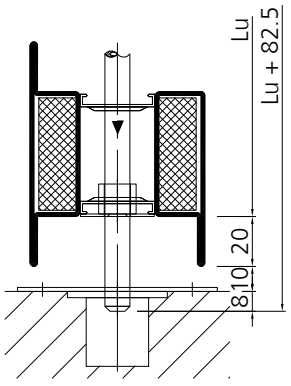
drive in sliding stopper only in unscrewed status
do not damage the thread at the end of the bolt!

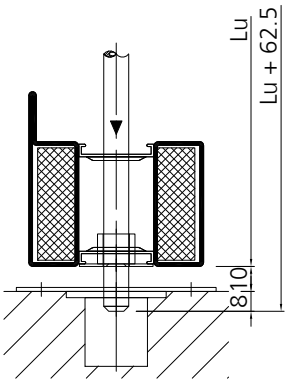
Selbstverriegelndes Falztreibriegelschloss
Crémone à verrouillage automatique à commande à levier
Self-locking drive bolt lock









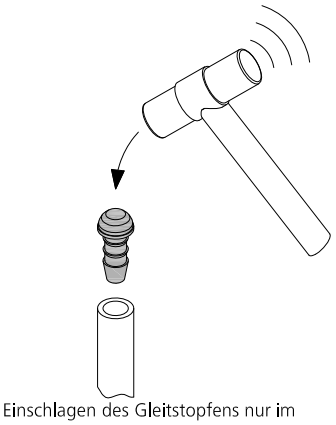


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Zuschnitt für Standflügelverriegelung
Isolierte Schwellen

Débit pour verrouillage de vantail semi-fixe
Seuils isolés

Cutting for locking of fixed leaf
Insulated thresholds

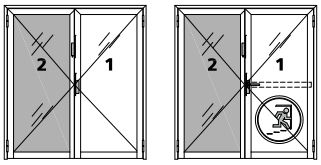


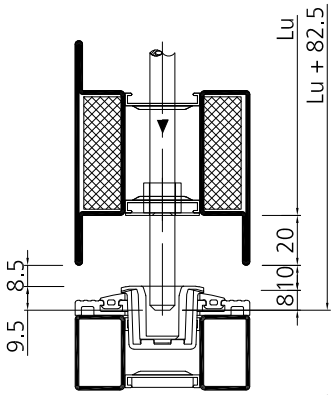
Einschlagen des Gleitstopfens nur im "nichtmontierten" Zustand
Gewinde am Stangenende nicht beschädigen!

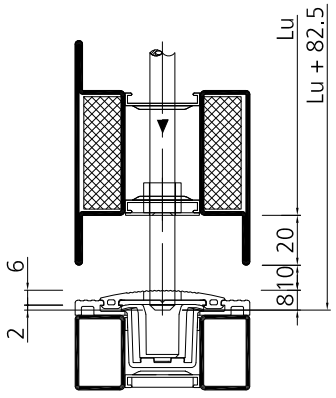
Pose de l'arrêt anti-friction "non monté"
Ne pas abîmer le filetage sur l'etrémité de la tige!

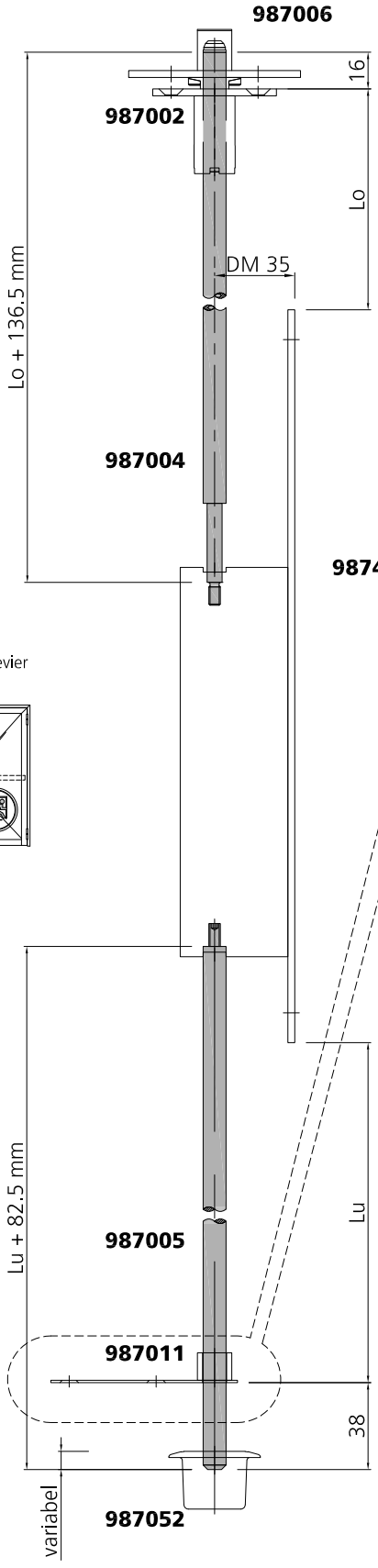
drive in sliding stopper only in unscrewed status
do not damage the thread at the end of the bolt!

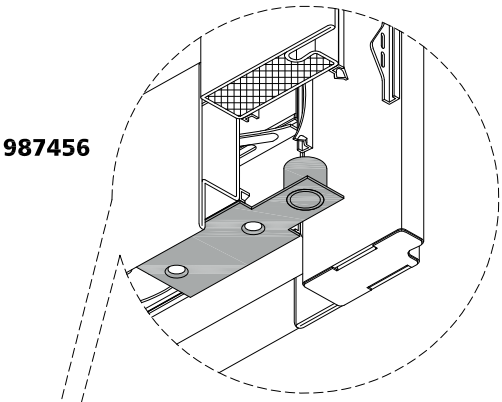
Selbstverriegelndes Falztreibriegelschloss
Crémone à verrouillage automatique à commande à levier
Self-locking drive bolt lock

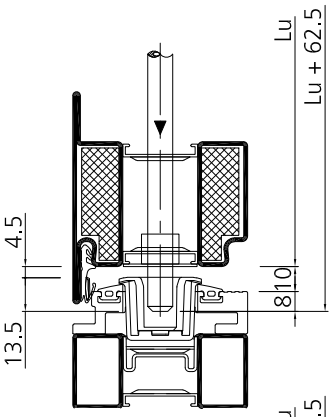


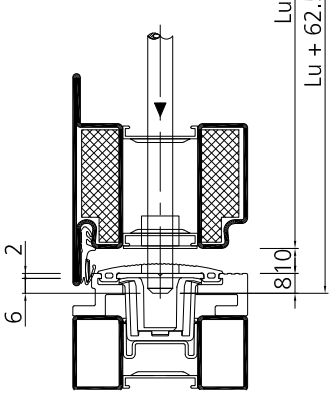












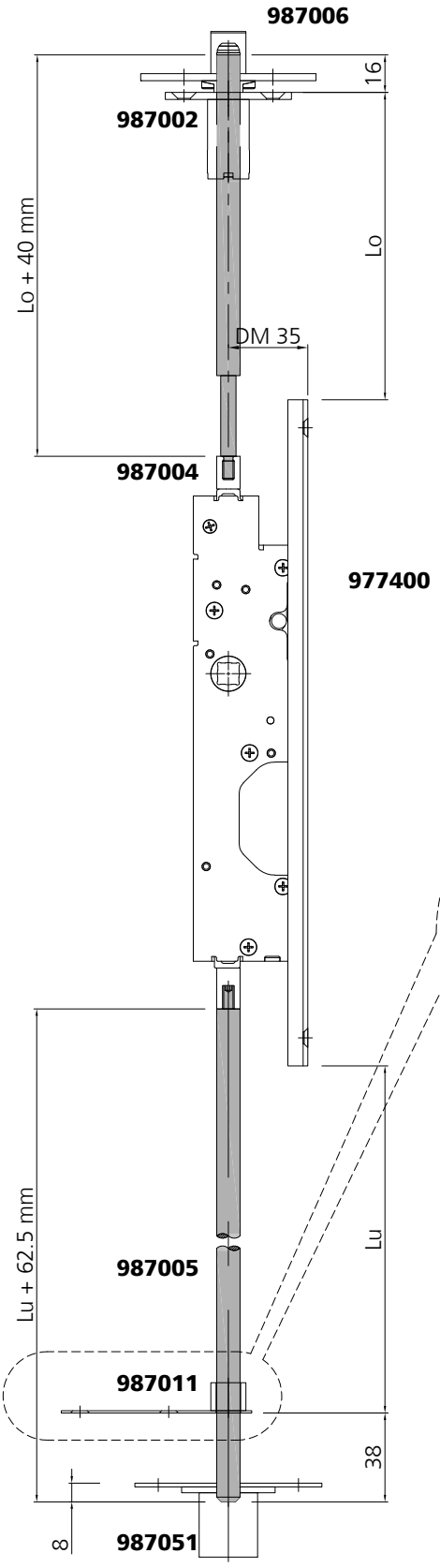
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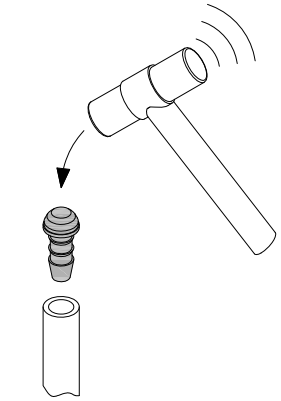
09/23

Zuschnitt für Standflügelverriegelung
Antipanik-Gegenkasten

Débit pour verrouillage de vantail semi-fixe
Crémone anti-panique

Cutting for locking of fixed leaf
Anti-panic opposite lock



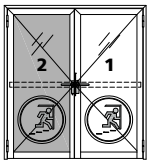


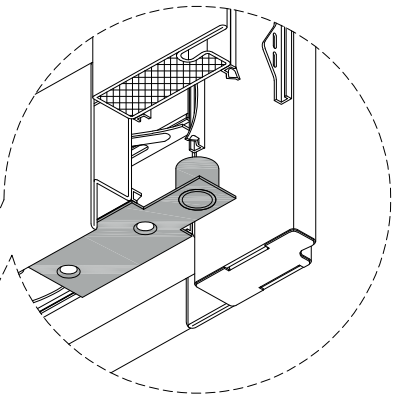
Einschlagen des Gleitstopfens nur im "nichtmontierten" Zustand
Gewinde am Stangenende nicht beschädigen!

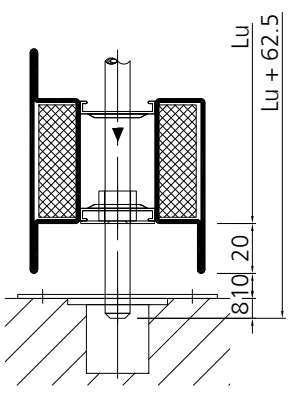
Pose de l`arrêt anti-friction "non monté"
Ne pas abîmer le filetage sur l`etrémité de la tige!

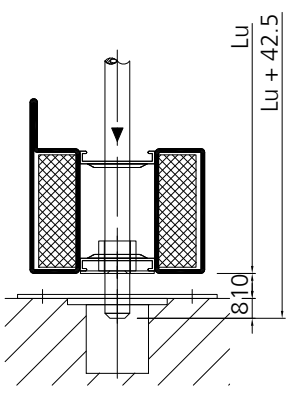
drive in sliding stopper only in unscrewed status
do not damage the thread at the end of the bolt!

Antipanik-Gegenkasten
Crémone anti-panique
Anti-panic opposite lock



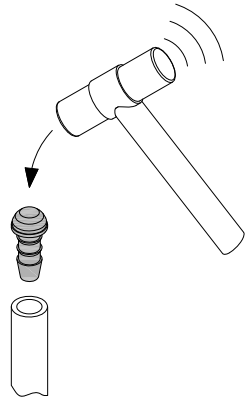






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Zuschnitt für Standflügelverriegelung
Isolierte Schwellen
Antipanik-Gegenkasten

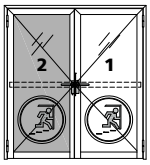


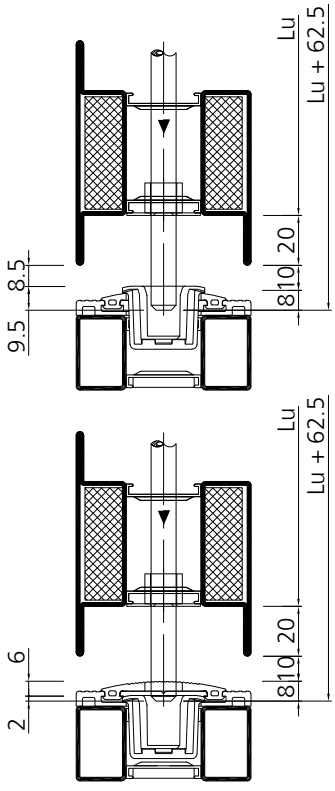
Einschlagen des Gleitstopfens nur im "nichtmontierten" Zustand
Gewinde am Stangenende nicht beschädigen!

Pose de l'arrêt anti-friction "non monté"
Ne pas abîmer le filetage sur l'etrémité de la tige!

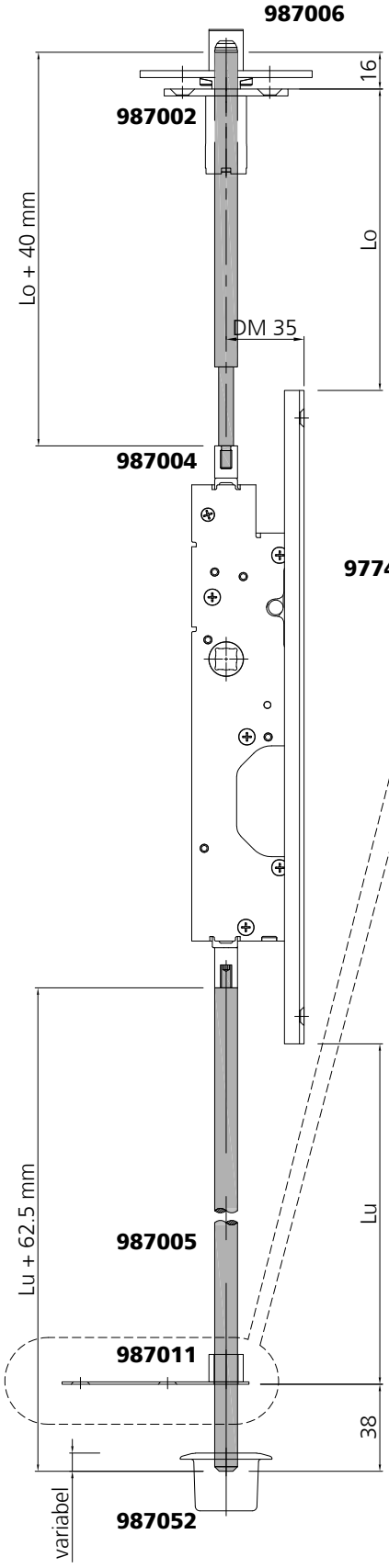
drive in sliding stopper only in unscrewed status
do not damage the thread at the end of the bolt!

Antipanik-Gegenkasten
Crémone anti-panique
Anti-panic opposite lock

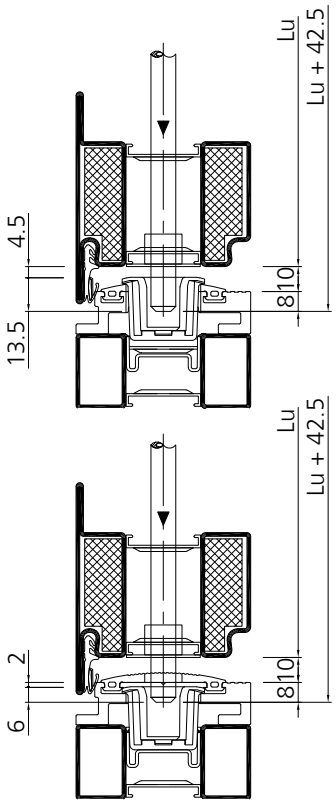




Débit pour verrouillage de vantail semi-fixe
Seuils isolés
Crémone anti-panique



Cutting for locking of fixed leaf
Insulated thresholds
Anti-panic opposite lock



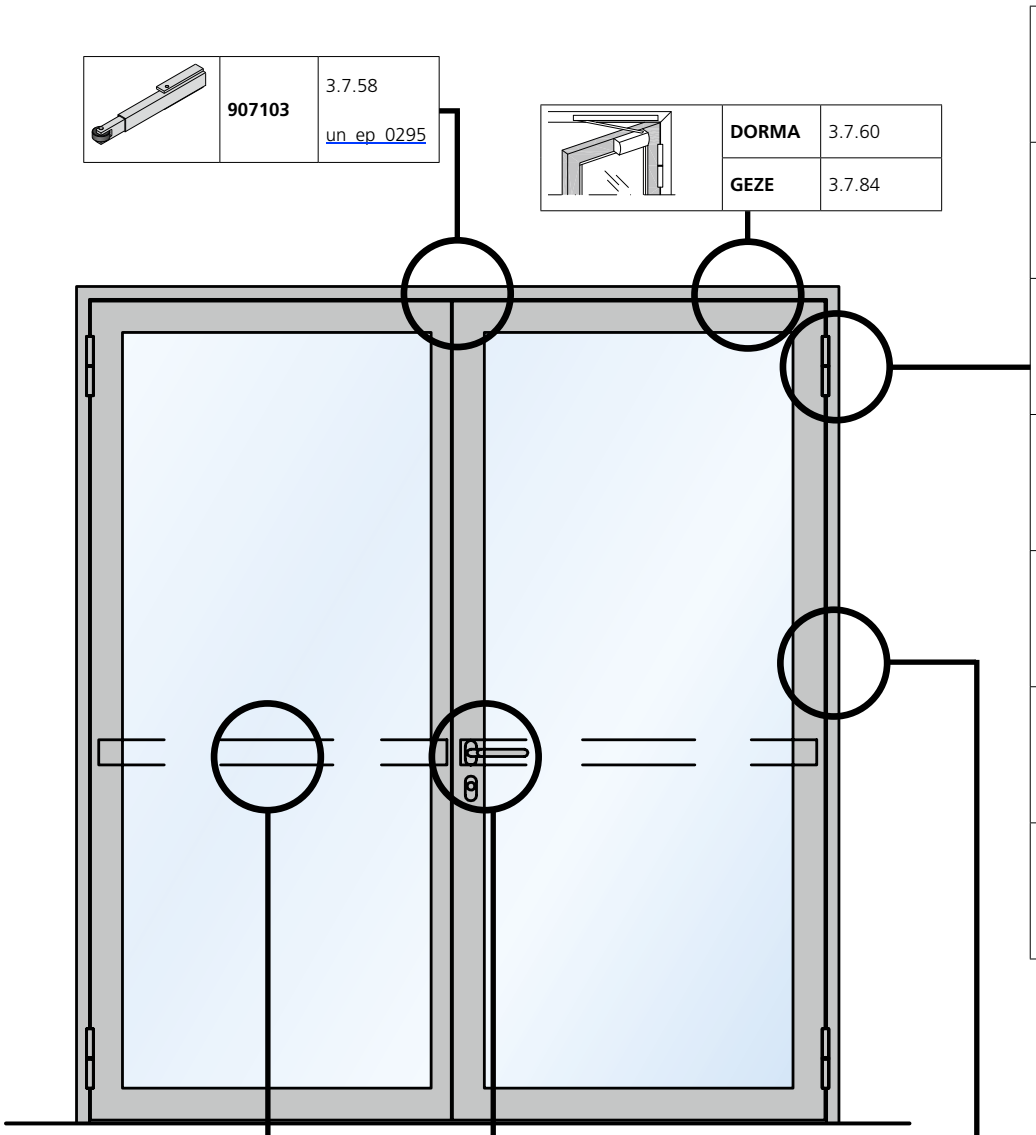
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09/23

Einbau Bänder, Drücker und Türschliesser

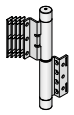
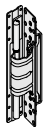
Montage paumelles, poignées et ferme-portes

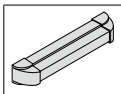
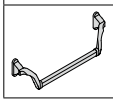
Installation of hinges, handles and door closers

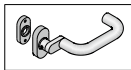
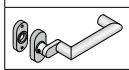


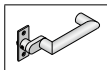
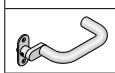
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	DORMA	3.7.60
	GEZE	3.7.84

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	**907663**	3.7.47 un_ep_0283
	**907667** **907668**	3.7.46 un_ep_0282
	**907669**	3.7.52 un_ep_0284
	**987612** **987613** **987623** **987624**	3.7.48 un_ep_0285
	**907680** **907681**	3.7.50 un_ep_0280
	**907740**	3.7.54 un_ep_0286

	**987207-** **987210**	3.7.32
	**907286-** **907289**	3.7.35

	**907350**	3.7.30
	**907351**	
	**907356**	

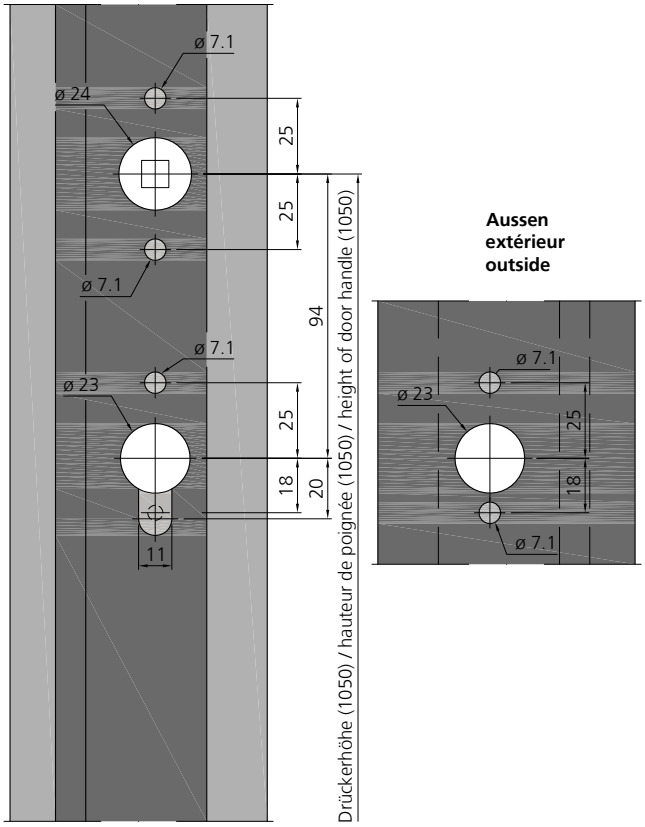
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	**987713**	3.7.56 un_ep_0288
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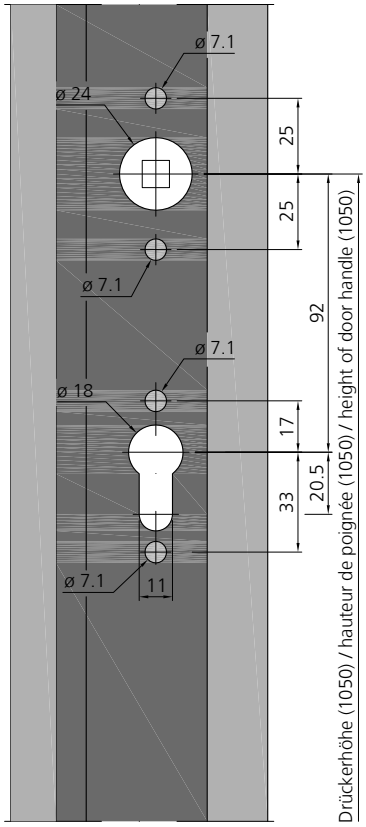
Einbau Drücker RZ/PZ
907326, 907327, 907329

Montage poignée de porte CR/CP
907326, 907327, 907329

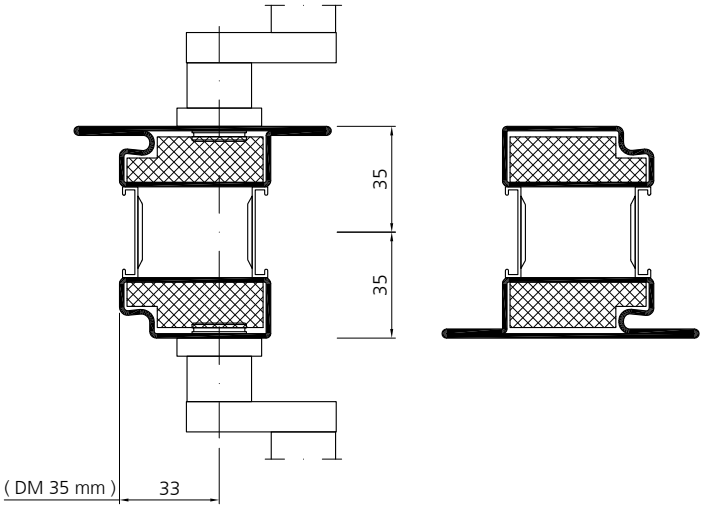
Door handle installation RC/PC
907326, 907327, 907329

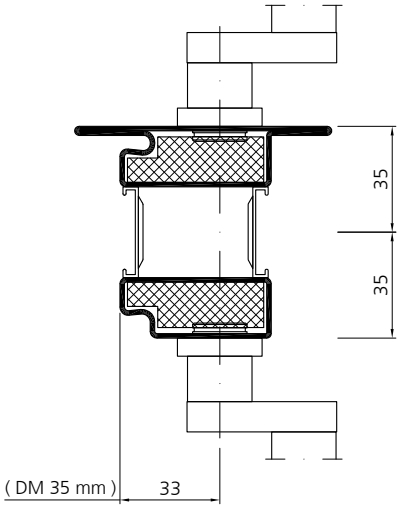


RZ / CR / RC



PZ / CP / PC

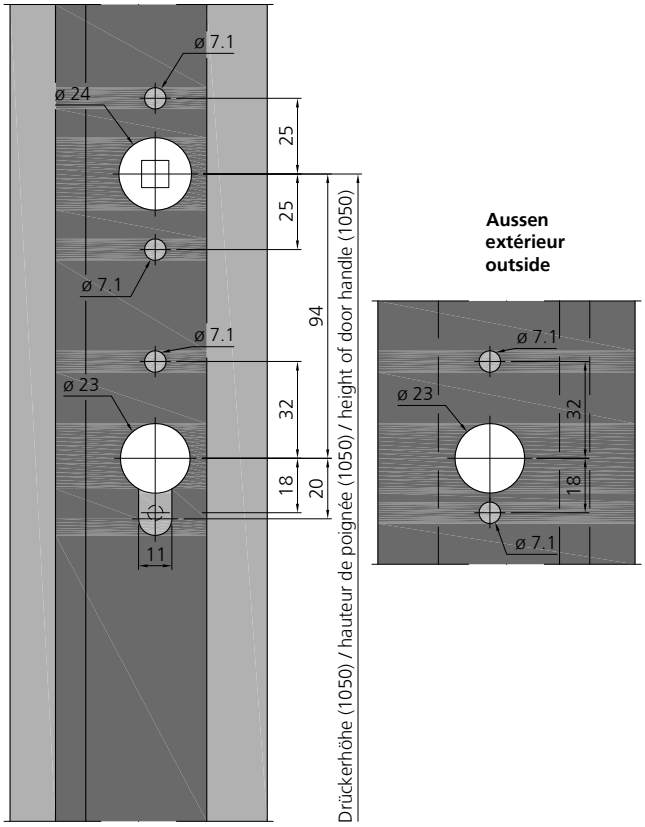




Einbau Drücker RZ/PZ
907350, 907351, 907356

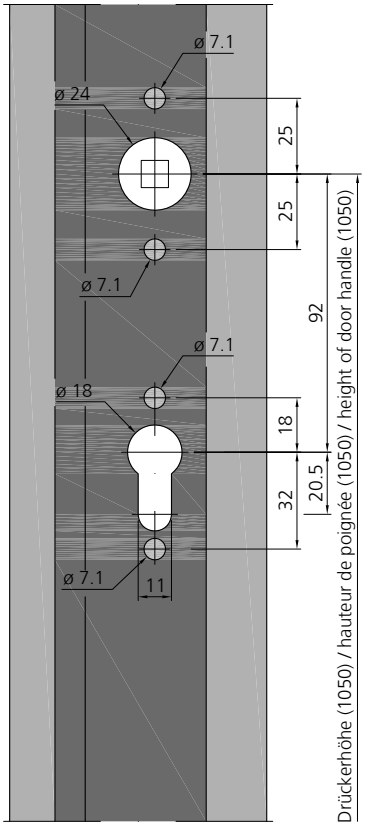
Montage poignée de porte CR/CP
907350, 907351, 907356

Door handle installation RC/PC
907350, 907351, 907356

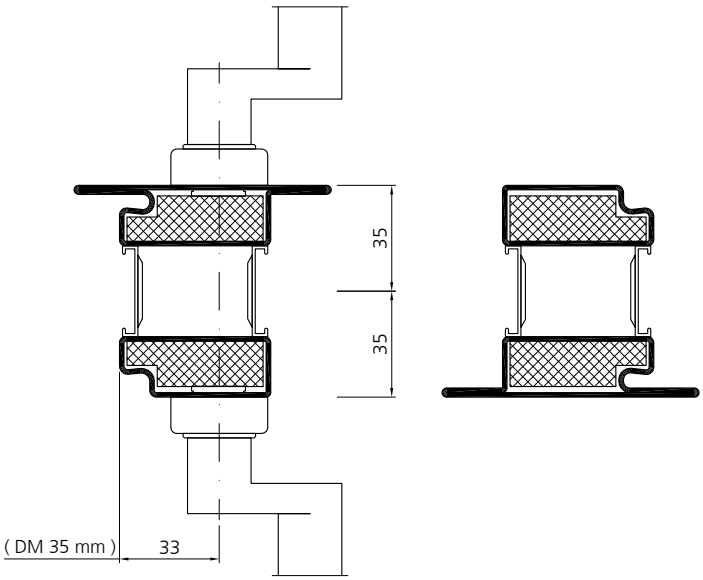


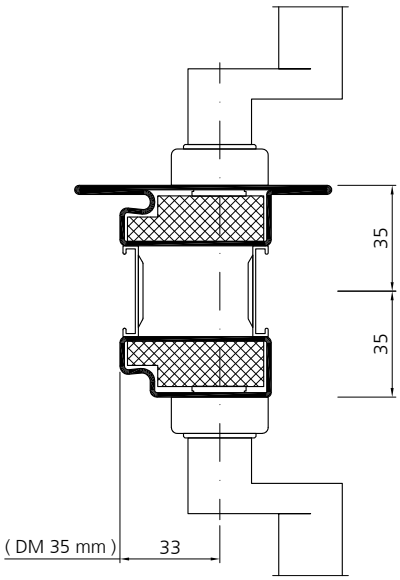
RZ / CR / RC

Aussen
extérieur
outside



PZ / CP / PC

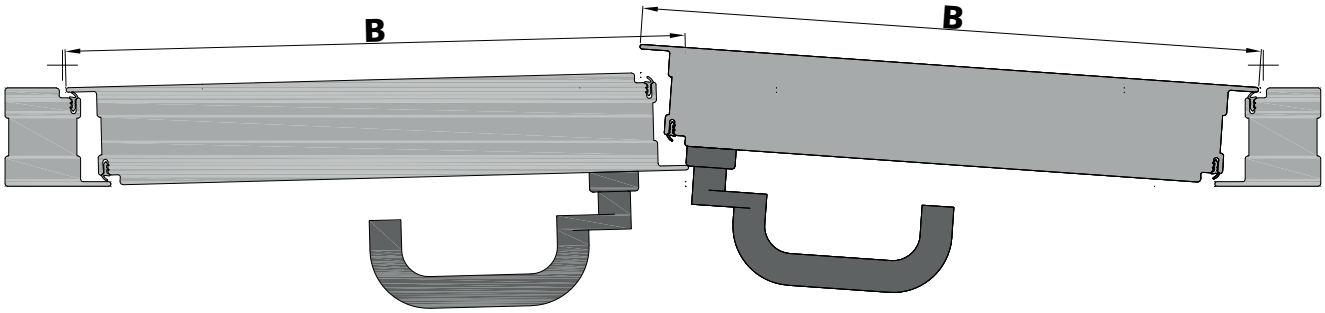




Einbau Drücker
Minimale Flügelbreiten

Montage poignée de porte
Largeur minimale des vantaux

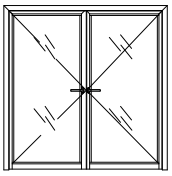
Door handle installation
Minimum leaf width



B : min. Flügelbreite / min. largeur de vantail / min. leaf width

		B
Band / Paumelle / Hinge	**907662 907664**	850 mm
	907667 907668	850 mm
	907663	850 mm
	907669	850 mm

		B
Band / Paumelle / Hinge	**987612 - 987613 987623 - 987624**	850 mm
	987680 987681	850 mm
	907740	850 mm

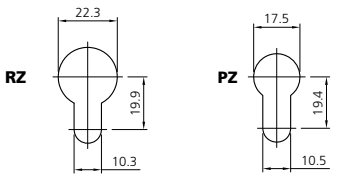


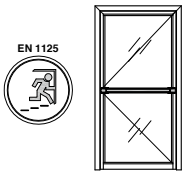
Einbau Anti-Panik-Druckstange
1-flügelige Tür

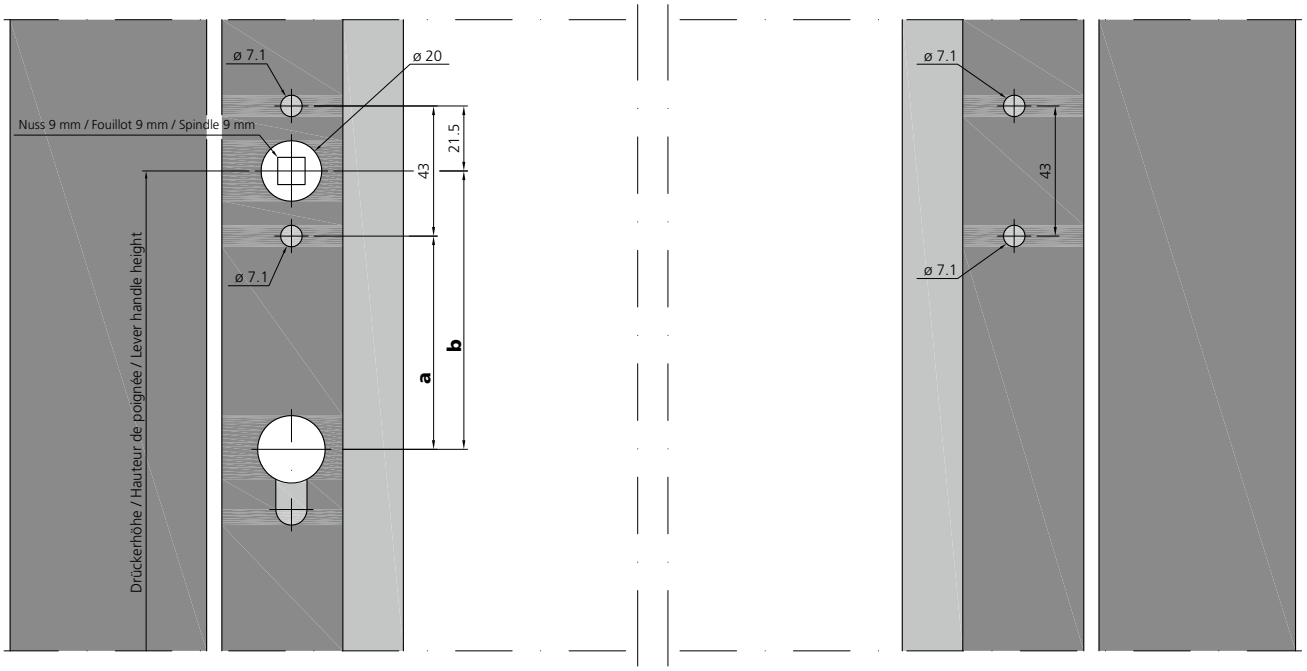
Montage pushbar anti-panique
Porte à 1 vantail

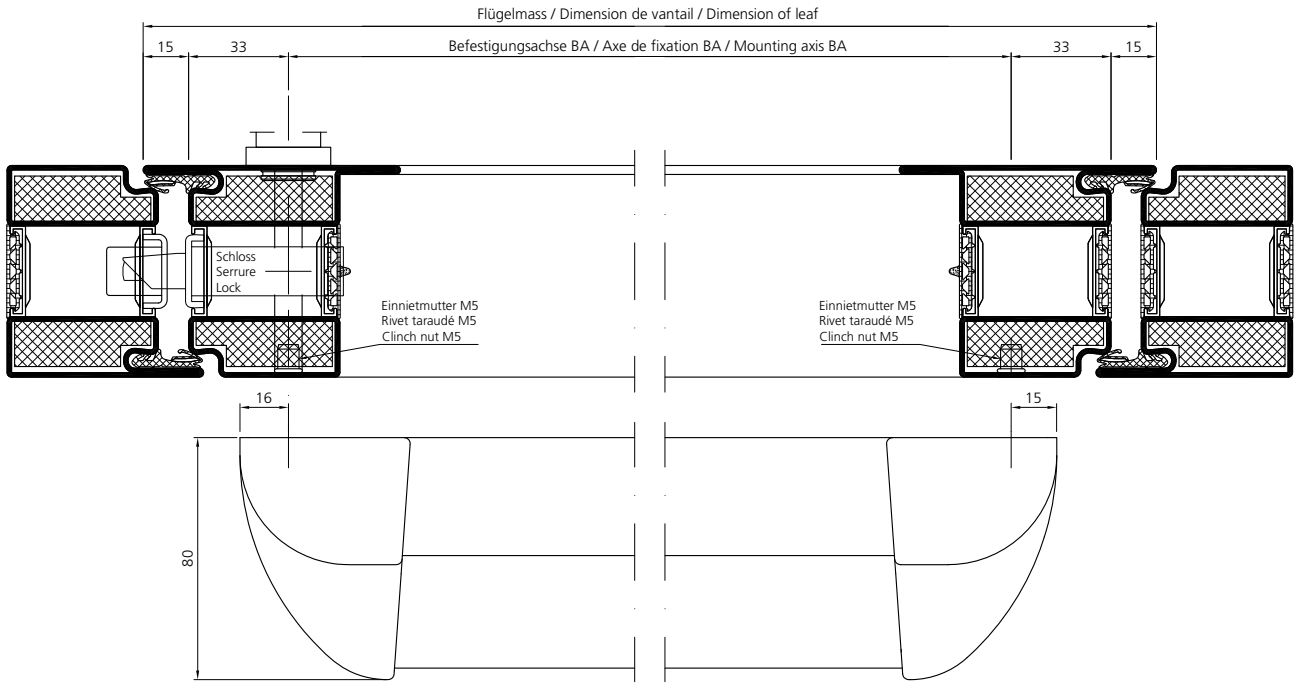
Anti-panic touch-bar installation
Single leaved door

	a	b
RZ	94	115.5
PZ	92	113.5







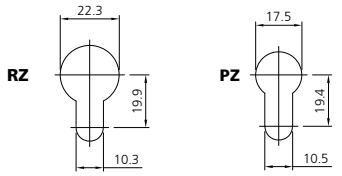


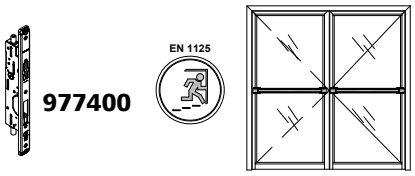
Einbau Anti-Panik-Druckstange
2-flügelige Tür

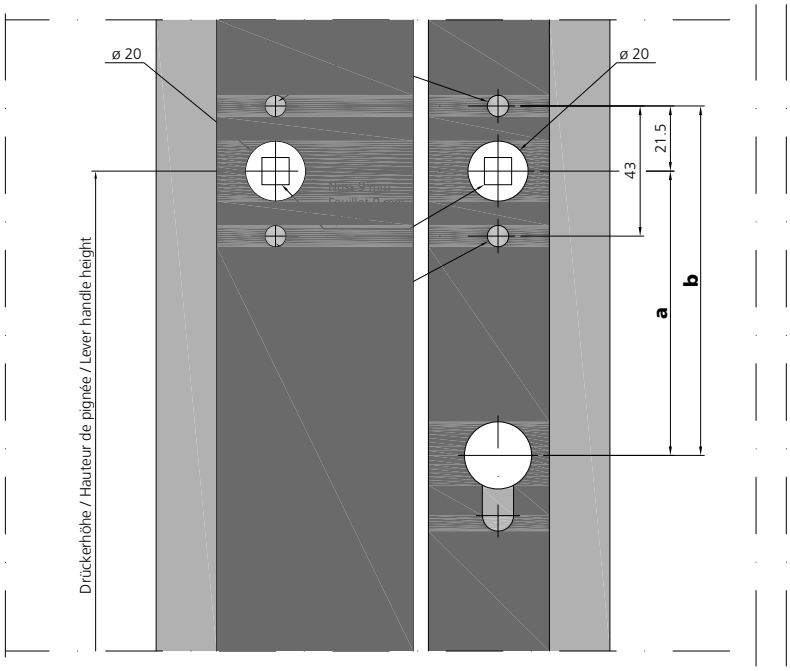
Montage pushbar anti-panique
Portes à 2 vantaux

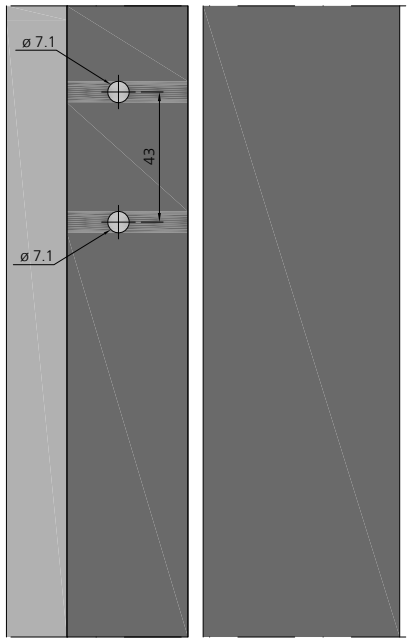
Anti-panic touch-bar installation
Double leaf door

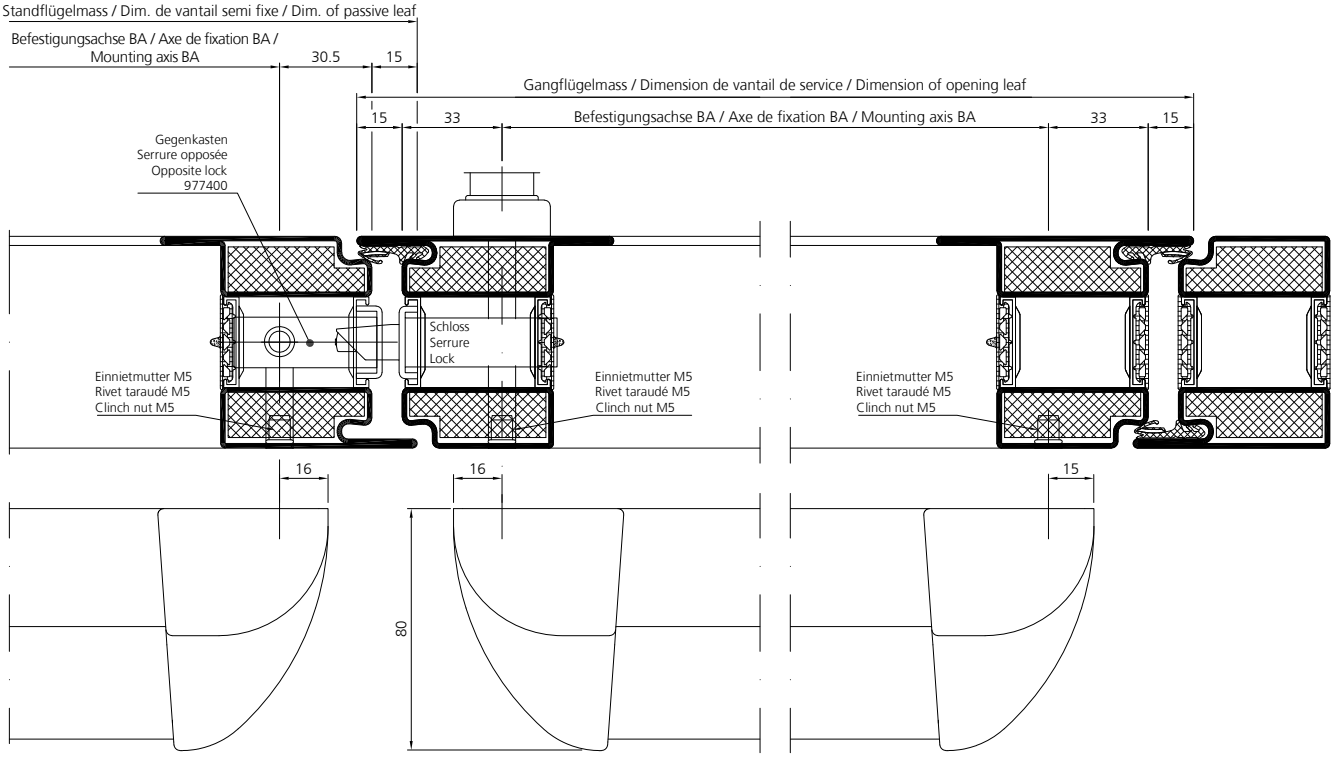
	a	b
RZ	94	115.5
PZ	92	113.5







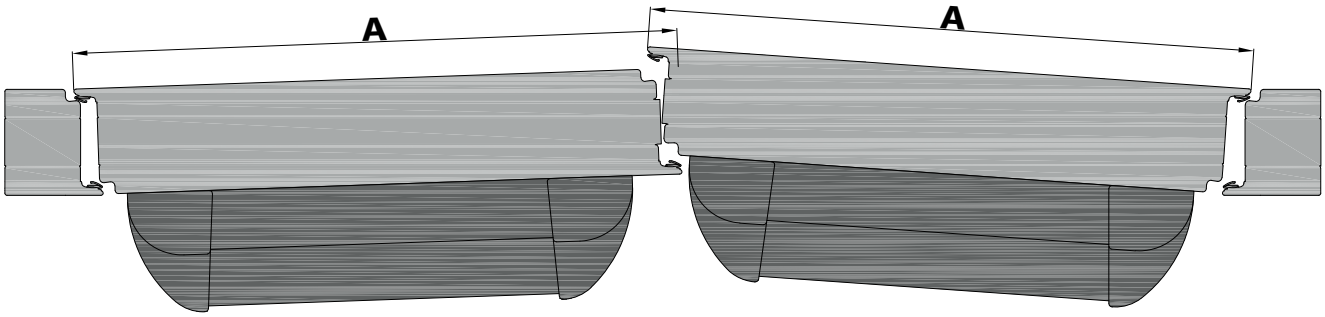




Einbau Druckstange
Minimale Flügelbreiten

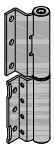
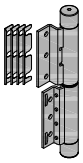
Montage pushbar
Largeur minimale des vantaux

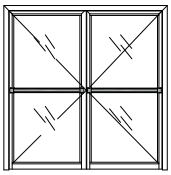
Touch-bar installation
Minimum leaf width



A : min. Flügelbreite / min. largeur de vantail / min. leaf width

		A
Band / Paumelle / Hinge	 **907662 907664**	850 mm
	 **907667 907668**	850 mm
	 **907663**	850 mm
	 **907669**	850 mm

		A
Band / Paumelle / Hinge	 **987612 - 987613 987623 - 987624**	850 mm
	 **987680 987681**	850 mm
	 **907740**	850 mm

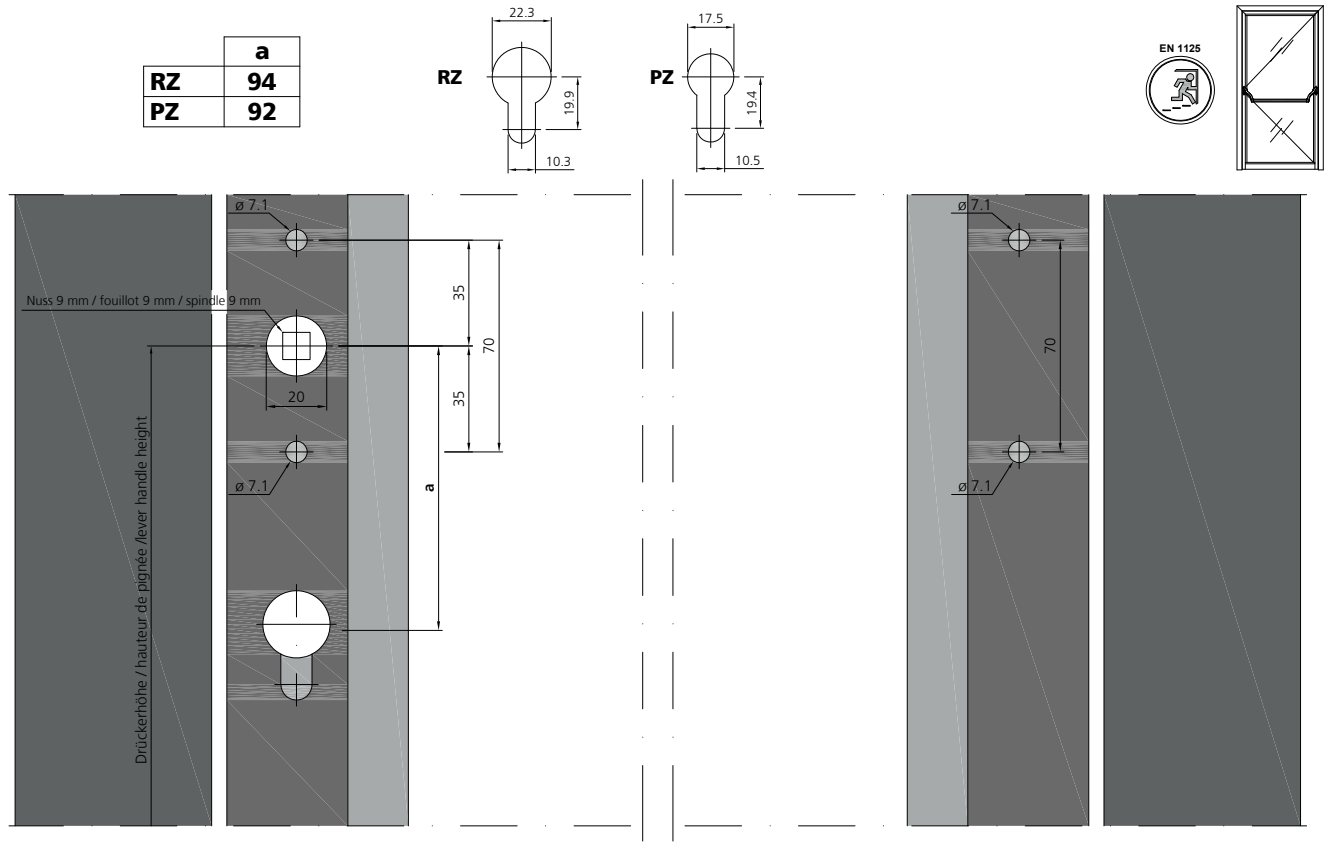


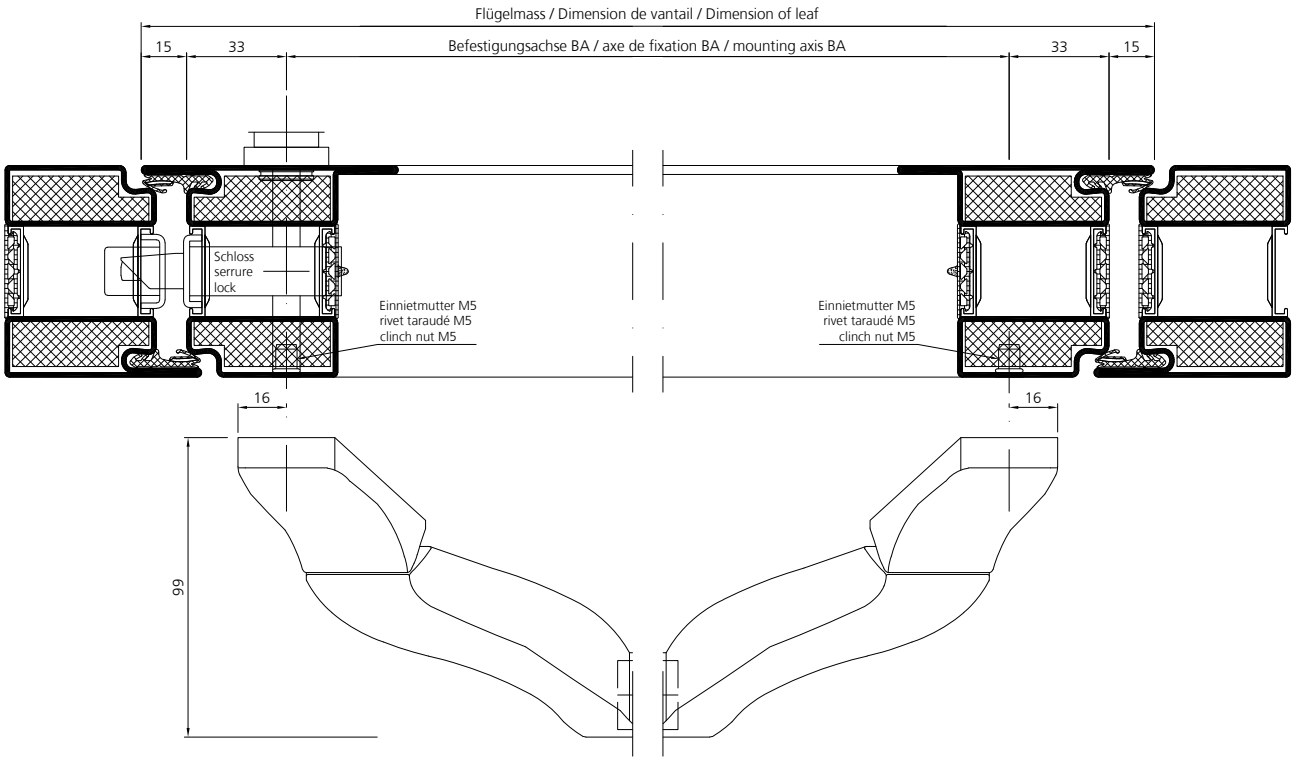
Einbau Anti-Panik-Stangengriff
1-flügelige Tür

Montage barre anti-panique
Porte à 1 vantail

Anti-panic-bar installation
Single leaved door

	a
RZ	94
PZ	92



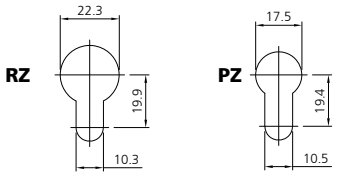


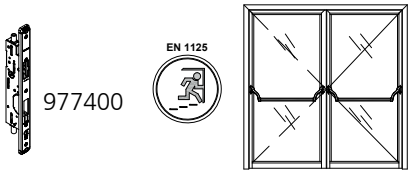
Einbau Anti-Panik-Stangengriff
2-flügelige Tür

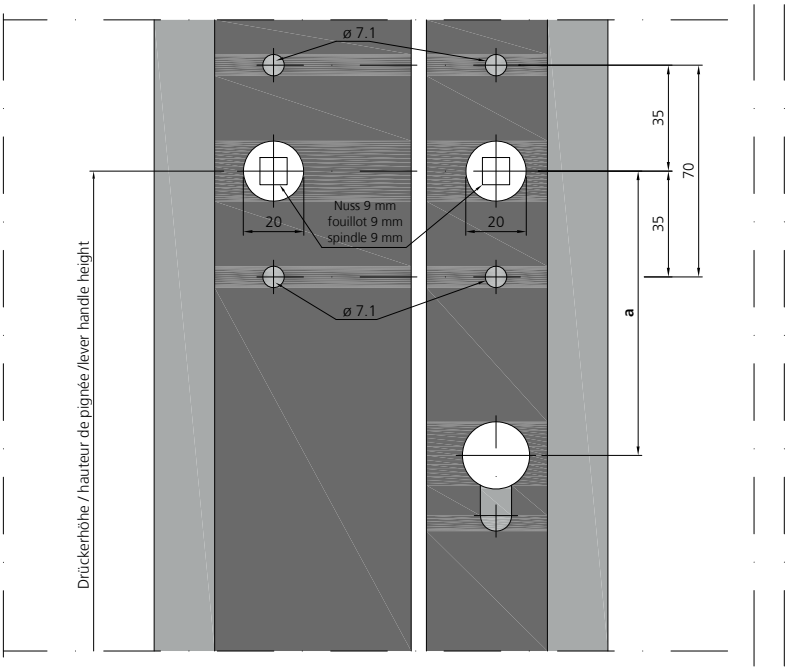
Montage barre anti-panique
Portes à 2 vantaux

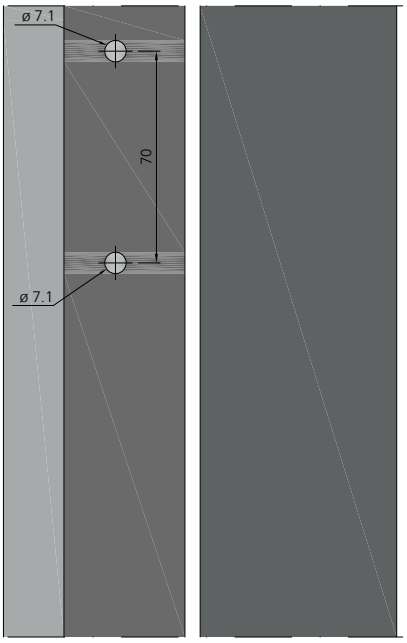
Anti-panic-bar installation
Double leaf door

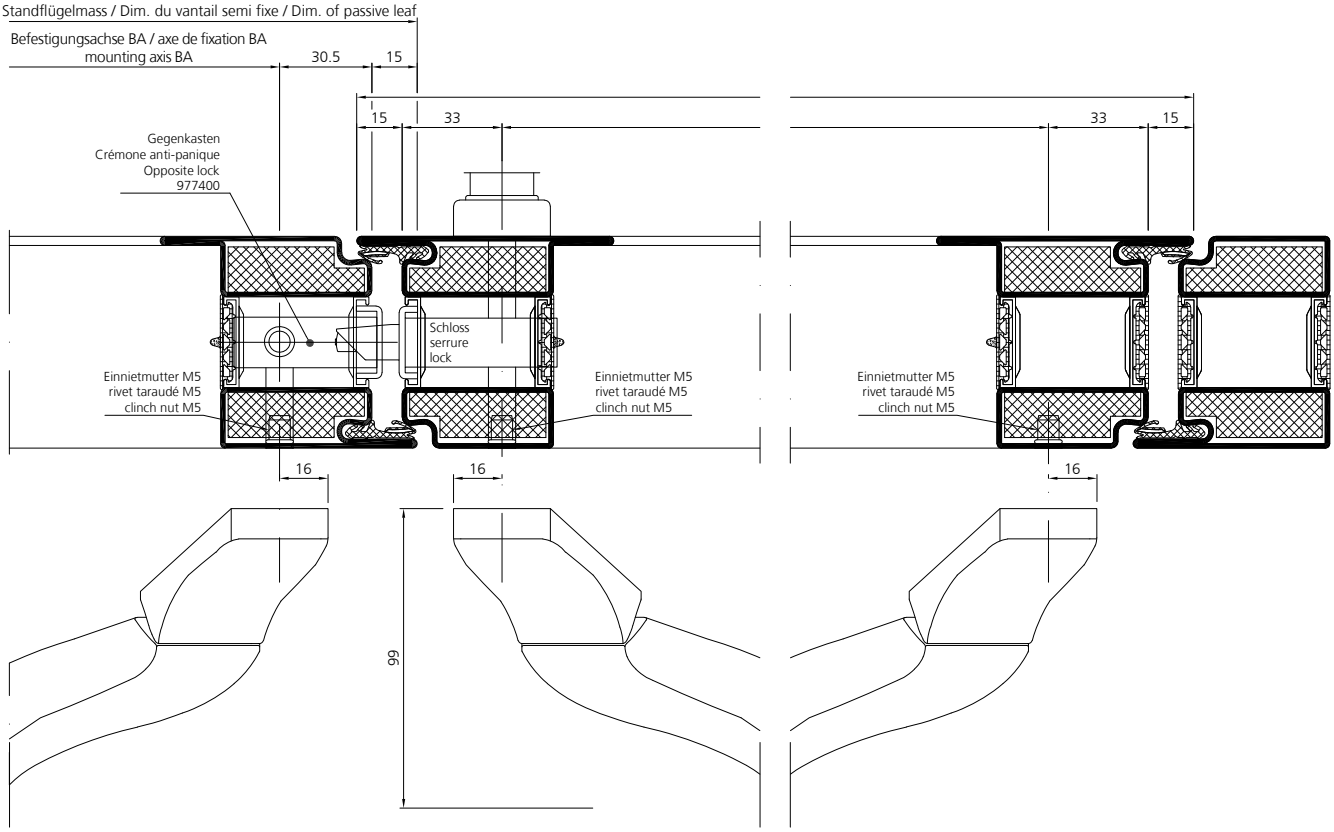
	a
RZ	94
PZ	92







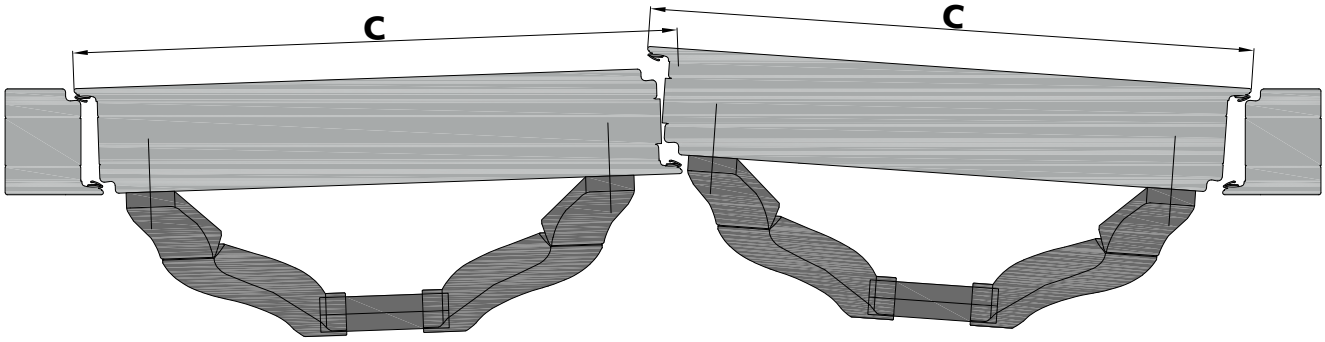




Einbau Stangengriff Minimale Flügelbreiten

Montage barre anti-panique Largeur minimale des vantaux

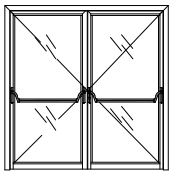
Push-bar installation Minimum leaf width



C : min. Flügelbreite / min. largeur de vantail / min. leaf width

Band / Paumelle / Hinge		C
	907662 907664	900 mm
	907667 907668	900 mm
	907663	950 mm
	907669	950 mm

Band / Paumelle / Hinge		C
	987612 - 987613 987623 - 987624	850 mm
	987680 987681	900 mm
	907740	850 mm



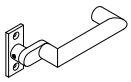
Durchgangsbreite bei 90° Flügelöffnung

Passage avec une ouverture de vantail de 90°

Inside width with 90° leaf opening

Türdrücker
und -knopf
Poignée de porte
et Bouton de porte
Door handle
and -knob

EN 179 EN 1125
EN 179



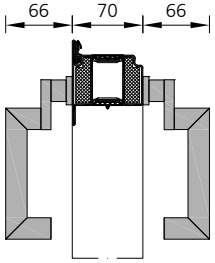
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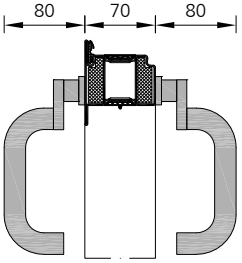


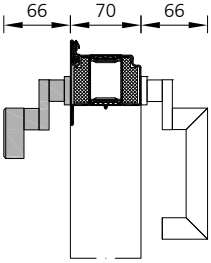
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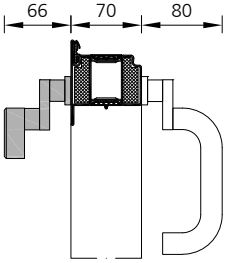


907329



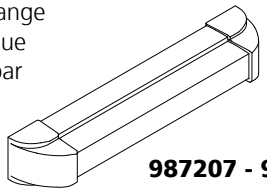




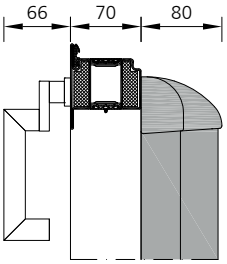


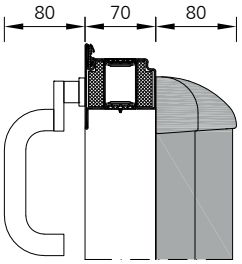
Antipanik-Druckstange
Pushbar anti-panique
Anti-panic touch-bar

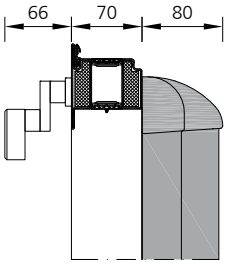
EN 1125



987207 - 987210

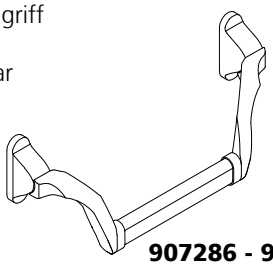




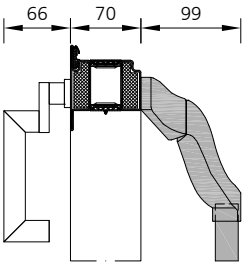


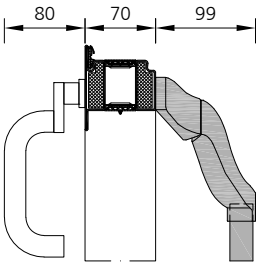
Antipanik-Stangengriff
Barre anti-panique
Anti-panic push-bar

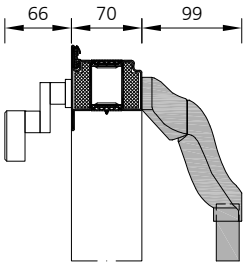
EN 1125



907286 - 907289





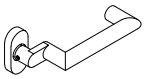


Durchgangsbreite bei 90° Flügelöffnung

Passage avec une ouverture de vantail de 90°

Inside width with 90° leaf opening

Türdrücker
und -knopf
Poignée de porte
et Bouton de porte
Door handle
and -knob



907351



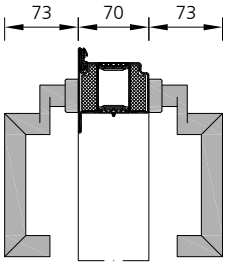
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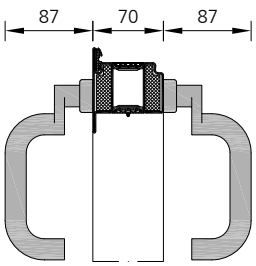


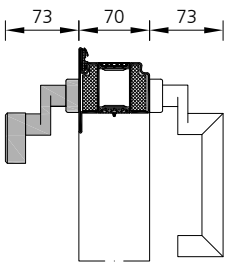
907356

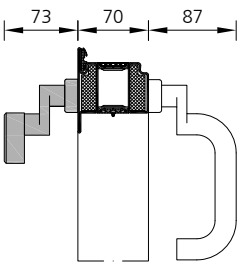
EN 179 EN 1125

EN 179



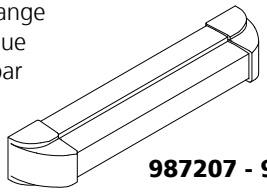




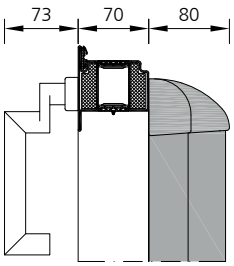


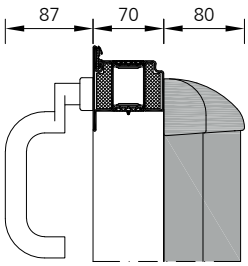
Antipanik-Druckstange
Pushbar anti-panique
Anti-panic touch-bar

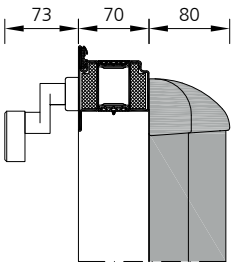
EN 1125



987207 - 987210

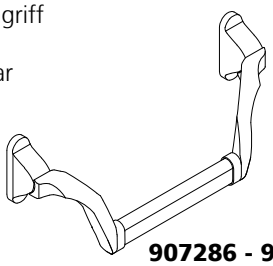




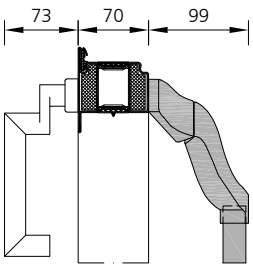


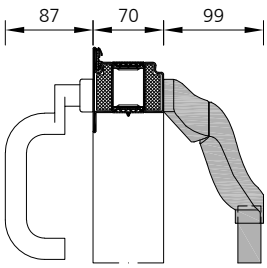
Antipanik-Stangengriff
Barre anti-panique
Anti-panic push-bar

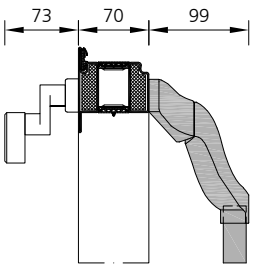
EN 1125



907286 - 907289







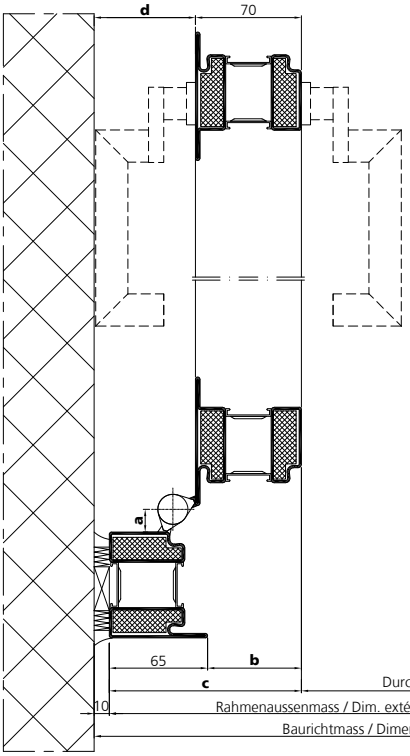
3

09/23

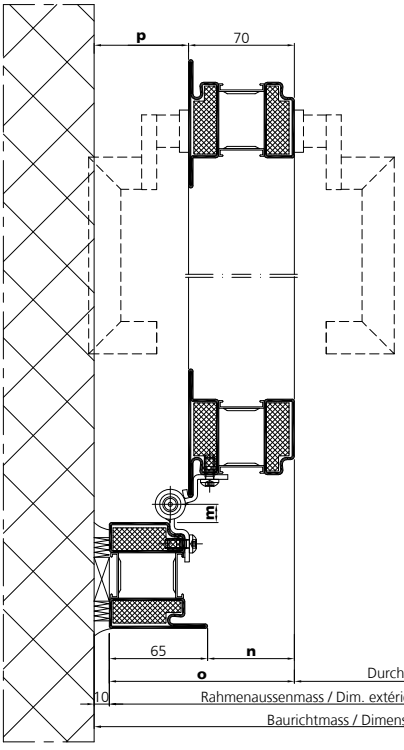
Lichte Durchgangsbreite bei 90° Flügelöffnung

Passage libre avec une ouverture de vantail de 90°

Inside width with 90° leaf opening



907662 907664	**a**	15
	b	62
	c	127
	d	67
907667 907668	**a**	15
	b	62
	c	127
	d	67
907663	**a**	17
	b	64
	c	129
	d	69
907669	**a**	17
	b	64
	c	129
	d	69

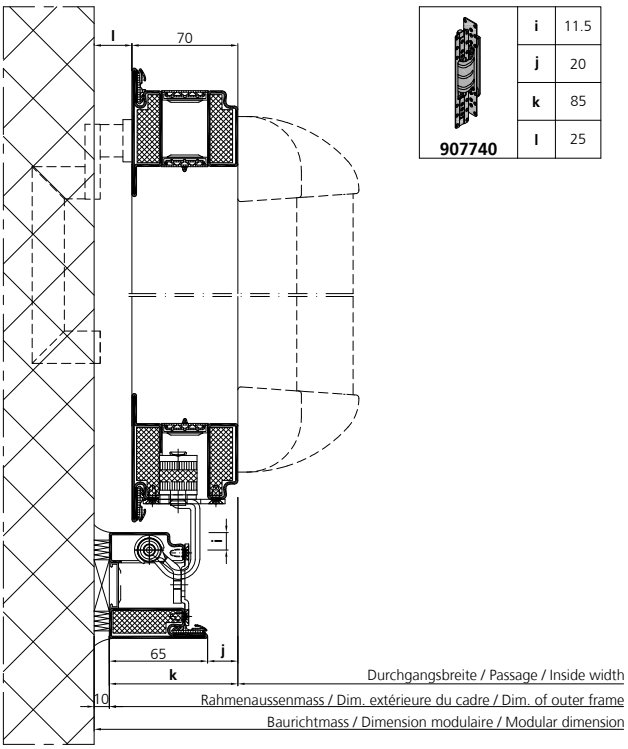


987612/-613 987623/-624	**m**	12
	n	57.5
	o	122.5
	p	62.5
987680- 987681	**m**	13.5
	n	56.5
	o	121.5
	p	61.5

Lichte Durchgangsbreite bei 90° Flügelöffnung

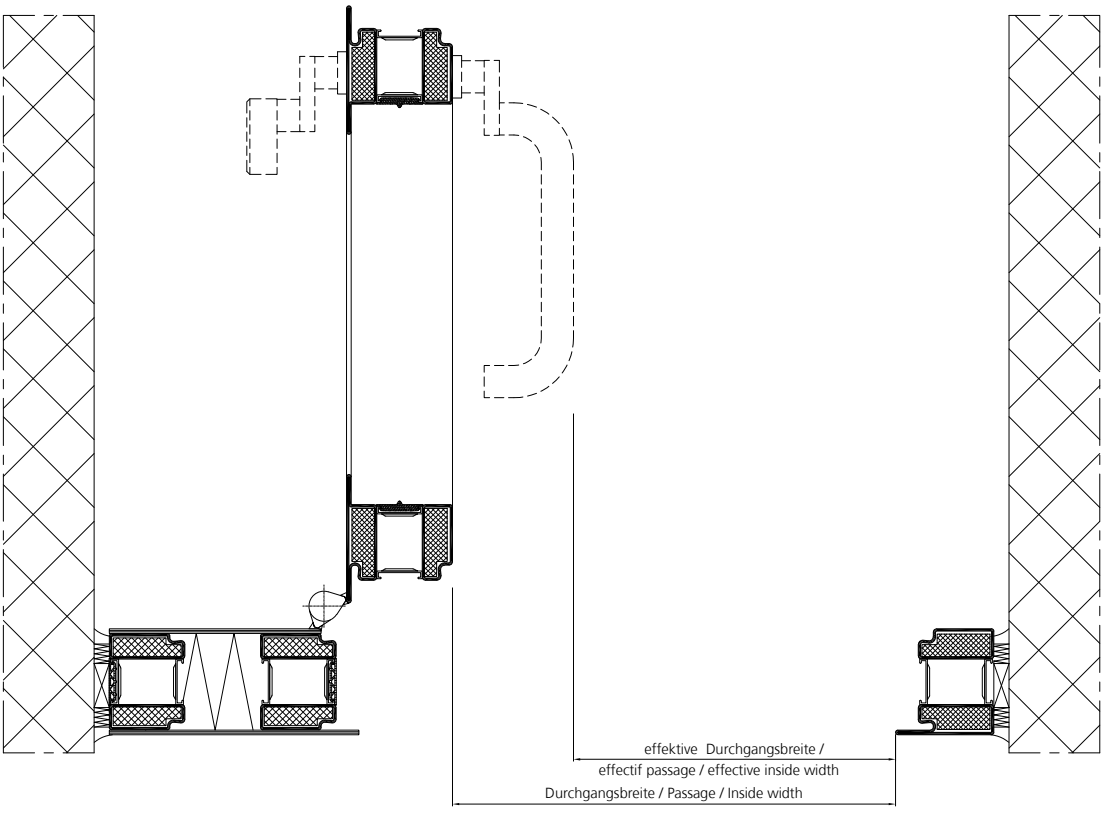
Passage libre avec une ouverture de vantail de 90°

Inside width with 90° leaf opening



907740

i	11.5
j	20
k	85
l	25



3

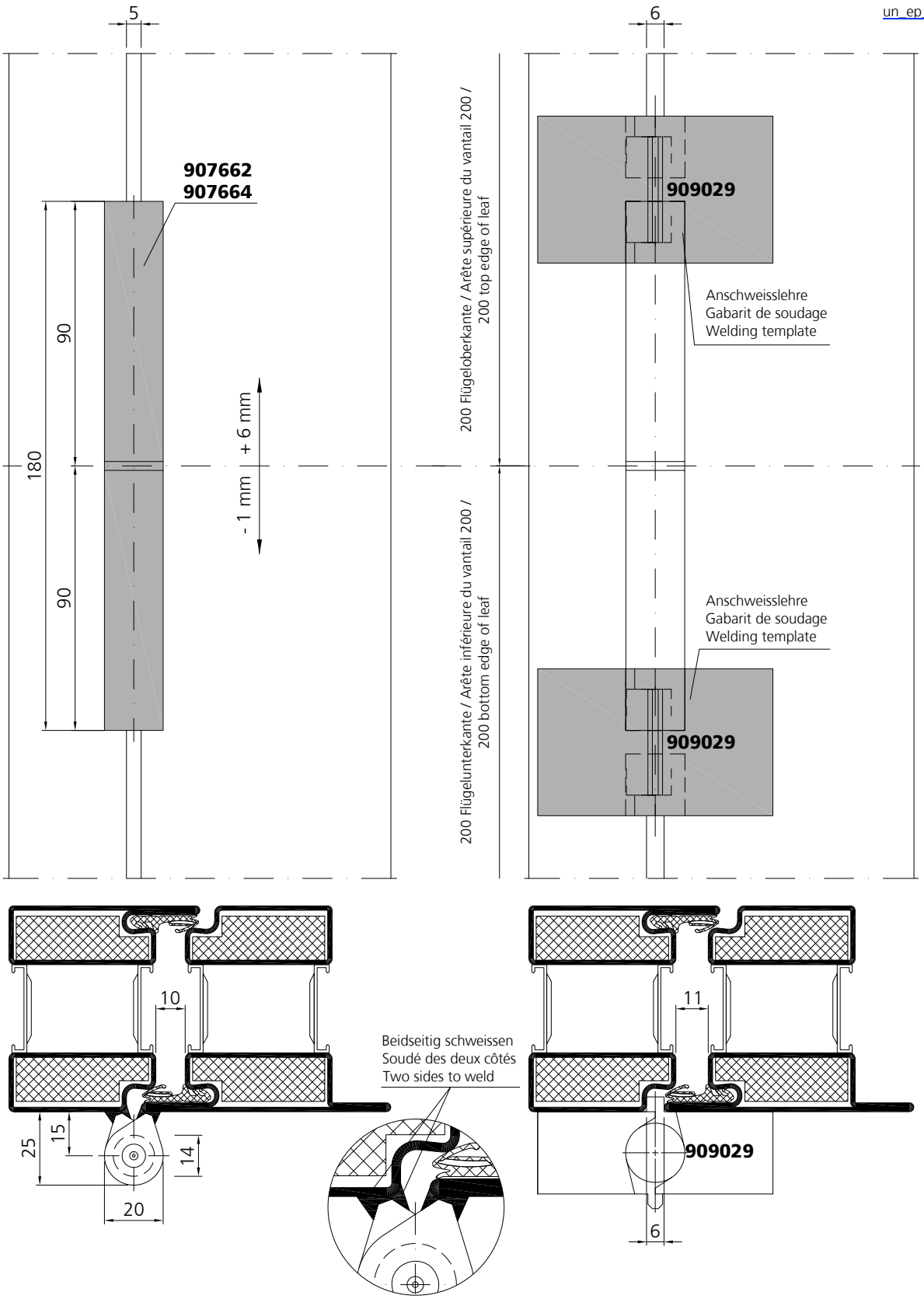
09/23

Beschlagseinbau
Anschweissband 907662/907664

Montage de la quincaillerie
Paumelle à souder 907662/907664

Installation of the fittings
Weld-on hinge 907662/907664

un_ep_0281



Für ein spannungsfreies Schliessen ist die Bandachse zentrisch über die Schattenfuge zu positionieren.

Afin d'éviter toute contrainte de fonctionnement au niveau du vantail, il est nécessaire de positionner l'axe de la paumelle au milieu de la rainure.

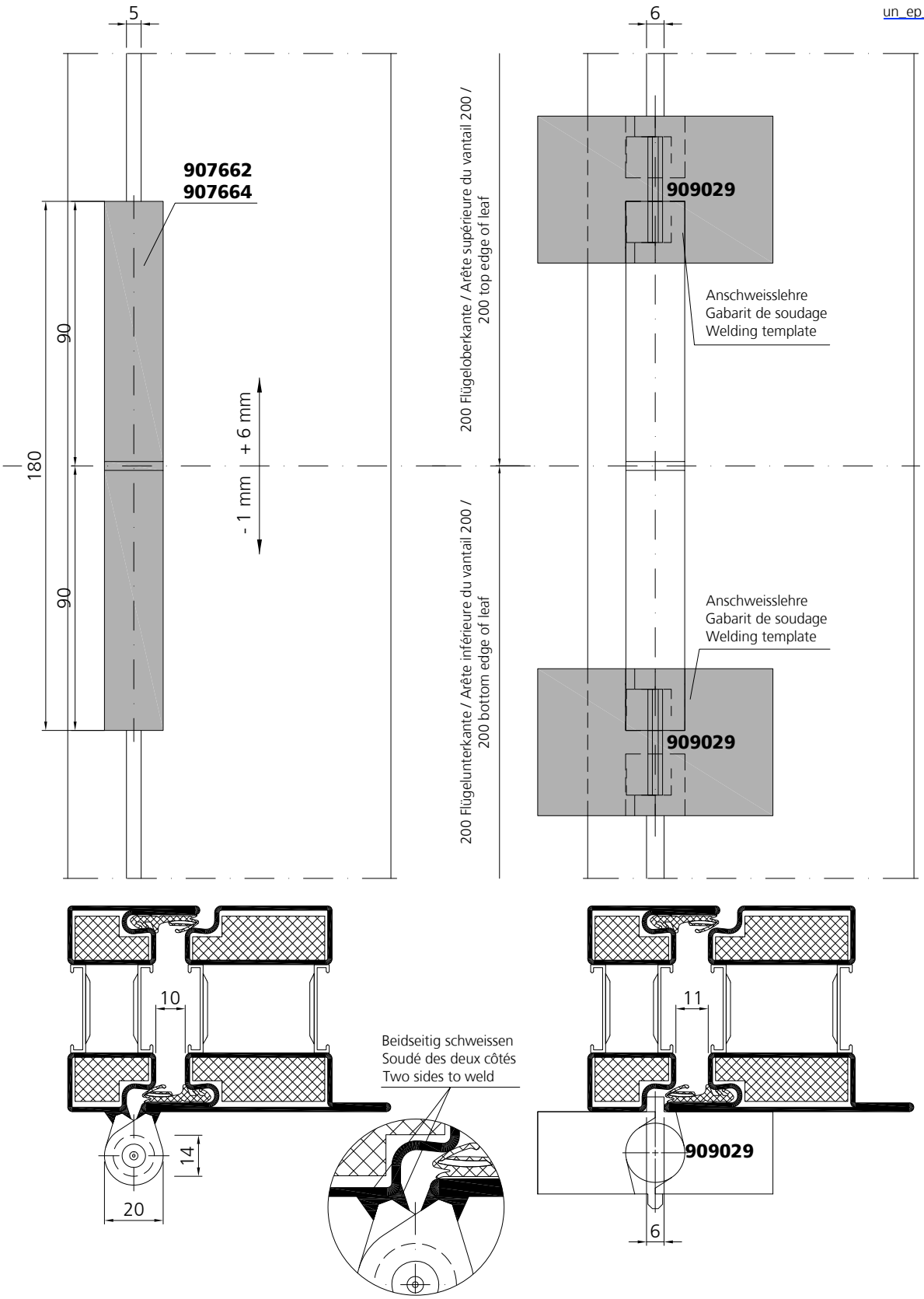
In order to obtain a tension-free closing the pivot axis has to be positioned in the center of the shadow gap.

Beschlagseinbau
Anschweissband 907662/907664

Montage de la quincaillerie
Paumelle à souder 907662/907664

Installation of the fittings
Weld-on hinge 907662/907664

un_ep_0281



Für ein spannungsfreies Schliessen ist die Bandachse zentrisch über die Schattenfuge zu positionieren.

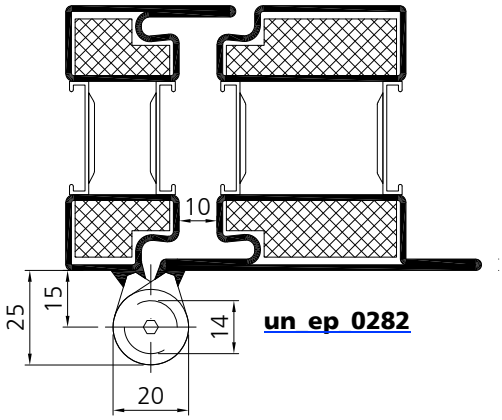
Afin d'éviter toute contrainte de fonctionnement au niveau du vantail, il est nécessaire de positionner l'axe de la paumelle au milieu de la rainure.

In order to obtain a tension-free closing the pivot axis has to be positioned in the center of the shadow gap.

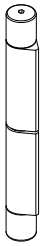
Beschlagseinbau
Bänder
mit Profil 535.731

Montage de la quincaillerie
Paumelles
avec profilé 535.731

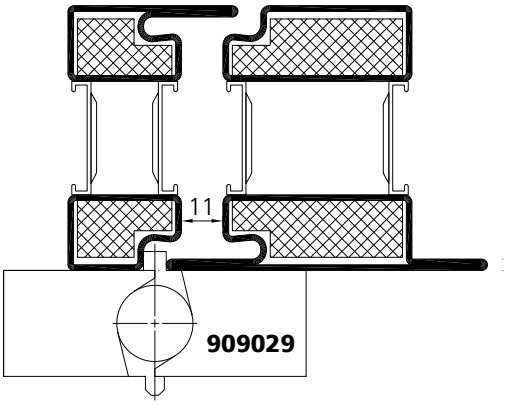
Installation of the fittings
Hinges
with profile 535.731



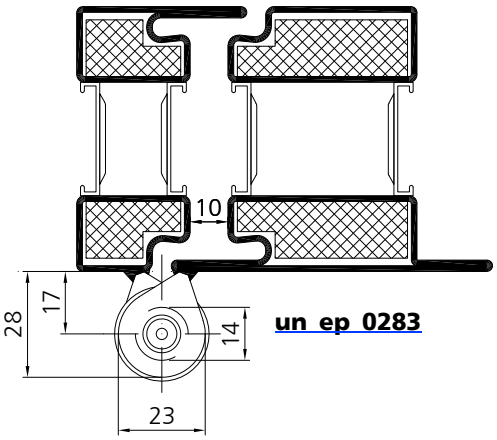
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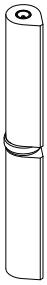
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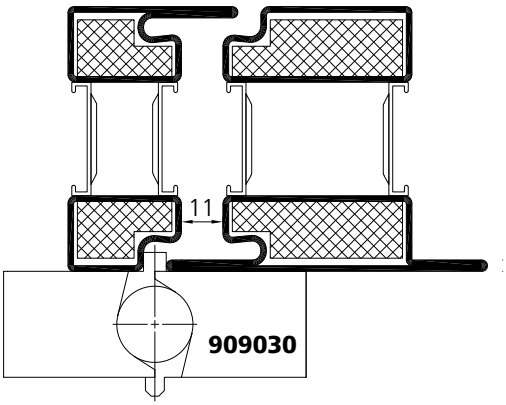
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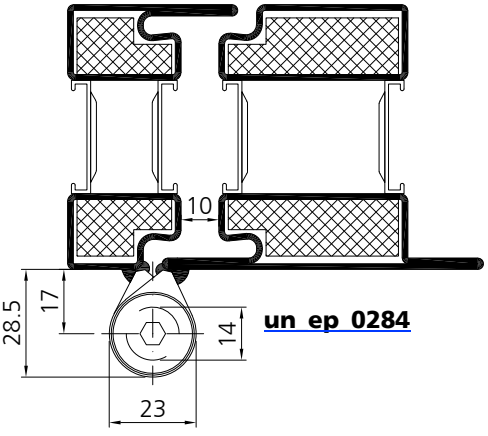
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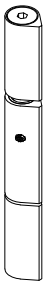
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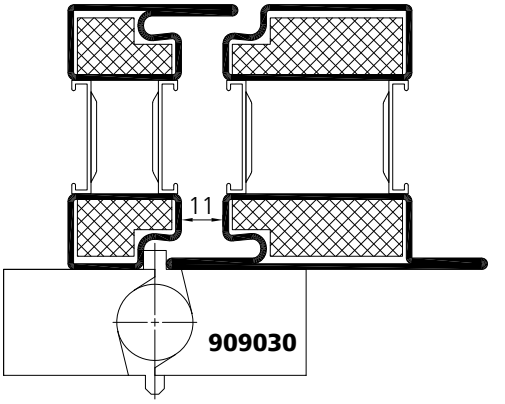
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un_ep_0284



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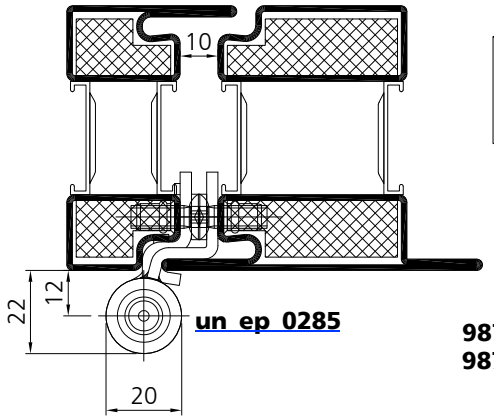


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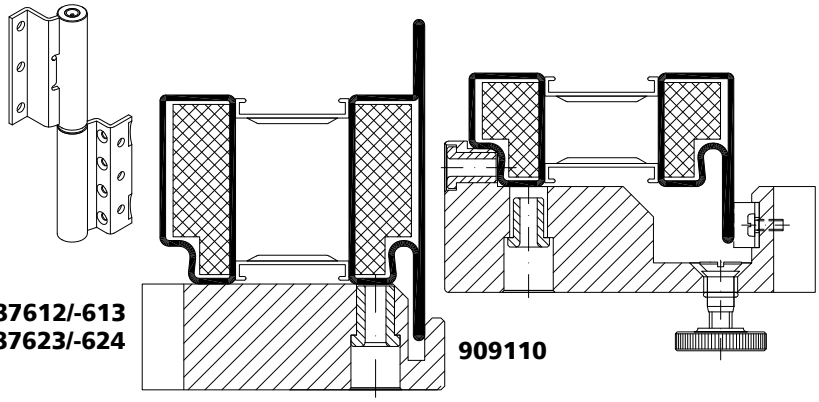
Beschlagseinbau
Bänder
mit Profil 535.731

Montage de la quincaillerie
Paumelles
avec profilé 535.731

Installation of the fittings
Hinges
with profile 535.731

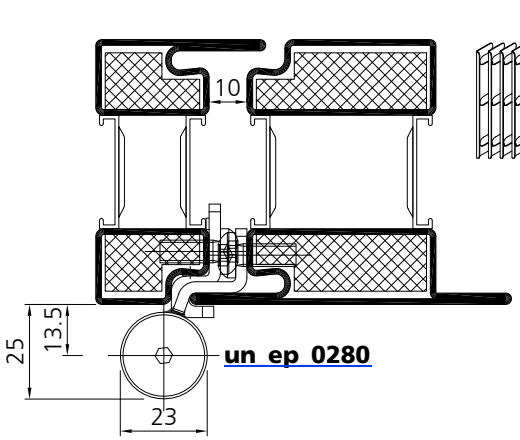


un_ep_0285

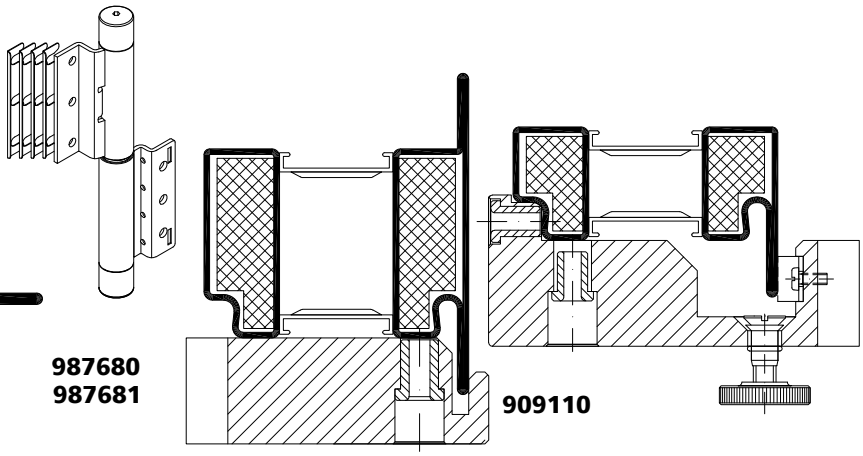


987612/-613
987623/-624

909110



un_ep_0280



987680
987681

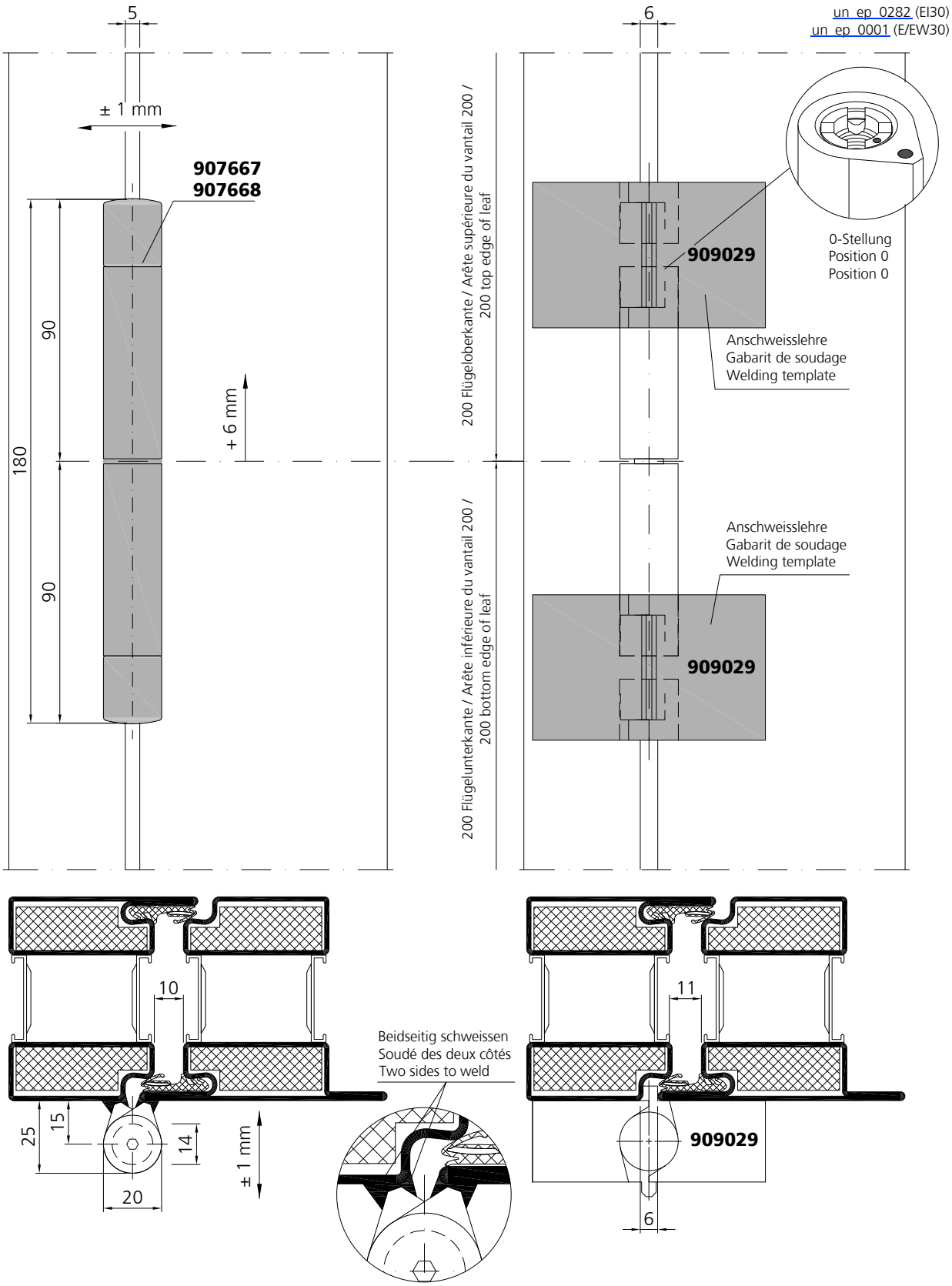
909110

3

Beschlagseinbau
Anschweissband 907667/907668

Montage de la quincaillerie
Paumelle à souder 907667/907668

Installation of the fittings
Weld-on hinge 907667/907668



Für ein spannungsfreies Schliessen ist die Bandachse zentrisch über die Schattenfuge zu positionieren.

Afin d'éviter toute contrainte de fonctionnement au niveau du vantail, il est nécessaire de positionner l'axe de la paumelle au milieu de la rainure.

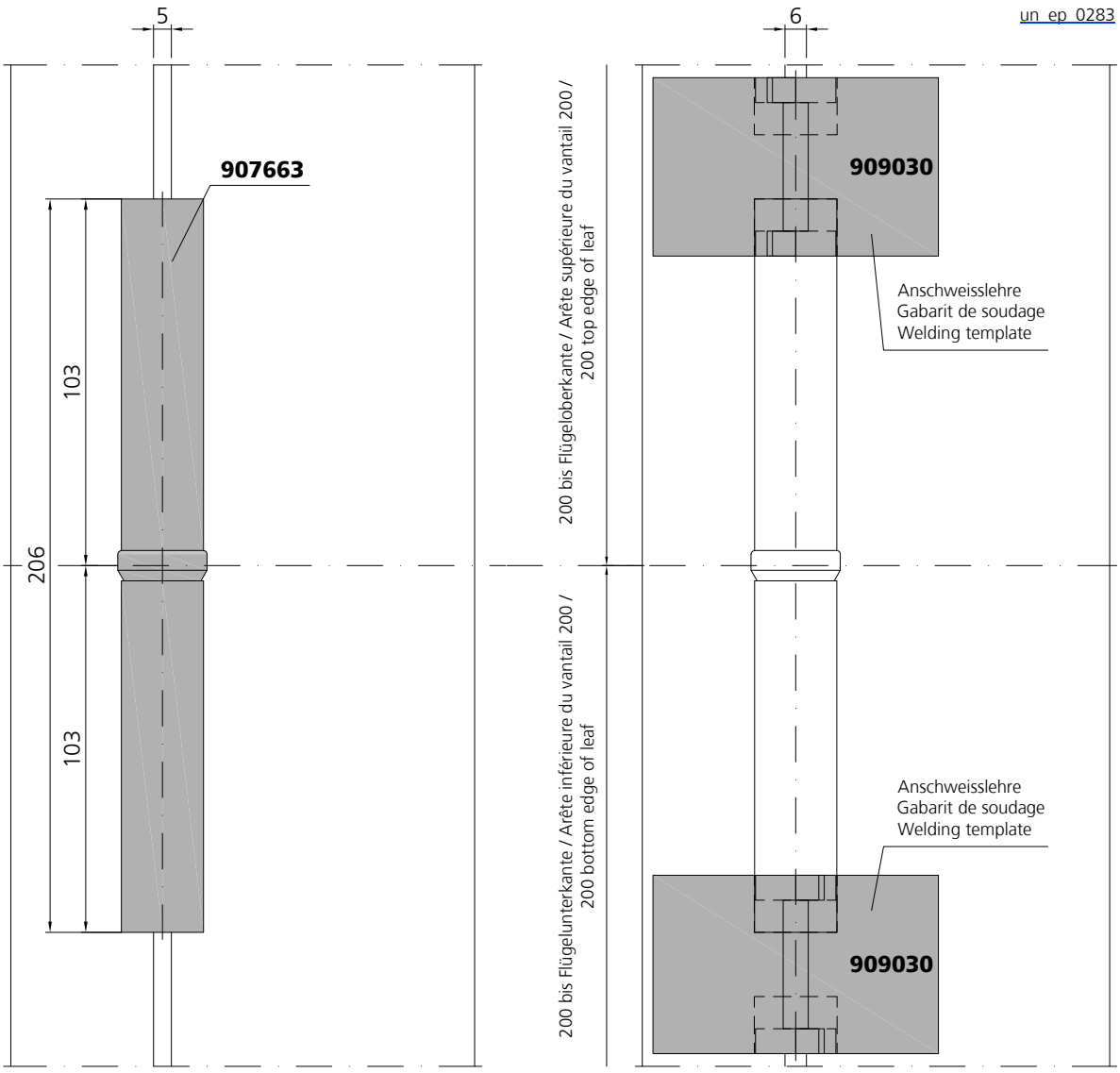
In order to obtain a tension-free closing the pivot axis has to be positioned in the center of the shadow gap.

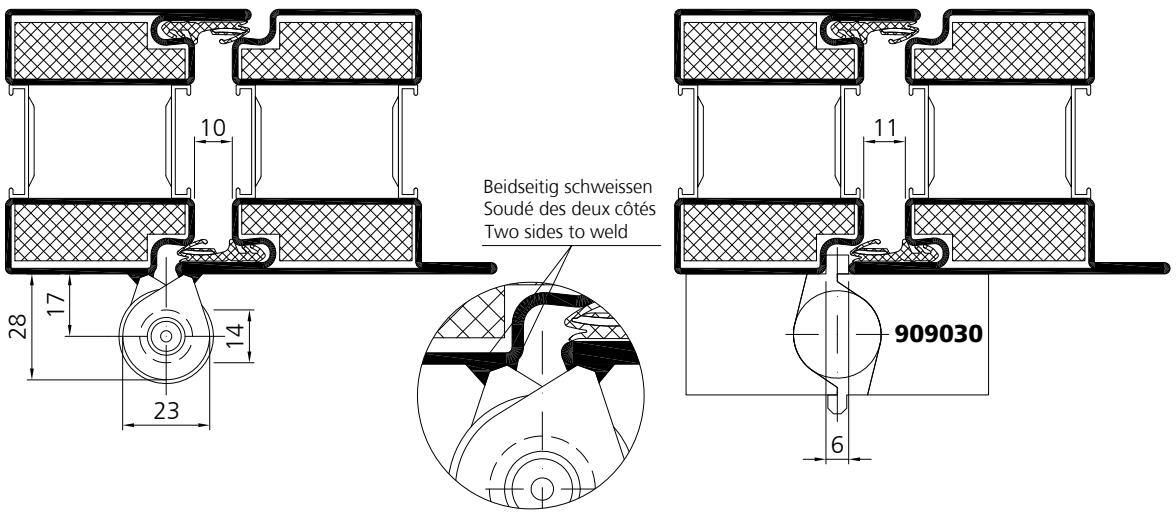
Beschlagseinbau
Anschweissband 907663

Montage de la quincaillerie
Paumelle à souder 907663

Installation of the fittings
Weld-on hinge 907663

un_ep_0283 (EI30)





Für ein spannungsfreies Schliessen ist die Bandachse zentrisch über die Schattenfuge zu positionieren.

Afin d'éviter toute contrainte de fonctionnement au niveau du vantail, il est nécessaire de positionner l'axe de la paumelle au milieu de la rainure.

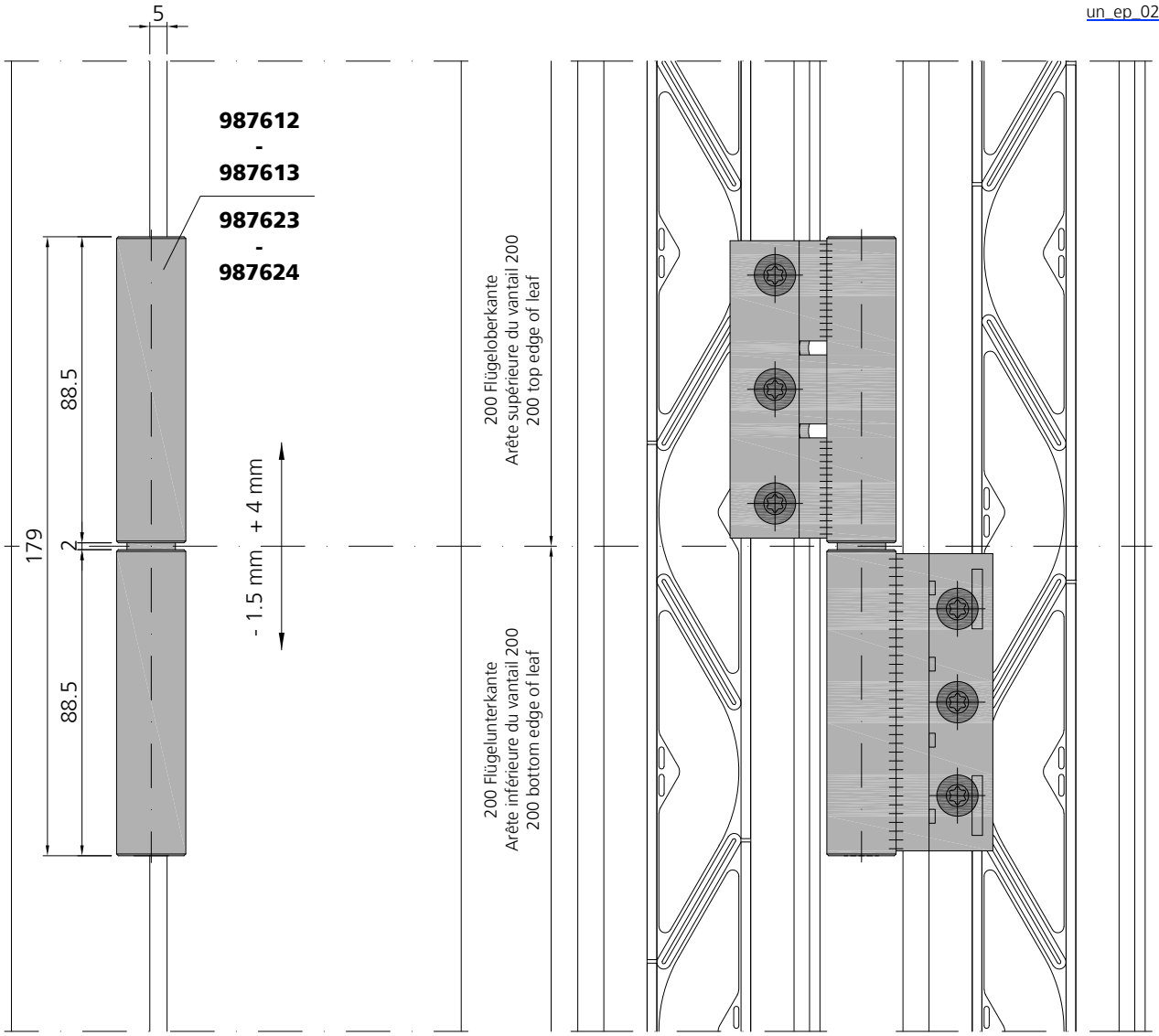
In order to obtain a tension-free closing the pivot axis has to be positioned in the center of the shadow gap.

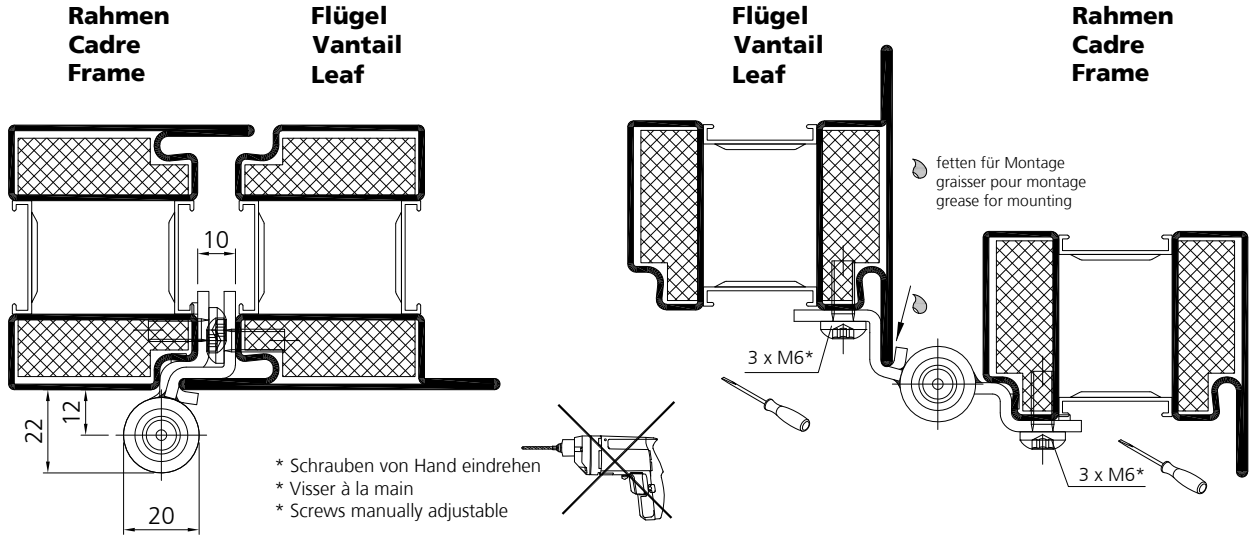
Beschlagseinbau
Anschraubband 987612-987613 / 987623-987624

Montage de la quincaillerie
Paumelle à visser 987612-987613 / 987623-987624

Installation of the fittings
screw-on hinge 987612-987613 / 987623-987624

un_ep_0285





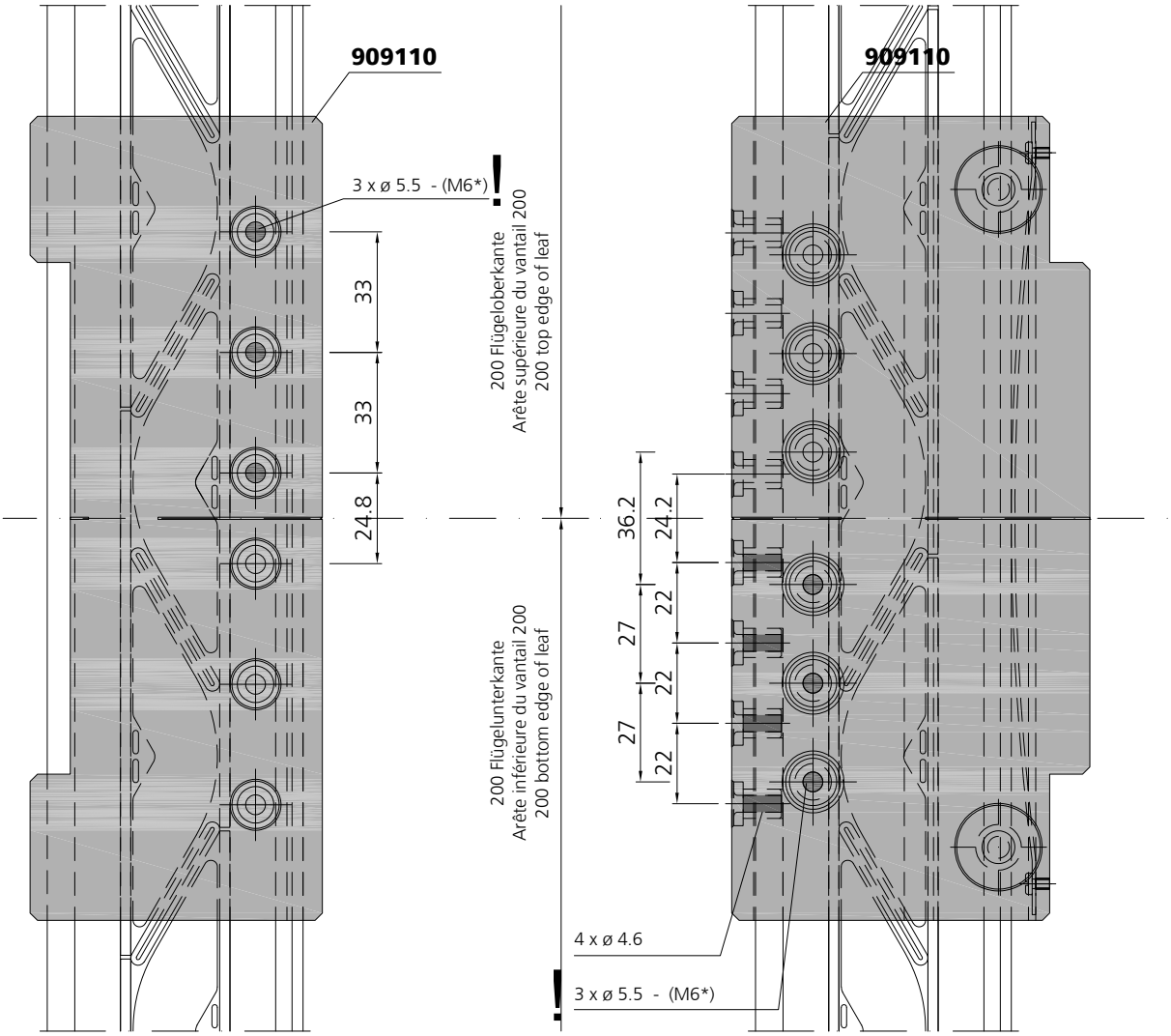
09/23

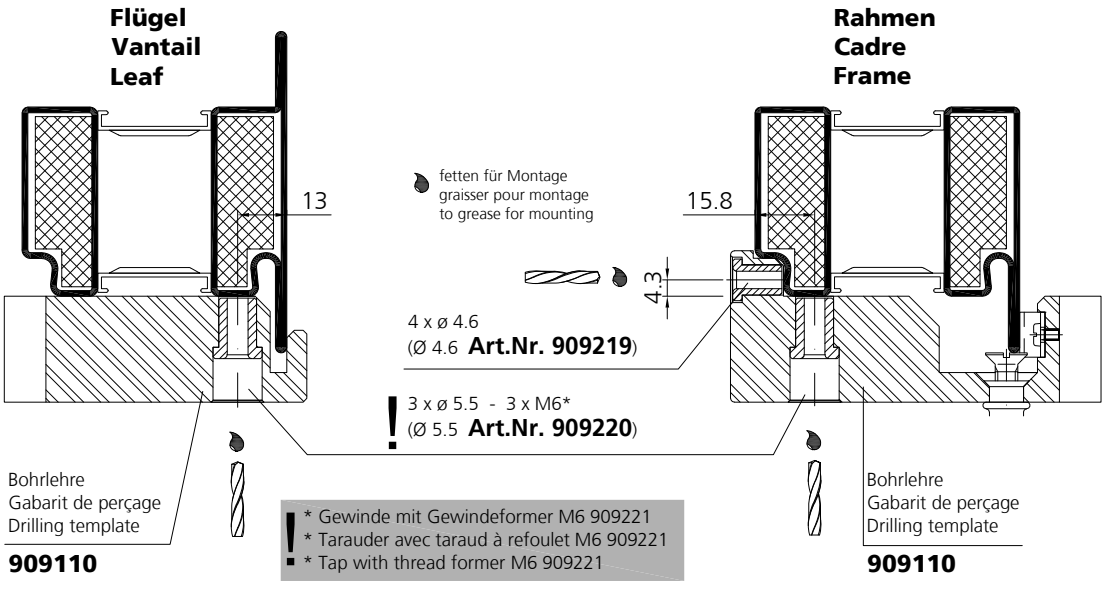
Beschlagseinbau
Anschraubband 987612-987613 / 987623-987624

Montage de la quincaillerie
Paumelle à visser 987612-987613 / 987623-987624

Installation of the fittings
screw-on hinge 987612-987613 / 987623-987624

un_ep_0285





* Gewinde mit Gewindeformer M6 909221
* Tarauder avec taraud à refoulet M6 909221
* Tap with thread former M6 909221

3

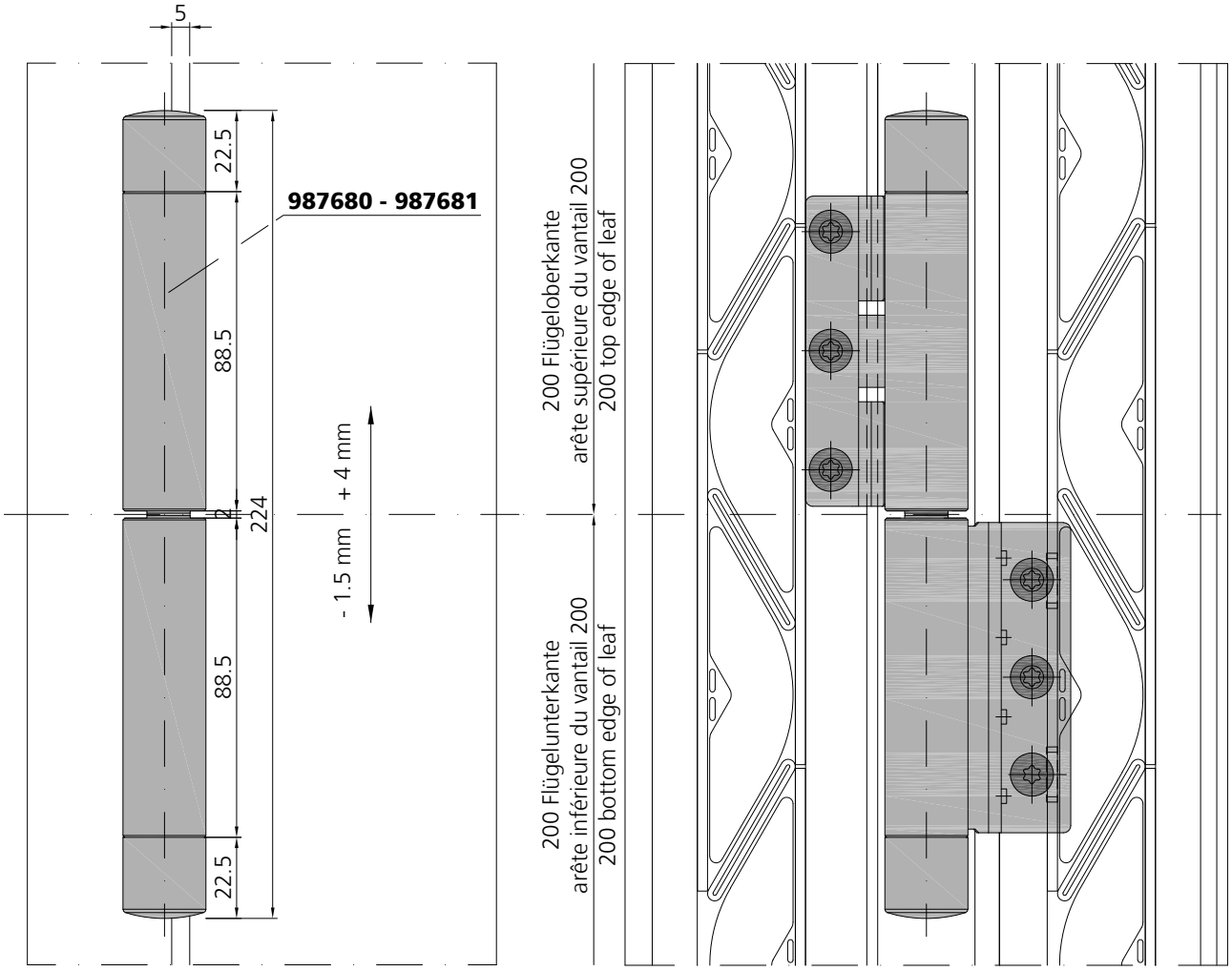
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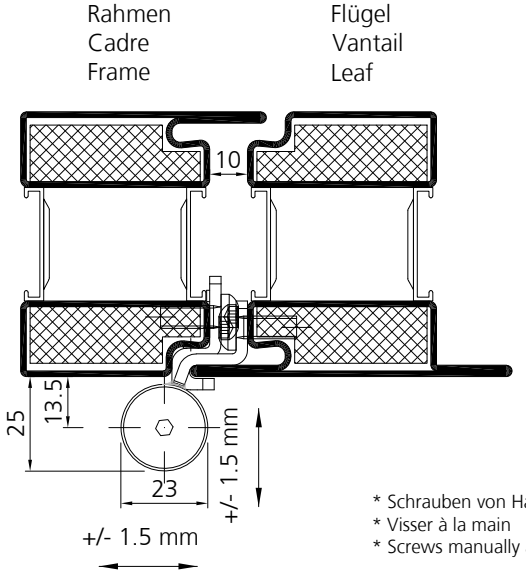
Beschlagseinbau
Anschraubband 987680-987681

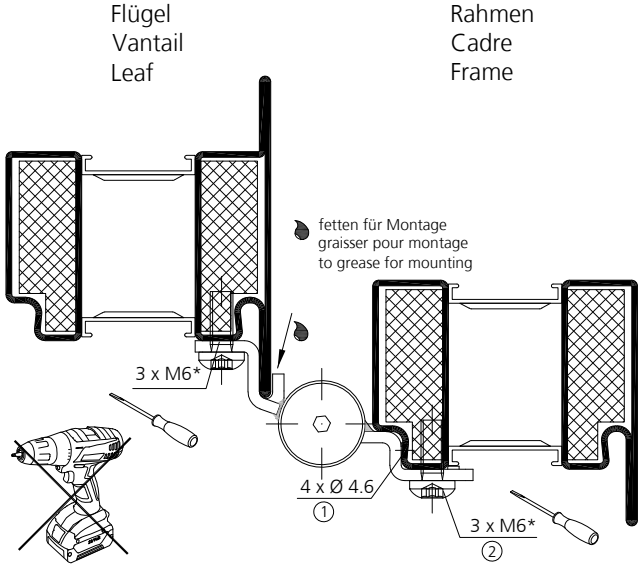
Montage de la quincaillerie
Paumelle à visser 987680-987681

Installation of the fittings
screw-on hinge 987680-987681

un_ep_0280







* Schrauben von Hand eindrehen
* Visser à la main
* Screws manually adjustable

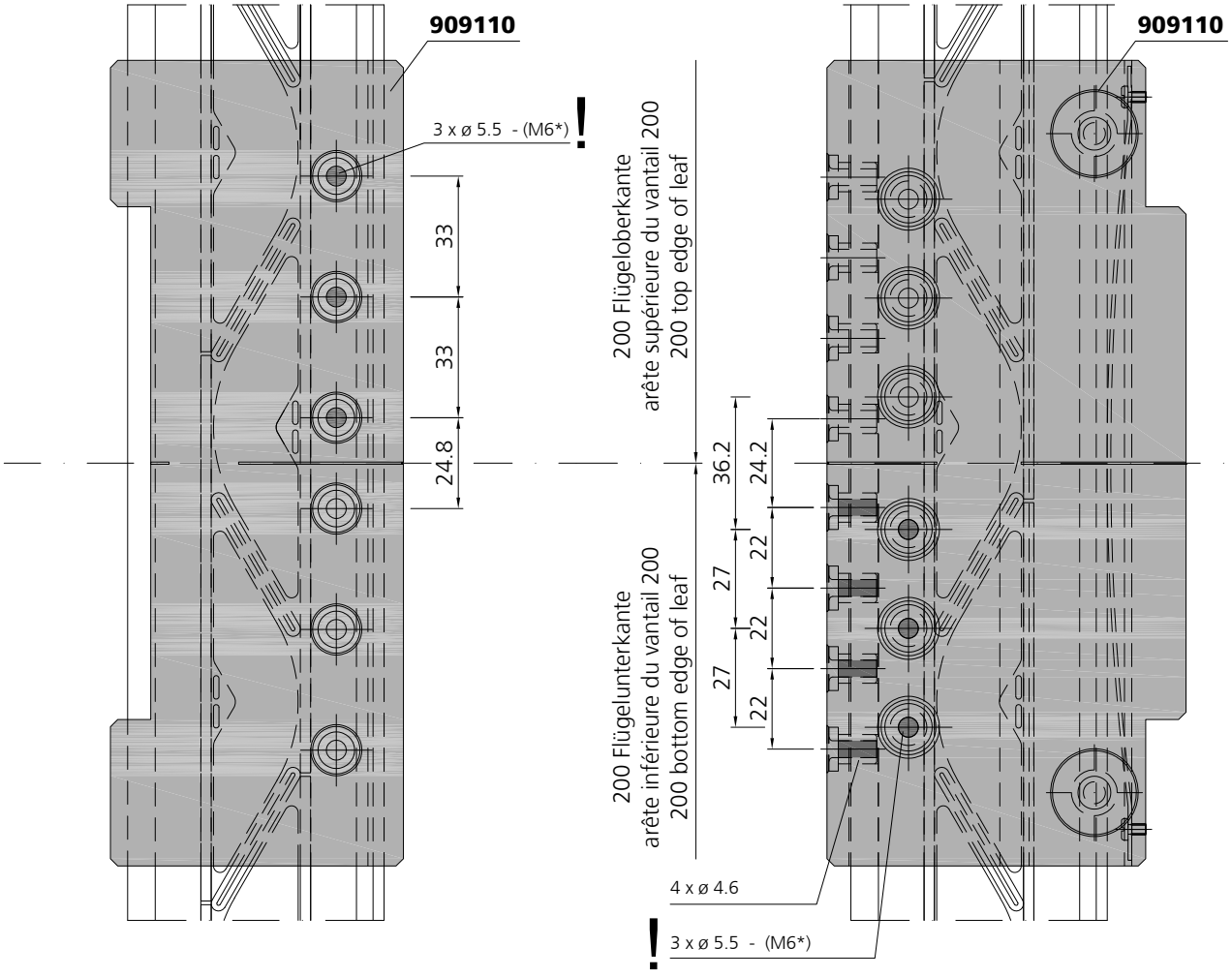
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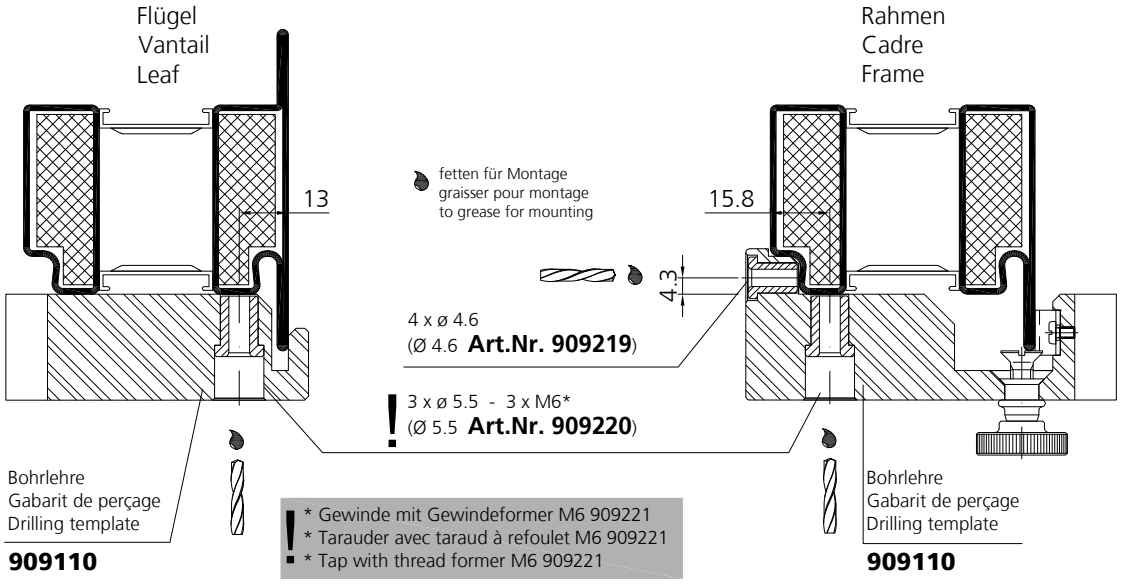
Beschlagseinbau
Anschraubband 987680-987681

Montage de la quincaillerie
Paumelle à visser 987680-987681

Installation of the fittings
screw-on hinge 987680-987681

un_ep_0280





3

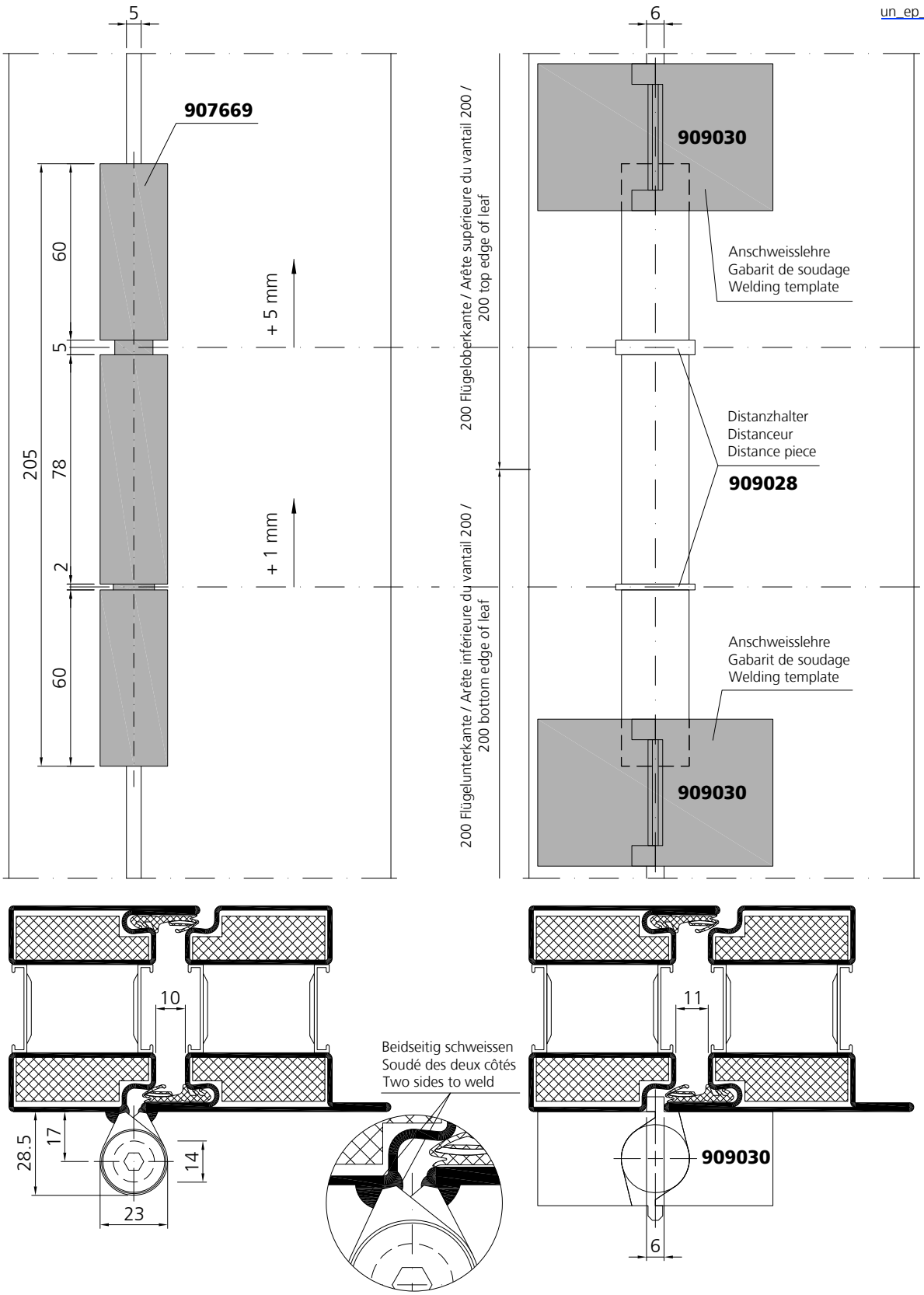
09/23

Beschlagseinbau
Anschweissband 907669

Montage de la quincaillerie
Paumelle à souder 907669

Installation of the fittings
Weld-on hinge 907669

un_ep_0284



Für ein spannungsfreies Schliessen ist die Bandachse zentrisch über die Schattenfuge zu positionieren.

Afin d'éviter toute contrainte de fonctionnement au niveau du vantail, il est nécessaire de positionner l'axe de la paumelle au milieu de la rainure.

In order to obtain a tension-free closing the pivot axis has to be positioned in the center of the shadow gap.

Platz für Notizen

Espace pour les notes

Space for memos

Beschlagseinbau
Verdecktliegendes Band 907740

Montage de la quincaillerie
Paumelle cachée 907740

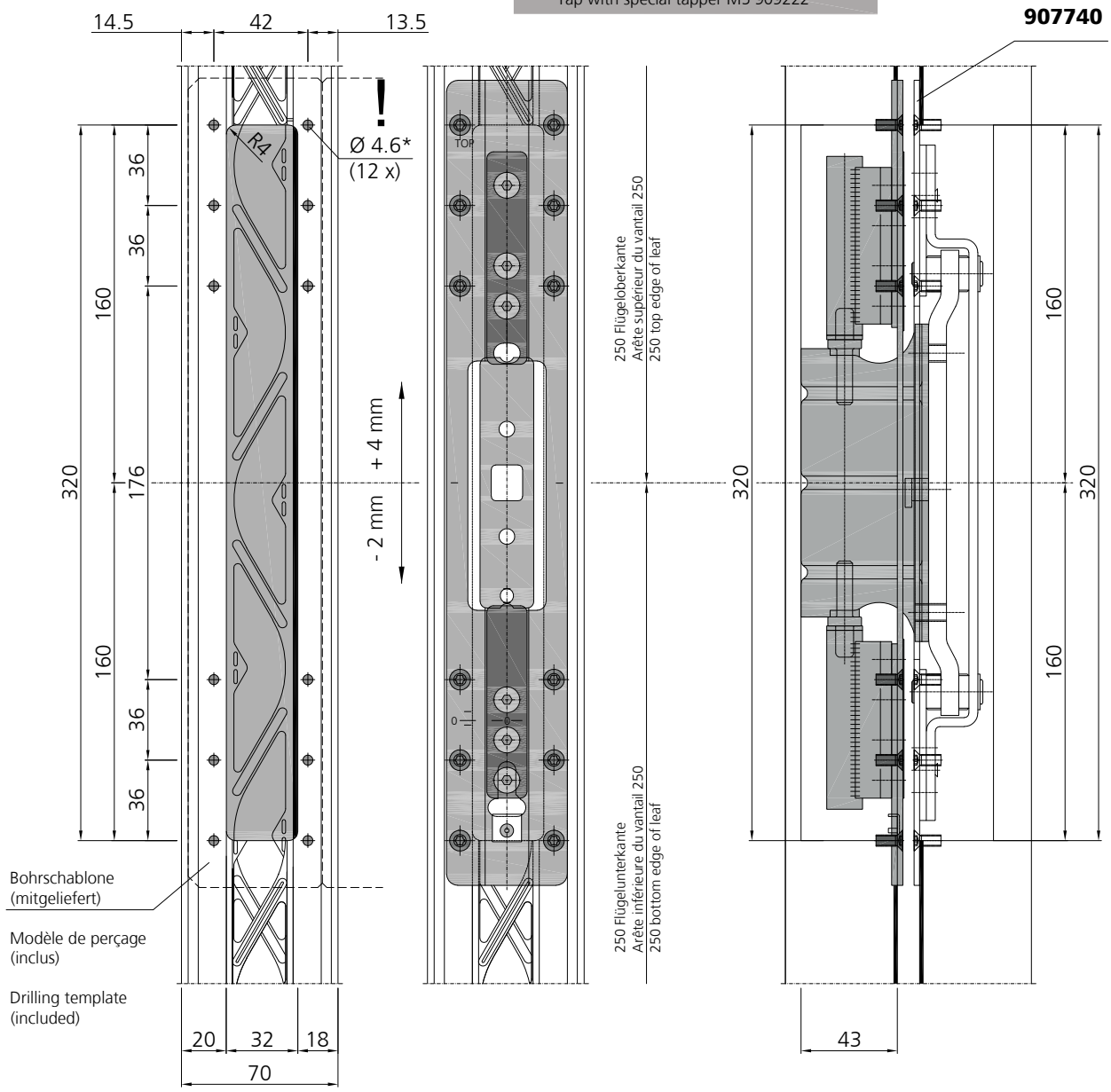
Installation of the fittings
Concealed hinge 907740

Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

un_ep_0286

Rahmen / Cadre / Frame

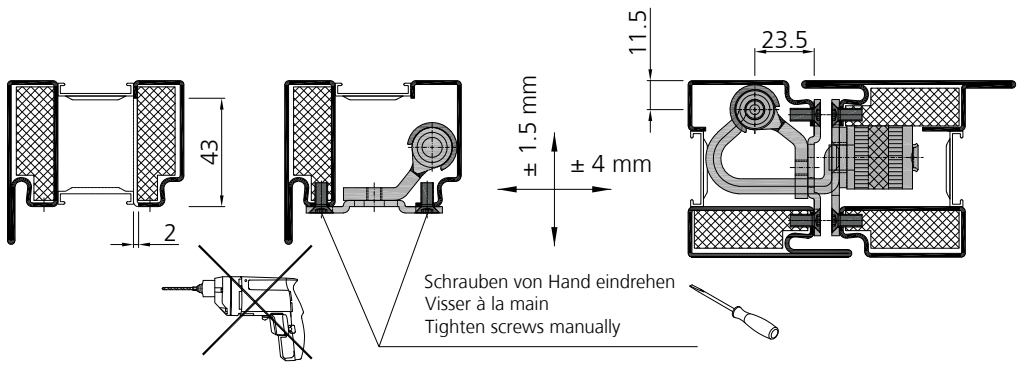
! * Gewinde mit Gewindeformer M5 909222
* Tarauder avec taraud M5 909222
* Tap with special tapper M5 909222



Montageanleitung und Umbauanleitung (DIN links/ DIN rechts) beachten!

Respecter les instructions de montage et les instructions de modification (DIN gauche/DIN droite)!

Adhere to the assembly instructions and the conversion instructions (DIN left/DIN right)!



09/23

Beschlagseinbau
Verdecktliegendes Band 907740

Montage de la quincaillerie
Paumelle cachée 907740

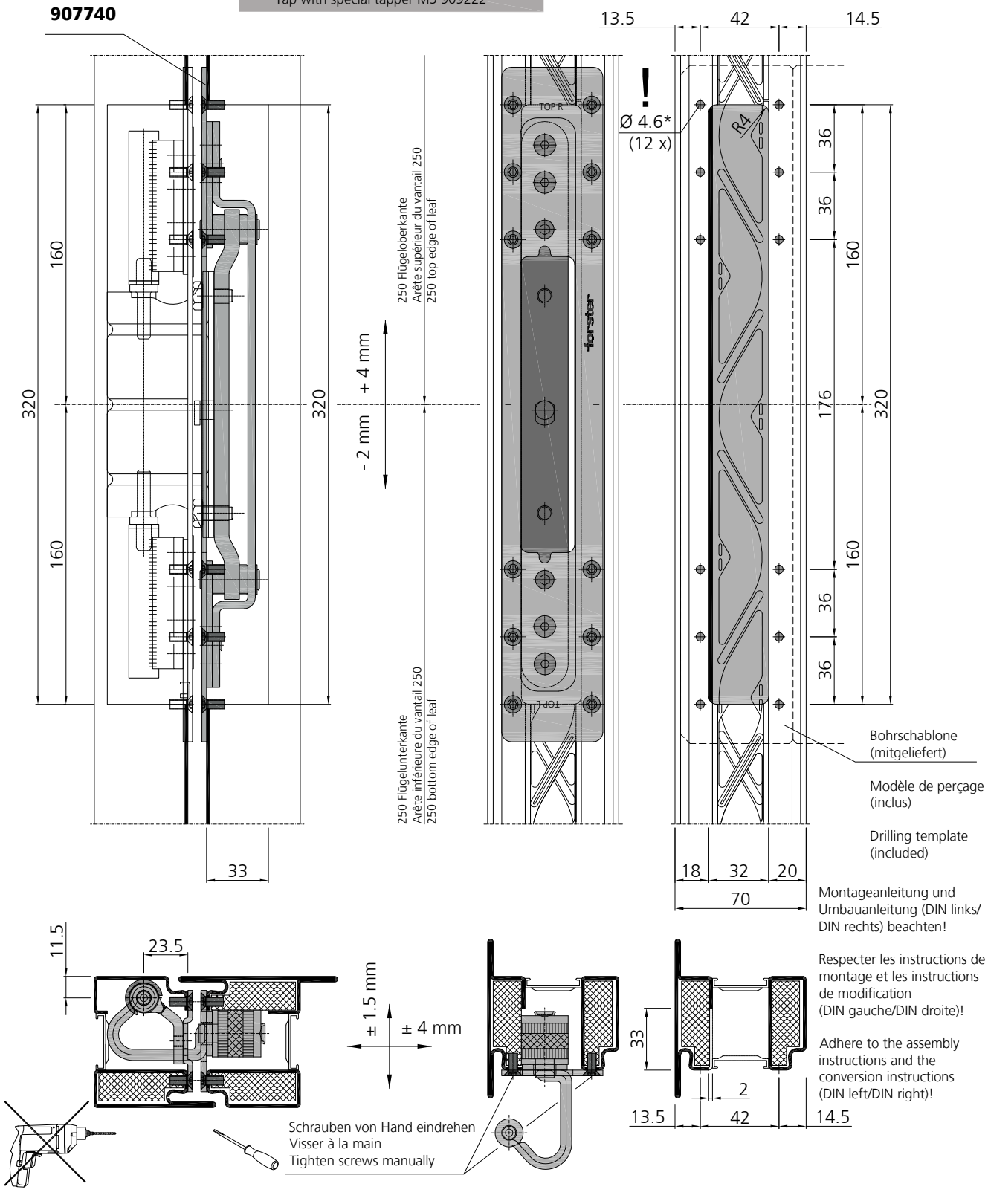
Installation of the fittings
Concealed hinge 907740

Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right

un_ep_0286

Flügel / Vantail / Leaf

! * Gewinde mit Gewindeformer M5 909222
* Tarauder avec taraud M5 909222
* Tap with special tapper M5 909222



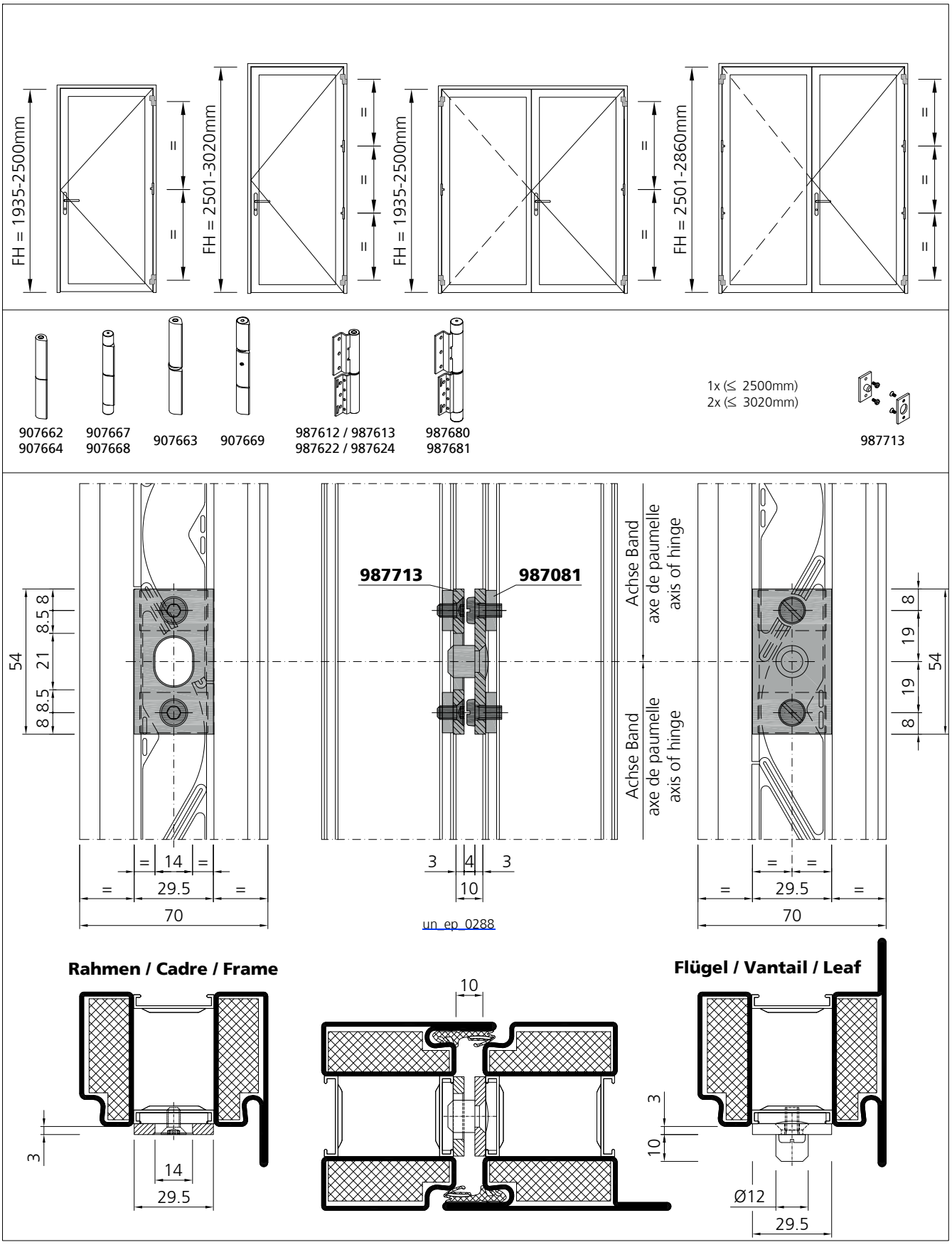
3

09/23

Beschlagseinbau
Sicherungsbolzen 987713

Montage de la quincaillerie
Boulon de sécurité 987713

Installation of the fittings
Locking pin 987713

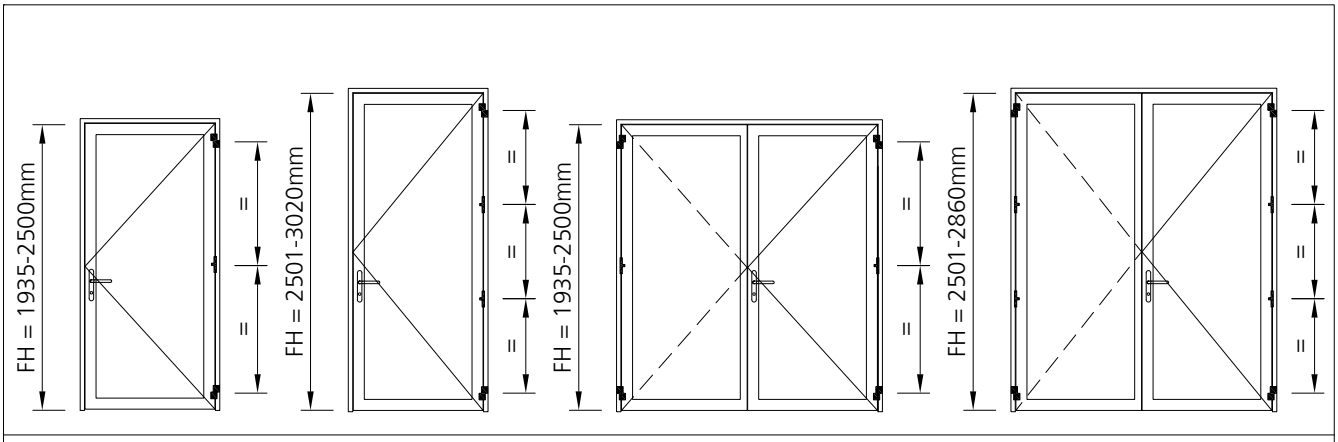


09/23

Beschlagseinbau
Sicherungsbolzen 987714

Montage de la quincaillerie
Boulon de sécurité 987714

Installation of the fittings
Locking pin 987714



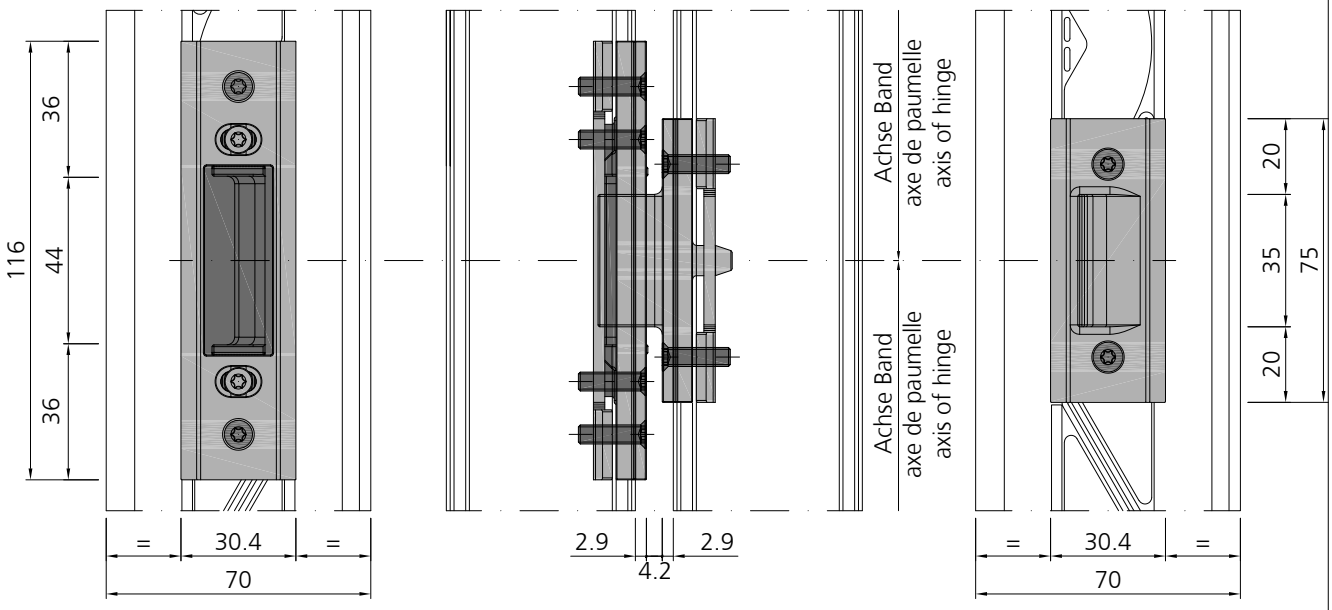


907740

1x (≤ 2500mm)
2x (≤ 3000mm)

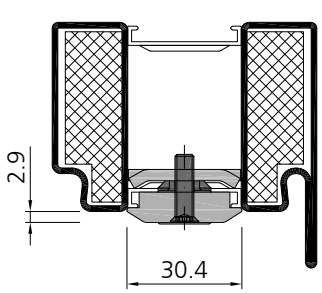


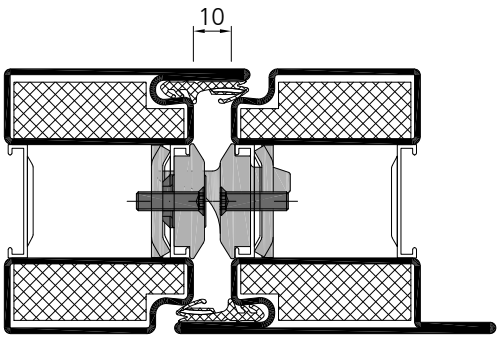
987714



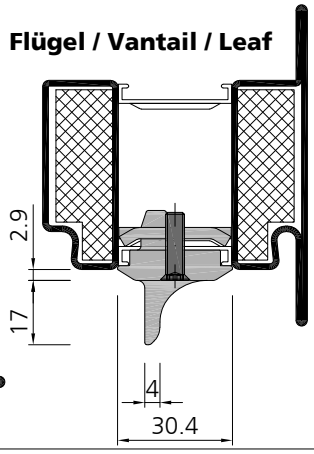
un_ep_0298

Rahmen / Cadre / Frame





Flügel / Vantail / Leaf



3

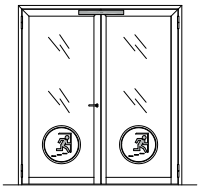
09/23

Beschlagseinbau
Mitnehmerklappe 907103
Einsatz bei Antipaniktüren

Montage de la quincaillerie
Taquet d'entrainement
907103
Utilisé pour des portes anti-paniques

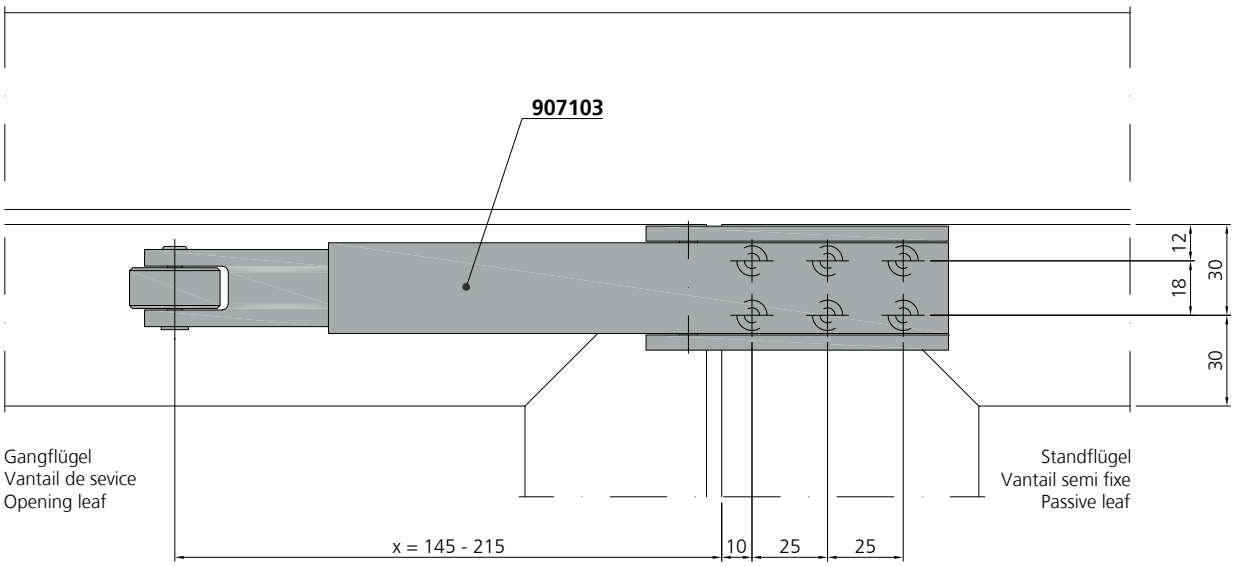
Installation of the fittings
Carry bar 907103
For use on panic doors

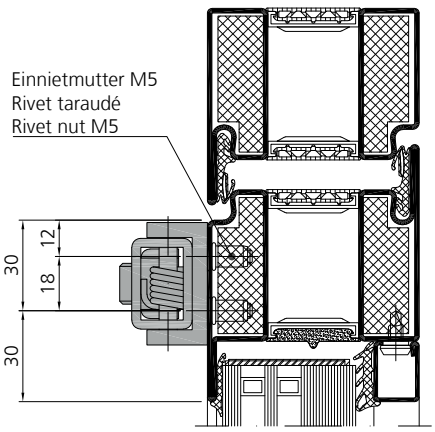
un_ep_0295



EN 179
EN 1125

Einsatz bei Antipanik-Türen
Utilisé pour portes antipanique
Use for anti-panic doors





Einbau: siehe Montageanleitung
Pose: voir instructions de montage
Installation: see assembly instructions

Platz für Notizen

Espace pour les notes

Space for memos

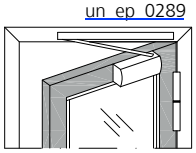
Dorma TS93B,
1 flügelig, Bandseite,
Normalmontage

Dorma TS93B,
1 vantail, coté paumelles,
Montage standard

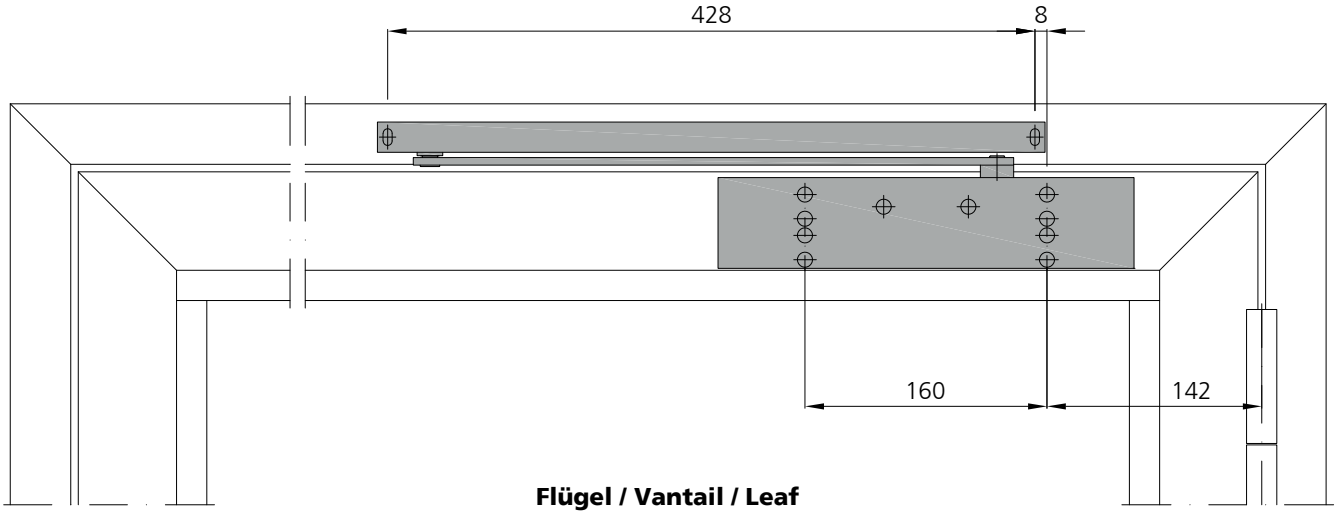
Dorma TS93B,
1 leaf, hinge side,
Standard mounting

un_ep_0289

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



Flügel / Vantail / Leaf

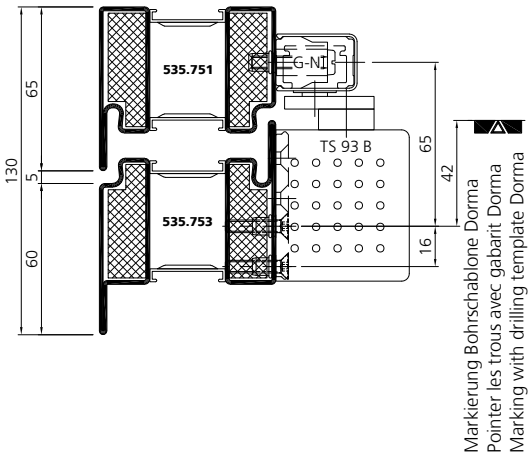
FRM min. 620 mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



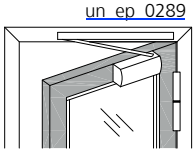
Dorma TS93B,
1 flügelig, Bandseite,
Normalmontage

Dorma TS93B,
1 vantail, coté paumelles,
Montage standard

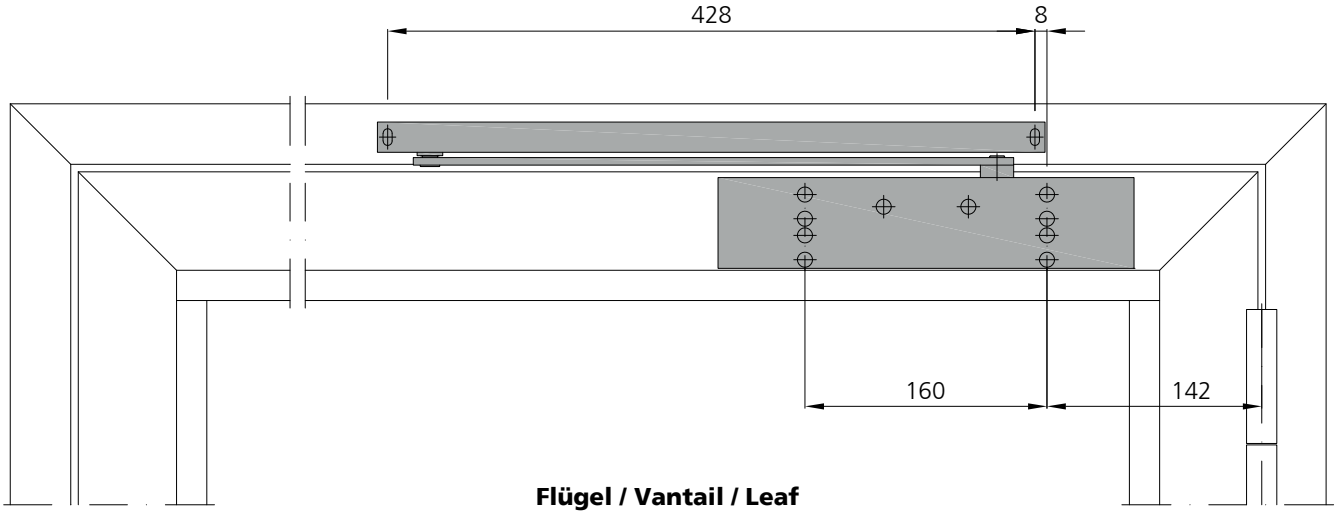
Dorma TS93B,
1 leaf, hinge side,
Standard mounting

un_ep_0289

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



Flügel / Vantail / Leaf

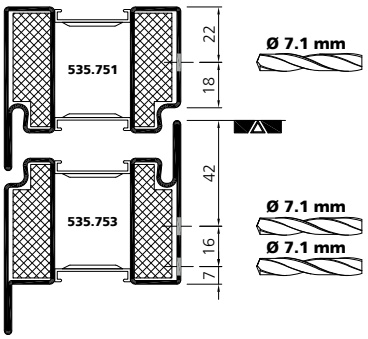
FRM min. 620 mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



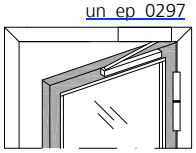
3

Dorma TS 93 G,
1 flügelig, Bandseite,
Kopfmontage

Dorma TS 93 G,
1 vantail, coté paumelles,
Montage renversé

Dorma TS 93 G,
1 leaf, hinge side,
Head mounting

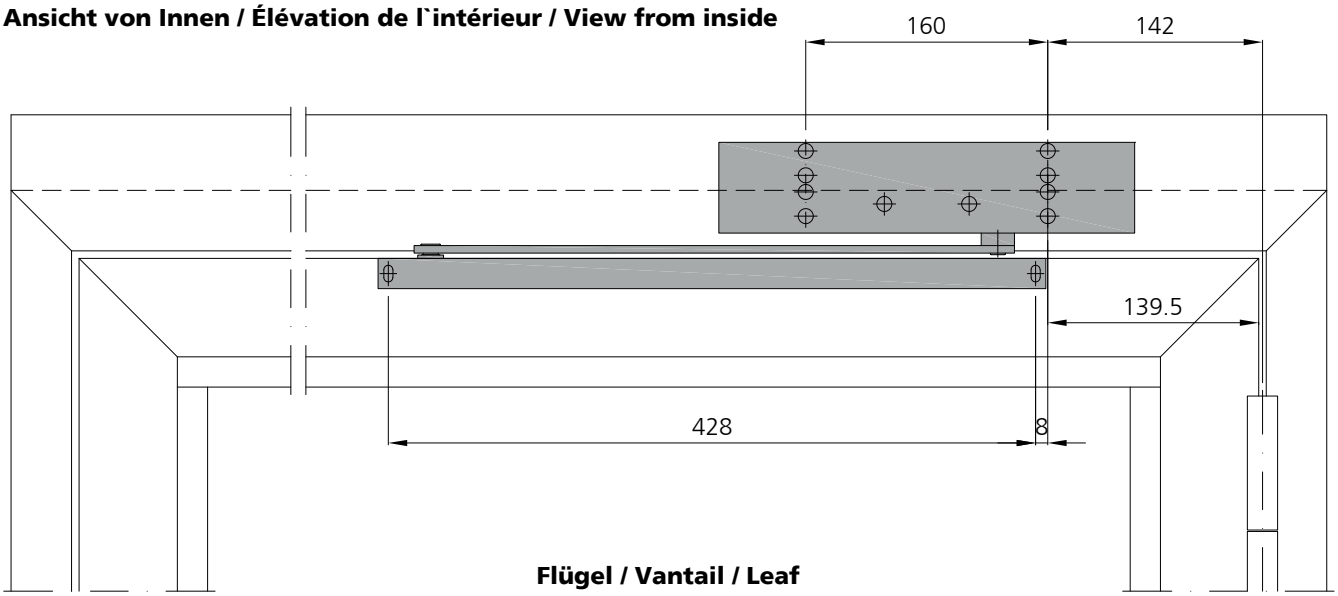
un_ep_0297



Masse sind gemäss Einbauanleitung Dorma zu prüfen!
Contrôler les dimensions selon les instructions de montage Dorma!
Dimensions have to be verified according to Dorma's assembly instructions!

DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intérieur / View from inside

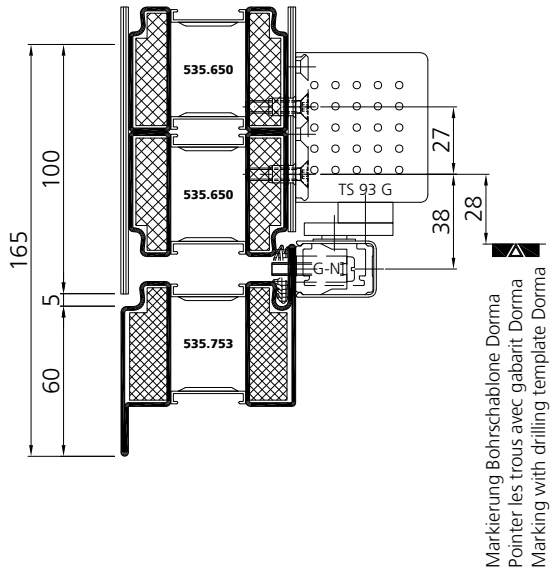


Flügel / Vantail / Leaf

FRM min. 620 mm

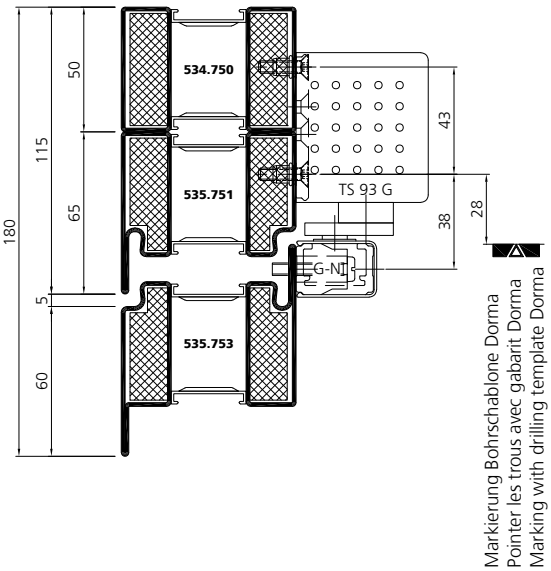


Variante 1



Markierung Bohrschablone Dorma
Pointer les trous avec gabarit Dorma
Marking with drilling template Dorma

Variante 2



Markierung Bohrschablone Dorma
Pointer les trous avec gabarit Dorma
Marking with drilling template Dorma

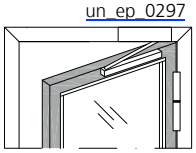
09/23

Dorma TS 93 G,
1 flügelig, Bandseite,
Kopfmontage

DormaTS 93 G,
1 vantail, coté paumelles,
Montage renversé

Dorma TS 93 G,
1 leaf, hinge side,
Head mounting

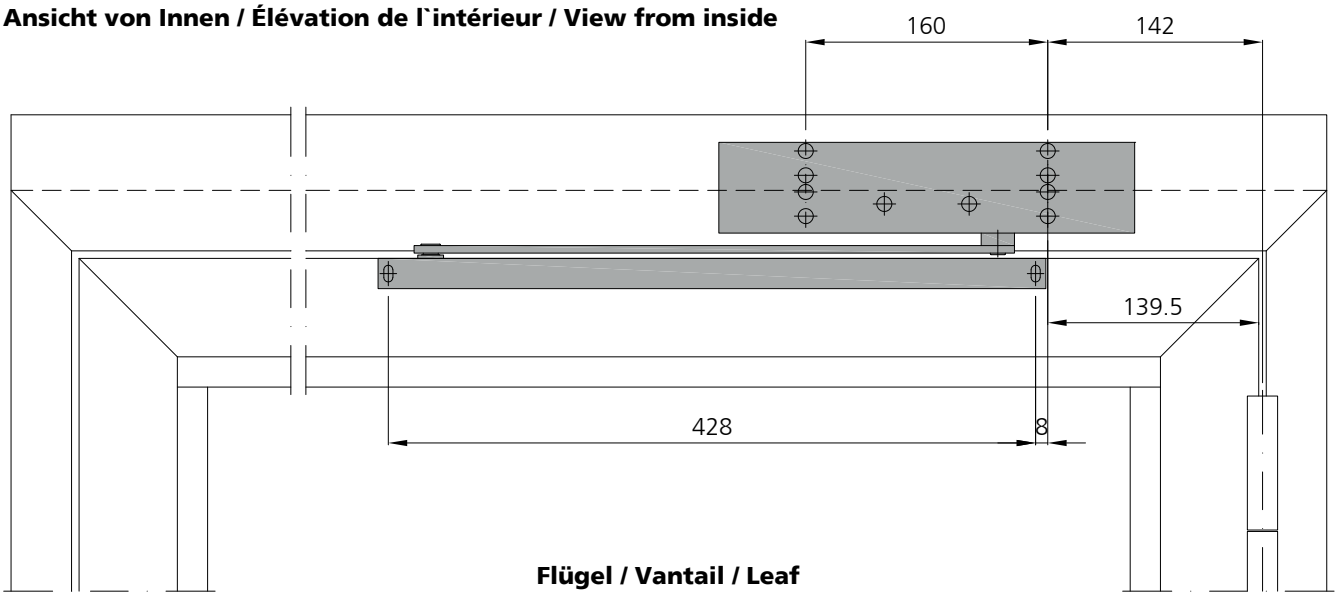
un_ep_0297



Masse sind gemäss Einbauanleitung Dorma zu prüfen!
Contrôler les dimensions selon les instructions de montage Dorma!
Dimensions have to be verified according to Dorma's assembly instructions!

DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intérieur / View from inside

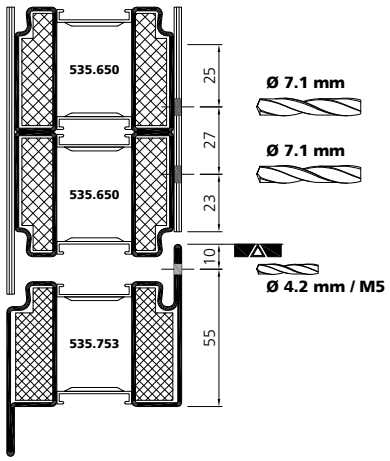


Flügel / Vantail / Leaf

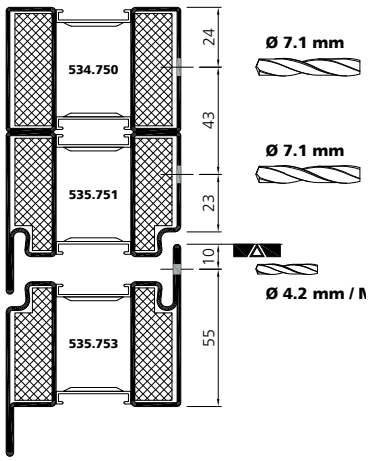
FRM min. 620 mm



Variante 1



Variante 2



3

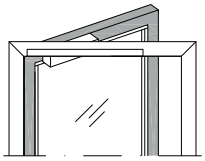
Dorma TS 93 G,
1 flügelig, Bandgegenseite, Normalmontage

Dorma TS 93 G,
1 vantail, coté opposé aux paumelles, Montage standard

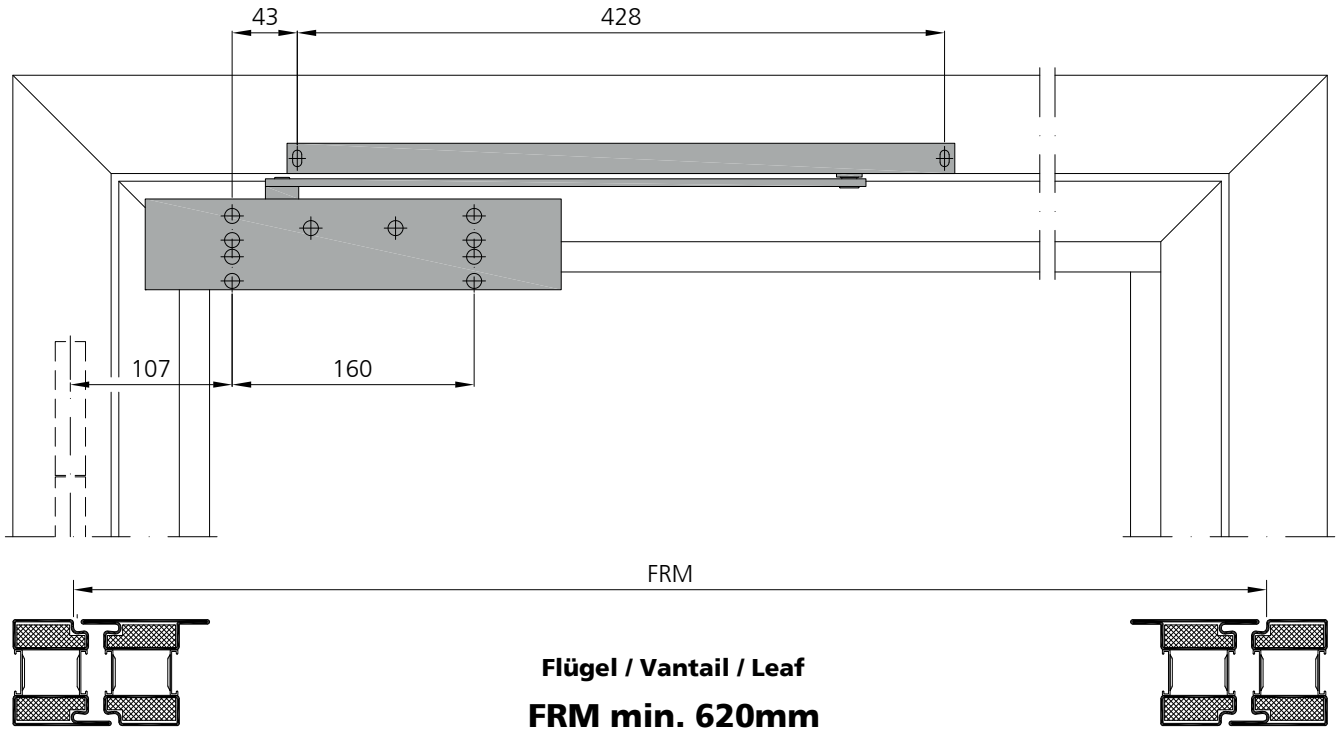
Dorma TS 93 G,
1 leaf, opposite hinge side, Standard mounting

un_ep_0300

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



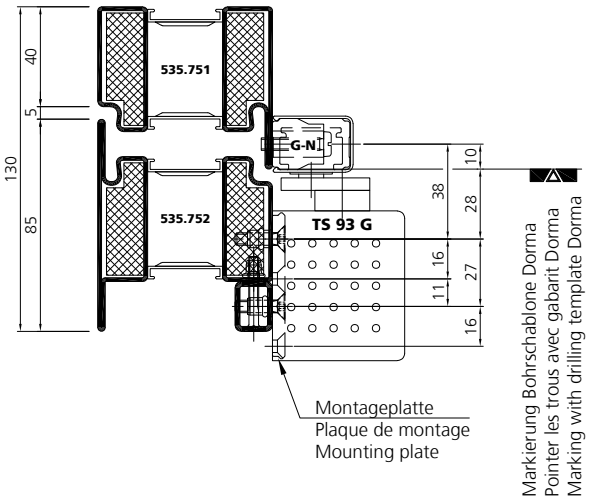
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



09/23

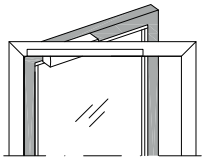
Dorma TS 93 G,
1 flügelig, Bandgegenseite, Normalmontage

Dorma TS 93 G,
1 vantail, coté opposé aux paumelles, Montage standard

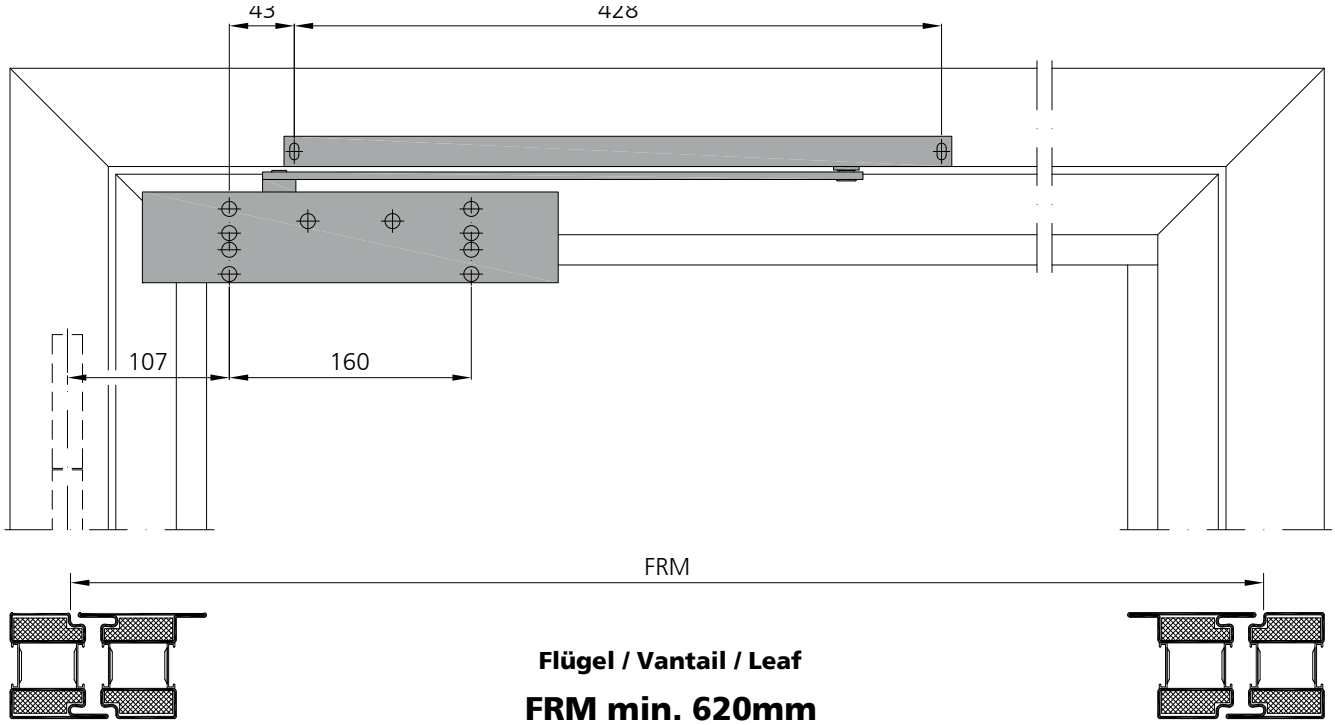
Dorma TS 93 G,
1 leaf, opposite hinge side, Standard mounting

un_ep_0300

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



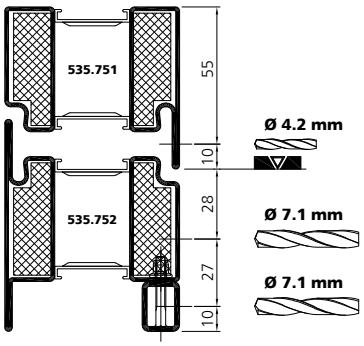
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!

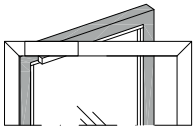


Dorma TS93B,
1 flügelig, Bandgegenseite
Kopfmontage

Dorma TS93B,
1 vantail, coté opposé aux paumelles, Montage renversé

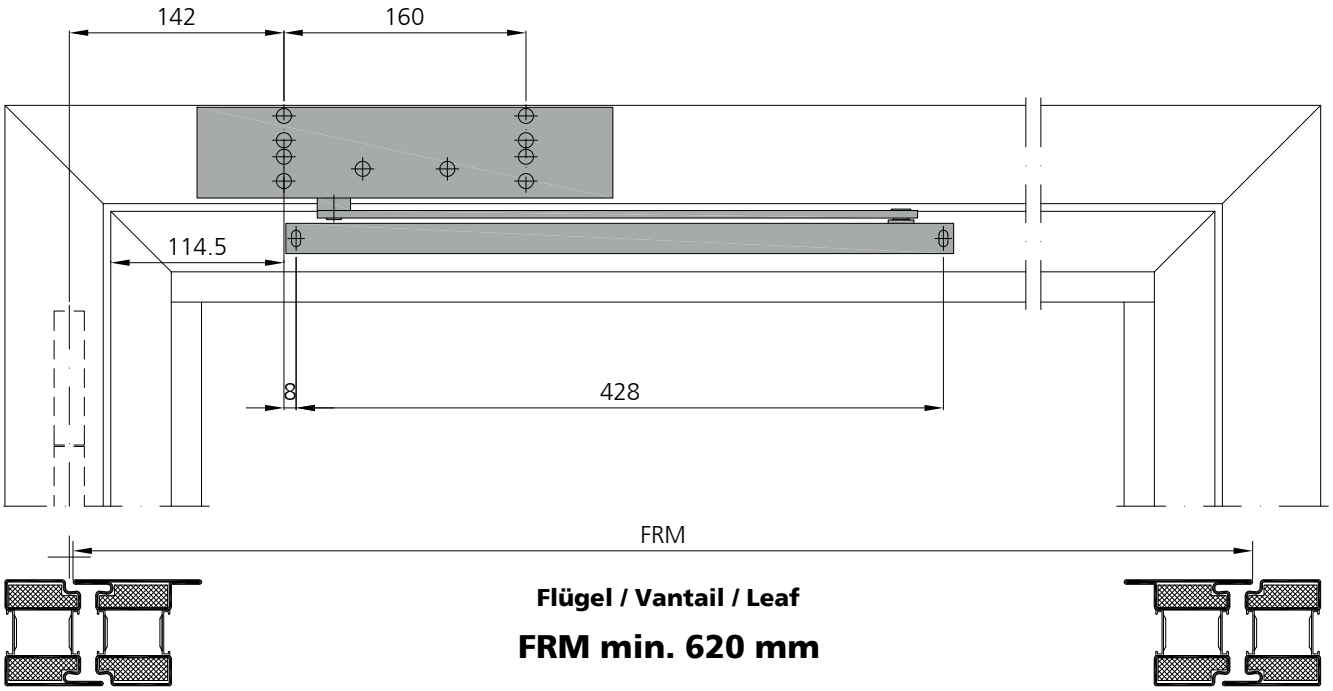
Dorma TS93B,
1 leaf, opposite hinge side,
Head mounting

un_ep_0290



DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intéreieur / View from inside



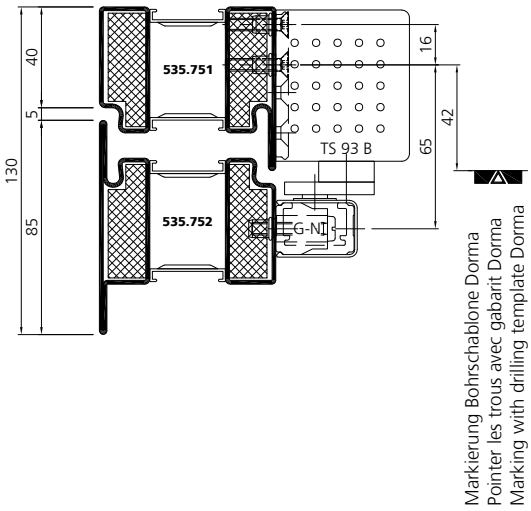
Flügel / Vantail / Leaf

FRM min. 620 mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



09/23

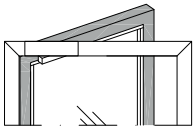
Dorma TS93B,
1 flügelig, Bandgegenseite
Kopfmontage

Dorma TS93B,
1 vantail, coté opposé aux paumelles, Montage renversé

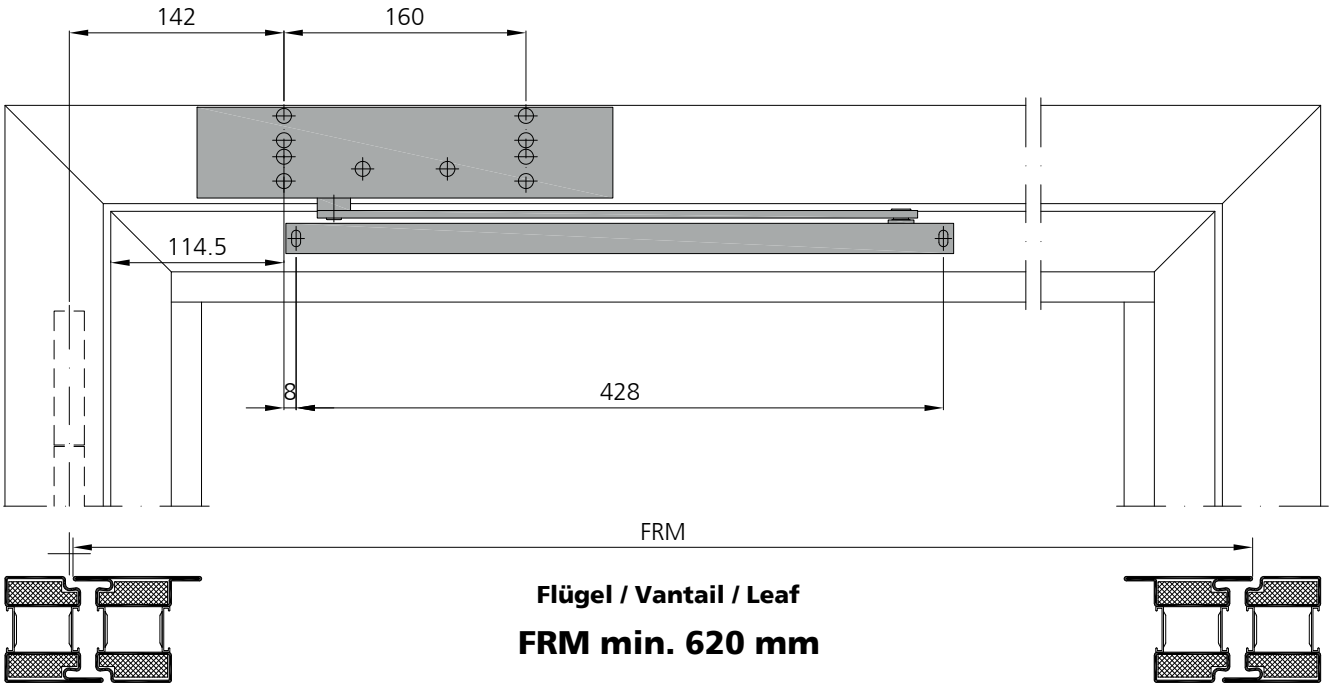
Dorma TS93B,
1 leaf, opposite hinge side,
Head mounting

un_ep_0290

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intéreieur / View from inside



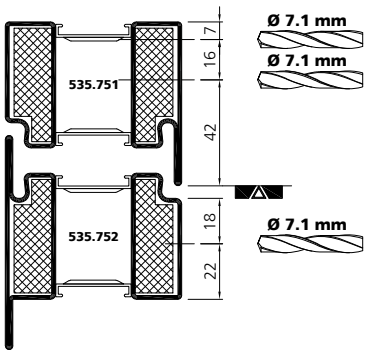
Flügel / Vantail / Leaf

FRM min. 620 mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



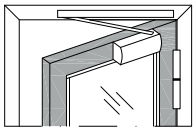
Dorma TS 98 XEA + G-N
1-flügelig
Bandseite
Normalmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté paumelles
Montage standard

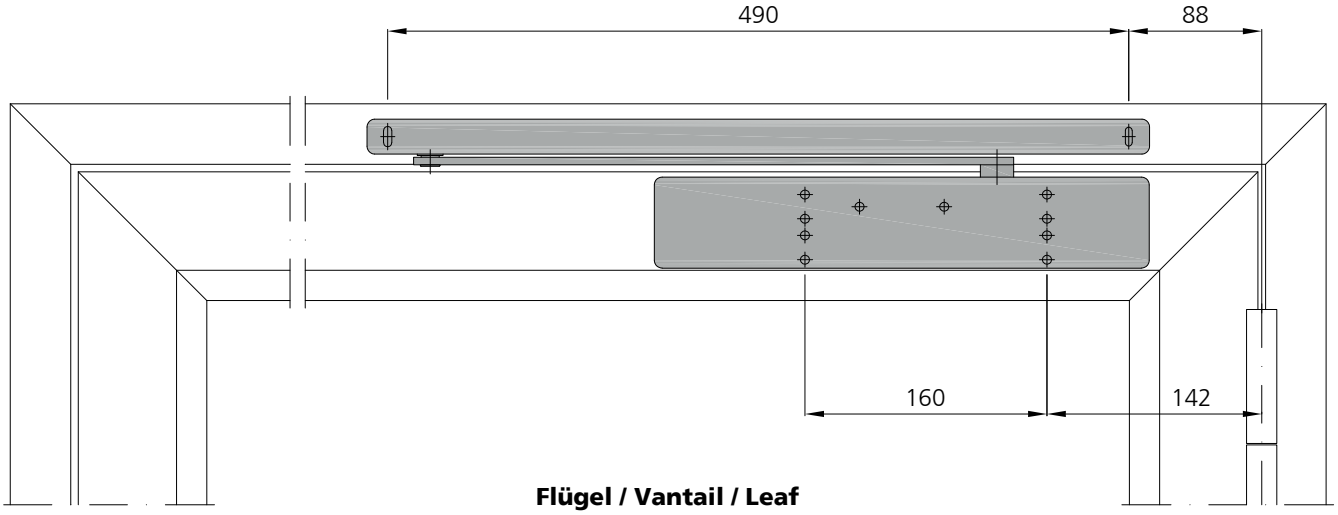
Dorma TS 98 XEA + G-N
1 leaf
Hinge side
Standard mounting

un_ep_0301

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



Flügel / Vantail / Leaf

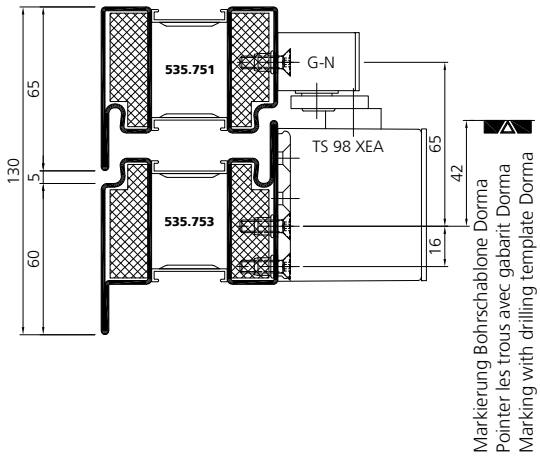
FRM min. 620mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



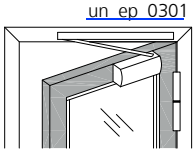
Dorma TS 98 XEA + G-N
1-flügelig
Bandseite
Normalmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté paumelles
Montage standard

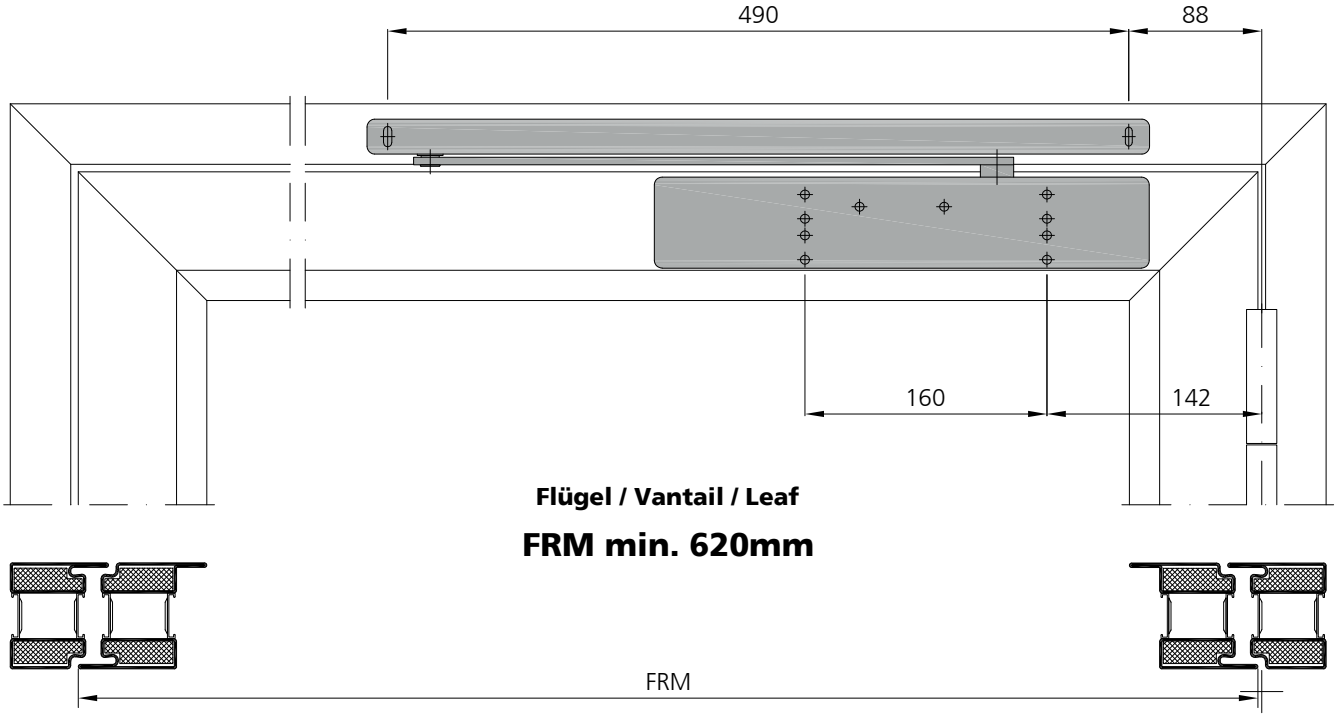
Dorma TS 98 XEA + G-N
1 leaf
Hinge side
Standard mounting

un_ep_0301

DIN rechts
DIN droite
DIN right



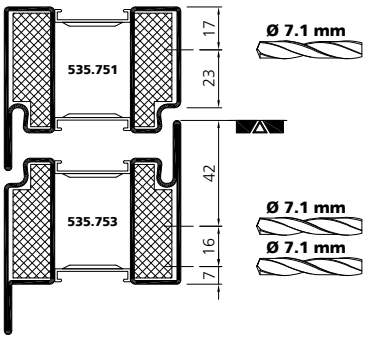
Ansicht von Innen / Élévation de l`intérieur / View from inside



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!

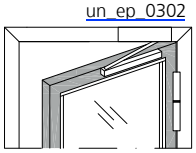


Dorma TS 98 XEA + G-N
1-flügelig
Bandseite
Kopfmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté paumelles
Montage inversé

Dorma TS 98 XEA + G-N
1 leaf
Hinge side
Head mounting

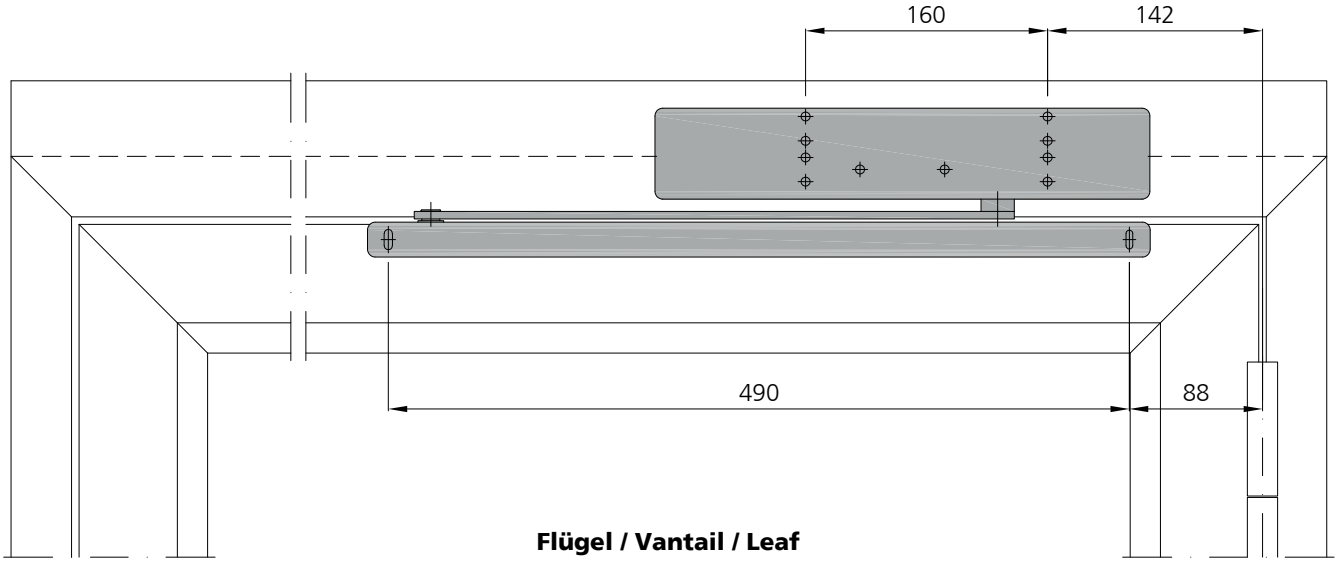
un_ep_0302



Masse sind gemäss Einbauanleitung Dorma zu prüfen!
Contrôler les dimensions selon les instructions de montage Dorma!
Dimensions have to be verified according to Dorma's assembly instructions!

DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intérieur / View from inside

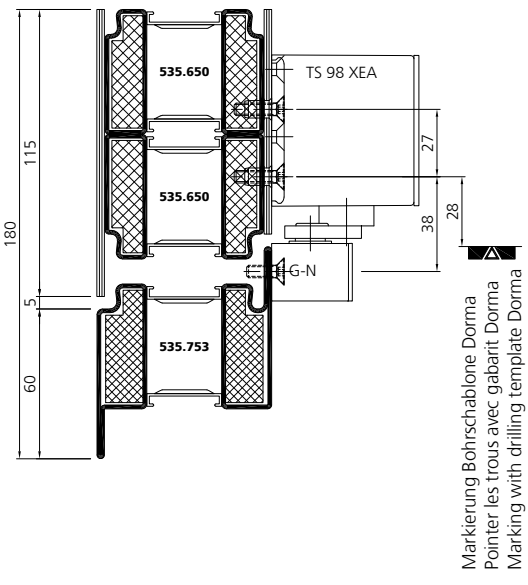


Flügel / Vantail / Leaf

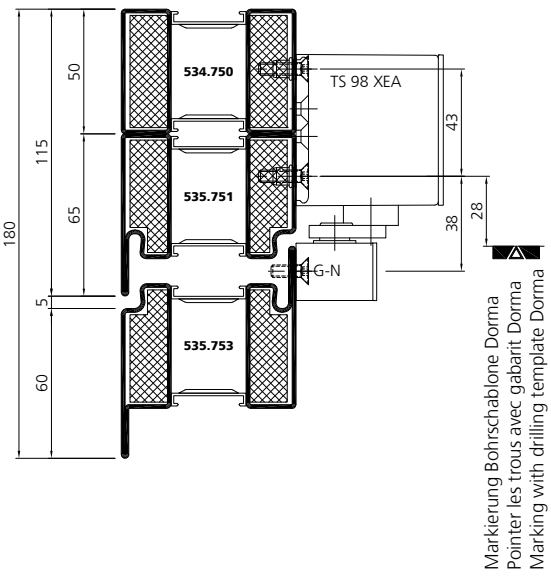
FRM min. 620mm



Variante 1



Variante 2



09/23

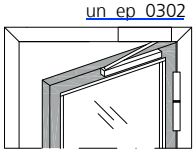
Dorma TS 98 XEA + G-N
1-flügelig
Bandseite
Kopfmontage

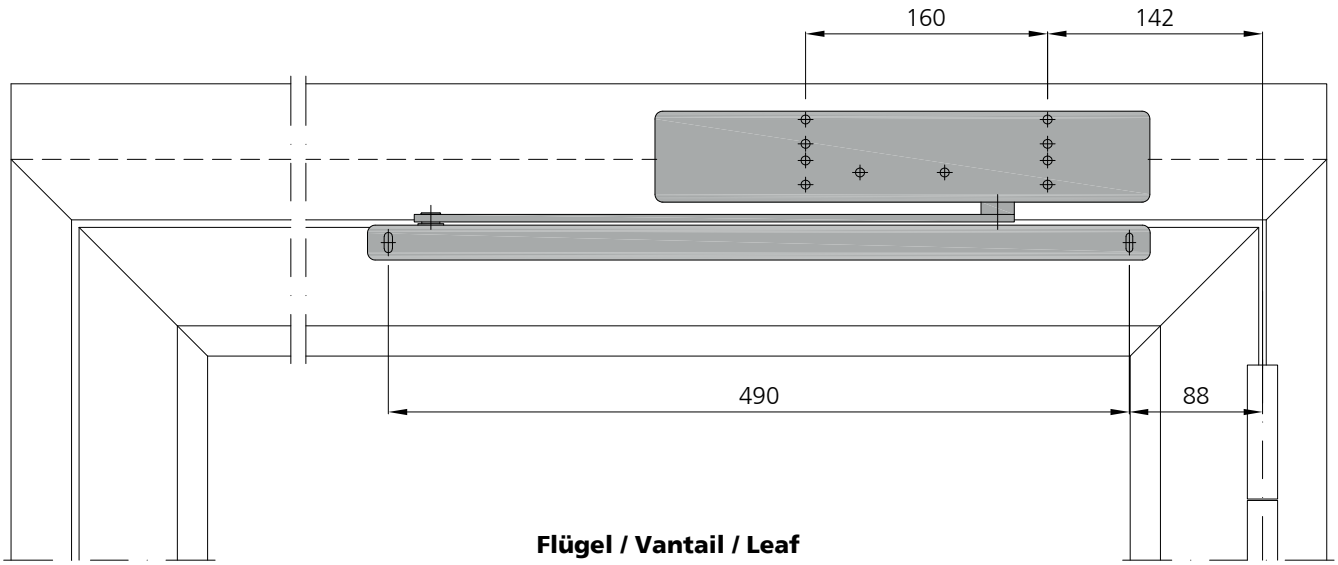
Dorma TS 98 XEA + G-N
1 vantail
Coté paumelles
Montage inversé

Dorma TS 98 XEA + G-N
1 leaf
Hinge side
Head mounting

un_ep_0302

DIN rechts
DIN droite
DIN right



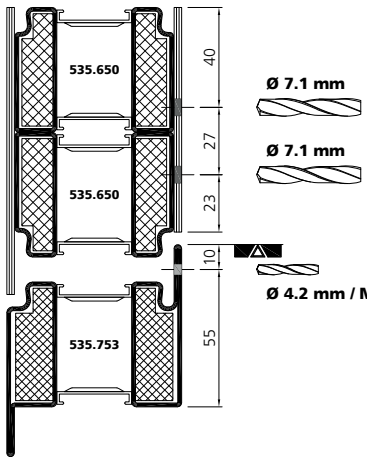


Flügel / Vantail / Leaf

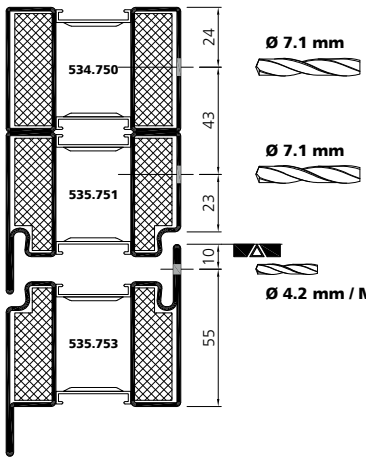
FRM min. 620mm



Variante 1



Variante 2



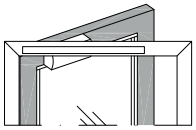
Dorma TS 98 XEA + G-N
1-flügelig
Gegenbandseite
Normalmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté opposé aux paumelles
Montage standard

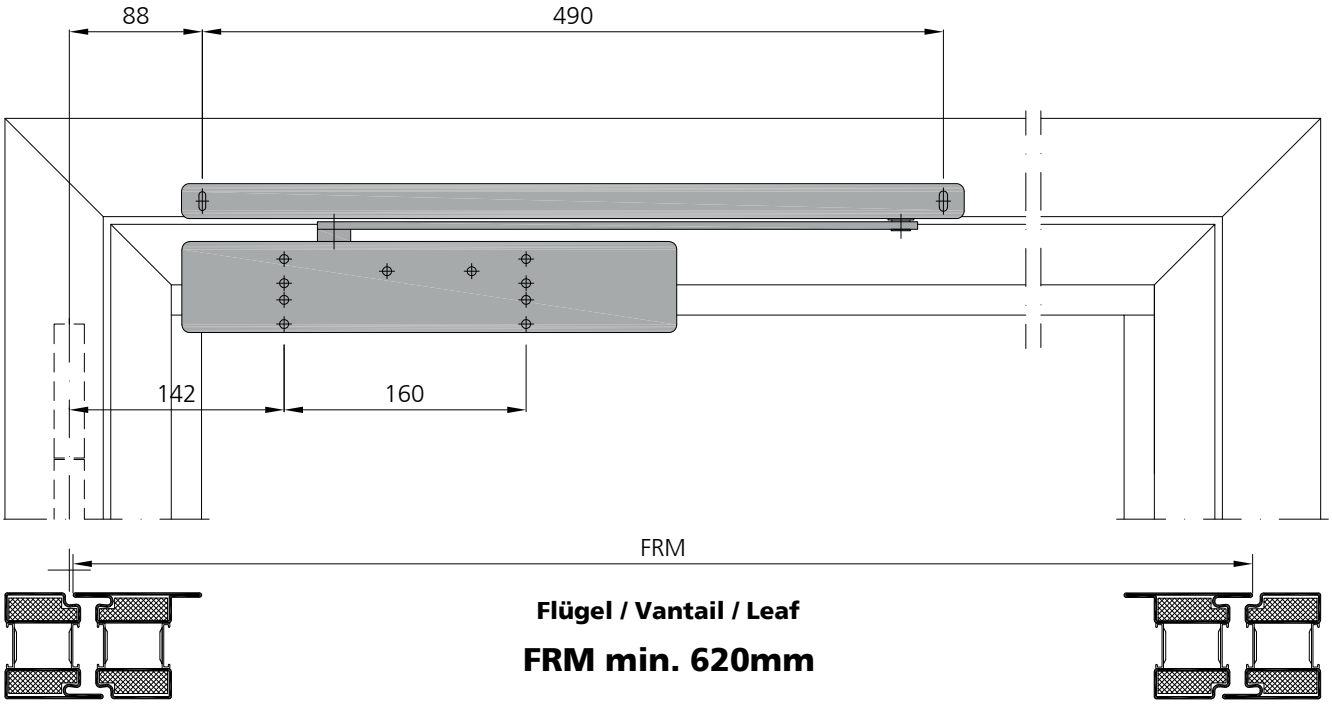
Dorma TS 98 XEA + G-N
1 leaf
Opposite hinge side
Standard mounting

un_ep_0303

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



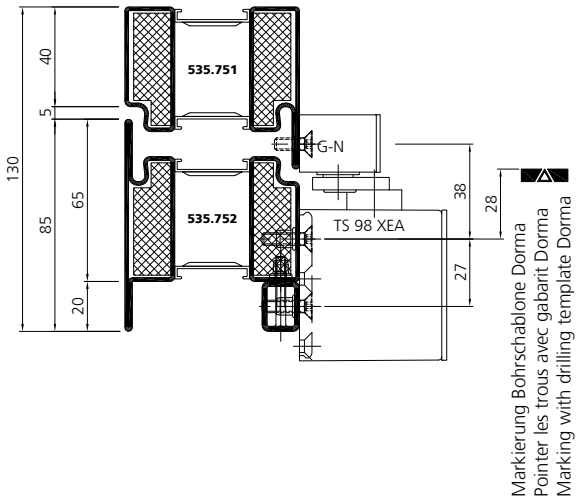
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



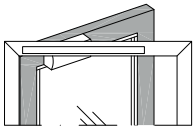
Dorma TS 98 XEA + G-N
1-flügelig
Gegenbandseite
Normalmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté opposé aux paumelles
Montage standard

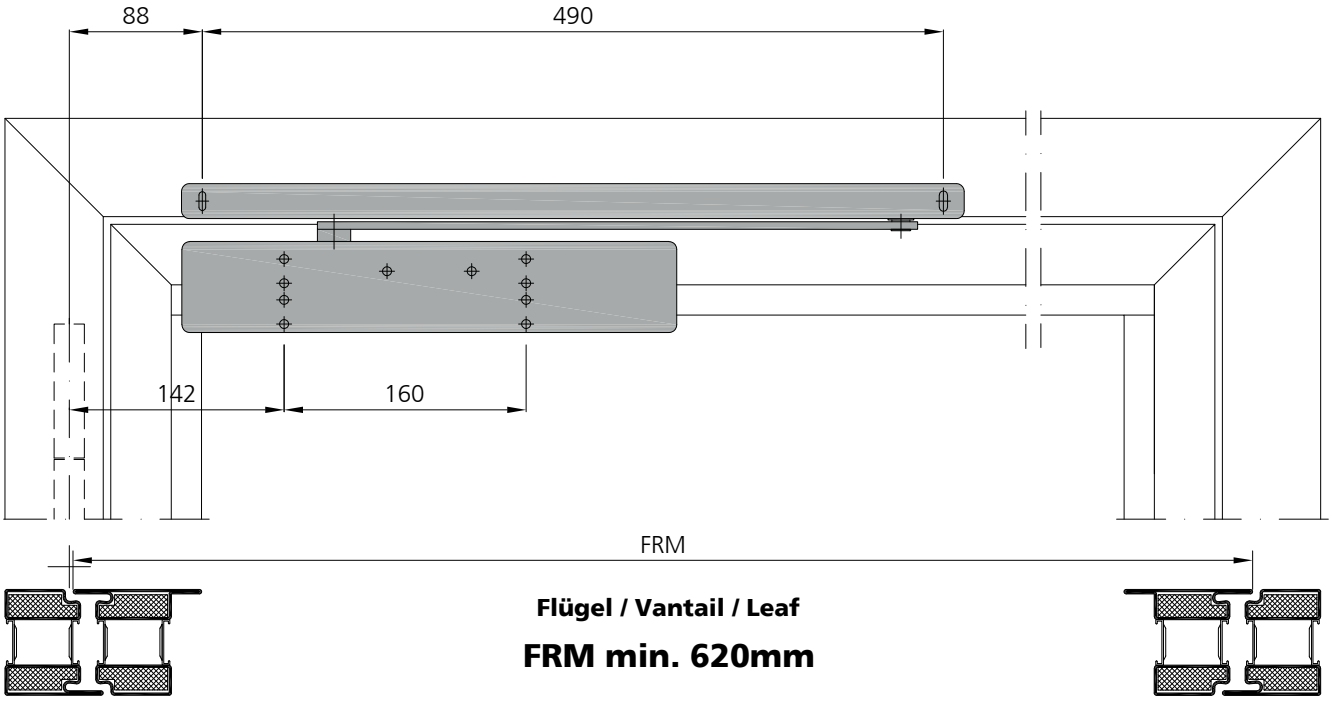
Dorma TS 98 XEA + G-N
1 leaf
Opposite hinge side
Standard mounting

un_ep_0303

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



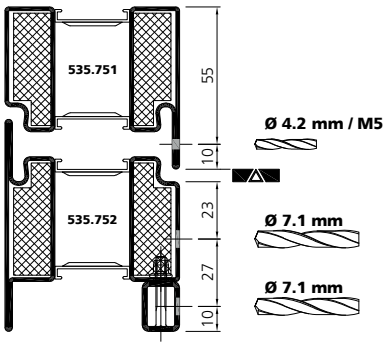
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!

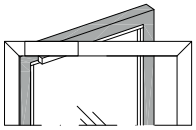


Dorma TS 98 XEA + G-N
1-flügelig
Gegenbandseite
Kopfmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté opposé aux paumelles
Montage inversé

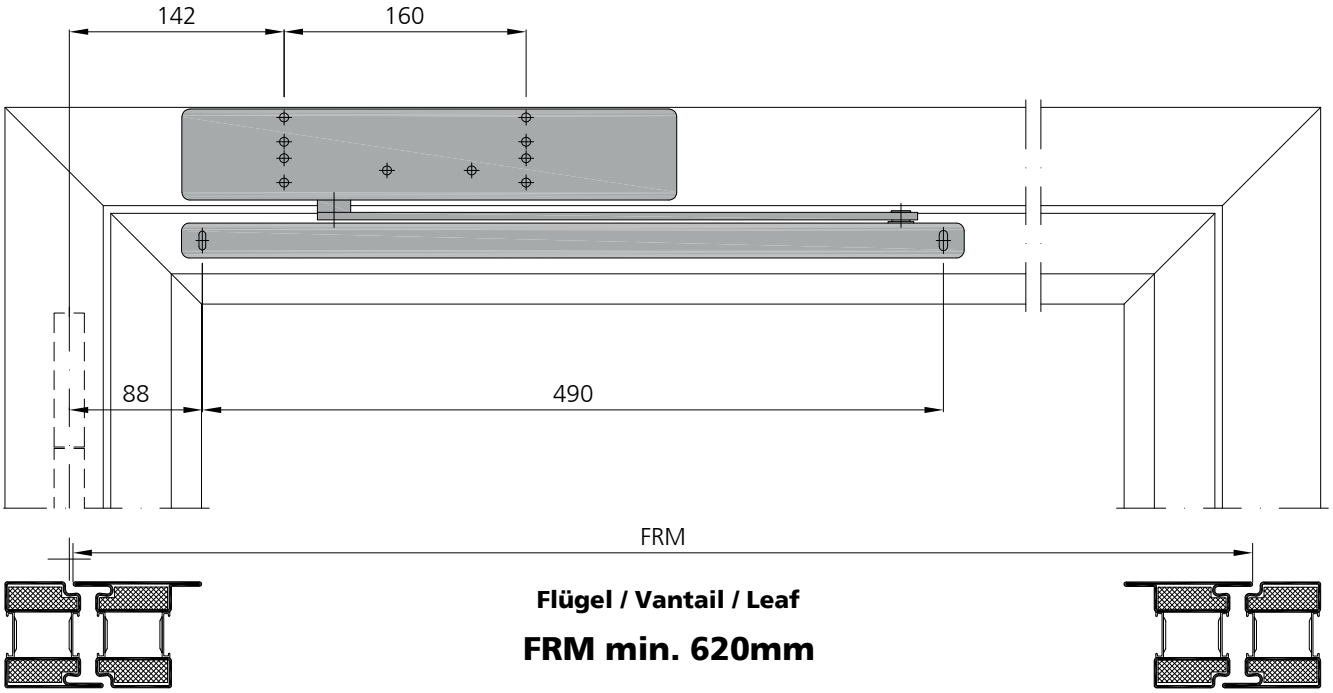
Dorma TS 98 XEA + G-N
1 leaf
Opposite hinge side
Head mounting

un_ep_0304



DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intérieur / View from inside



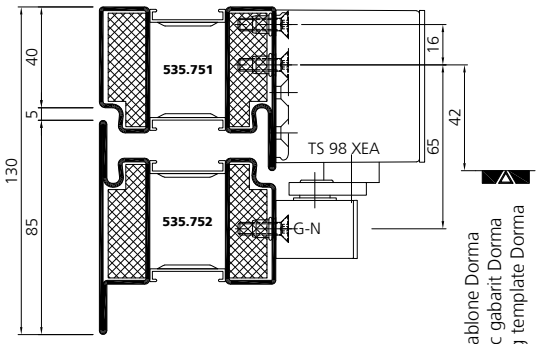
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



Markierung Bohrschablone Dorma
Pointer les trous avec gabarit Dorma
Marking with drilling template Dorma

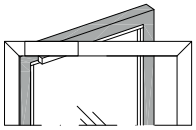
Dorma TS 98 XEA + G-N
1-flügelig
Gegenbandseite
Kopfmontage

Dorma TS 98 XEA + G-N
1 vantail
Coté opposé aux paumelles
Montage inversé

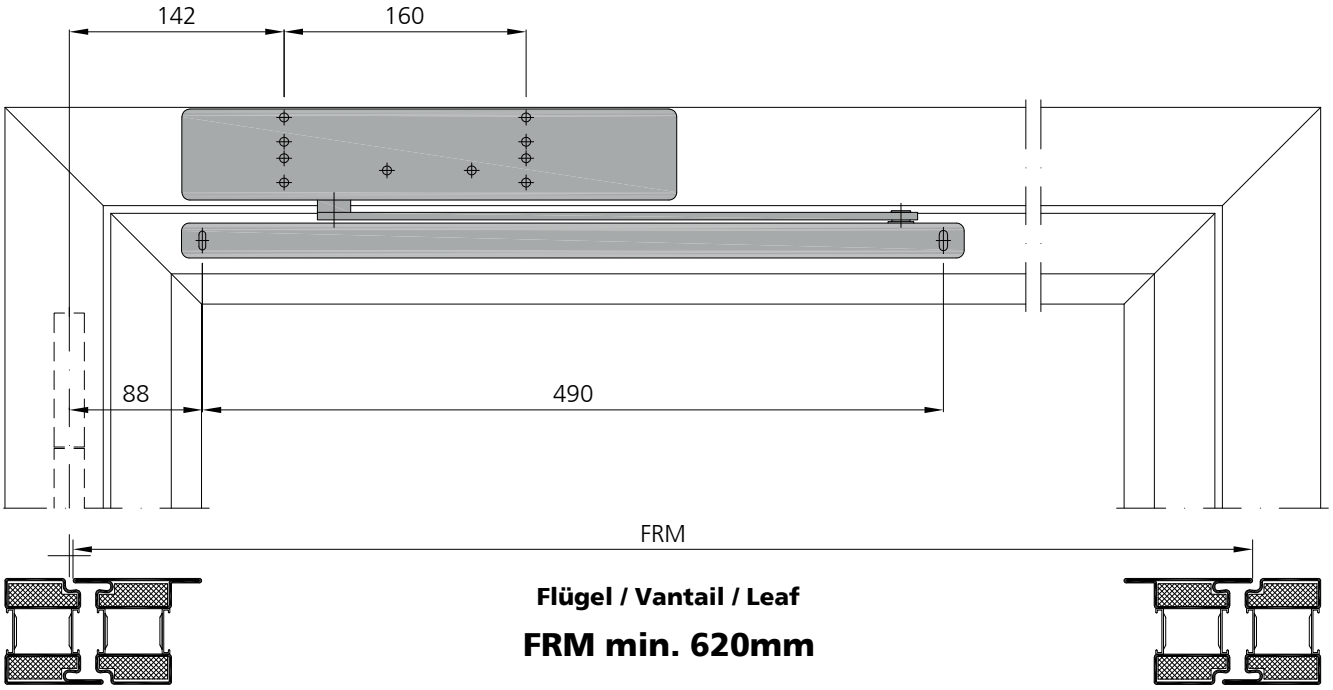
Dorma TS 98 XEA + G-N
1 leaf
Opposite hinge side
Head mounting

un_ep_0304

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



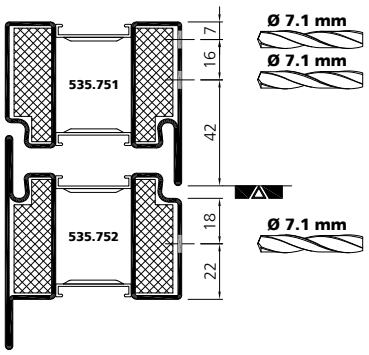
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



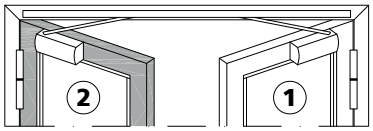
Dorma TS93B G-SR,
2 flügelig, Bandseite,
Normalmontage

Dorma TS93B G-SR,
2 vantaux, coté paumelles,
Montage standard

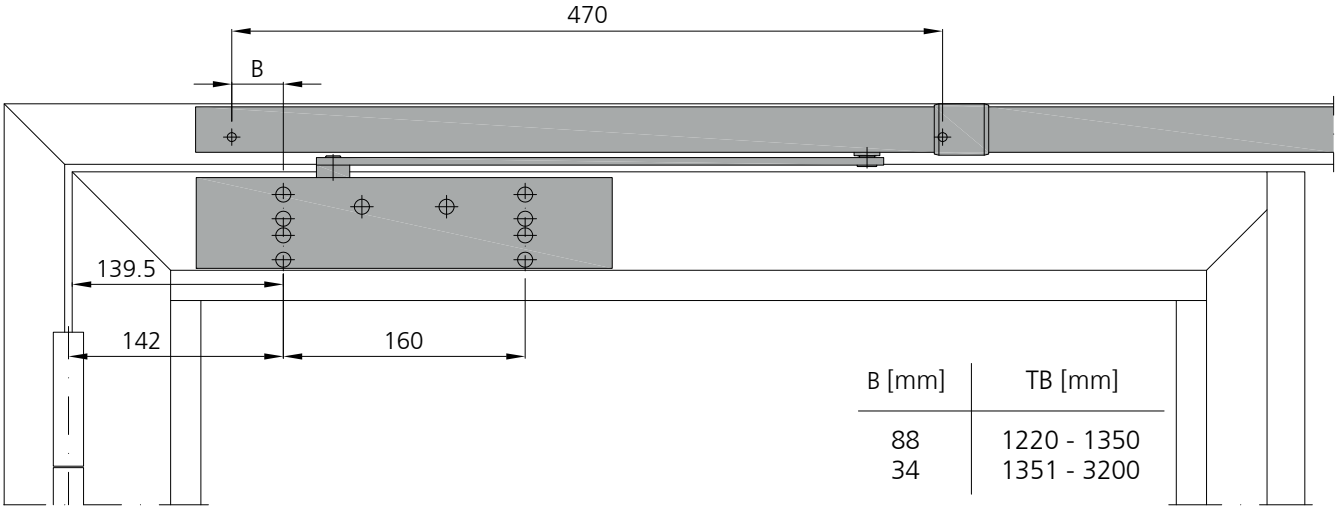
Dorma TS93B G-SR,
2 leaves, hinge side,
Standard mounting

un_ep_0291

DIN rechts
DIN droite
DIN right



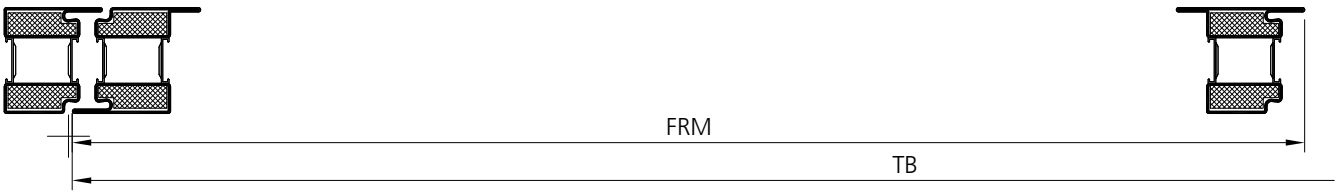
Ansicht von Innen / Élévation de l`intérieur / View from inside



B [mm]	TB [mm]
88	1220 - 1350
34	1351 - 3200

Standflügel / Vantail semi-fixe / Fixed leaf

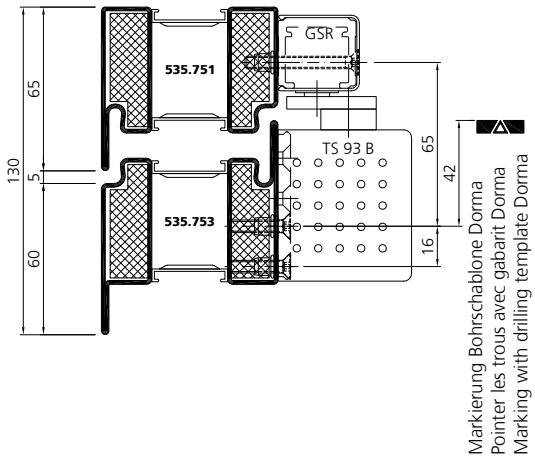
FRM min. 620 mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



09/23

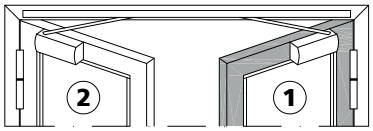
Dorma TS93B G-SR,
2 flügelig,Bandseite,
Normalmontage

Dorma TS93B G-SR,
2 vantaux, coté paumelles,
Montage standard

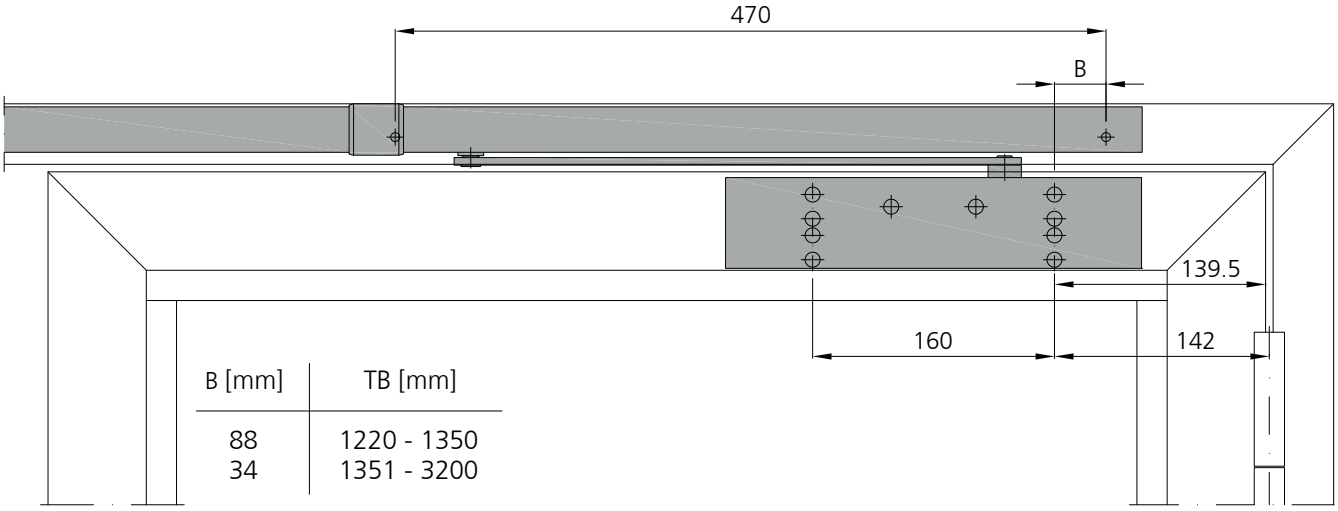
Dorma TS93B G-SR,
2 leaves, hinge side,
Standard mounting

un_ep_0291

DIN rechts
DIN droite
DIN right



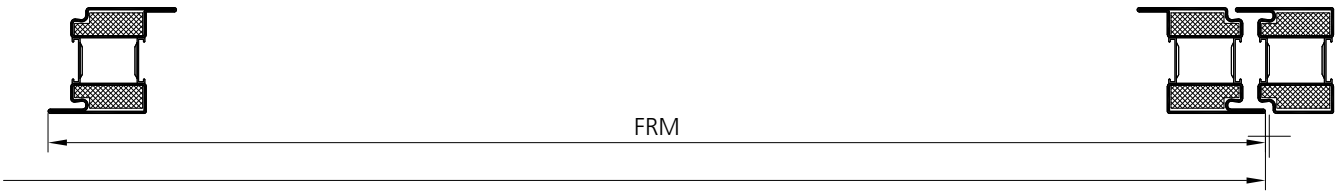
Ansicht von Innen / Élévation de l`intérieur / View from inside



B [mm]	TB [mm]
88	1220 - 1350
34	1351 - 3200

Gangflügel / Vantail de service / Opening leaf

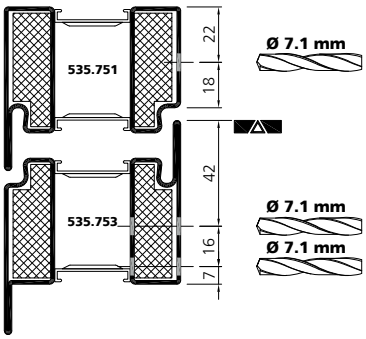
FRM min. 620 mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



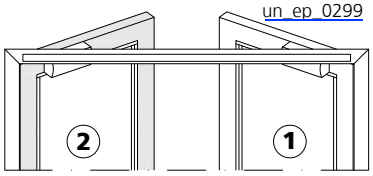
Dorma TS 93 G G-SR/BG
2-flügelig
Gegenbandseite
Normalmontage

Dorma TS 93 G G-SR/BG
2 vantaux
Coté opposé aux paumelles
Montage standard

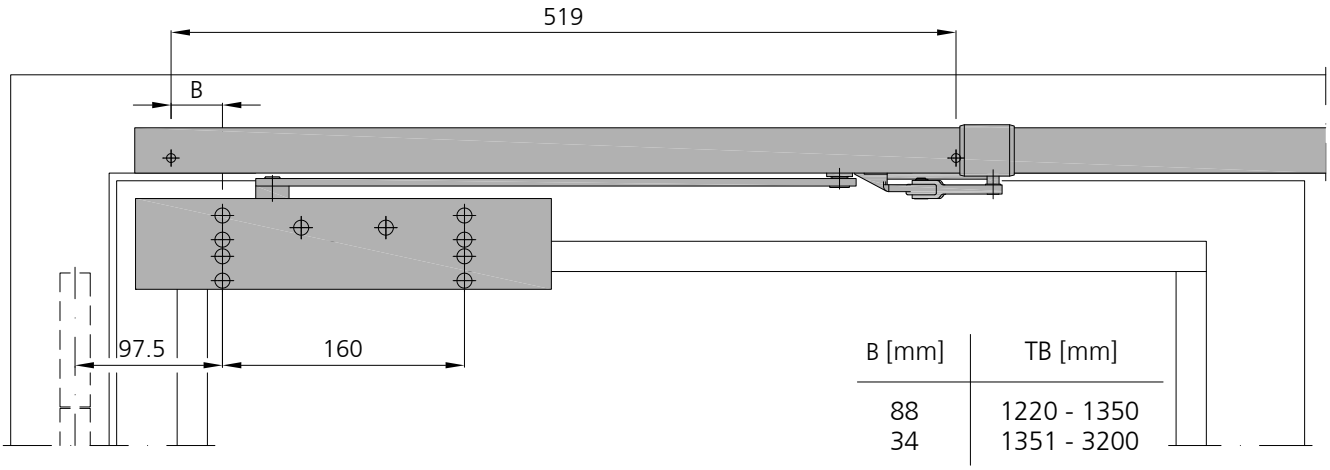
Dorma TS 93 G G-SR/BG
2 leafs
Opposite hinge side
Standard mounting

un_ep_0299

DIN rechts
DIN droite
DIN right



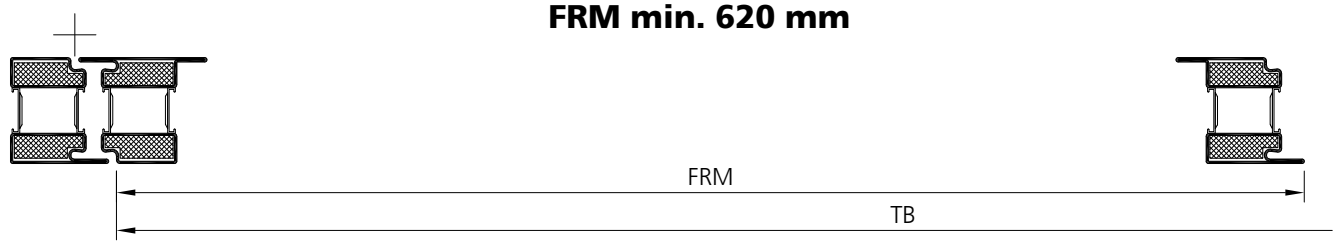
Ansicht von Innen / Élévation de l`intérieur / View from inside



B [mm]	TB [mm]
88	1220 - 1350
34	1351 - 3200

Standflügel / Vantail semi-fixe / Fixed leaf

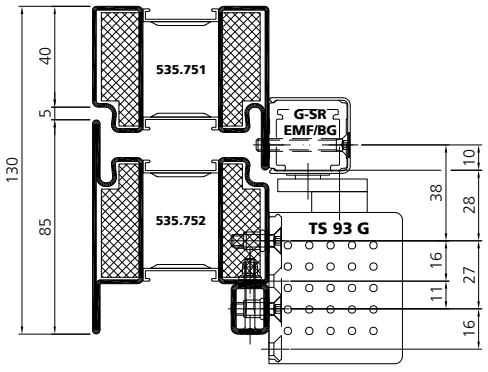
FRM min. 620 mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



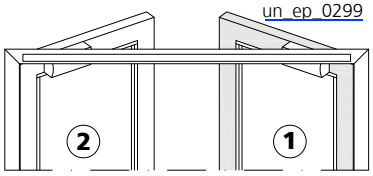
Dorma TS 93 G G-SR/BG
2-flügelig
Gegenbandseite
Normalmontage

Dorma TS 93 G G-SR/BG
2 vantaux
Coté opposé aux paumelles
Montage standard

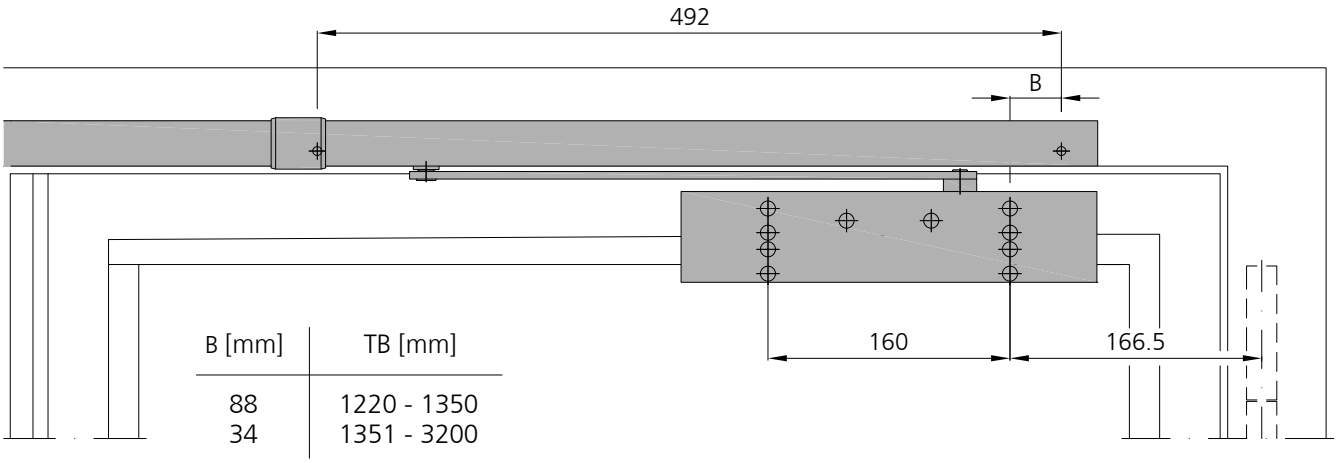
Dorma TS 93 G G-SR/BG
2 leafs
Opposite hinge side
Standard mounting

un_ep_0299

DIN rechts
DIN droite
DIN right



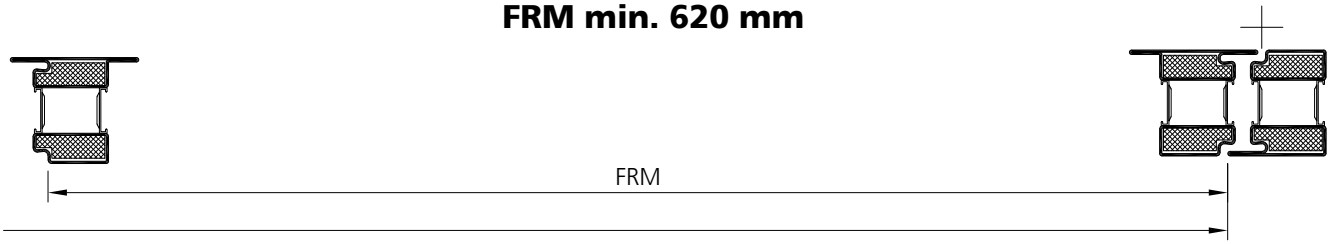
Ansicht von Innen / Élévation de l`intérieur / View from inside



B [mm]	TB [mm]
88	1220 - 1350
34	1351 - 3200

Gangflügel / Vantail de service / Opening leaf

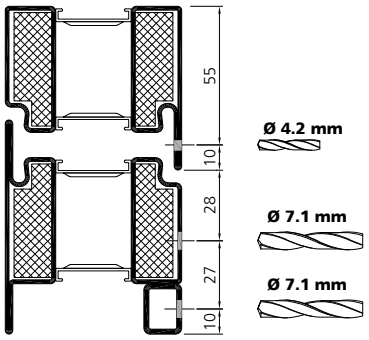
FRM min. 620 mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



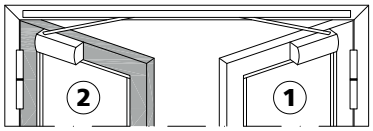
Dorma TS 98 XEA + G-SR
2-flügelig
Bandseite
Normalmontage

Dorma TS 98 XEA + G-SR
2 vantaux
Coté paumelles
Montage standard

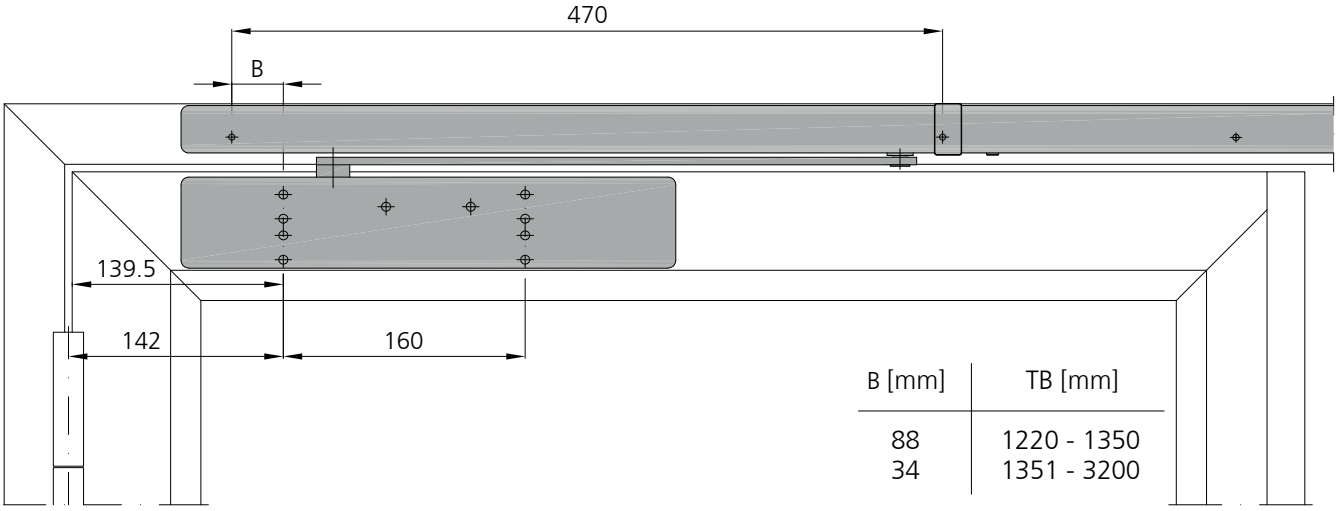
Dorma TS 98 XEA + G-SR
2 leafs
Hinge side
Standard mounting

un_ep_0305

DIN rechts
DIN droite
DIN right



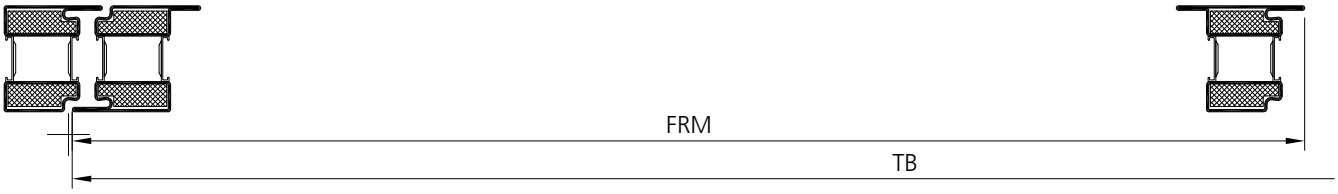
Ansicht von Innen / Élévation de l`intérieur / View from inside



B [mm]	TB [mm]
88	1220 - 1350
34	1351 - 3200

Standflügel / Vantail semi-fixe / Fixed leaf

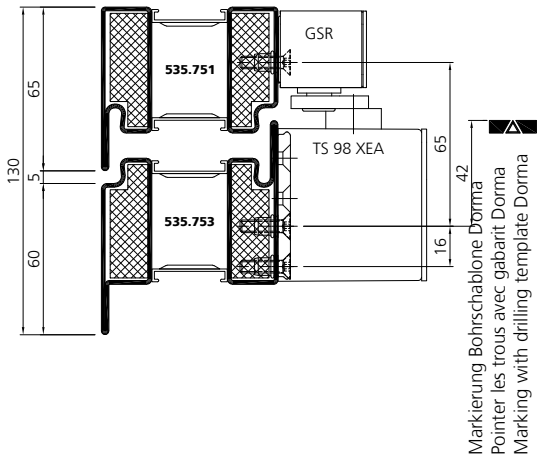
FRM min. 400mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



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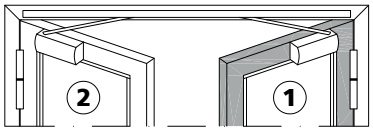
Dorma TS 98 XEA + G-SR
2-flügelig
Bandseite
Normalmontage

Dorma TS 98 XEA + G-SR
2 vantaux
Coté paumelles
Montage standard

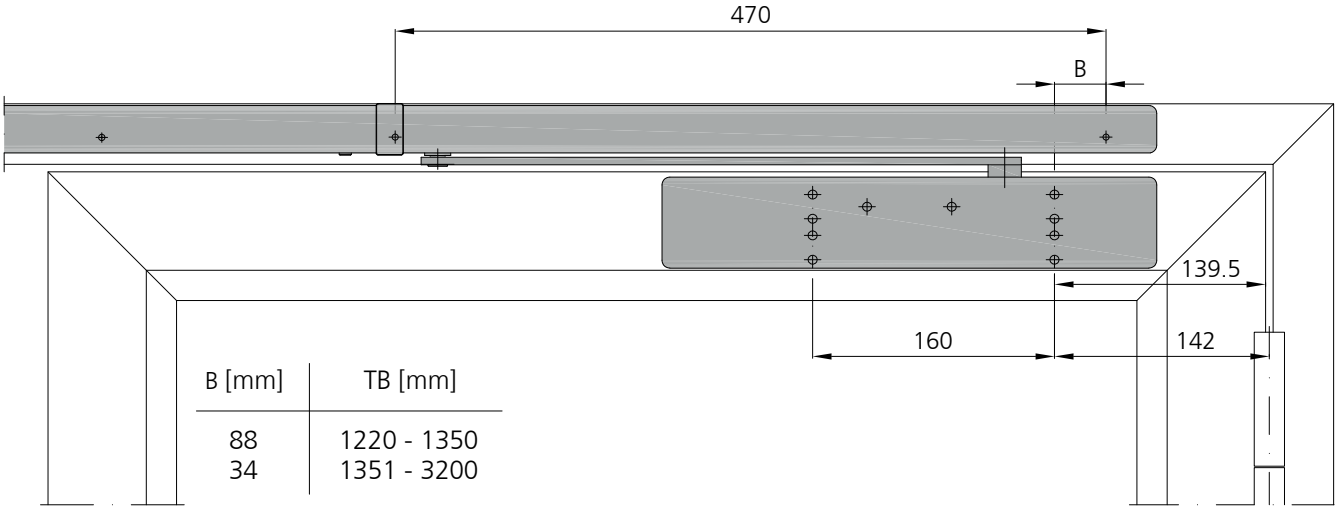
Dorma TS 98 XEA + G-SR
2 leafs
Hinge side
Standard mounting

un_ep_0305

DIN rechts
DIN droite
DIN right



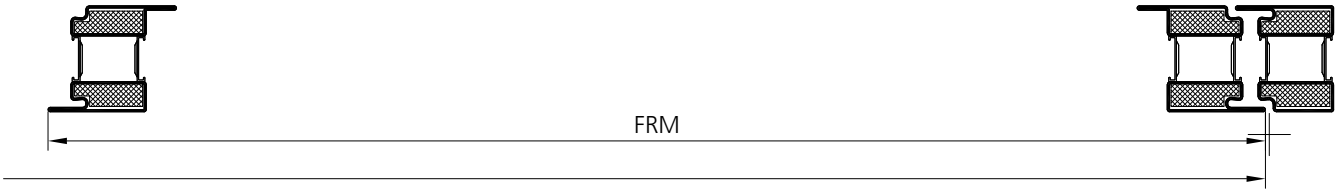
Ansicht von Innen / Élévation de l`intérieur / View from inside



B [mm]	TB [mm]
88	1220 - 1350
34	1351 - 3200

Gangflügel / Vantail de service / Opening leaf

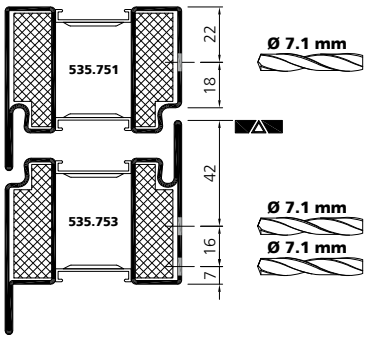
FRM min. 620mm



Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!

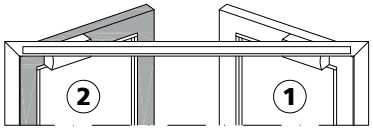


Dorma TS 98 XEA + G-SR
2-flügelig
Gegenbandseite
Normalmontage

Dorma TS 98 XEA + G-SR
2 vantaux
Coté opposé aux paumelles
Montage standard

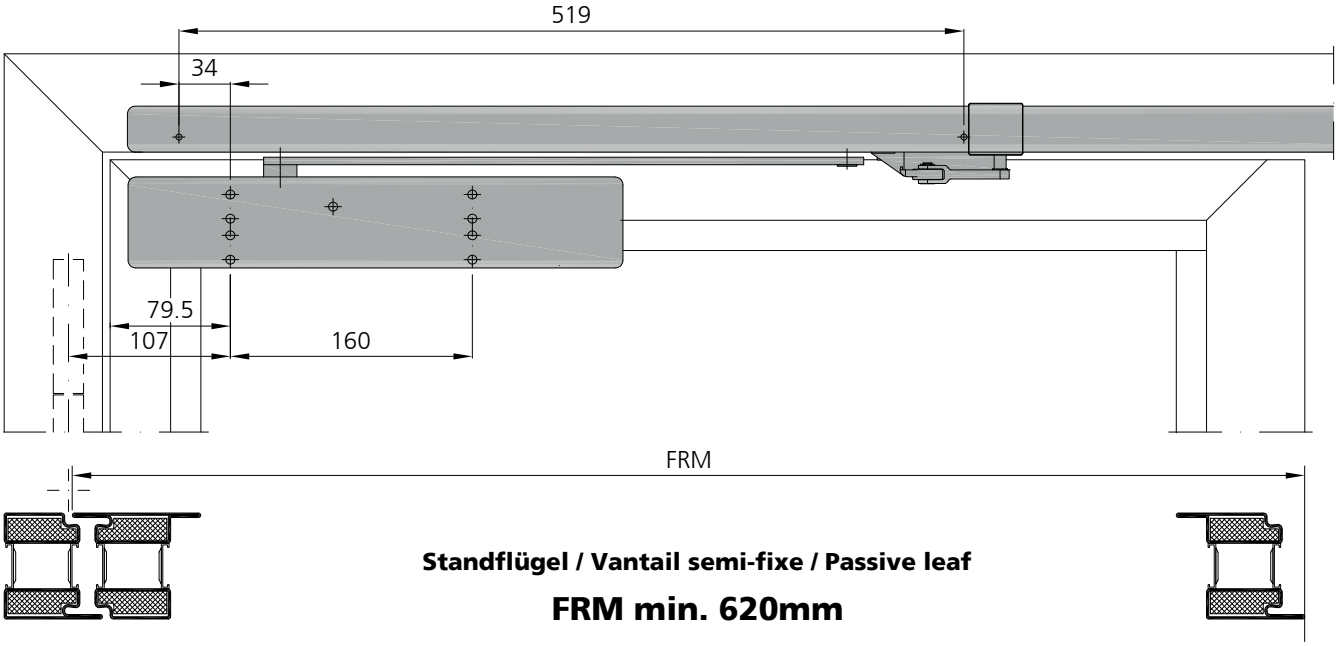
Dorma TS 98 XEA + G-SR
2 leafs
Opposite hinge side
Standard mounting

un_ep_0306



DIN links
DIN gauche
DIN left

Ansicht von Innen / Élévation de l`intérieur / View from inside



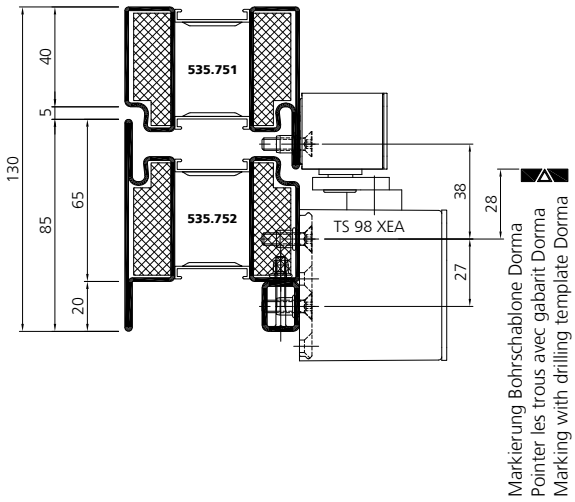
Standflügel / Vantail semi-fixe / Passive leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!



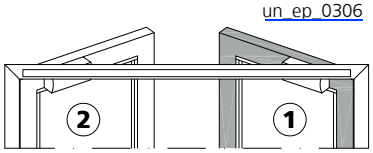
09/23

Dorma TS 98 XEA + G-SR
2-flügelig
Gegenbandseite
Normalmontage

Dorma TS 98 XEA + G-SR
2 vantaux
Coté opposé aux paumelles
Montage standard

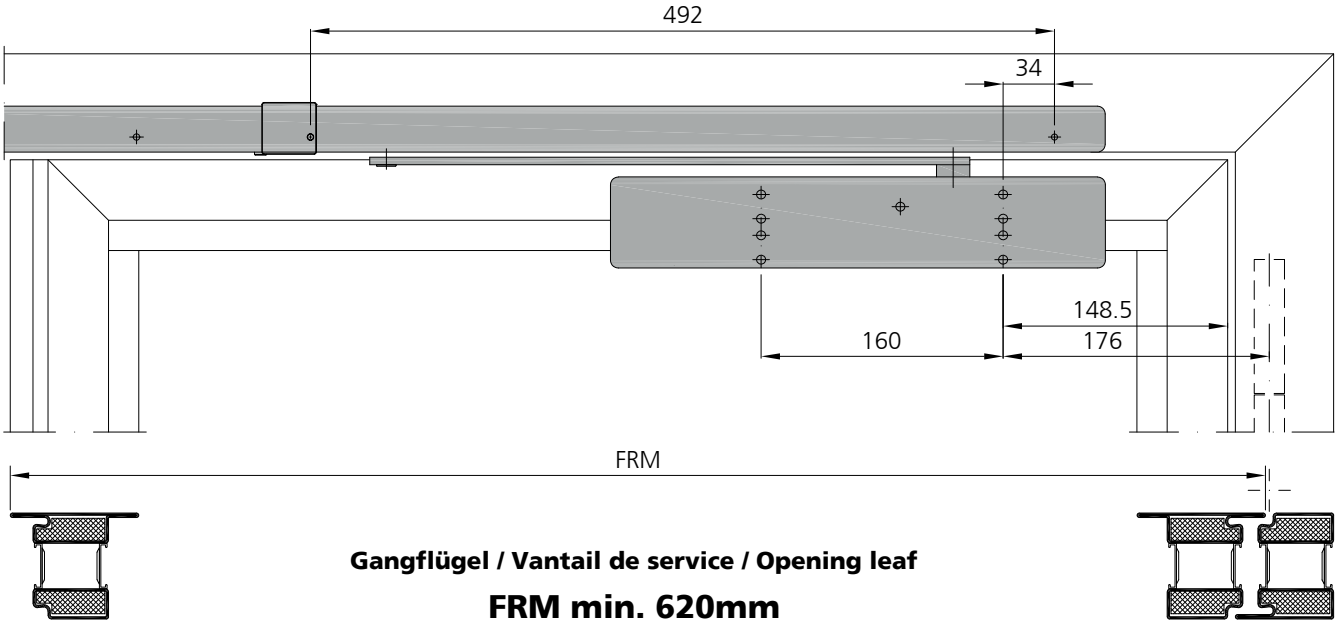
Dorma TS 98 XEA + G-SR
2 leafs
Opposite hinge side
Standard mounting

un_ep_0306



DIN links
DIN gauche
DIN left

Ansicht von Innen / Élévation de l`intérieur / View from inside



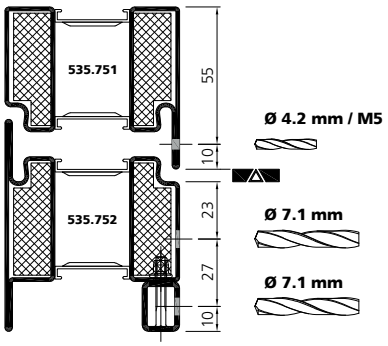
Gangflügel / Vantail de service / Opening leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung Dorma zu prüfen!

Contrôler les dimensions selon les instructions de montage Dorma!

Dimensions have to be verified according to Dorma's assembly instructions!

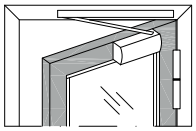


GEZE TS 5000,
1 flügelig, Bandseite,
Normalmontage

GEZE TS 5000,
1 vantail, coté paumelles,
Montage standard

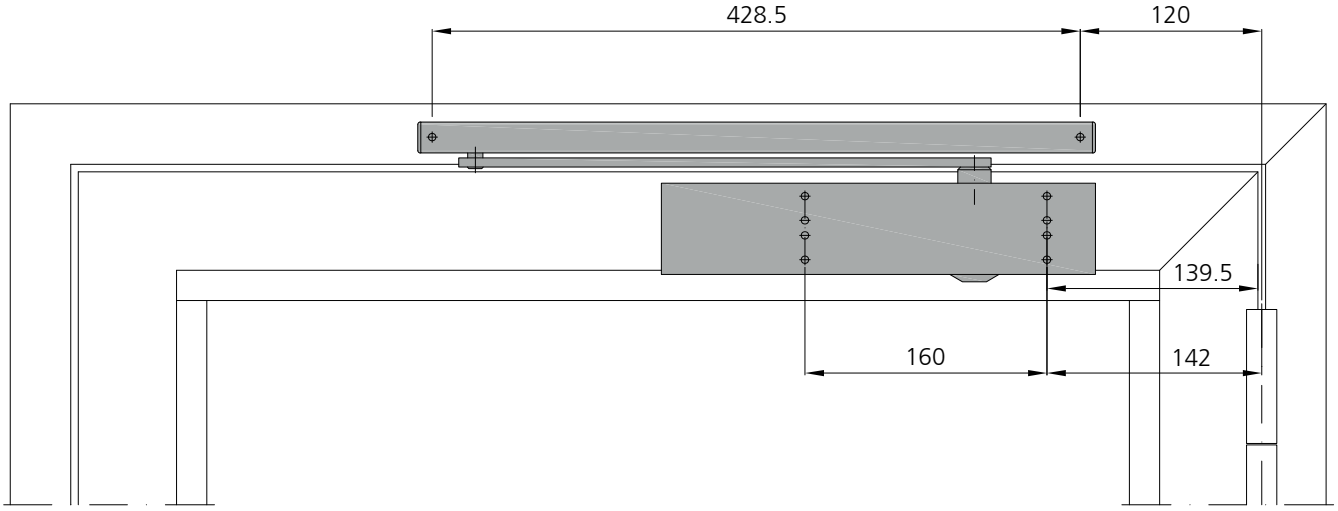
GEZE TS 5000,
1 leaf, hinge side,
Standard mounting

un_ep_0292



DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intéreieur / View from inside



Flügel / Vantail / Leaf

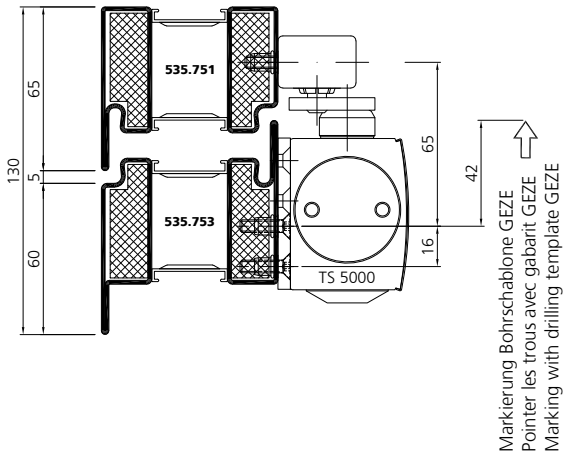
FRM min. 620 mm



Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!

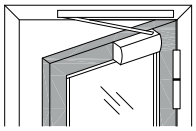


GEZE TS 5000,
1 flügelig, Bandseite,
Normalmontage

GEZE TS 5000,
1 vantail, coté paumelles,
Montage standard

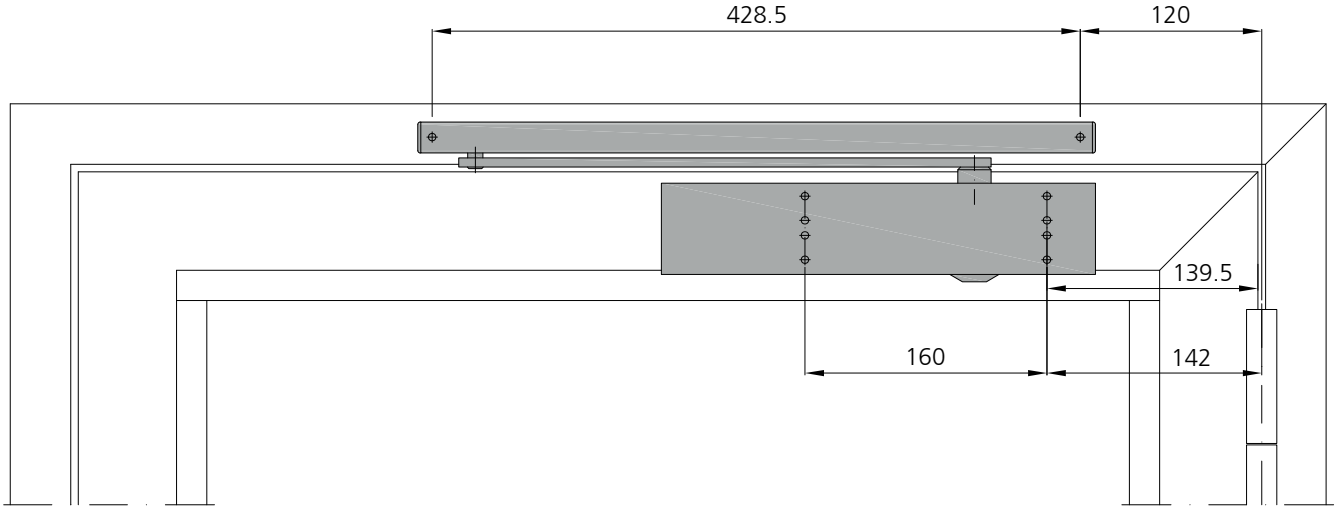
GEZE TS 5000,
1 leaf, hinge side,
Standard mounting

un_ep_0292



DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intéreieur / View from inside



Flügel / Vantail / Leaf

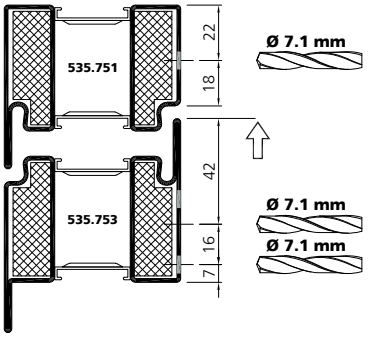
FRM min. 620 mm



Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



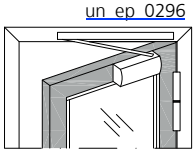
3

GEZE 5000 L,
1 flügelig, Bandseite,
Kopfmontage

GEZE 5000 L,
1 vantail, coté paumelles,
Montage renversé

GEZE 5000 L,
1 leaf, hinge side,
Head mounting

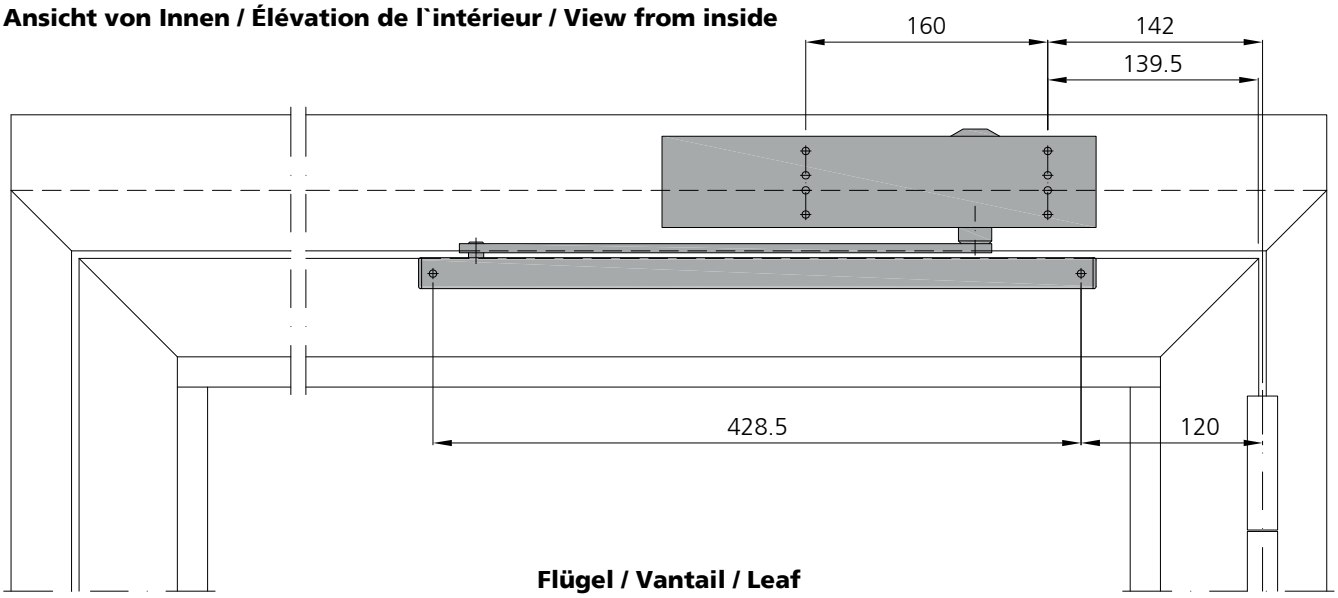
un_ep_0296



Masse sind gemäss Einbauanleitung GEZE zu prüfen!
Contrôler les dimensions selon les instructions de montage GEZE!
Dimensions have to be verified according to GEZE's assembly instructions!

DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intérieur / View from inside

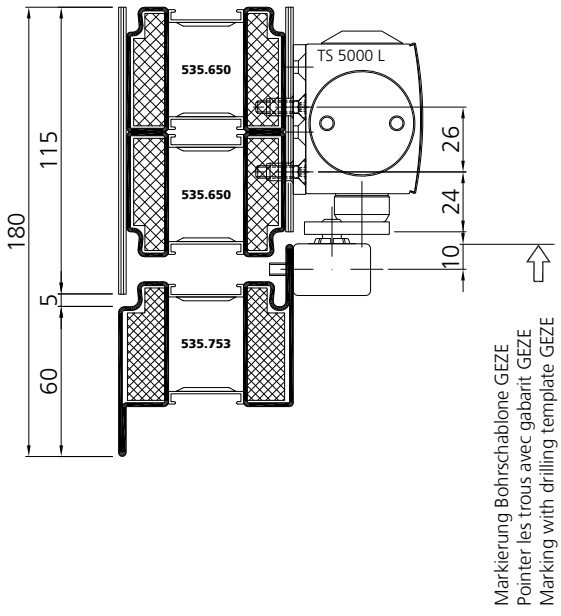


Flügel / Vantail / Leaf

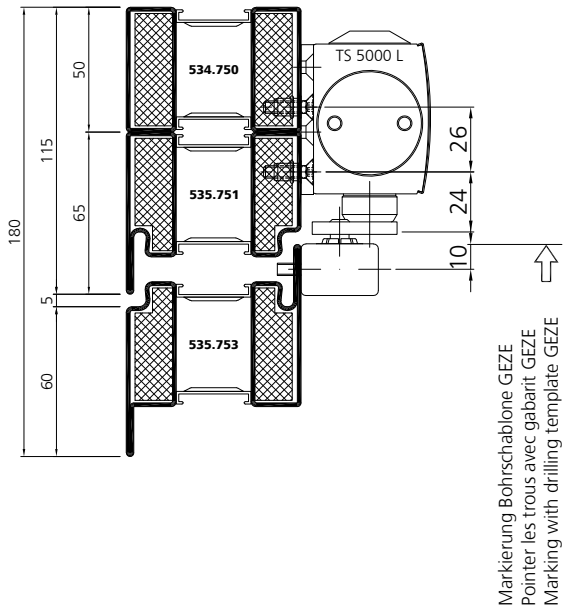
FRM min. 620 mm



Variante 1



Variante 2

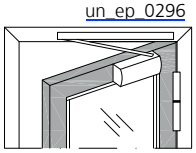


GEZE 5000 L,
1 flügelig, Bandseite,
Kopfmontage

GEZE 5000 L,
1 vantail, coté paumelles,
Montage renversé

GEZE 5000 L,
1 leaf, hinge side,
Head mounting

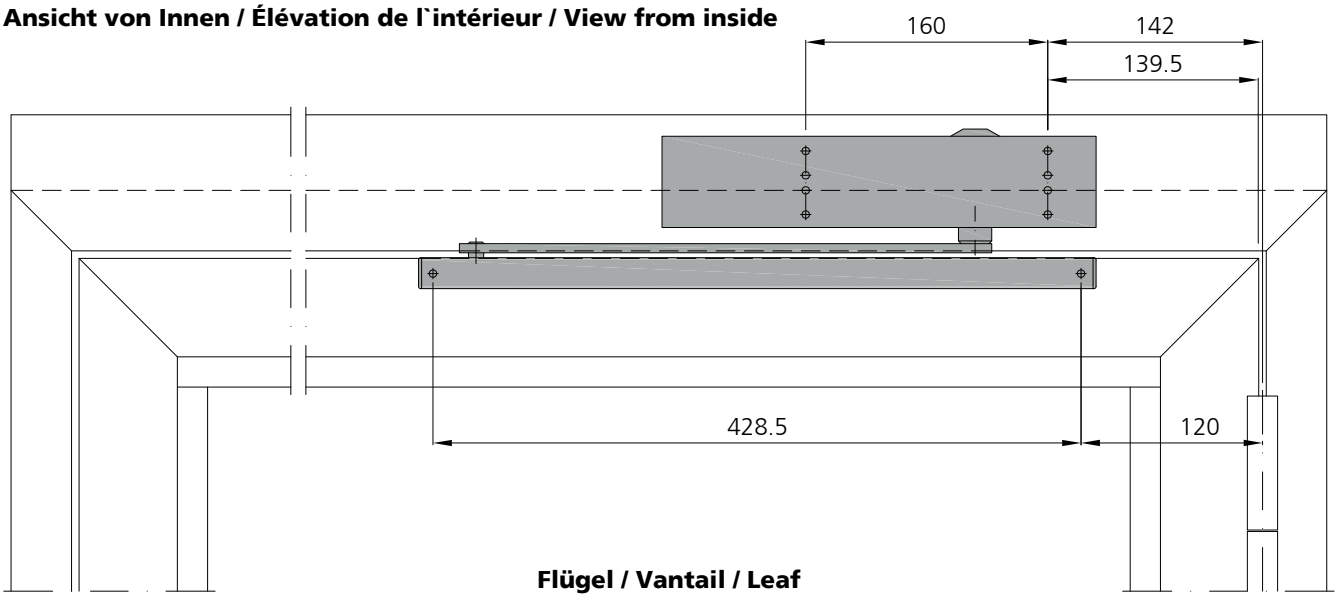
un_ep_0296



Masse sind gemäss Einbauanleitung GEZE zu prüfen!
Contrôler les dimensions selon les instructions de montage GEZE!
Dimensions have to be verified according to GEZE's assembly instructions!

DIN rechts
DIN droite
DIN right

Ansicht von Innen / Élévation de l`intérieur / View from inside

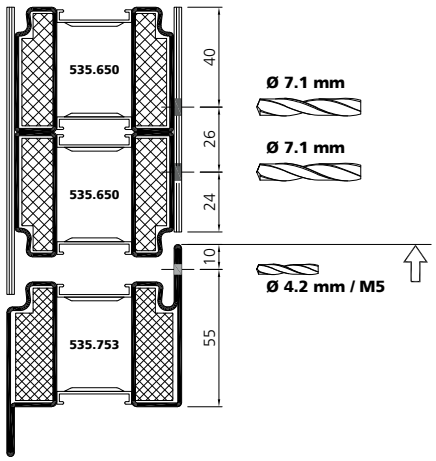


Flügel / Vantail / Leaf

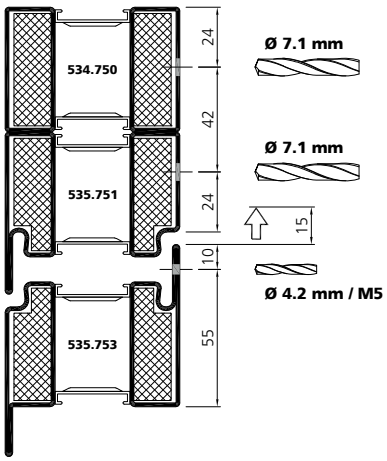
FRM min. 620 mm



Variante 1



Variante 2



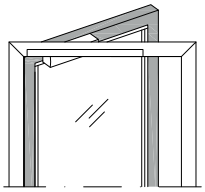
GEZE TS 5000 L / BG
1-flügelig
Gegenbandseite
Normalmontage

GEZE TS 5000 L / BG
1 vantail
Coté opposé aux paumelles
Montage standard

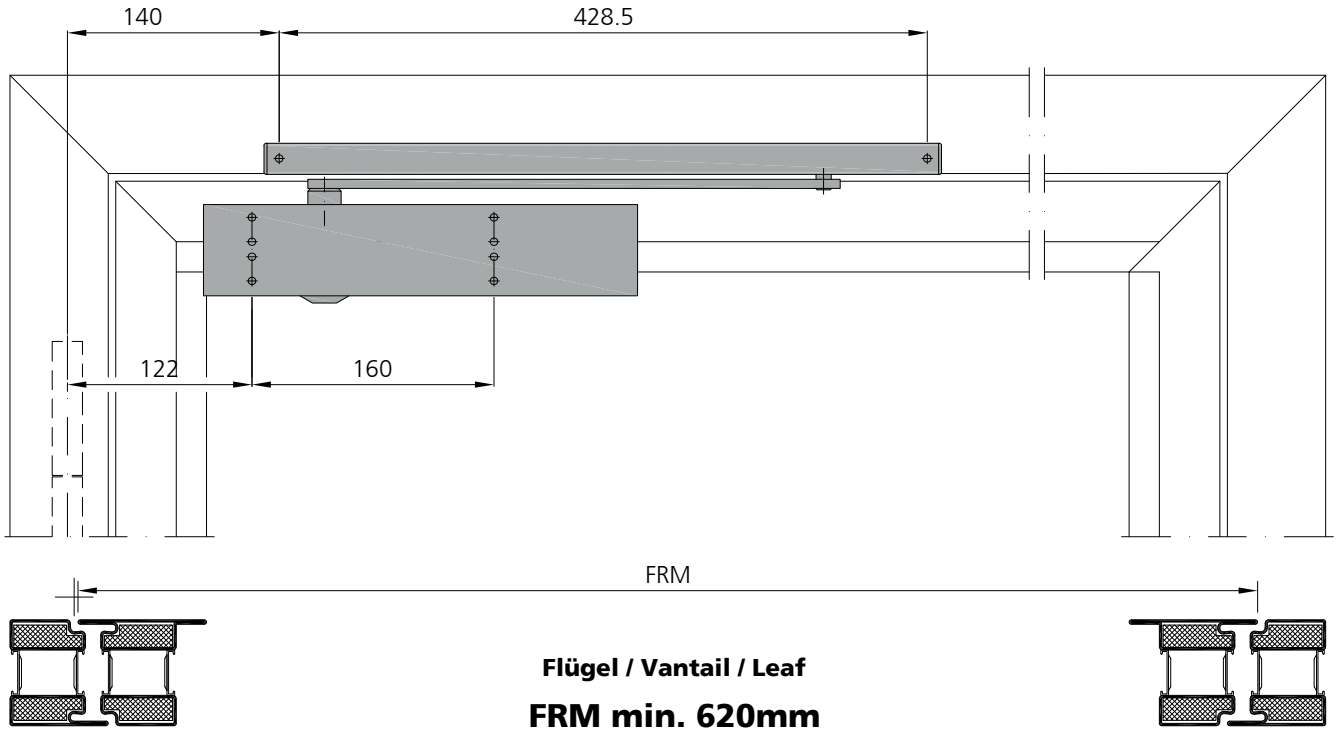
GEZE TS 5000 L / BG
1 leaf
Opposite hinge side
Standard mounting

un_ep_0307

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



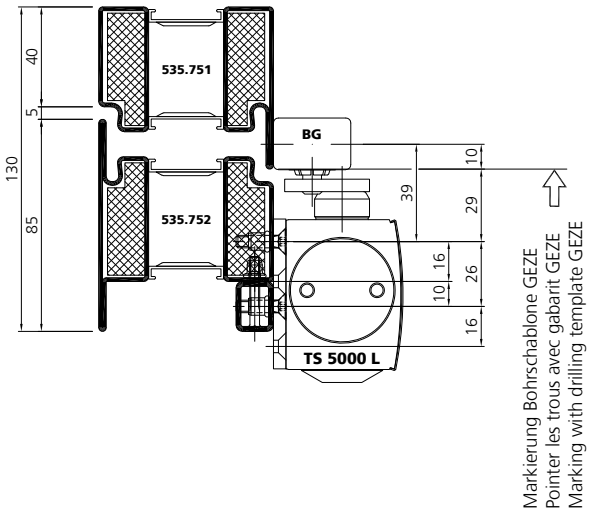
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



09/23

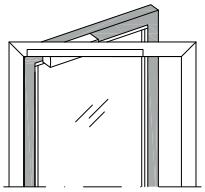
GEZE TS 5000 L / BG
1-flügelig
Gegenbandseite
Normalmontage

GEZE TS 5000 L / BG
1 vantail
Coté opposé aux paumelles
Montage standard

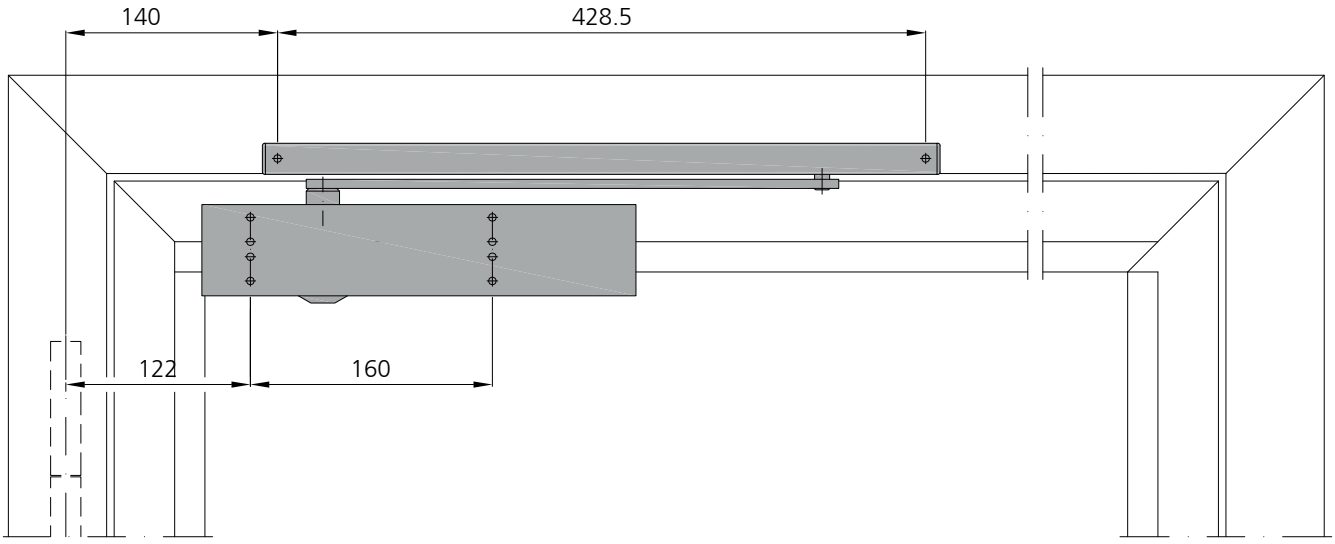
GEZE TS 5000 L / BG
1 leaf
Opposite hinge side
Standard mounting

un_ep_0307

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside





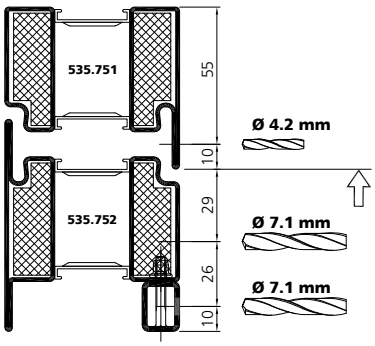
Flügel / Vantail / Leaf

FRM min. 620mm

Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



3

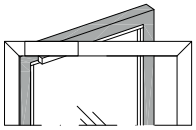
GEZE TS 5000,
1 flügelig, Bandgegenseite, Kopfmontage

GEZE TS 5000,
1 vantail, coté opposé aux paumelles, Montage renversé

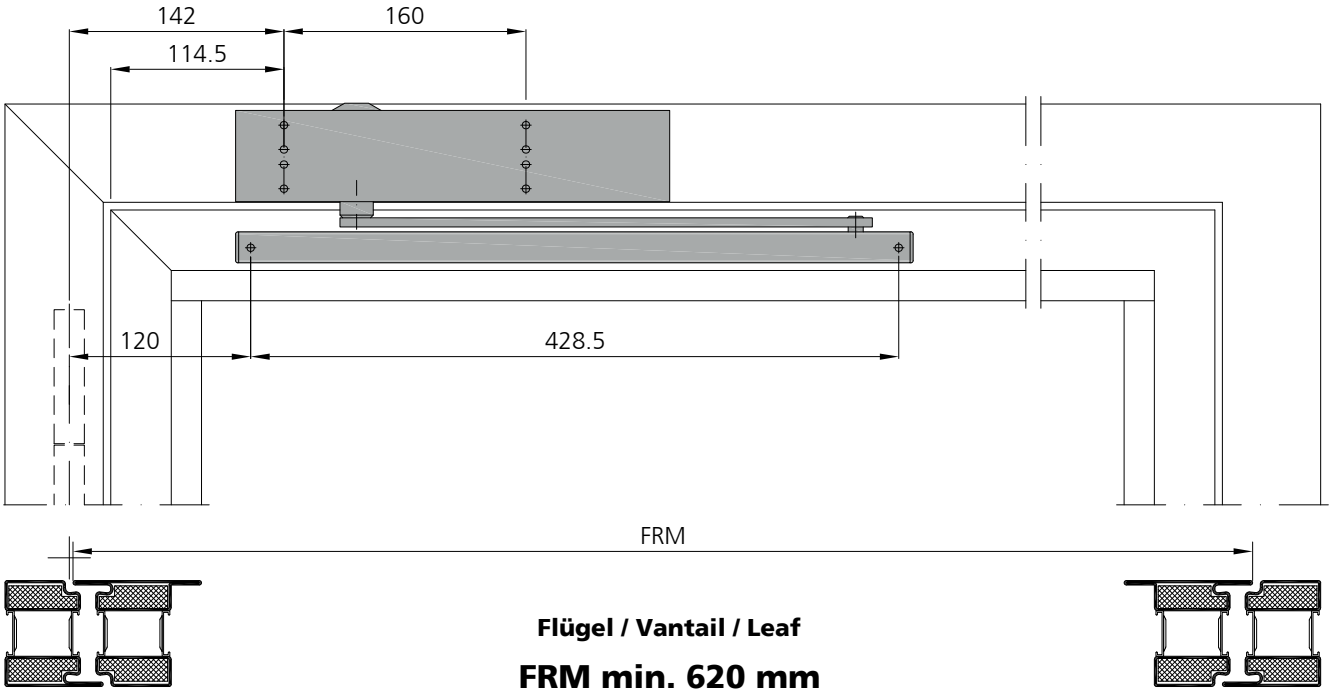
GEZE TS 5000,
1 leaf, opposite hinge side, Head mounting

un_ep_0293

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



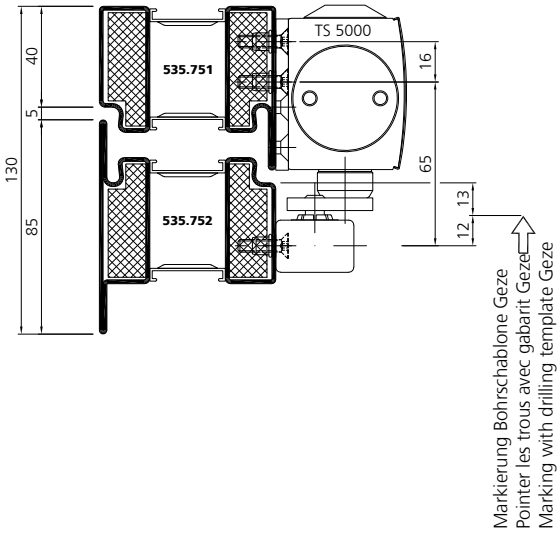
Flügel / Vantail / Leaf

FRM min. 620 mm

Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



09/23

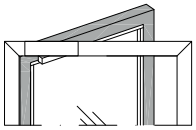
GEZE TS 5000,
1 flügelig, Bandgegenseite, Kopfmontage

GEZE TS 5000,
1 vantail, coté opposé aux paumelles, Montage renversé

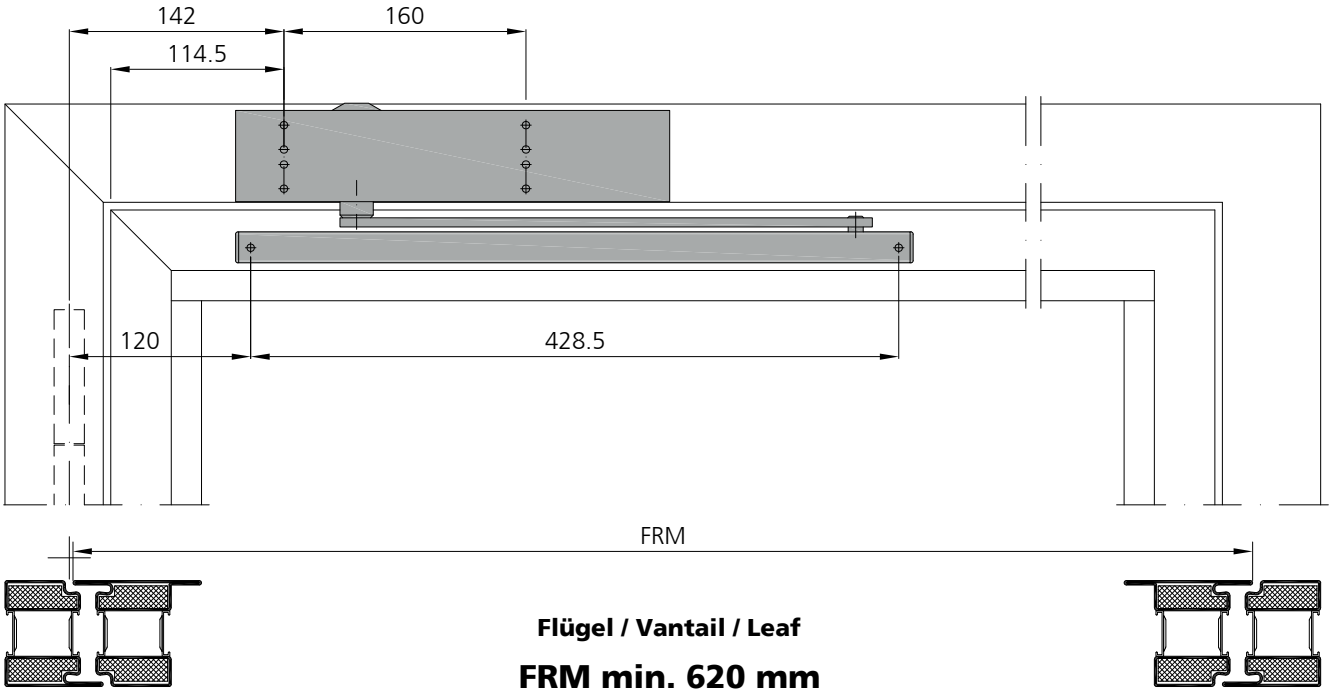
GEZE TS 5000,
1 leaf, opposite hinge side, Head mounting

un_ep_0293

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



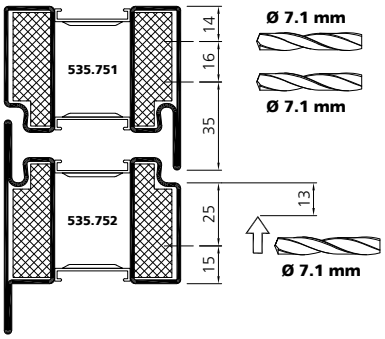
Flügel / Vantail / Leaf

FRM min. 620 mm

Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



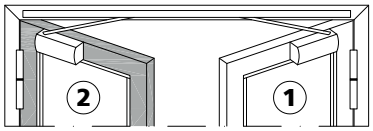
GEZE TS 5000 ISM,
2 flügelig, Bandseite,
Normalmontage

GEZE TS 5000 ISM,
2 vantaux, coté paumelles,
Montage standard

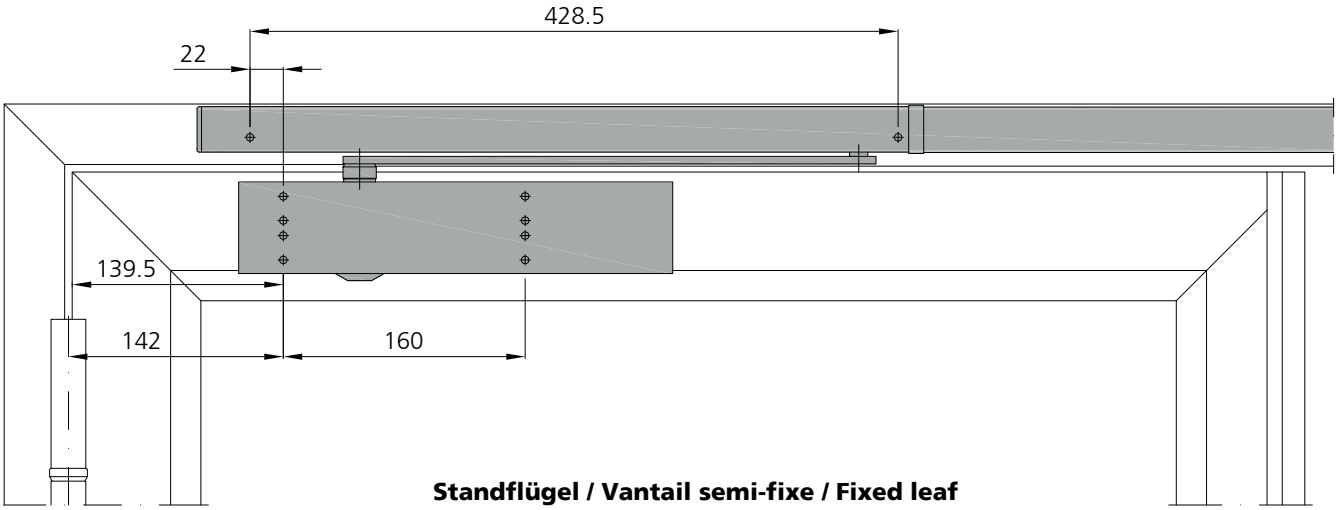
GEZE TS 5000 ISM,
2 leaves, hinge side,
Standard mounting

un_ep_0294

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



Standflügel / Vantail semi-fixe / Fixed leaf

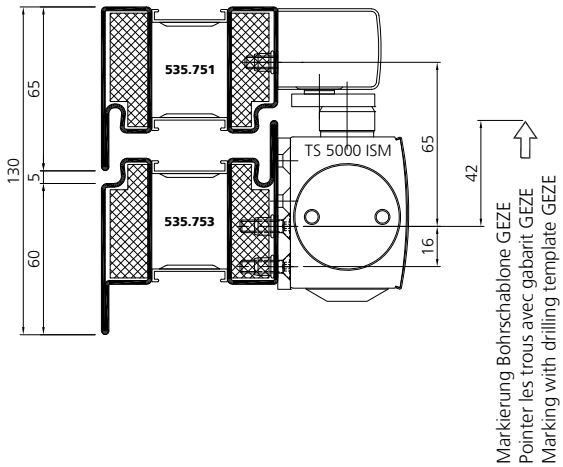
FRM > 400mm



Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



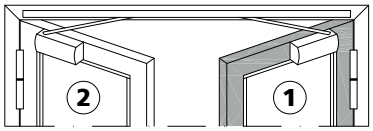
GEZE TS 5000 ISM,
2 flügelig, Bandseite,
Normalmontage

GEZE TS 5000 ISM,
2 vantaux, coté paumelles,
Montage standard

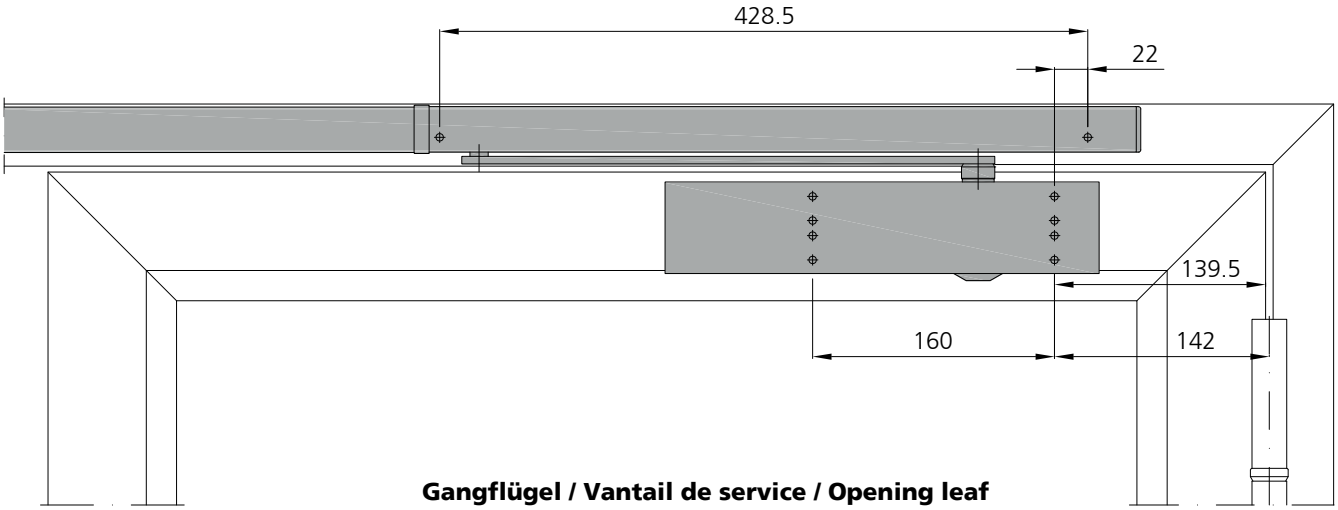
GEZE TS 5000 ISM,
2 leaves, hinge side,
Standard mounting

un_ep_0294

DIN rechts
DIN droite
DIN right



Ansicht von Innen / Élévation de l`intérieur / View from inside



Gangflügel / Vantail de service / Opening leaf

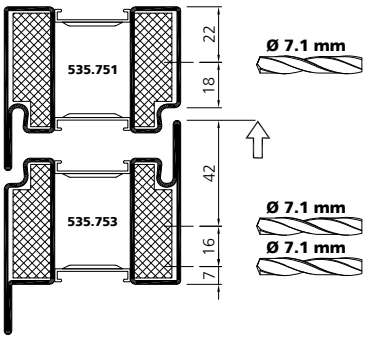
FRM > 620mm



Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



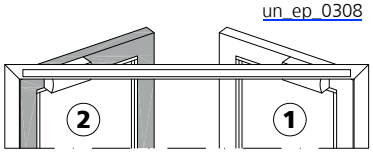
3

GEZE TS 5000 L-ISM
2-flügelig
Gegenbandseite
Normalmontage

GEZE TS 5000 L-ISM
2 vantaux
Coté opposé aux paumelles
Montage standard

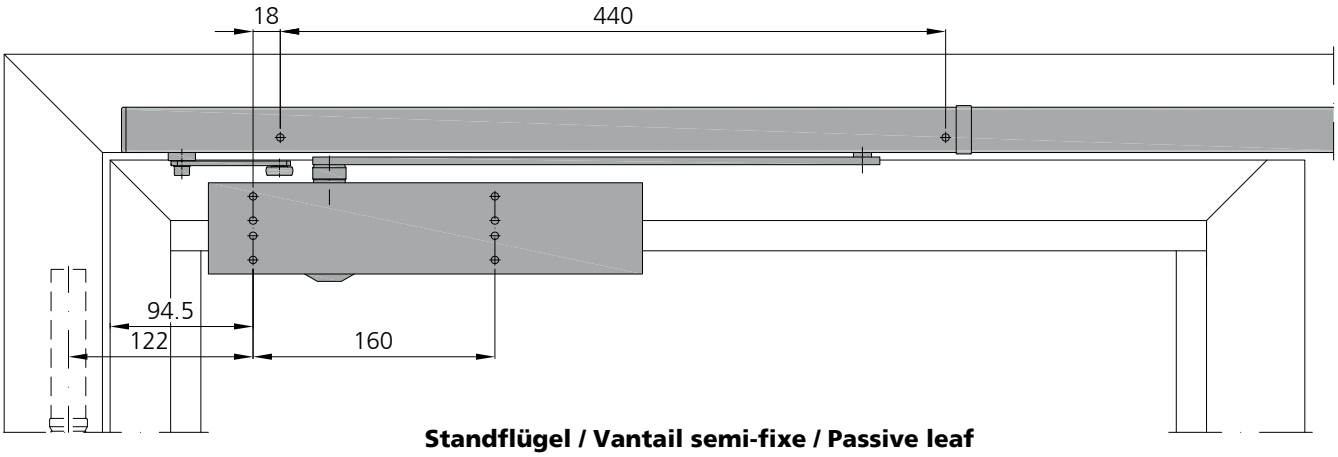
GEZE TS 5000 L-ISM
2 leafs
Opposite hinge side
Standard mounting

un_ep_0308



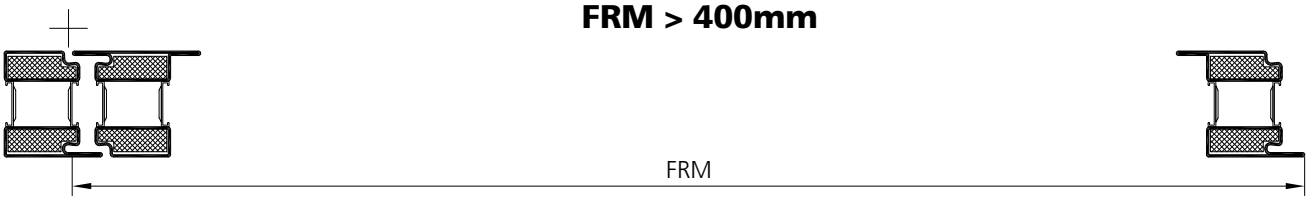
DIN links
DIN gauche
DIN left

Ansicht von Innen / Élévation de l`intérieur / View from inside



Standflügel / Vantail semi-fixe / Passive leaf

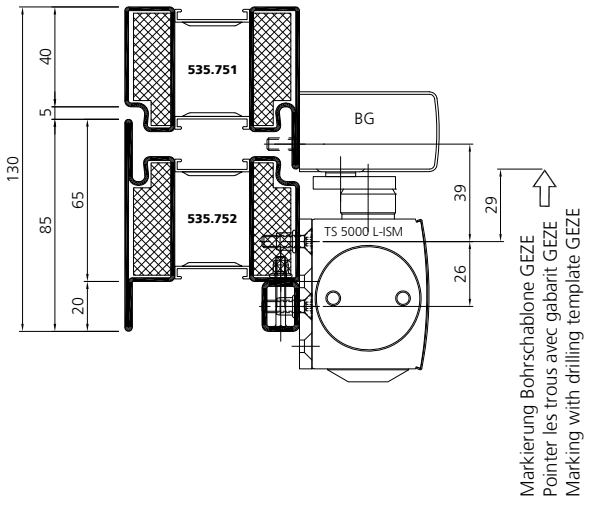
FRM > 400mm



Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!

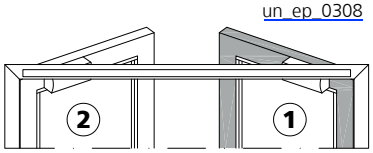


GEZE TS 5000 L-ISM
2-flügelig
Gegenbandseite
Normalmontage

GEZE TS 5000 L-ISM
2 vantaux
Coté opposé aux paumelles
Montage standard

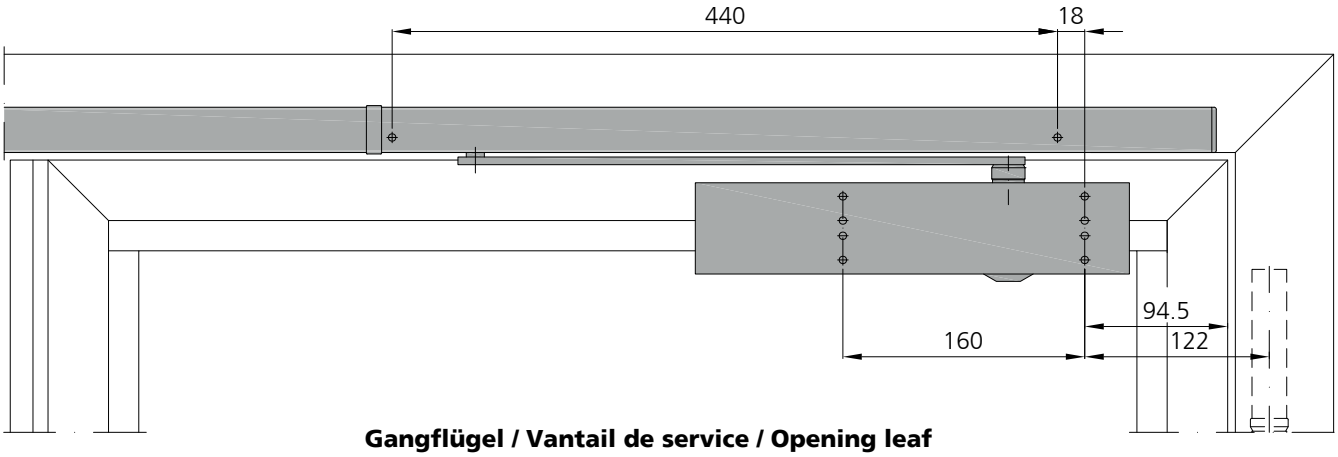
GEZE TS 5000 L-ISM
2 leafs
Opposite hinge side
Standard mounting

un_ep_0308



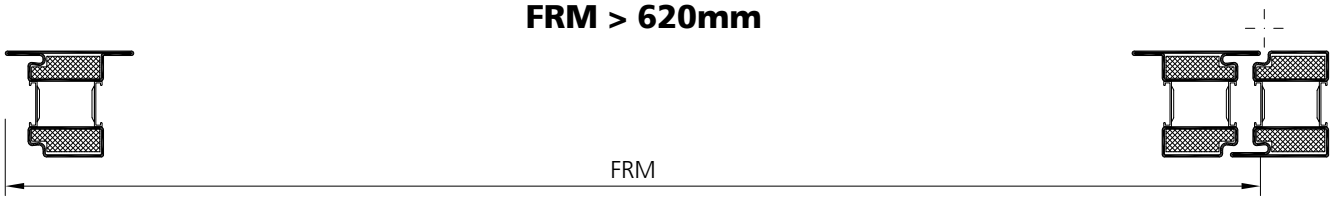
DIN links
DIN gauche
DIN left

Ansicht von Innen / Élévation de l`intérieur / View from inside



Gangflügel / Vantail de service / Opening leaf

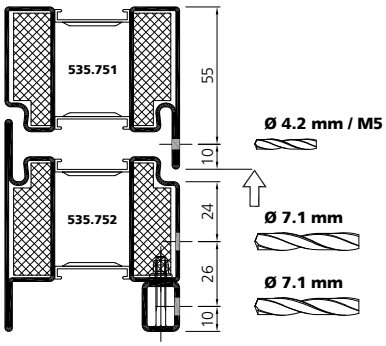
FRM > 620mm



Masse sind gemäss Einbauanleitung GEZE zu prüfen!

Contrôler les dimensions selon les instructions de montage GEZE!

Dimensions have to be verified according to GEZE's assembly instructions!



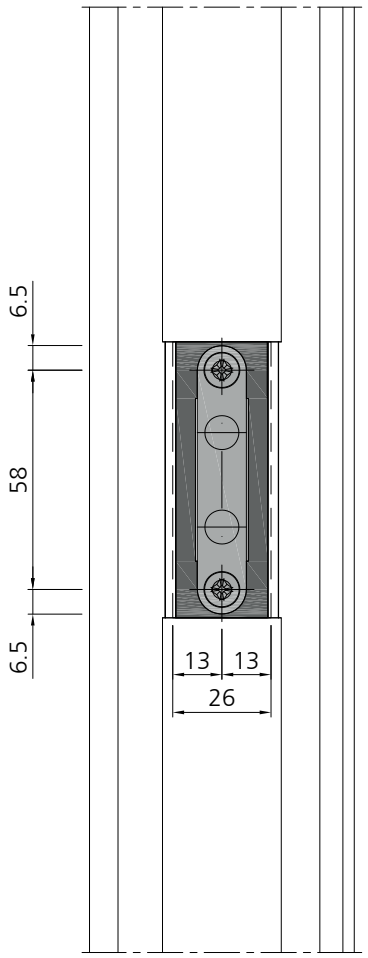
3

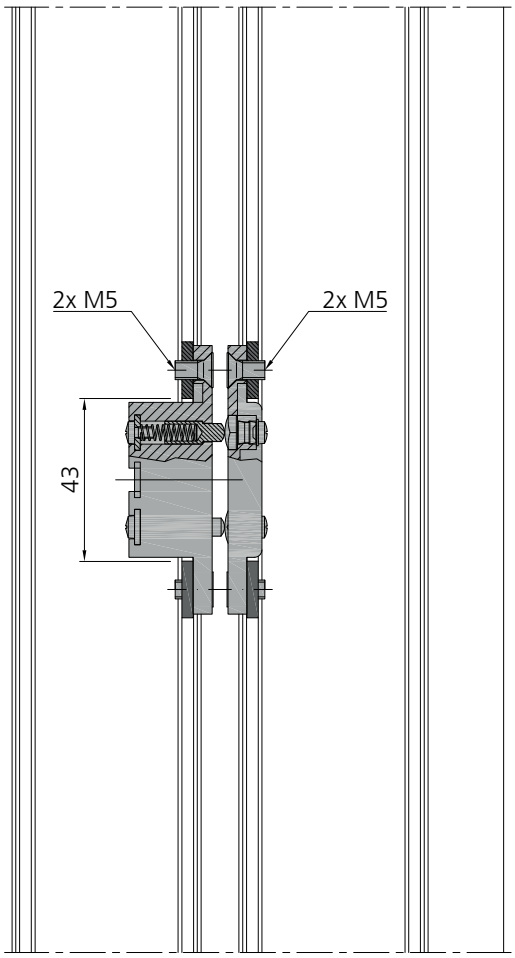
Stromübertrager
effeff 10305

Conducteur de courant
effeff 10305

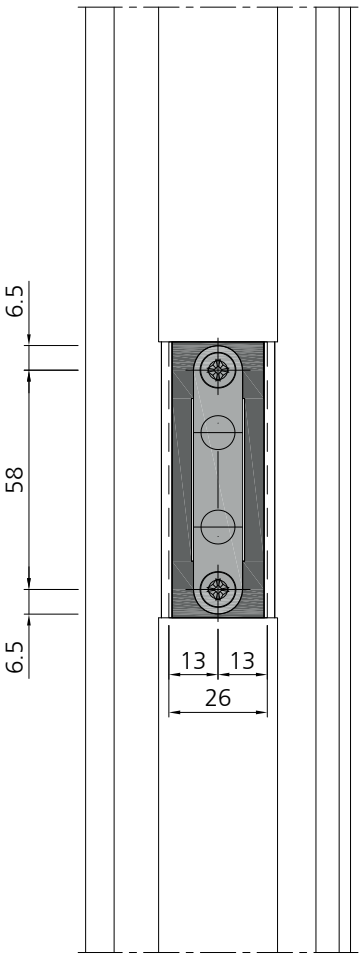
Current transfer
effeff 10305

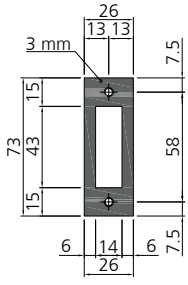
Rahmen / cadre / frame



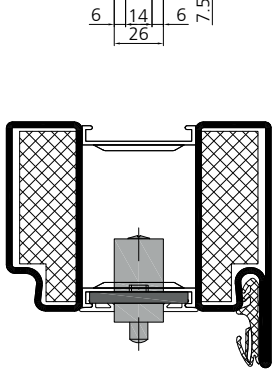


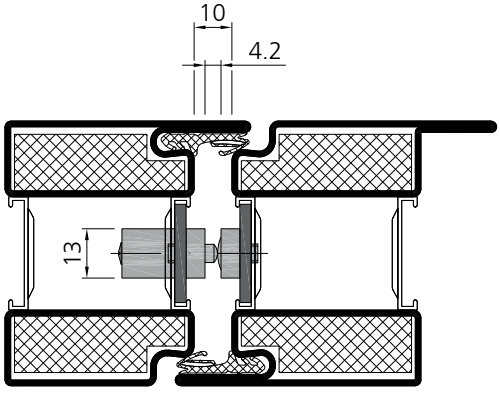
Flügel / vantail / leaf

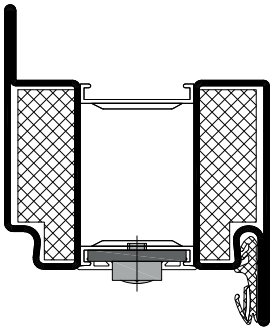




Eigenfertigung
auto-fabrication
in house produktion







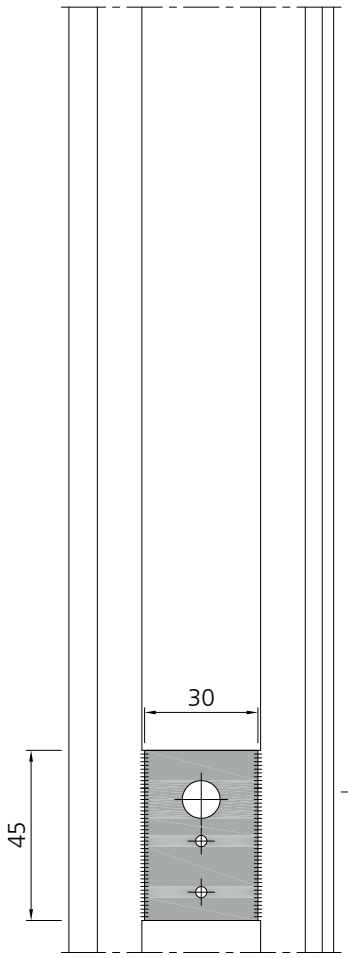
09/23

Kabelübergang
Haumann KÜ-180

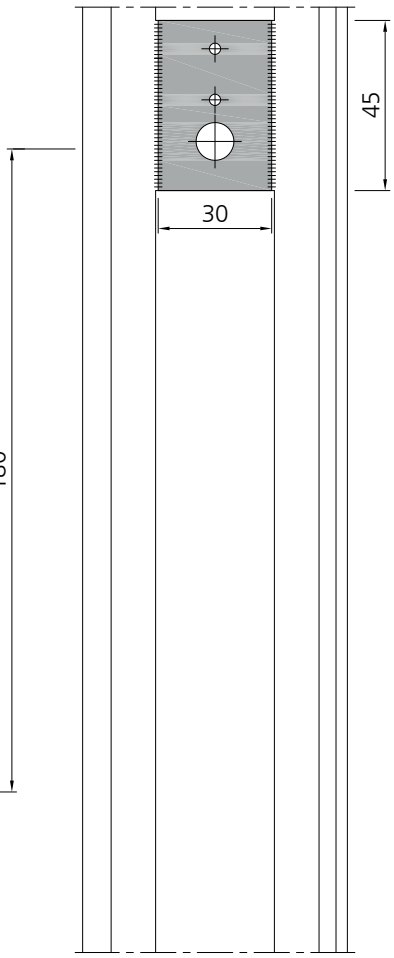
Passe-câble
Haumann KÜ-180

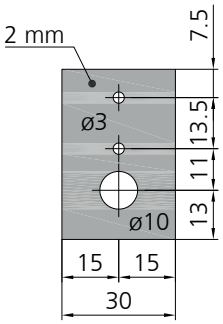
Cable crossing
Haumann KÜ-180

Rahmen / cadre / frame

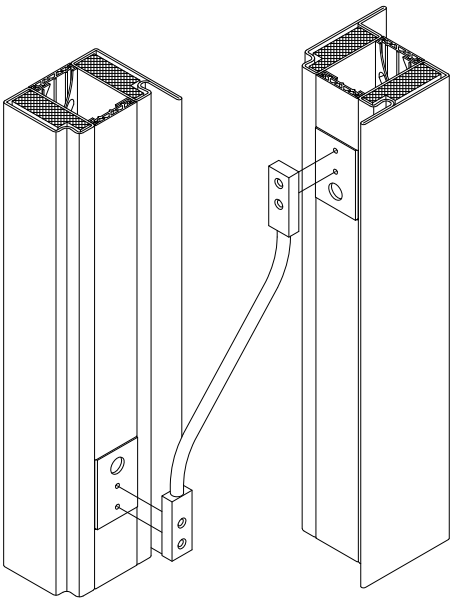


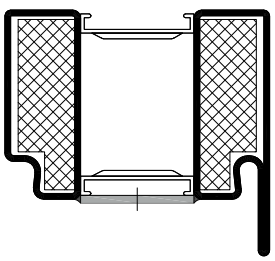
Flügel / vantail / leaf

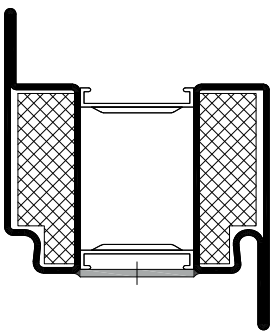




Eigenfertigung
auto-fabrication
in house produktion





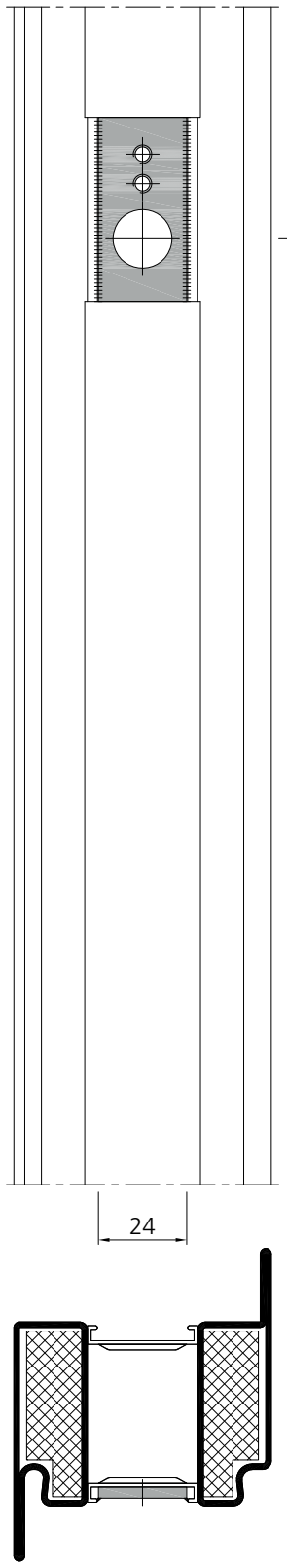


Kabelübergang
Dorma KÜ-480 / KÜ-260

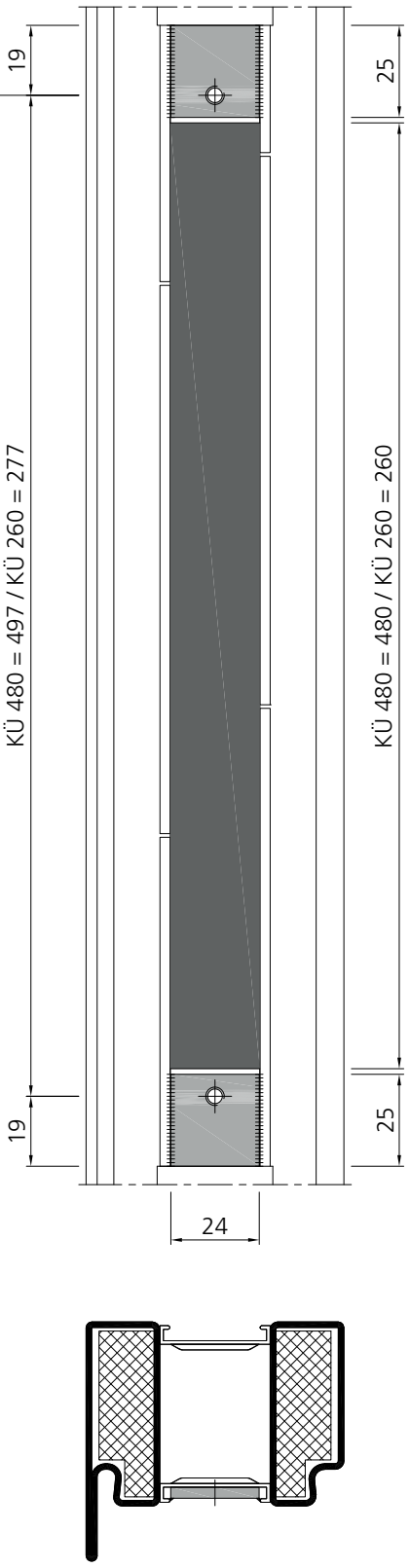
Passe-câble
Dorma KÜ-480 / KÜ-260

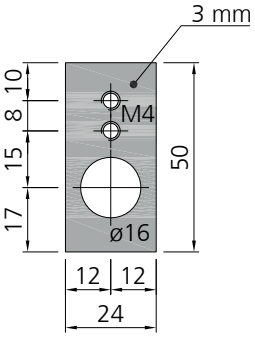
Cable crossing
Dorma KÜ-480 / KÜ-260

Flügel / vantail / leaf

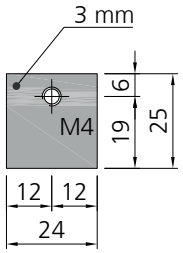


Rahmen / cadre / frame

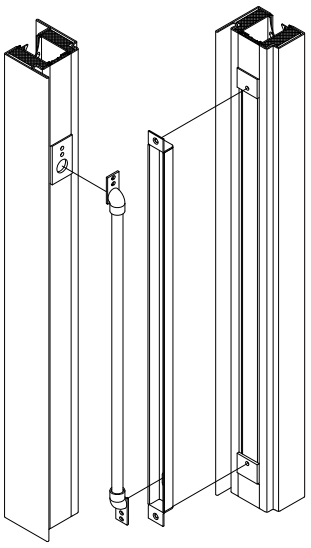




Eigenfertigung
auto-fabrication
in house produktion



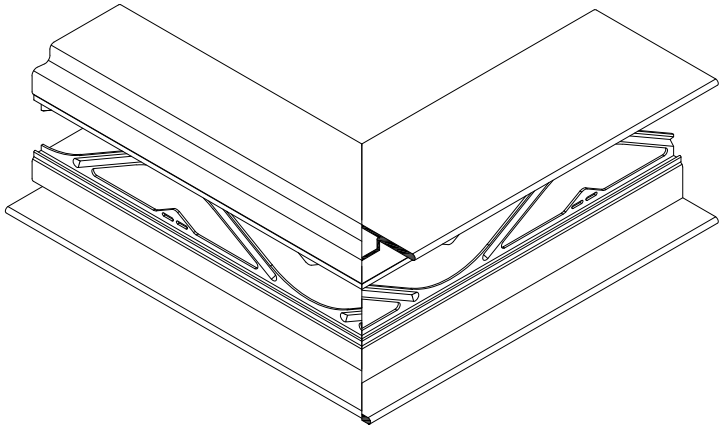
Eigenfertigung
auto-fabrication
in house produktion

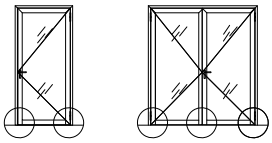


Falzabdeckung
Sockel

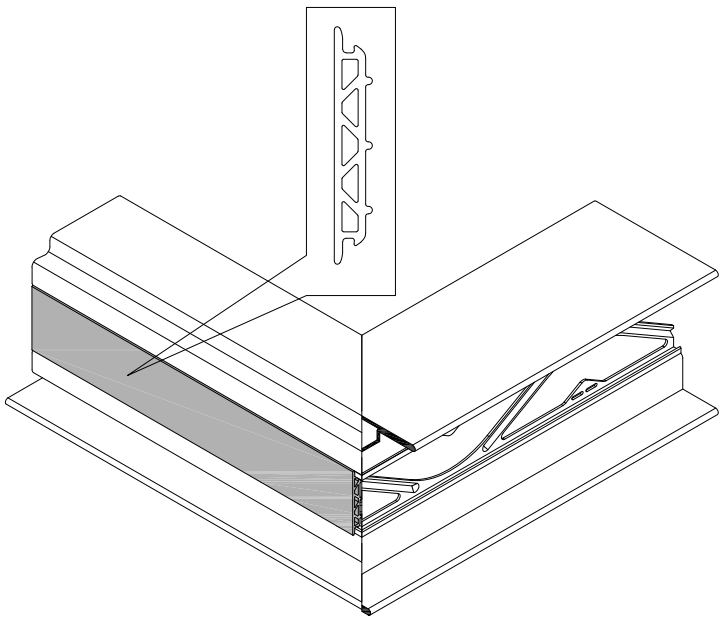
Recouvrement de feuillure
Socle

Rebate cover
Bottom rail

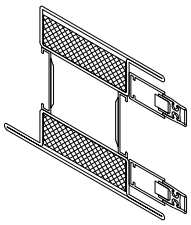


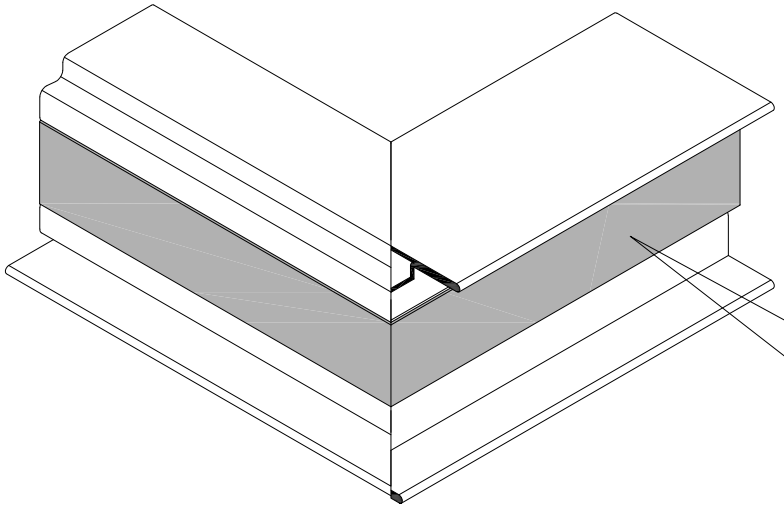


985704

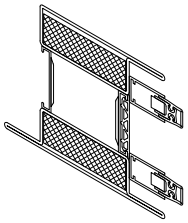


forster
905010 - 905019

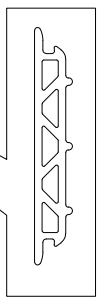




forster
905920 - 905927
905930 - 905937



985704

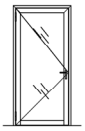


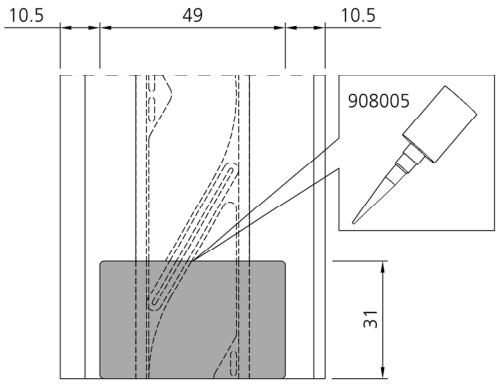
Absenkbare Bodendichtung ein- und auswärts öffnend
1-flügelig

Joint seuil automatique ouvrant vers l'intérieur et l'extérieur
1 vantail

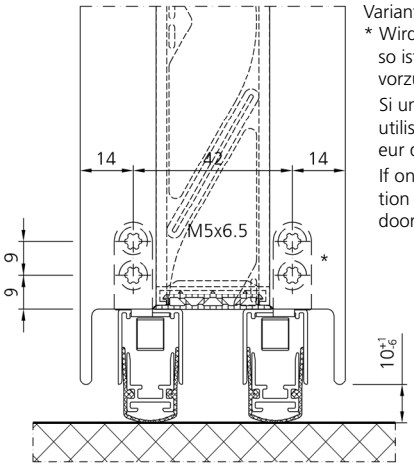
Drop floor seal opening in- and outwards
1 leaf

Ansicht **A**
Vue **A**
View **A**





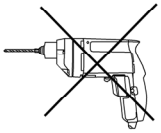
Blech im Montageset beiliegend
Plaque incluse dans le set de fixation
Plate included in set fastening



Variante:
* Wird nur eine Senkdichtung verwendet, so ist der Einbau auf der Türinnenseite vorzunehmen.
Si un seul joint de seuil automatique est utilisé, il doit être monté sur le côté intérieur de la porte.
If only one drop seal is used, then installation must take place on the inside of the door.

Schrauben von Hand eindrehen
Tourner les vis à la main
Screws manually adjustable

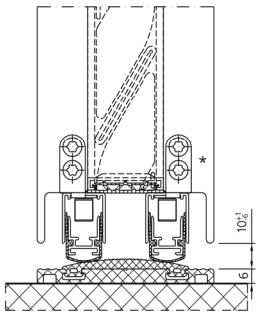


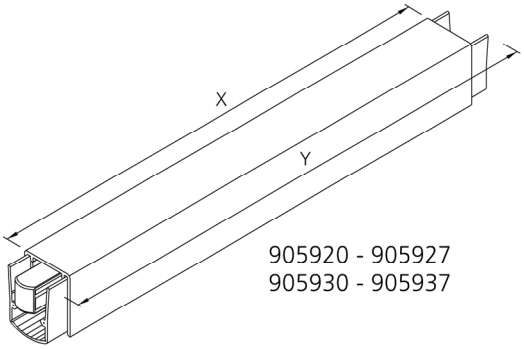


Für Flügelbreiten ≥1200 mm wird die Verwendung von doppelseitigem Klebeband zur zusätzlichen Befestigung empfohlen.
Bei Türen mit Rauchschutz ist die Verwendung jedoch zwingend erforderlich.

Pour des largeurs de vantail ≥1200 mm, l'utilisation d'une bande adhésive double face est recommandée pour une fixation supplémentaire.
Elle est toutefois obligatoire sur les portes avec étanchéité aux fumées.

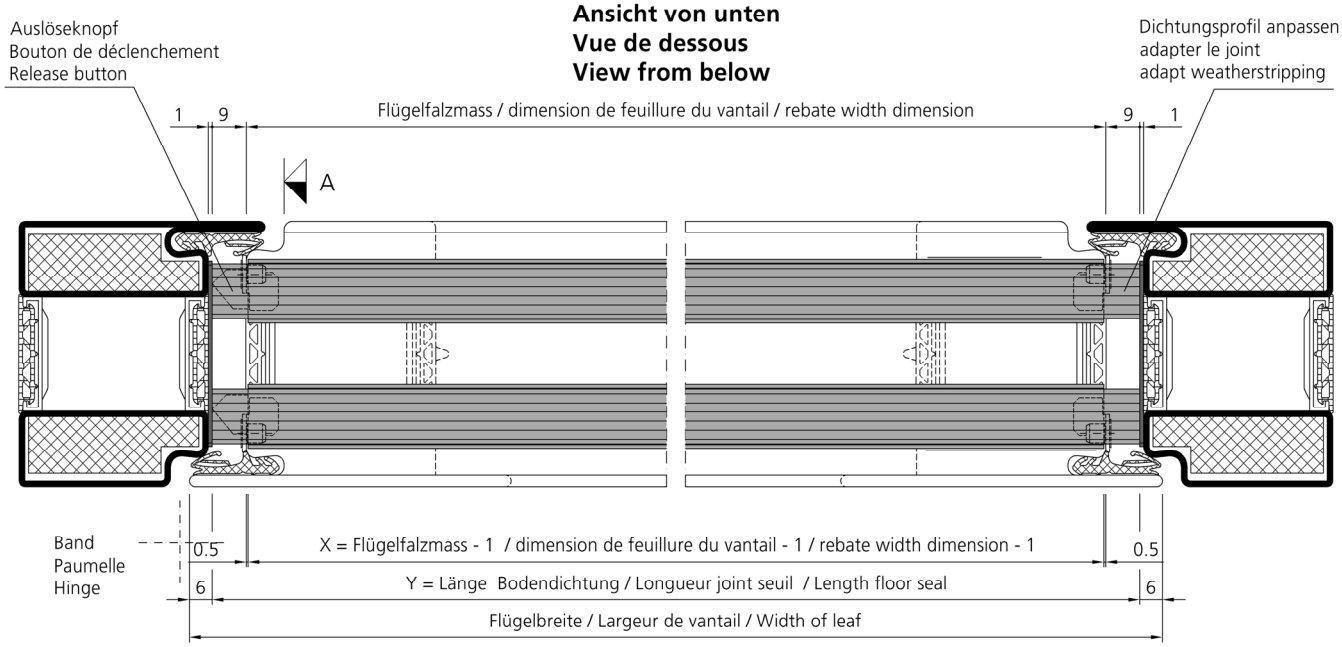
The use of double-sided adhesive tape is recommended for additional fixation on leaf widths ≥1200 mm.
However, this use is mandatory on doors with smoke protection.





905920 - 905927
905930 - 905937

Ansicht von unten
Vue de dessous
View from below



Platz für Notizen

Espace pour les notes

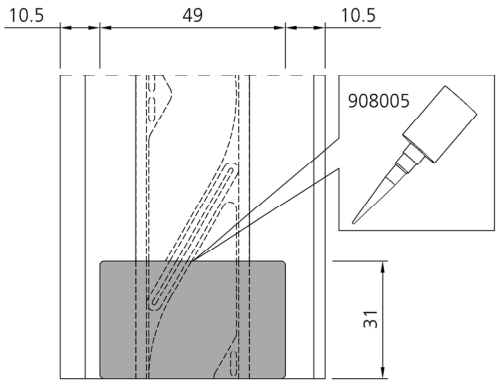
Space for memos

Absenkbare Bodendichtung ein- und auswärts öffnend
2-flügelig

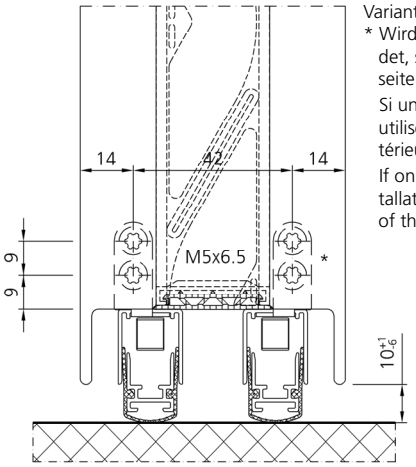
Joint seuil automatique ouvrant vers l'intérieur et l'extérieur
2 vantaux

Drop floor seal opening in- and outwards
2 leaf

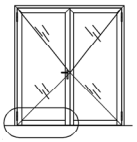
Ansicht **A**
Vue **A**
View **A**



Blech im Montageset beiliegend
Plaque incluse dans le set de fixation
Plate included in set fastening

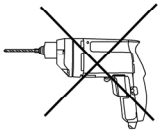


Variante:
* Wird nur eine Senkdichtung verwendet, so ist der Einbau auf der Türinnenseite vorzunehmen.
Si un seul joint de seuil automatique est utilisé, il doit être monté sur le côté intérieur de la porte.
If only one drop seal is used, then installation must take place on the inside of the door.



Schrauben von Hand eindrehen
Tourner les vis à la main
Screws manually adjustable

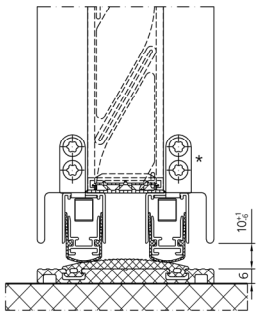


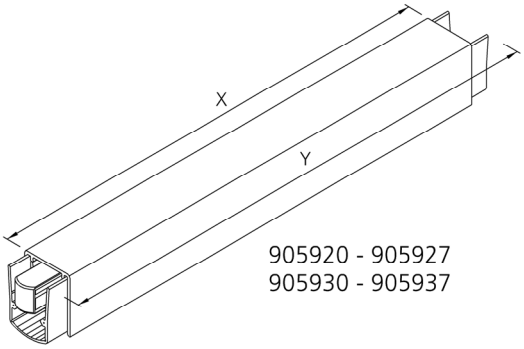


Für Flügelbreiten ≥1200 mm wird die Verwendung von doppelseitigem Klebeband zur zusätzlichen Befestigung empfohlen.
Bei Türen mit Rauchschutz ist die Verwendung jedoch zwingend erforderlich.

Pour des largeurs de vantail ≥1200 mm, l'utilisation d'une bande adhésive double face est recommandée pour une fixation supplémentaire.
Elle est toutefois obligatoire sur les portes avec étanchéité aux fumées.

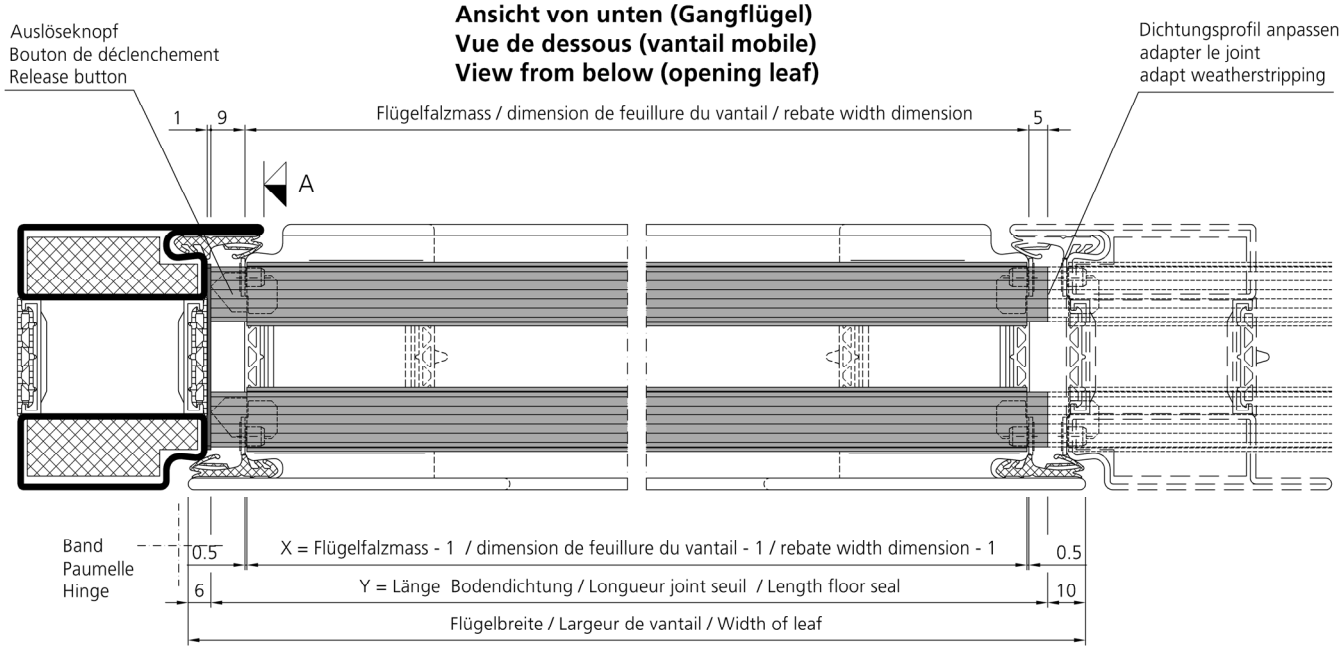
The use of double-sided adhesive tape is recommended for additional fixation on leaf widths ≥1200 mm.
However, this use is mandatory on doors with smoke protection.





905920 - 905927
905930 - 905937

Ansicht von unten (Gangflügel)
Vue de dessous (vantail mobile)
View from below (opening leaf)

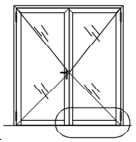


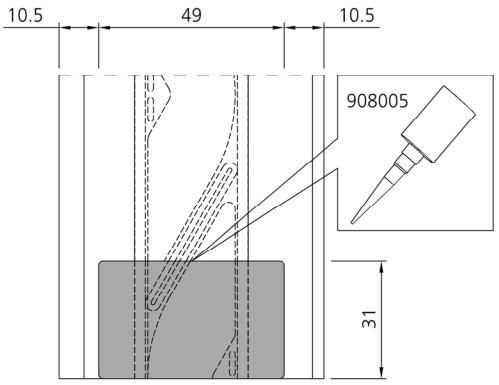
Absenkbare Bodendichtung ein- und auswärts öffnend
2-flügelig

Joint seuil automatique ouvrant vers l'intérieur et l'extérieur
2 vantaux

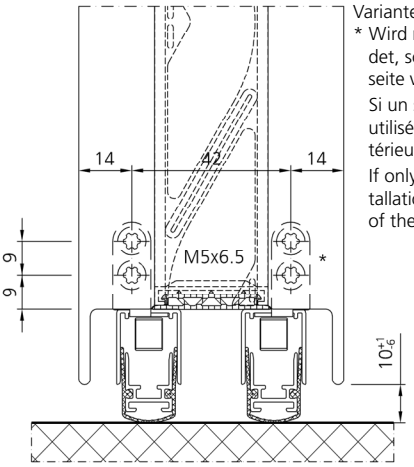
Drop floor seal opening in- and outwards
2 leaf

Ansicht **A**
Vue **A**
View **A**





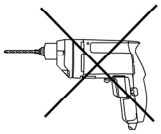
Blech im Montageset beiliegend
Plaque incluse dans le set de fixation
Plate included in set fastening



Variante:
* Wird nur eine Senkdichtung verwendet, so ist der Einbau auf der Türinnenseite vorzunehmen.
Si un seul joint de seuil automatique est utilisé, il doit être monté sur le côté intérieur de la porte.
If only one drop seal is used, then installation must take place on the inside of the door.

Schrauben von Hand eindrehen
Tourner les vis à la main
Screws manually adjustable

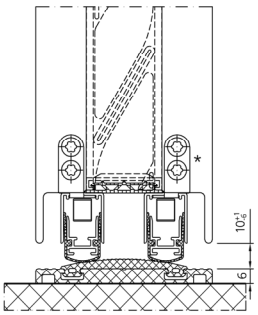


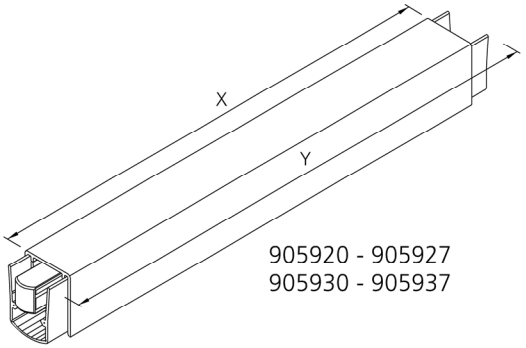


Für Flügelbreiten ≥1200 mm wird die Verwendung von doppelseitigem Klebeband zur zusätzlichen Befestigung empfohlen.
Bei Türen mit Rauchschutz ist die Verwendung jedoch zwingend erforderlich.

Pour des largeurs de vantail ≥1200 mm, l'utilisation d'une bande adhésive double face est recommandée pour une fixation supplémentaire.
Elle est toutefois obligatoire sur les portes avec étanchéité aux fumées.

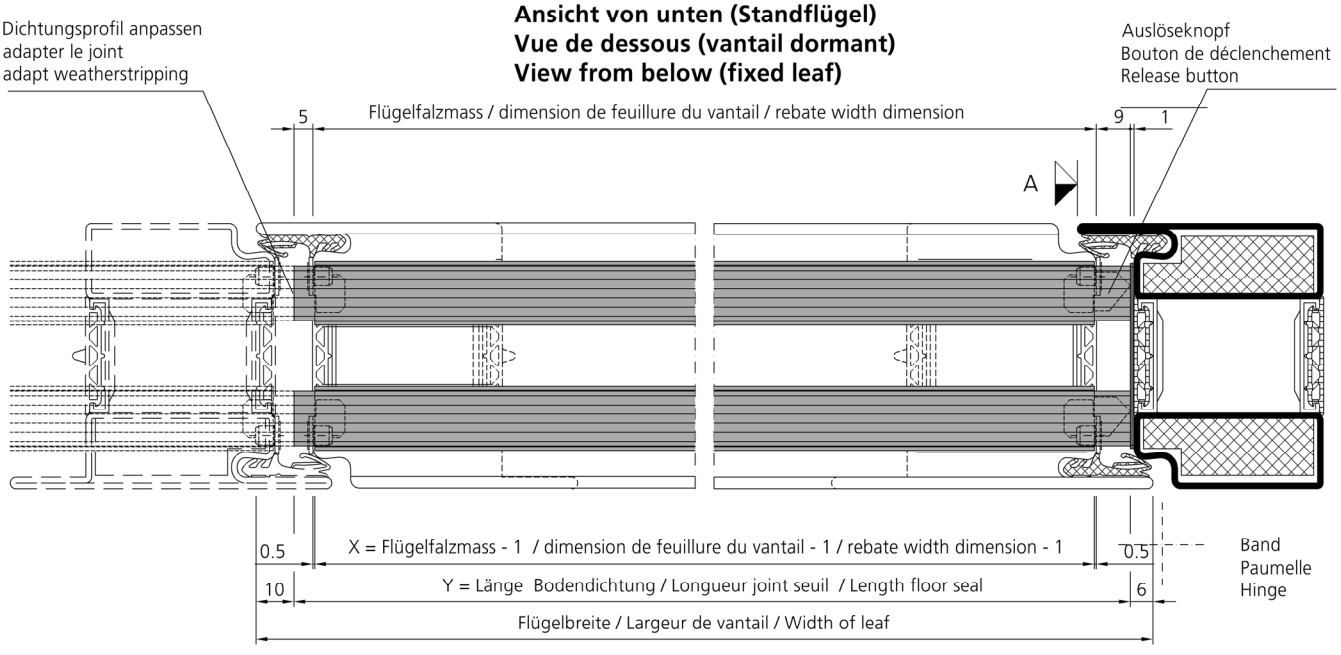
The use of double-sided adhesive tape is recommended for additional fixation on leaf widths ≥1200 mm.
However, this use is mandatory on doors with smoke protection.





905920 - 905927
905930 - 905937

Ansicht von unten (Standflügel)
Vue de dessous (vantail dormant)
View from below (fixed leaf)



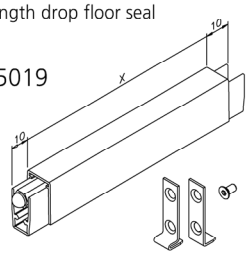
Absenkbare Bodendichtung ein- und auswärts öffnend
1-flügelig
Isolierte Schwelle

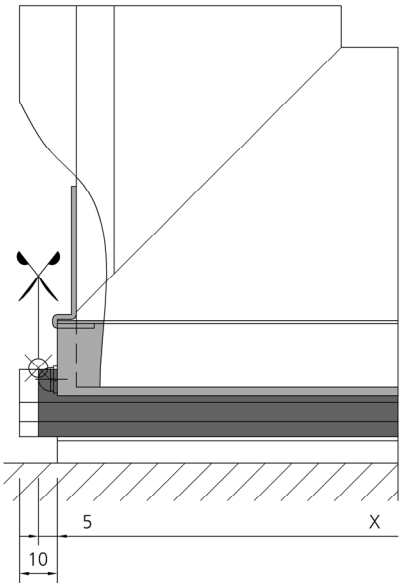
Joint seuil automatique ouvrant vers l'intérieur et l'extérieur
1 vantail, Seuil isolé

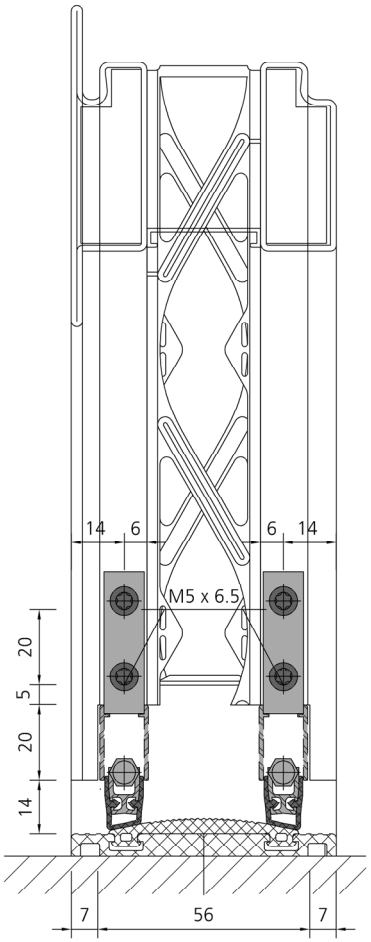
Drop floor seal opening in- and outwards
1 leaf
Insulated threshold

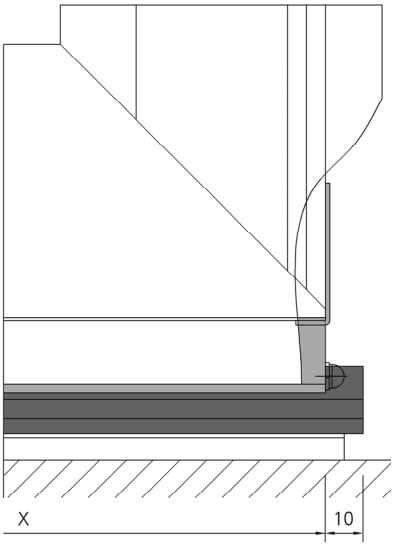
X = Länge absenkbare Bodendichtung
Longueur joint seuil automatique
Length drop floor seal

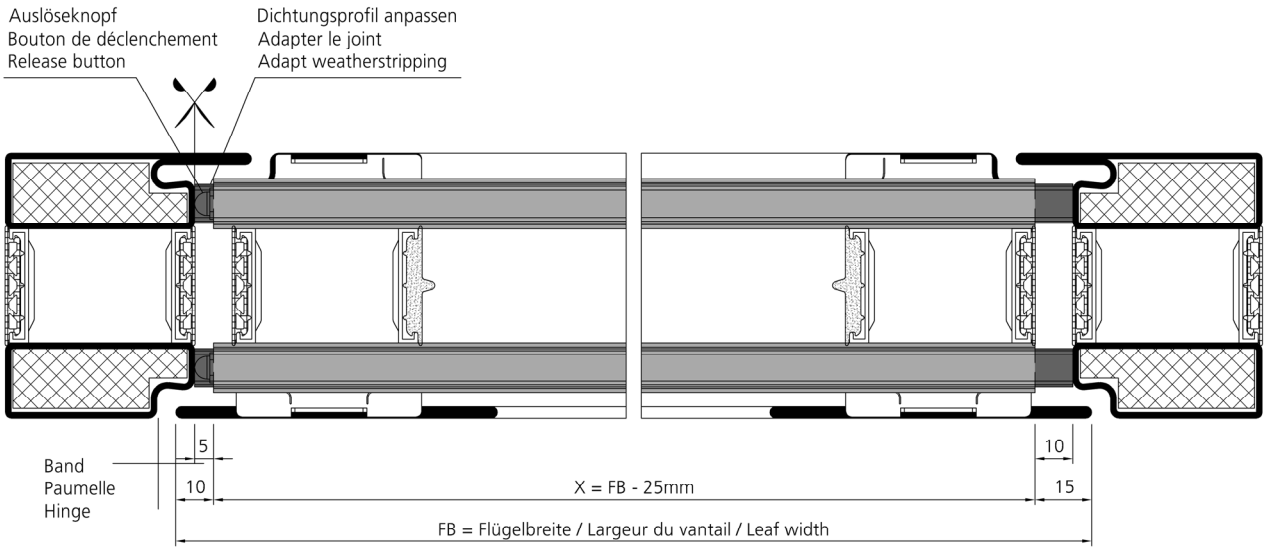
905010 - 905019











Platz für Notizen

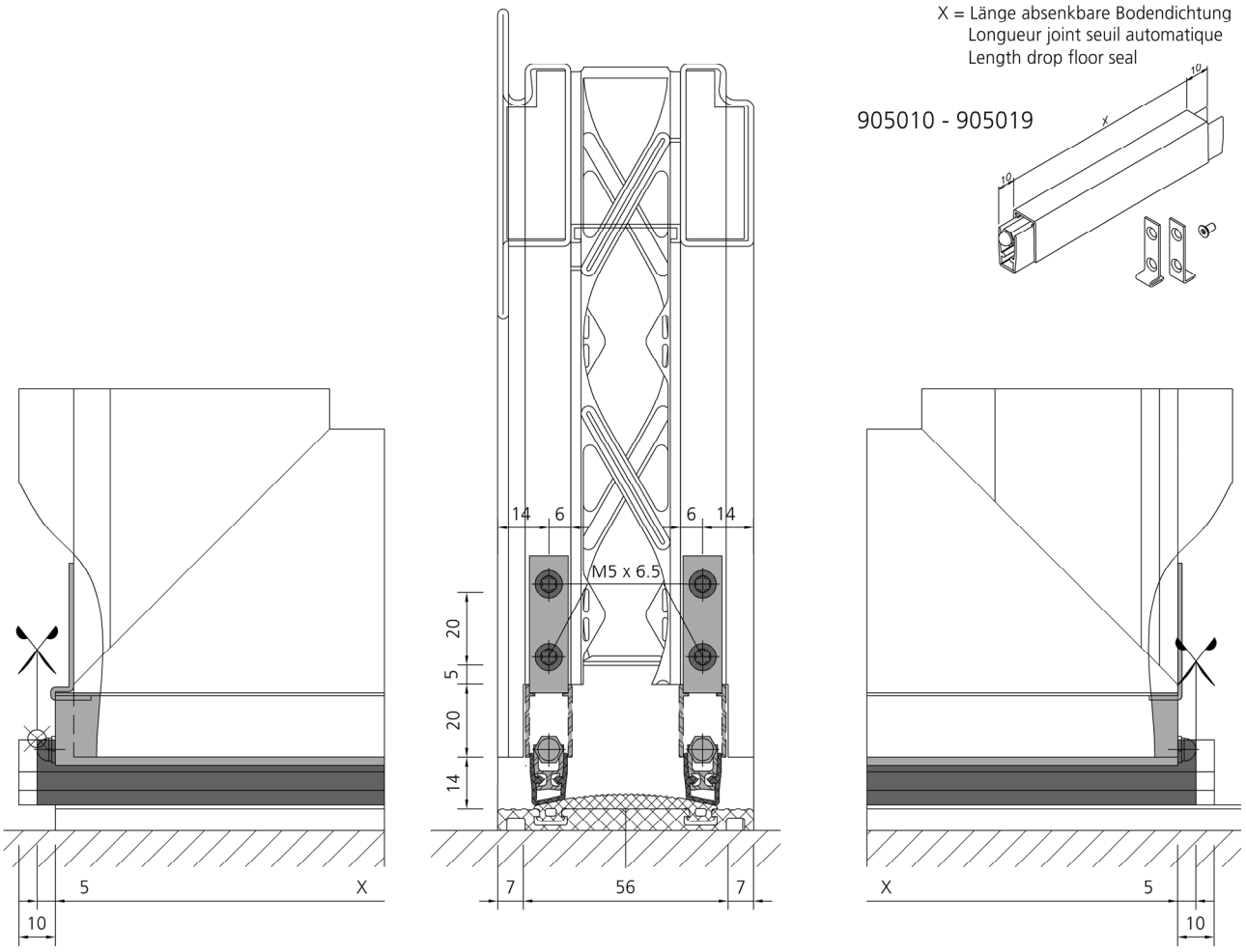
Espace pour les notes

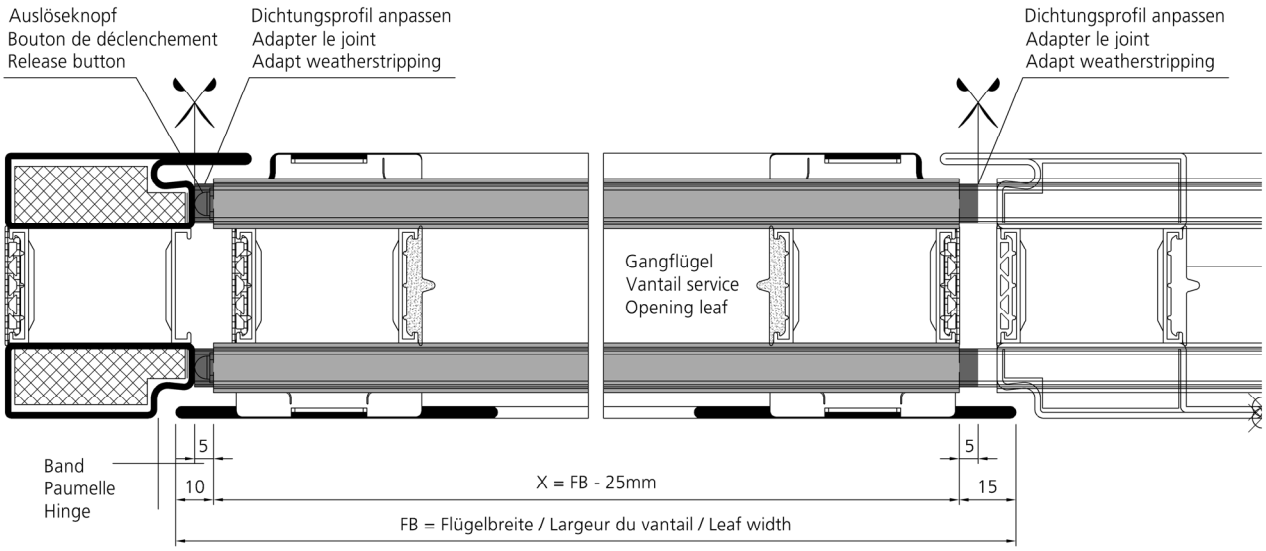
Space for memos

Absenkbare Bodendichtung ein- und auswärts öffnend
2-flügelig
Isolierte Schwelle

Joint seuil automatique ouvrant vers l'intérieur et l'extérieur
2 vantaux, Seuil isolé

Drop floor seal opening in- and outwards
2 leaf
Insulated threshold

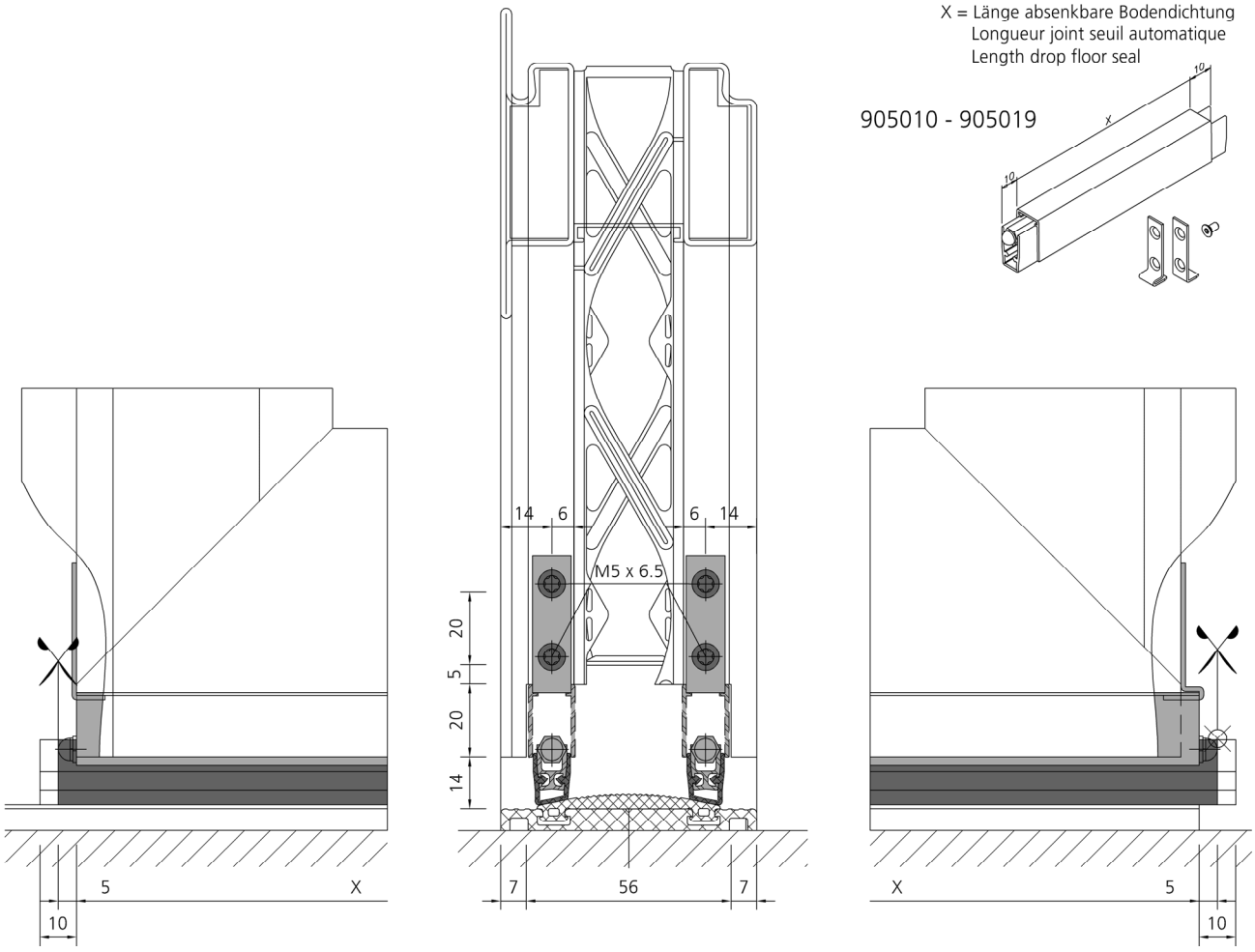


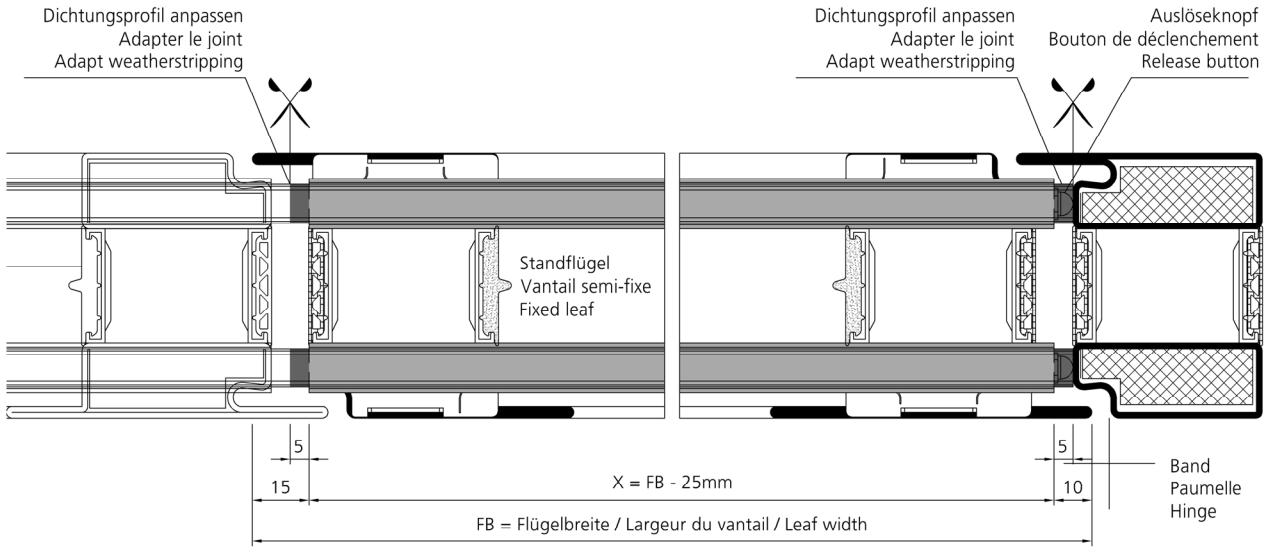


Absenkbare Bodendichtung ein- und auswärts öffnend
2-flügelig
Isolierte Schwelle

Joint seuil automatique ouvrant vers l'intérieur et l'extérieur
2 vantaux, Seuil isolé

Drop floor seal opening in- and outwards
2 leaf
Insulated threshold





Montage Aufsatzprofil
Renova 2
Universal Design

Montage profilé d'applique
Renova 2
Universal Design

Installation attachment profile
Renova 2
Universal Design

984851



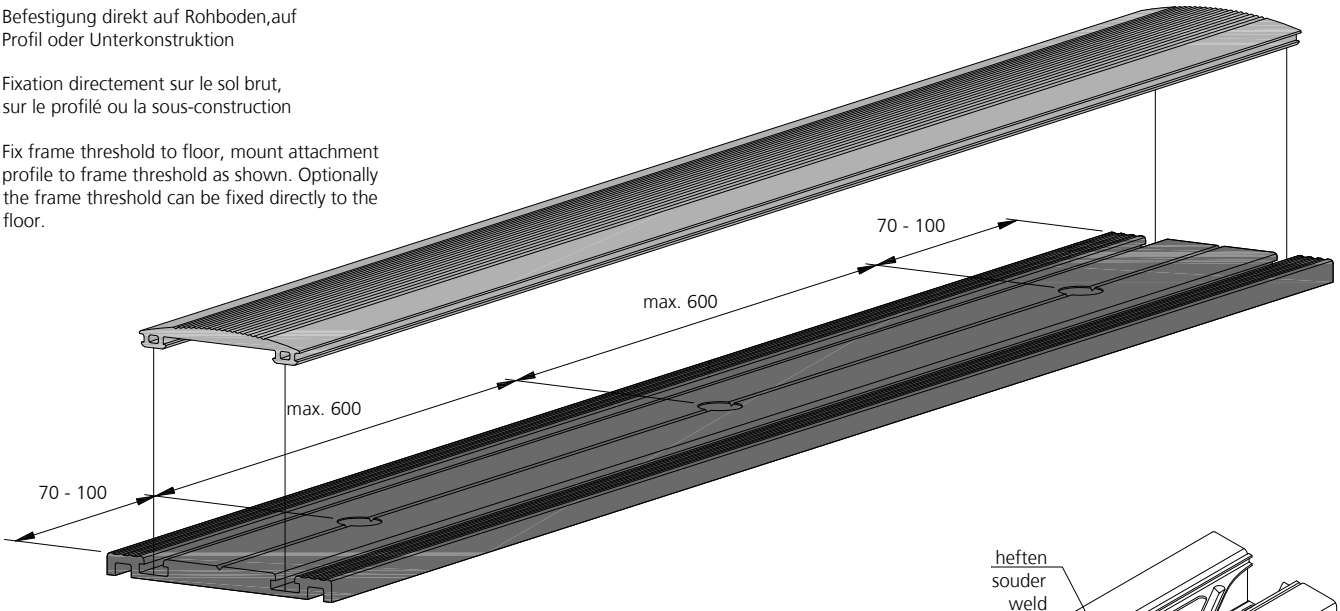
985721

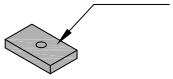


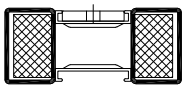
Befestigung direkt auf Rohboden,auf Profil oder Unterkonstruktion

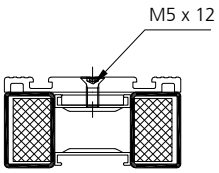
Fixation directement sur le sol brut, sur le profilé ou la sous-construction

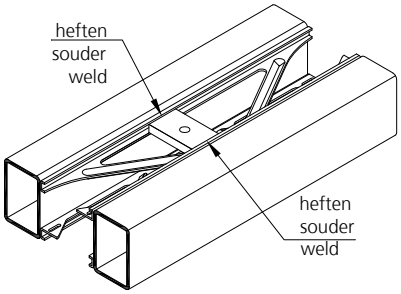
Fix frame threshold to floor, mount attachment profile to frame threshold as shown. Optionally the frame threshold can be fixed directly to the floor.



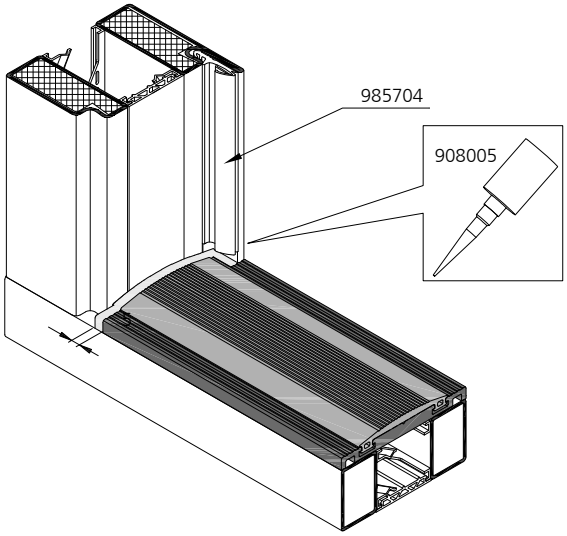




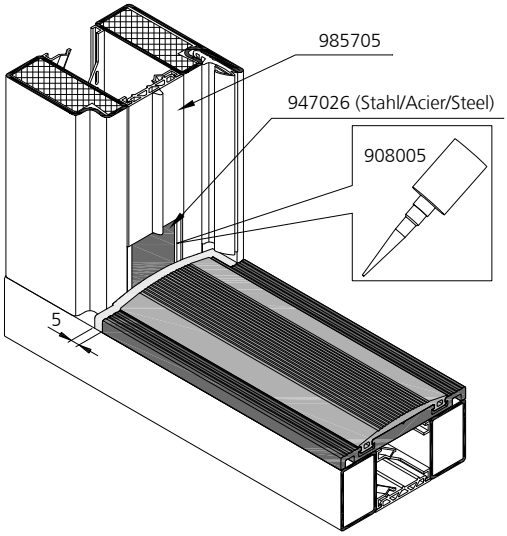




Variante / Variantes / Variations 1



Variante / Variantes / Variations 2



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Montage Aufsatzprofil
Renova
Anschlagschwelle

Montage profilé d'applique
Renova
Seuil en butée

Installation attachment profile
Renova
Buffer threshold

984850



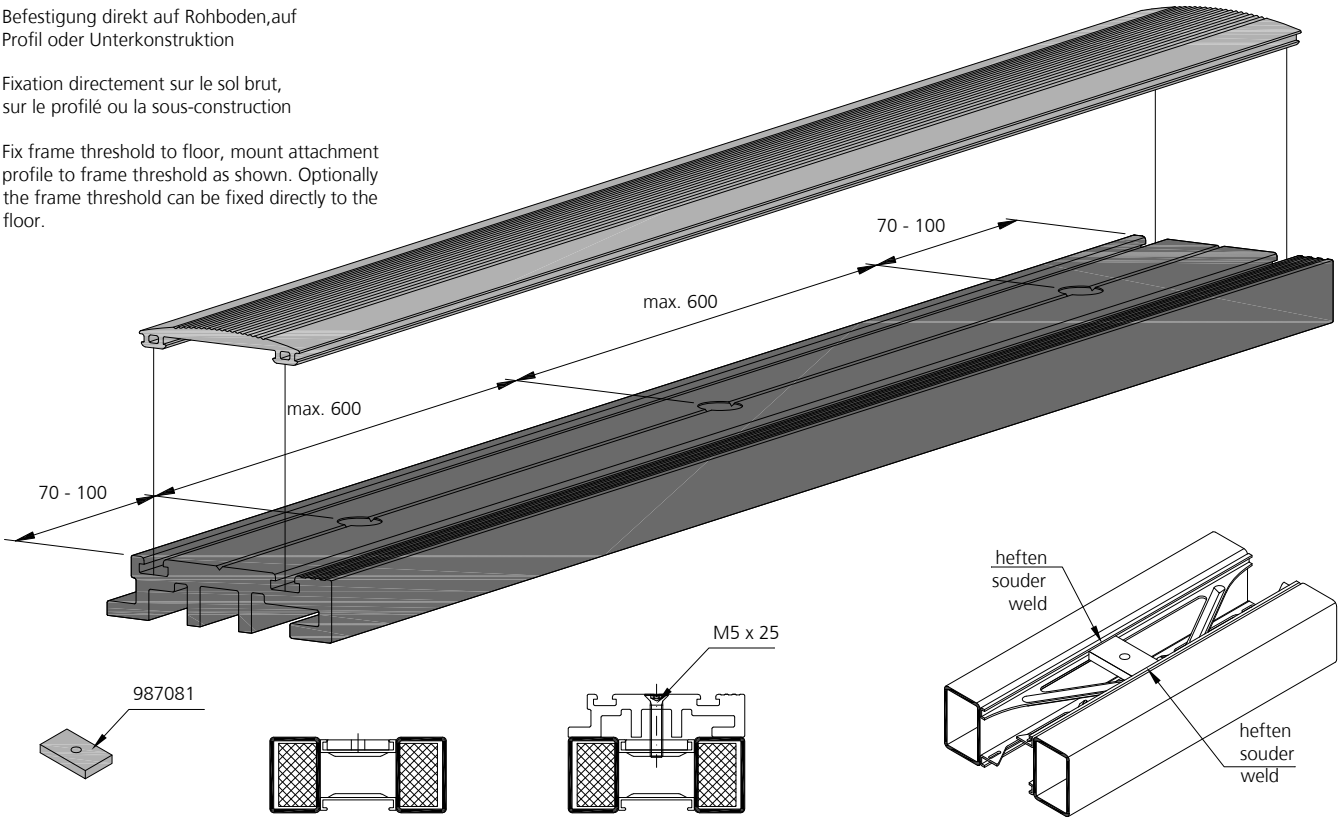
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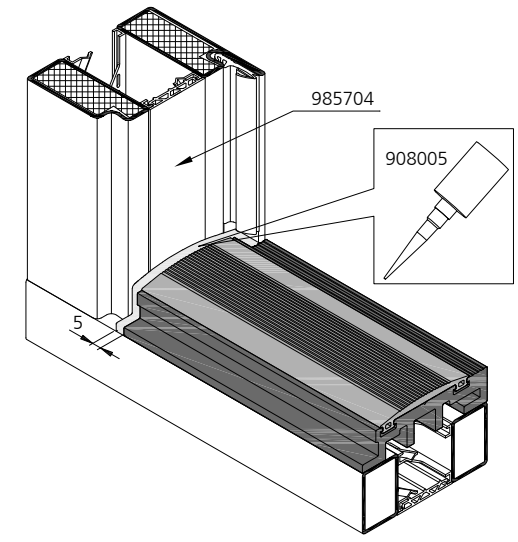
Befestigung direkt auf Rohboden,auf Profil oder Unterkonstruktion

Fixation directement sur le sol brut, sur le profilé ou la sous-construction

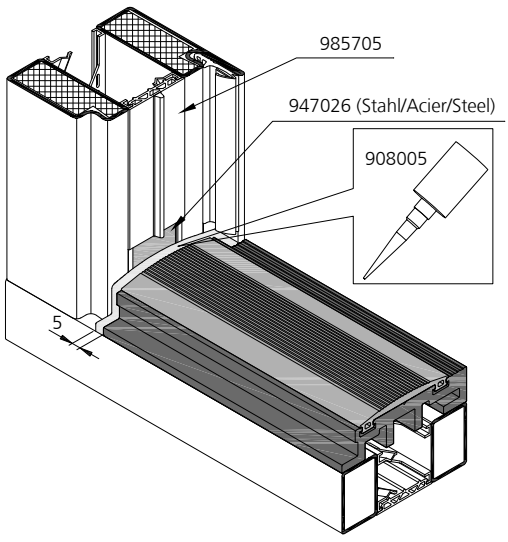
Fix frame threshold to floor, mount attachment profile to frame threshold as shown. Optionally the frame threshold can be fixed directly to the floor.



Variante / Variantes / Variations 1



Variante / Variantes / Variations 2

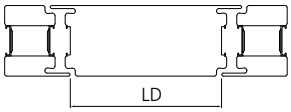


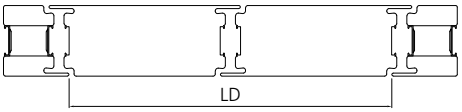
Zuschnitt und Klinkung
Schwellenprofil

Débitage et usinage
Profilé de seuil

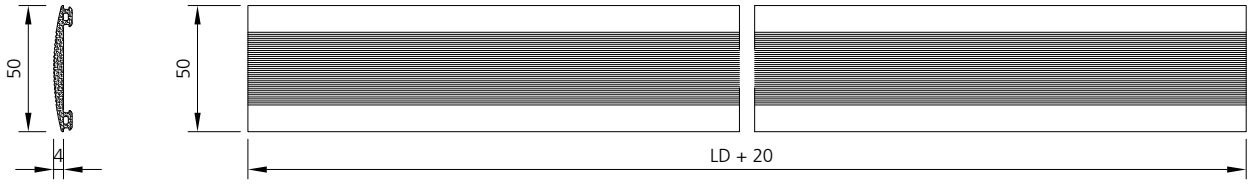
Cutting and notching
Threshold profile

LD = Lichtes Durchgangsmass
Passage libre
Inside width

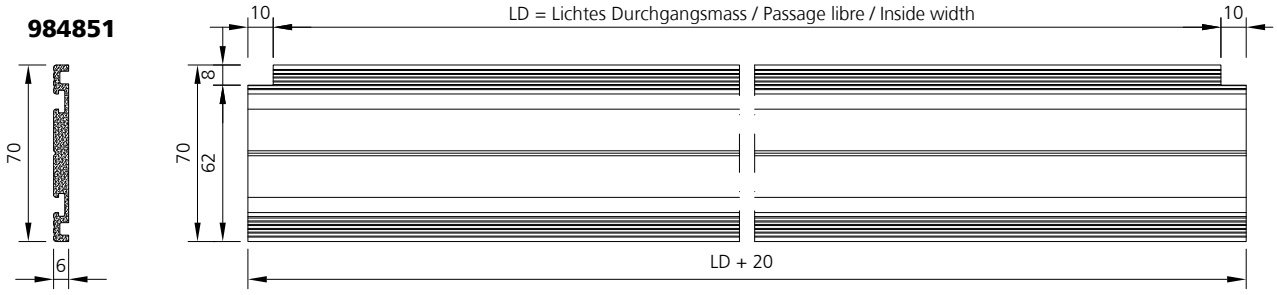




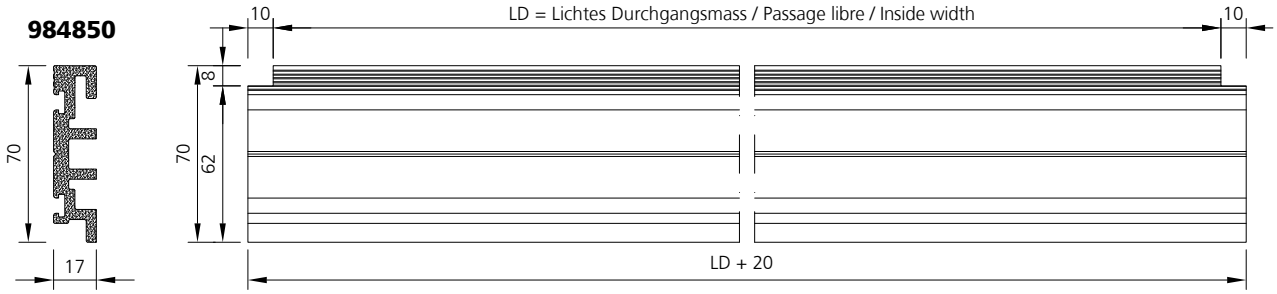
985721



984851



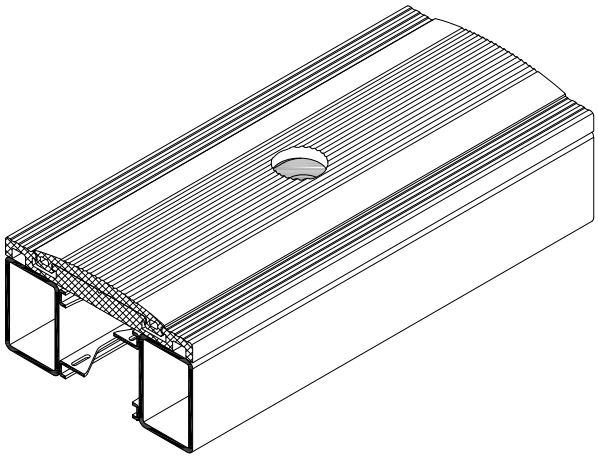
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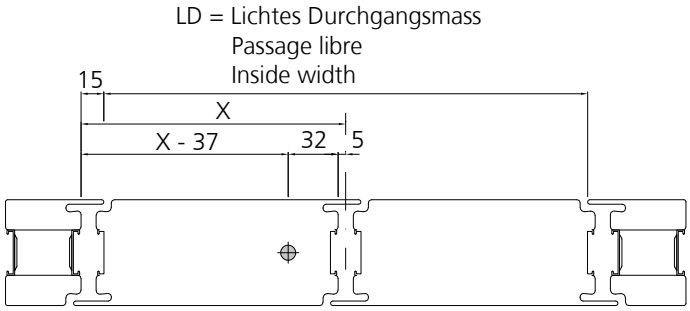


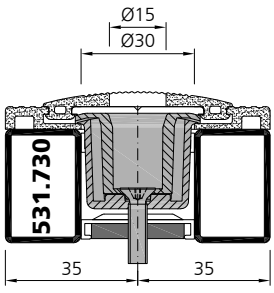
Einbau Bodenschliesshülse 987052
verdeckt, Aufsatzprofil flach

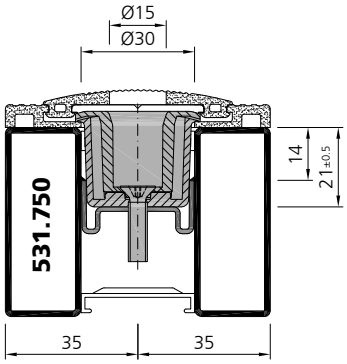
Montage du douille de fermeture au sol 987052
caché, Profilé d'applique plat

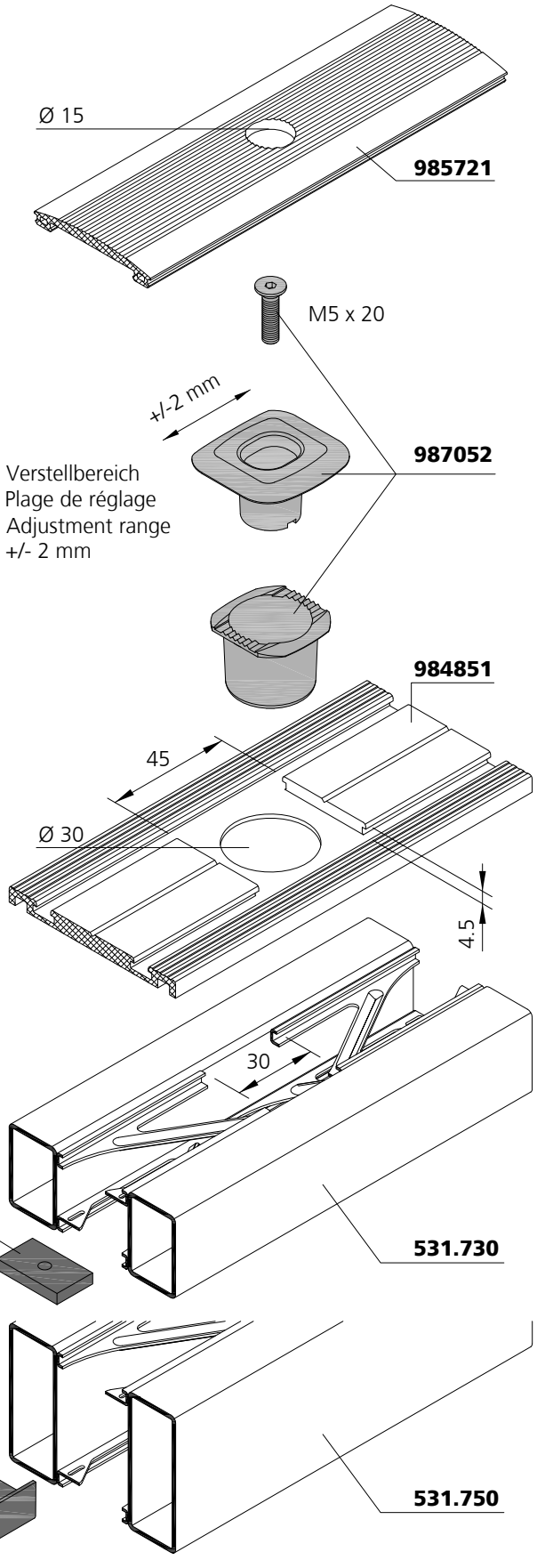
Installation of floor covering bush 987052
concealed, Attachment profile plane











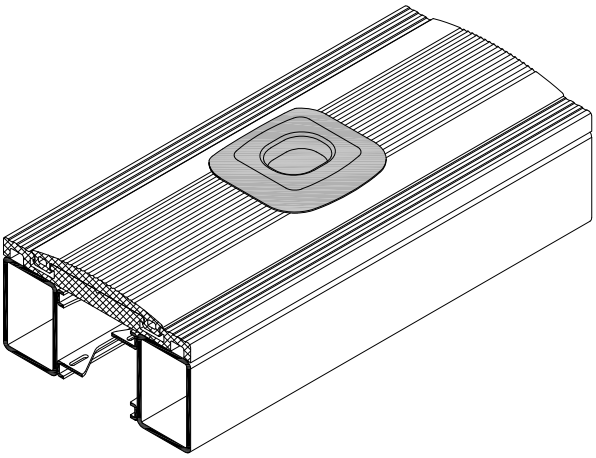
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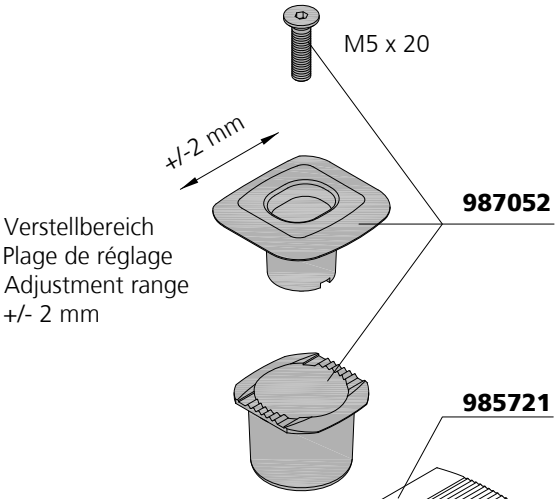
09/23

Einbau Bodenschliesshülse 987052
sichtbar, Aufsatzprofil flach

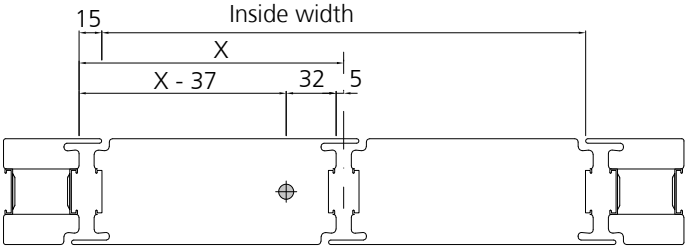
Montage du douille de fermeture au sol 987052
visible, Profilé d'applique plat

Installation of floor covering bush 987052
visible, Attachment profile plane

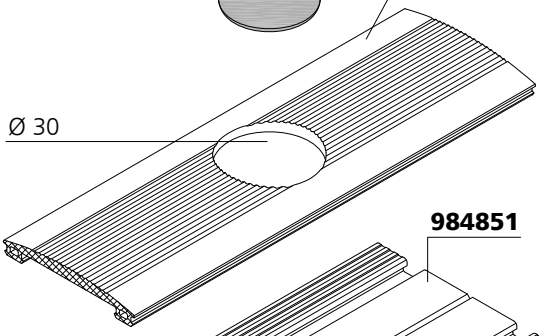


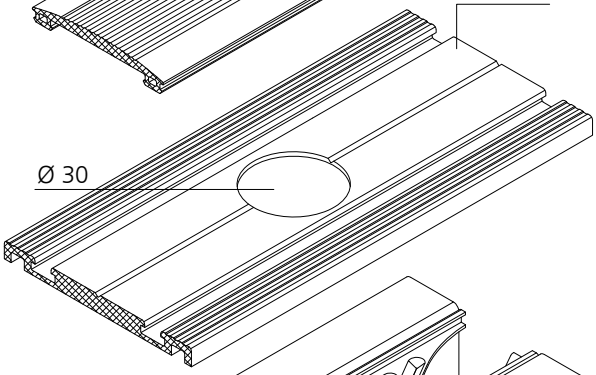


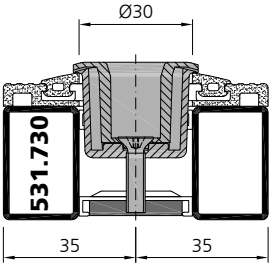
LD = Lichtes Durchgangsmass
Passage libre
Inside width

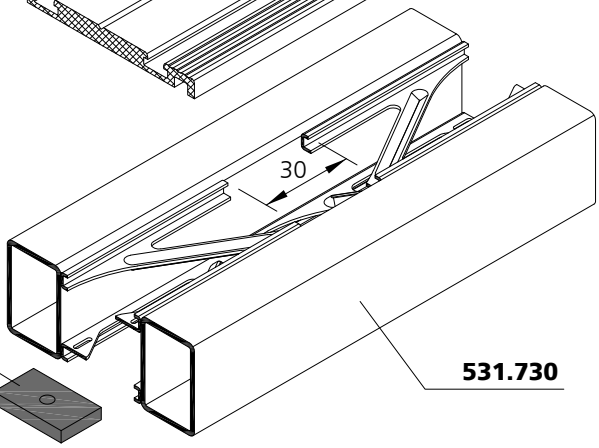


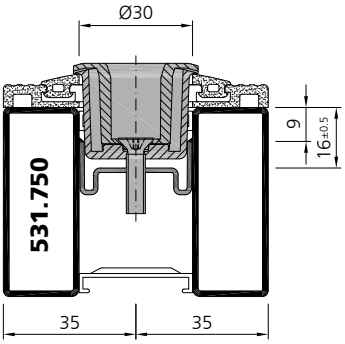
Standflügel
Vantail semi-fixe
Fixed leaf

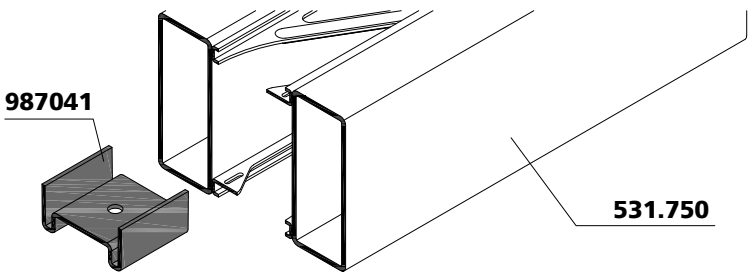










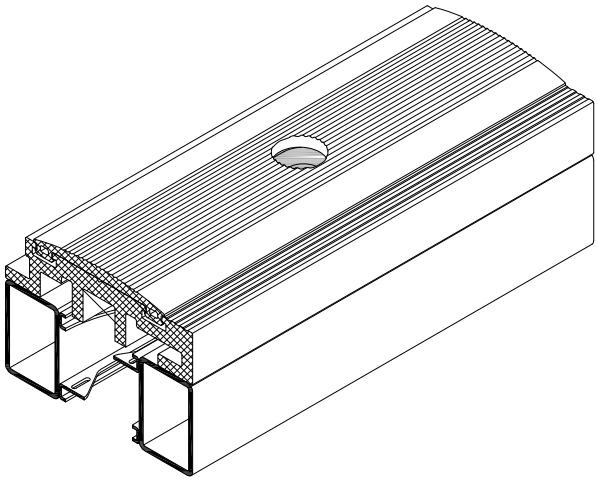


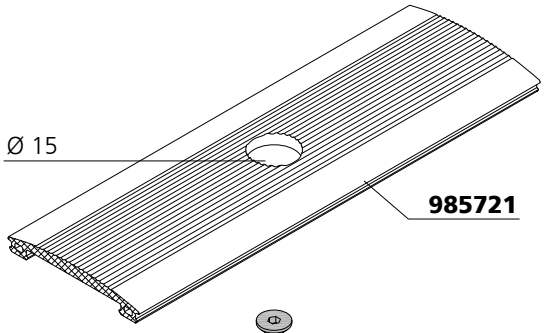
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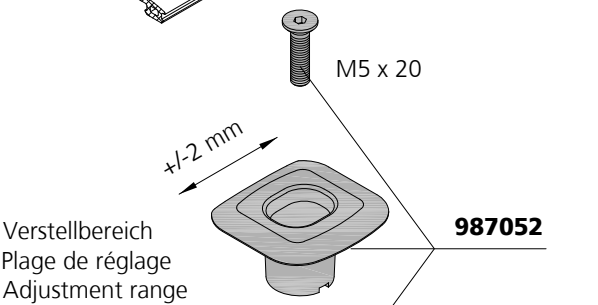
Einbau Bodenschliesshülse 987052
verdeckt, Aufsatzprofil Anschlag

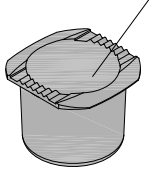
Montage du douille de fermeture au sol 987052
caché, Profilé d'applique butée

Installation of floor covering bush 987052
concealed, Buffer attachment profile

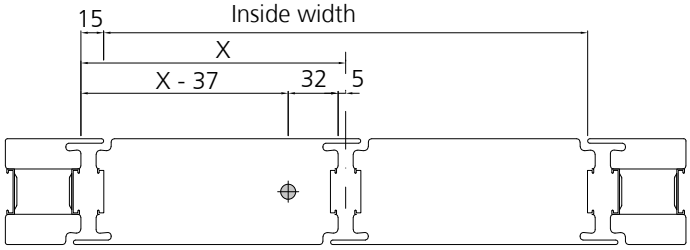




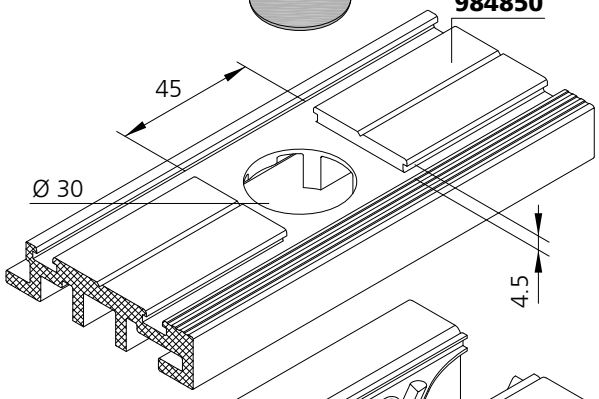


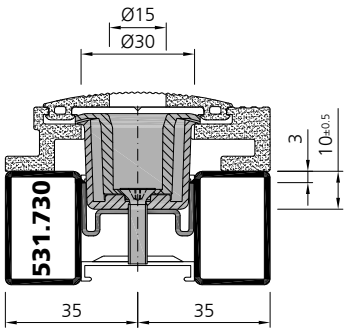


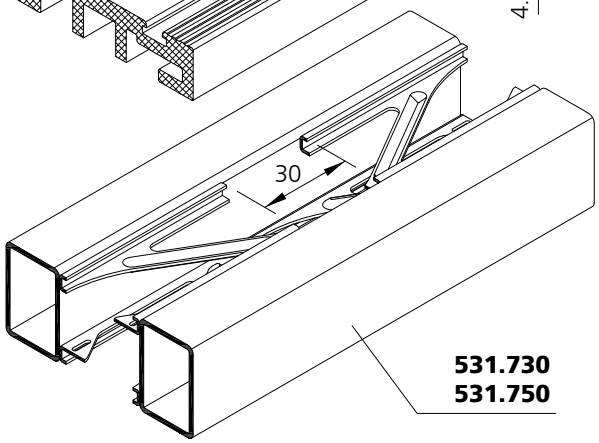
LD = Lichtes Durchgangsmass
Passage libre
Inside width

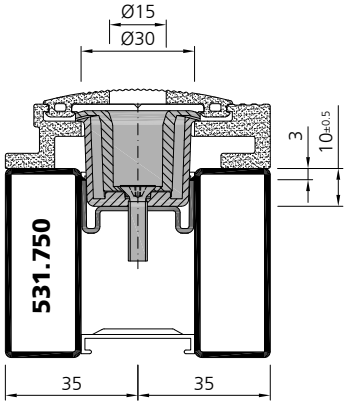


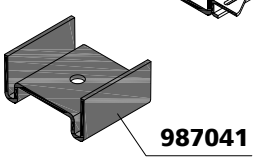
Standflügel
Vantail semi-fixe
Fixed leaf











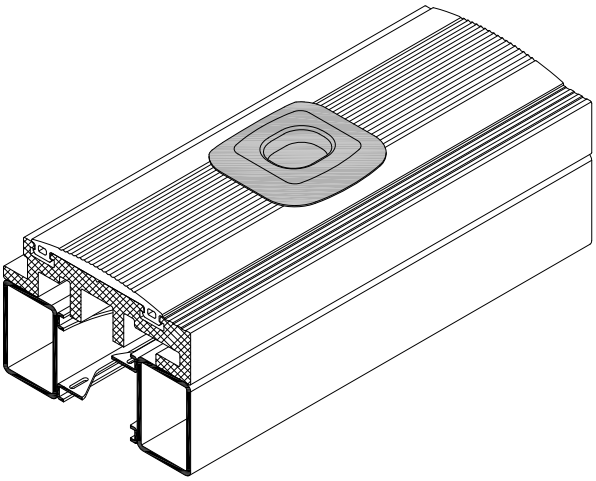
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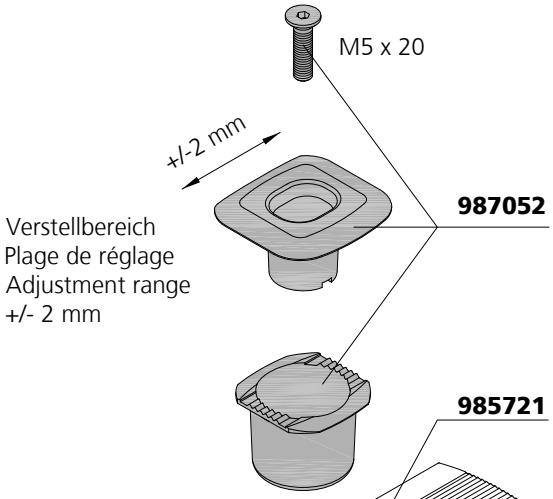
09/23

Einbau Bodenschliesshülse 987052
sichtbar, Aufsatzprofil Anschlag

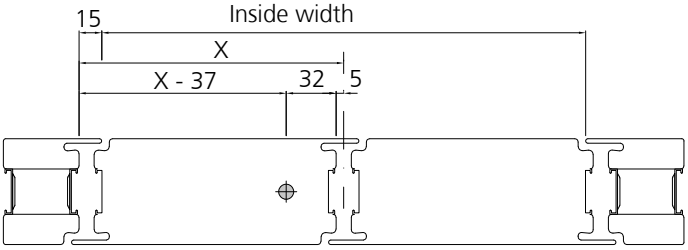
Montage du douille de fermeture au sol 987052
caché, Profilé d'applique butée

Installation of floor covering bush 987052
concealed, Buffer attachment profile

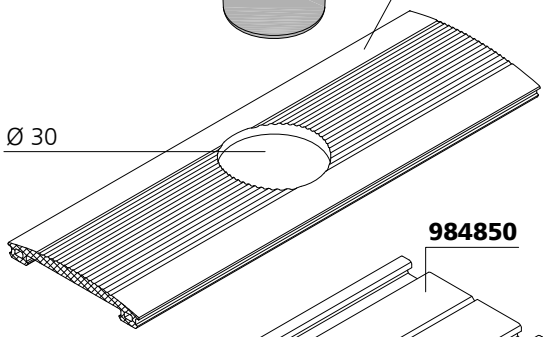


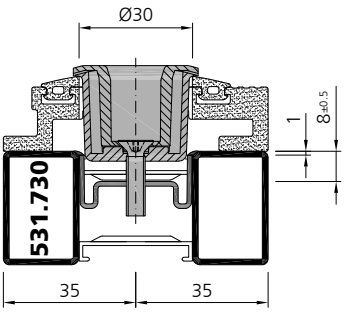


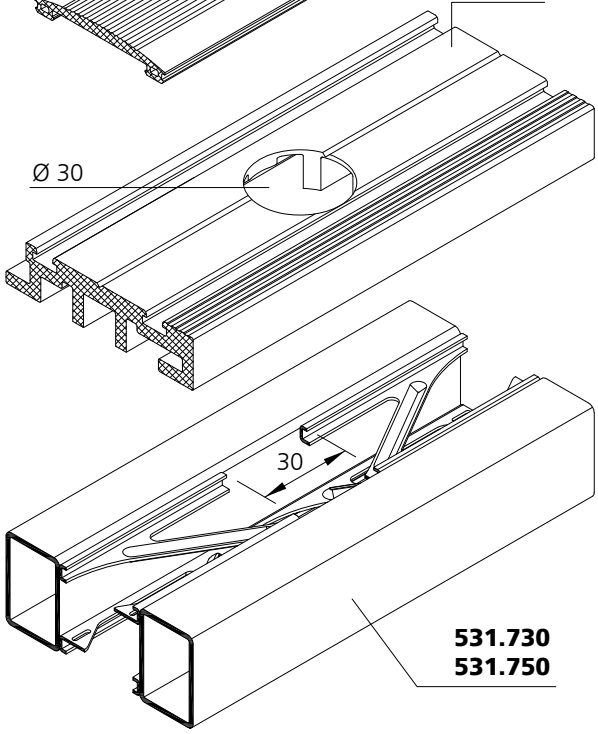
LD = Lichtes Durchgangsmass
Passage libre
Inside width

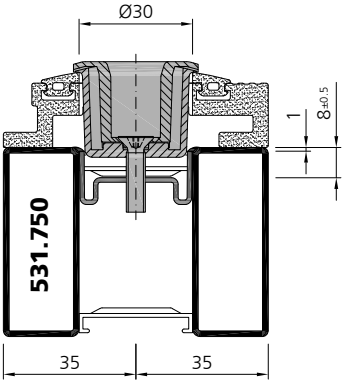


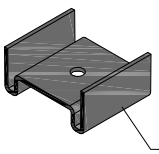
Standflügel
Vantail semi-fixe
Fixed leaf











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Dichtungseinbau
Falzabdeckung Rahmen

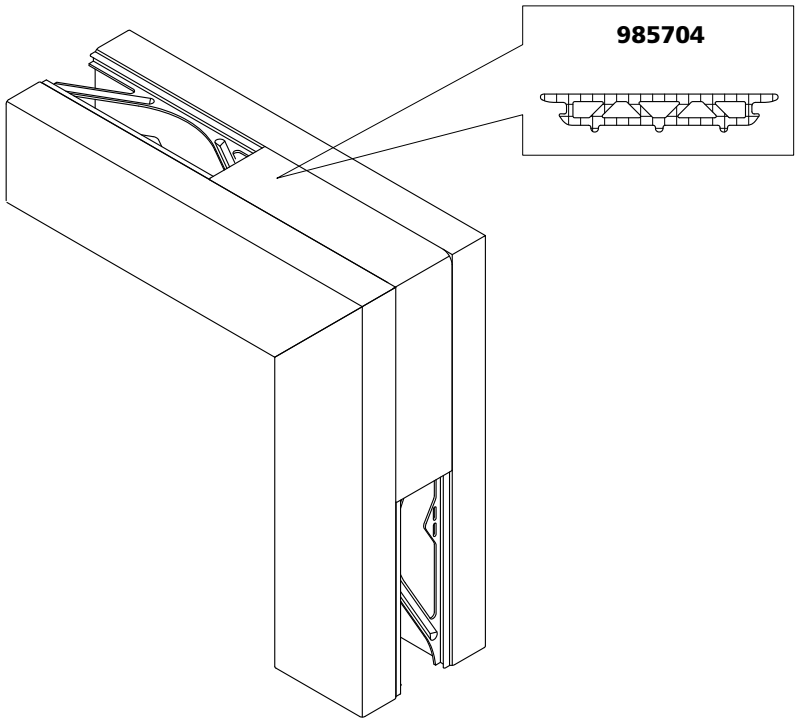
Montage du joint
Recouvrement de feuillure du cadre

Installation of seal
Rebate cover frame

Die Dichtung **985704** wird um die Aussenecke herum durchgehend geführt.

Poser en continu le recouvrement de feuillure **985704** autour des angles extérieurs.

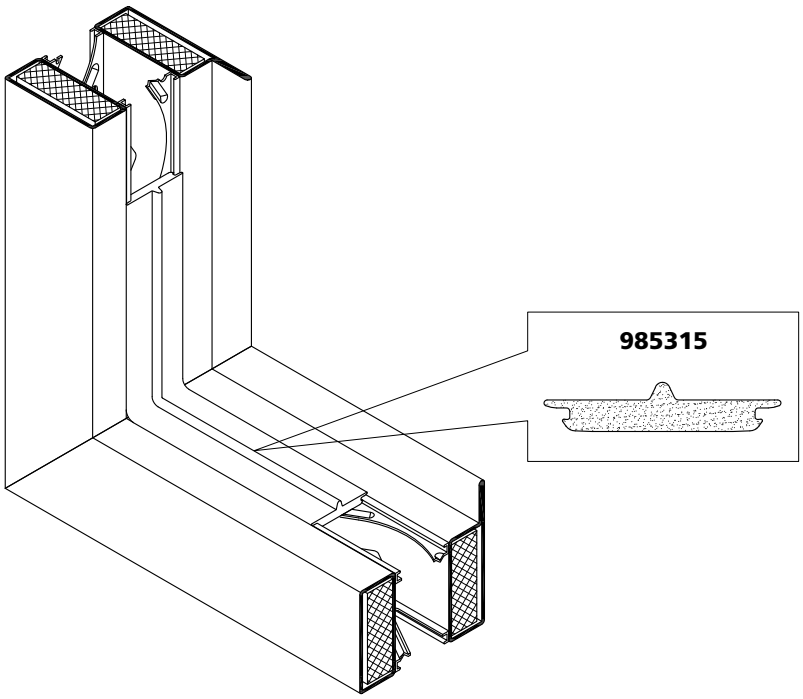
The seal **985704** is placed continiously around the outer corner.



Die Dichtung **985315** wird in der Innenecke durchgehend geführt.

Poser en continu le recouvrement de feuillure **985315** dans les angles intérieurs.

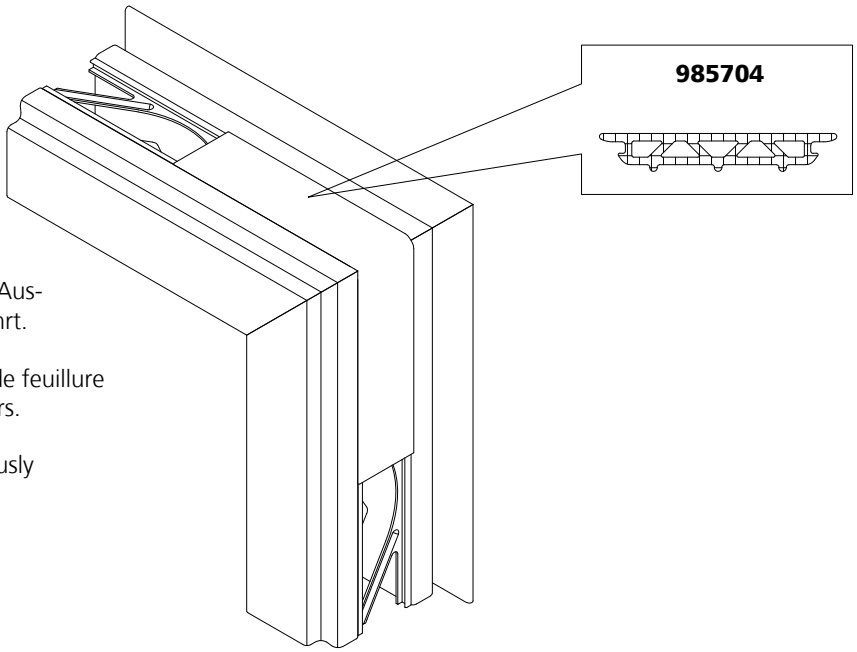
The seal **985315** is placed continiously around the inner corner.



Dichtungseinbau
Falzabdeckung Türflügel

Montage du joint
Recouvrement de feuillure vantail de porte

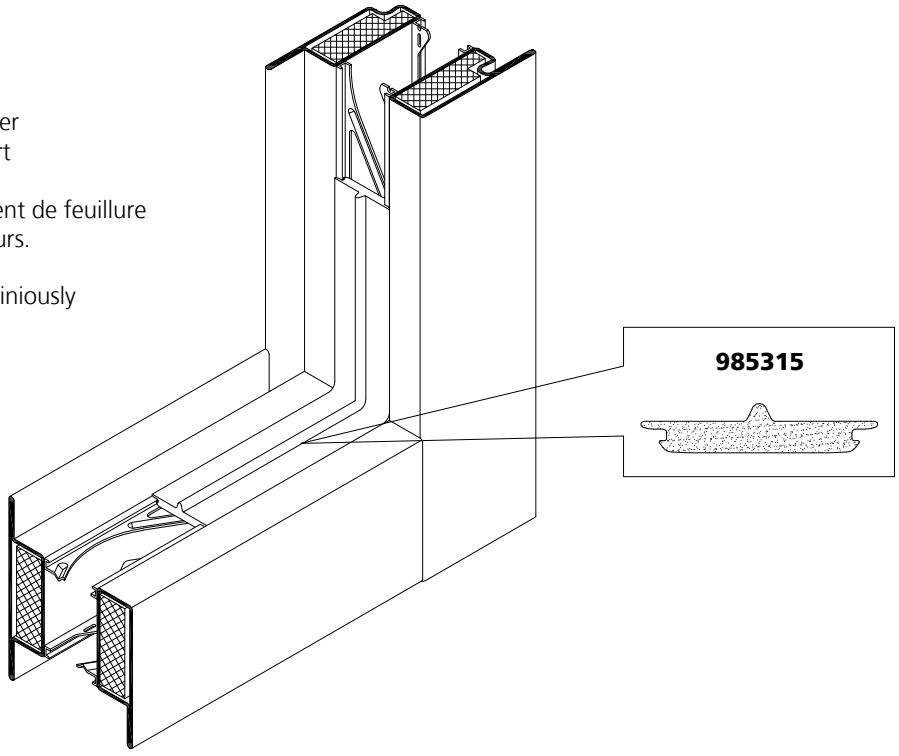
Installation of seal
Rebate cover door leaf



Die Dichtung **985704** wird um die Aussenecke herum durchgehend geführt.

Poser en continu le recouvrement de feuillure **985704** autour des angles extérieurs.

The seal **985704** is placed continiously around the outer corner.



Die Dichtung **985315** wird in der Innenecke durchgehend geführt

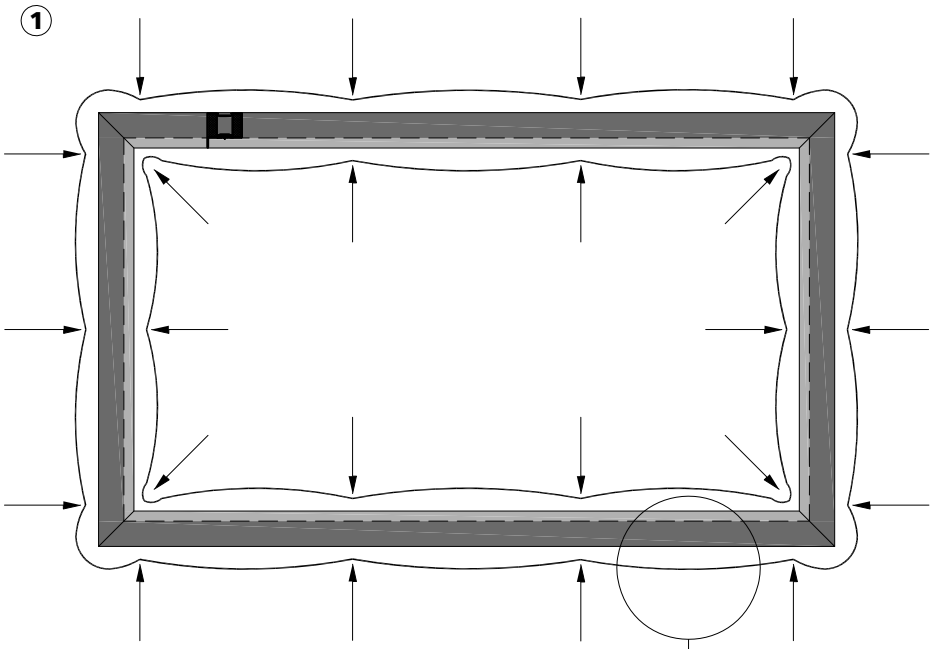
Poser en continu le recouvrement de feuillure **985315** dans les angles intérieurs.

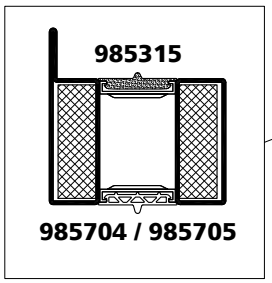
The seal **985315** is placed continiously around the inner corner.

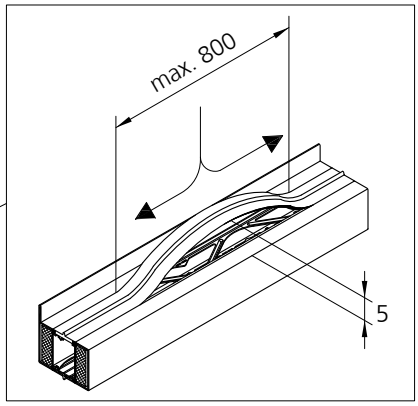
Dichtungseinbau
Falzabdeckung Rahmen

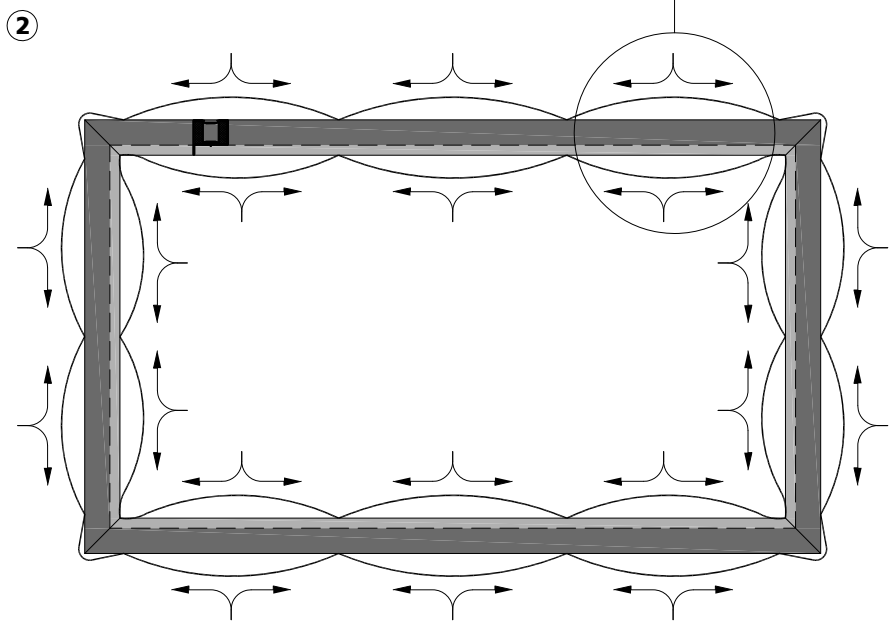
Montage du joint
Recouvrement de feuillure du cadre

Installation of seal
Rebate cover frame







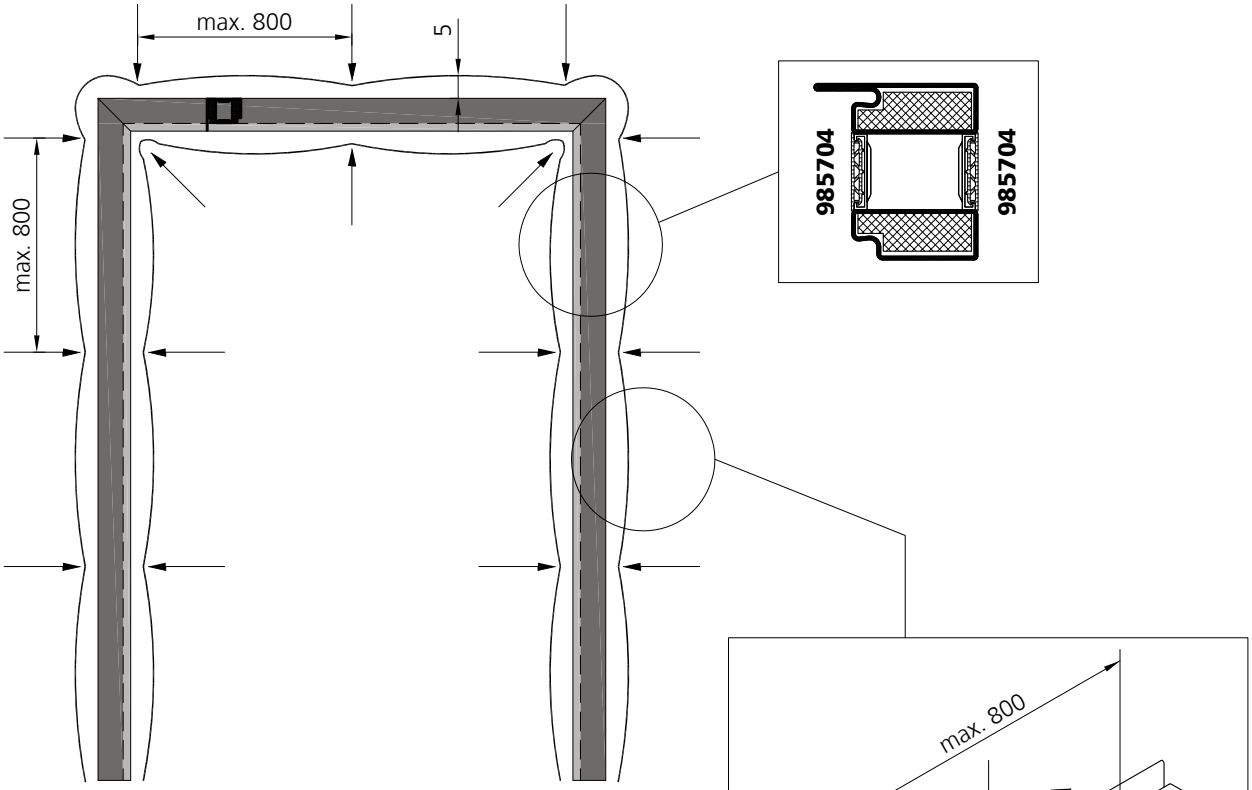


Dichtungseinbau
Falzabdeckung Türrahmen

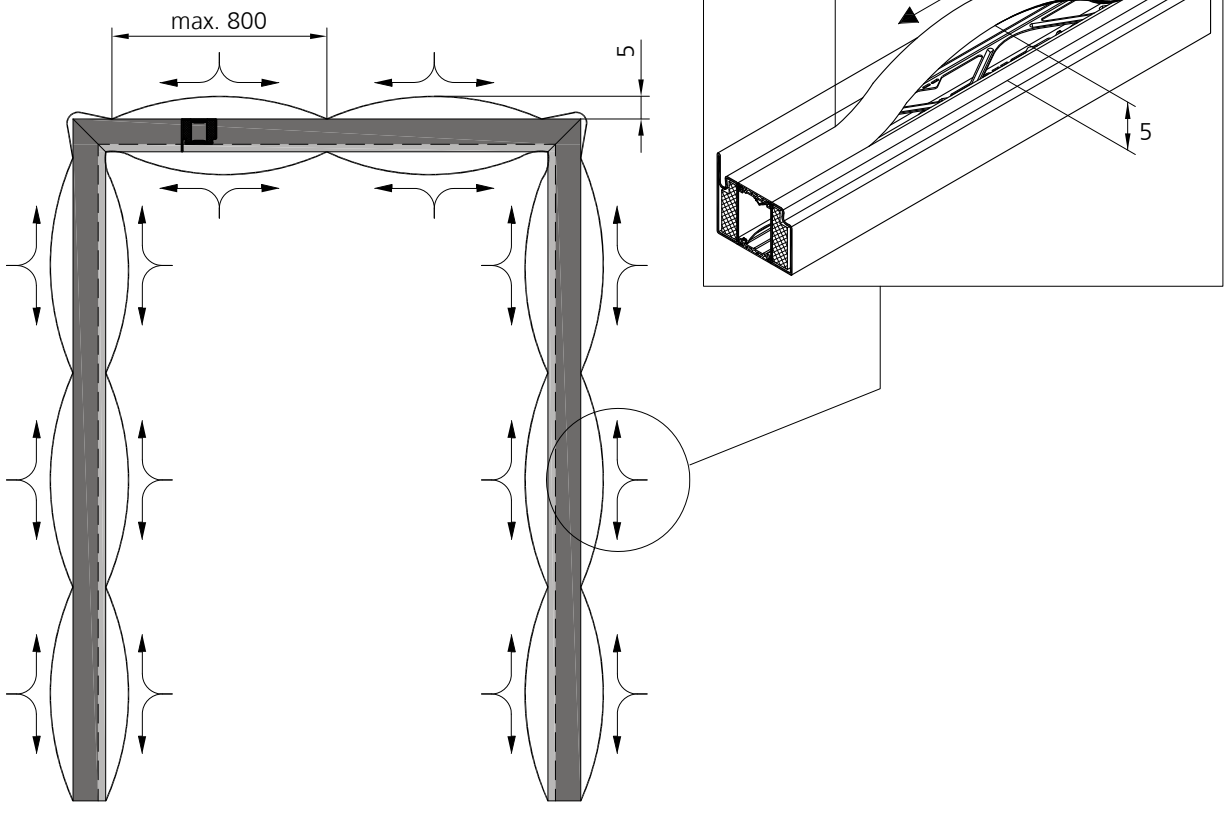
Montage du joint
Recouvrement de feuillure de cadre de porte

Installation of seal
Rebate cover on door frame

①



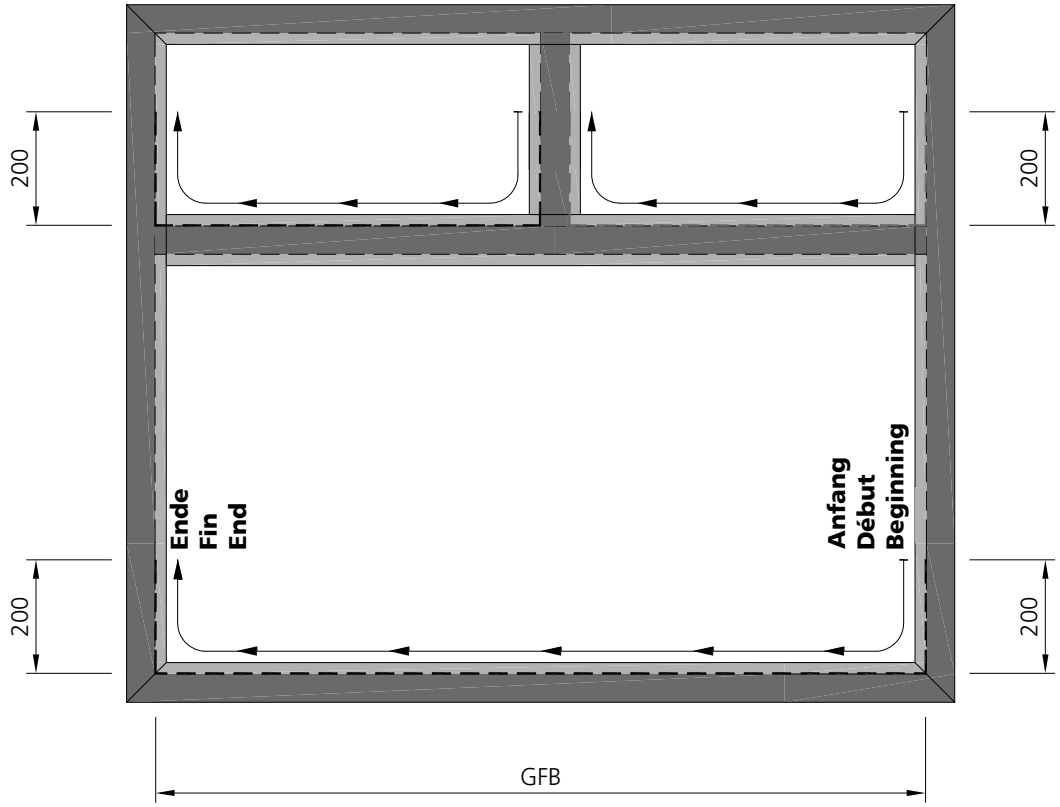
②

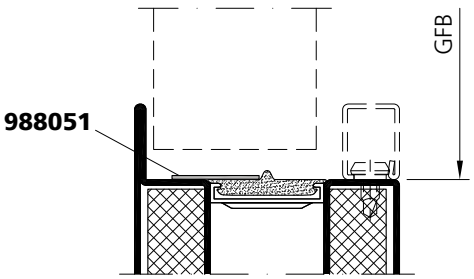


Dichtungseinbau
Falzabdichtung Festfeld

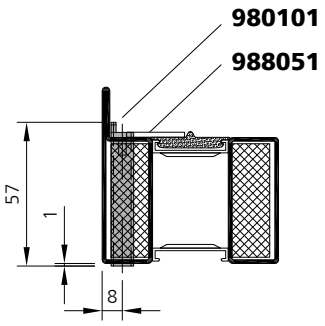
Montage du joint
Etanchement de feuillure du vitrage fixe

Installation of seal
Rebate seal of fixed glazing



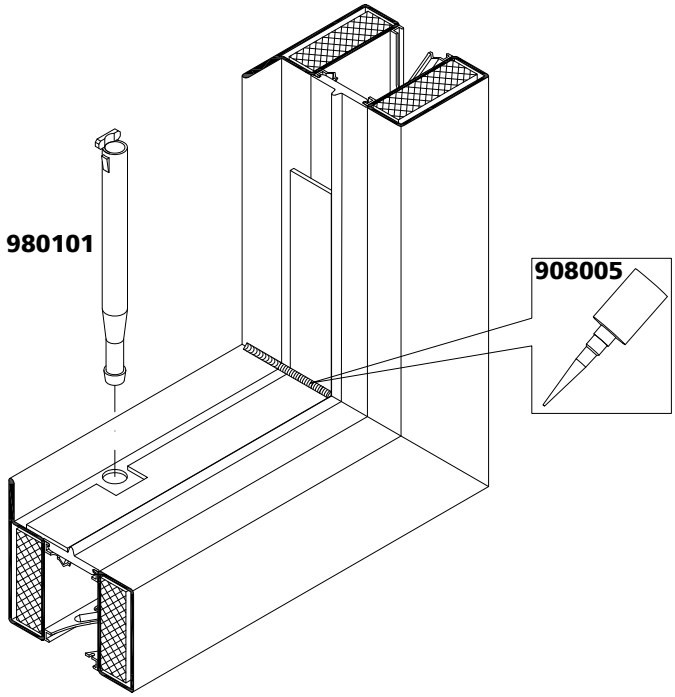


Dichtungseinbau
Einbau indirekte Entwässerung / Belüftung
Rahmen



Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit **Art. Nr. 908005** abgeklebt.

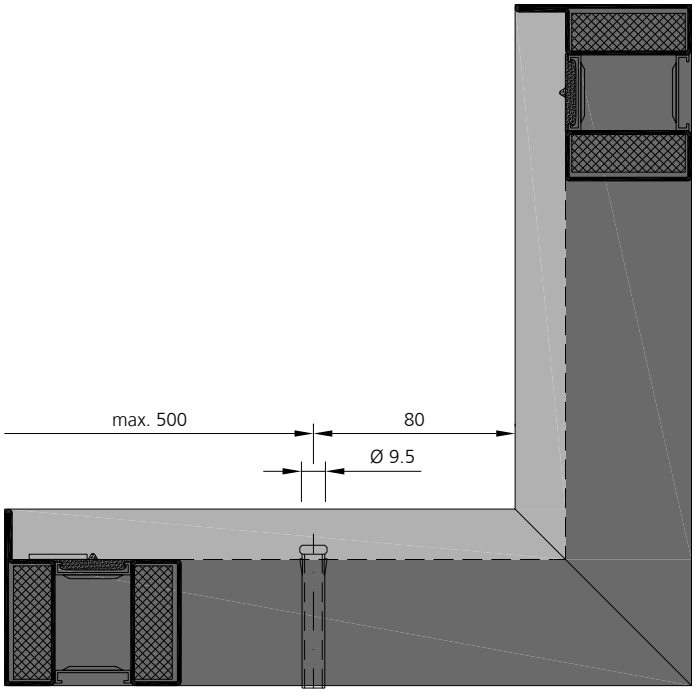
Montage du joint
Montage d'une évacuation/évacuation d'eau indirecte
Cadre



Coller le ruban de butyle **art. no. 988051** dans les angles avec le produit **art. no. 908005.**

Installation of seal
Installation of indirect drainage / ventilation
Frame

The butyl tape **art. no. 988051** is bond additionally in the corners with **art. no. 908005.**

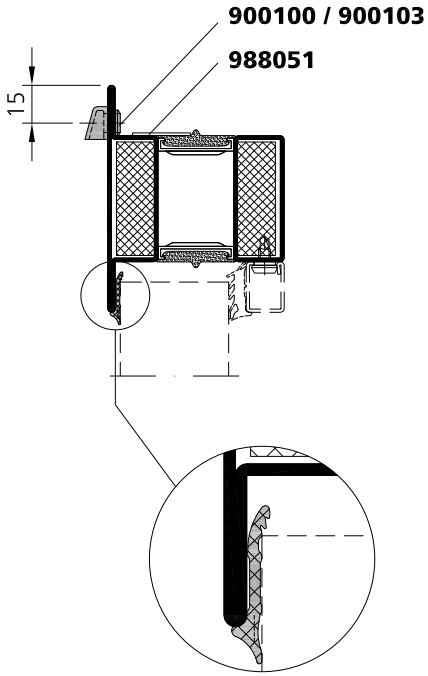


Das indirekte Entspannungsröhrchen **Art. Nr. 980101** wird durch das Rahmenprofil gesteckt und auf der Austrittseite mit 1 mm Überstand abgeschnitten.

Faire passer la tubulure de décompression indirecte **art. no. 980101** à travers le profilé de cadre et la couper sur le côté sortie avec une saillie de 1 mm.

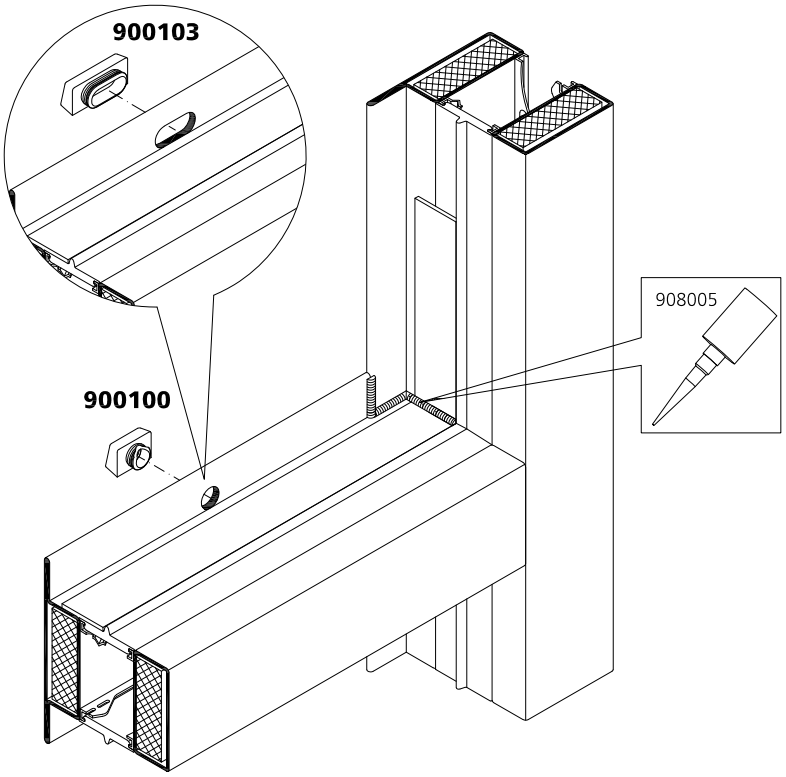
The indirect decompression pipe **art. no. 980101** is plugged in through the frame profile and cut off at the exit side, leaving an overhang of 1mm.

Dichtungseinbau
Einbau direkte Entwässerung / Belüftung
Sprosse



Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit Dichtungsmasse **Art. Nr. 908005** abgeklebt.

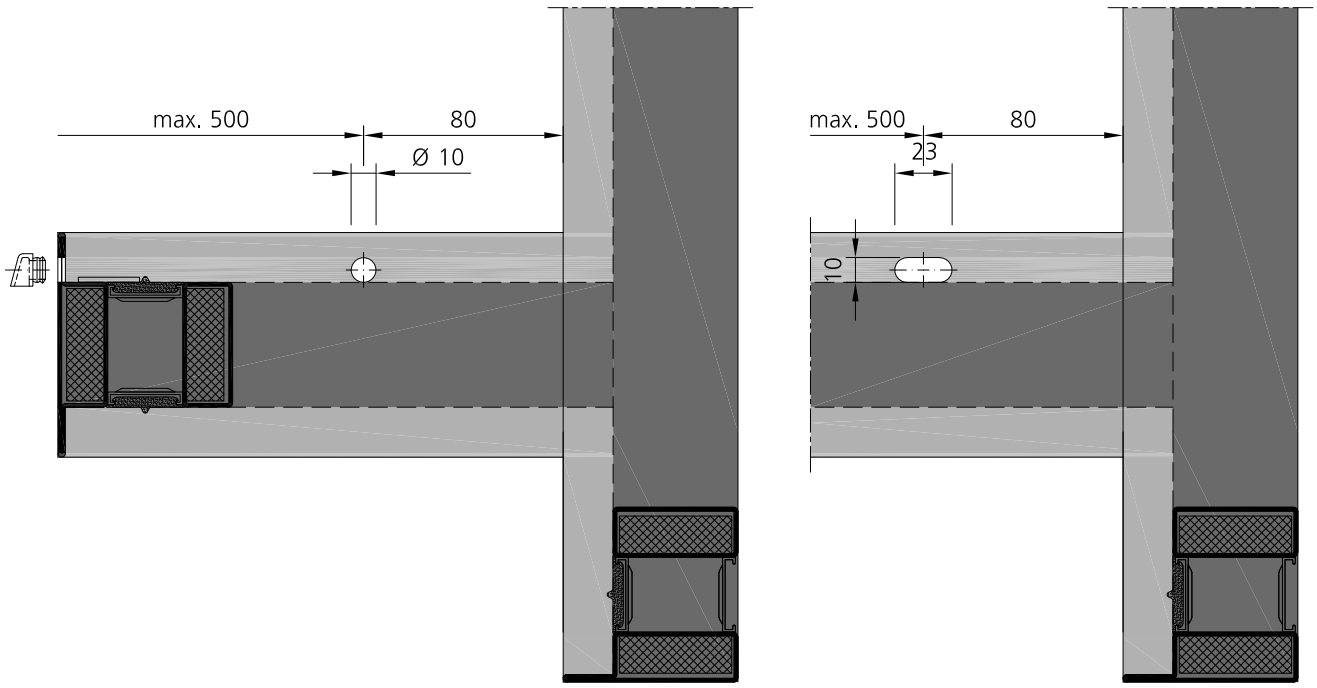
Montage du joint
Montage d'une ventilation/évacuation d'eau directe
Traverse



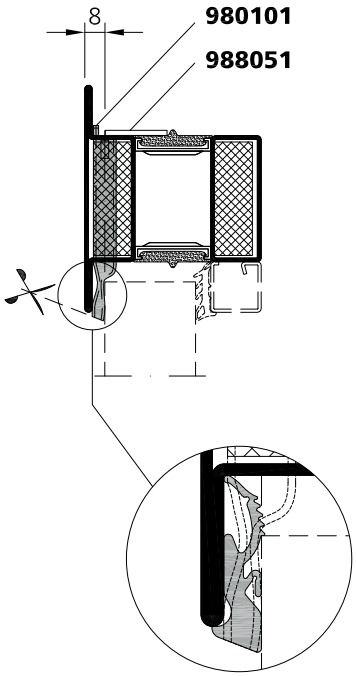
Coller le ruban de butyle **art. no. 988051** dans les angles avec le mastic **art. no. 908005**.

Installation of seal
Installation of direct drainage/ ventilation
Transom

The butyl tape **art. no. 988051** is strengthened in the corners with sealing compound **art. no. 908005**.

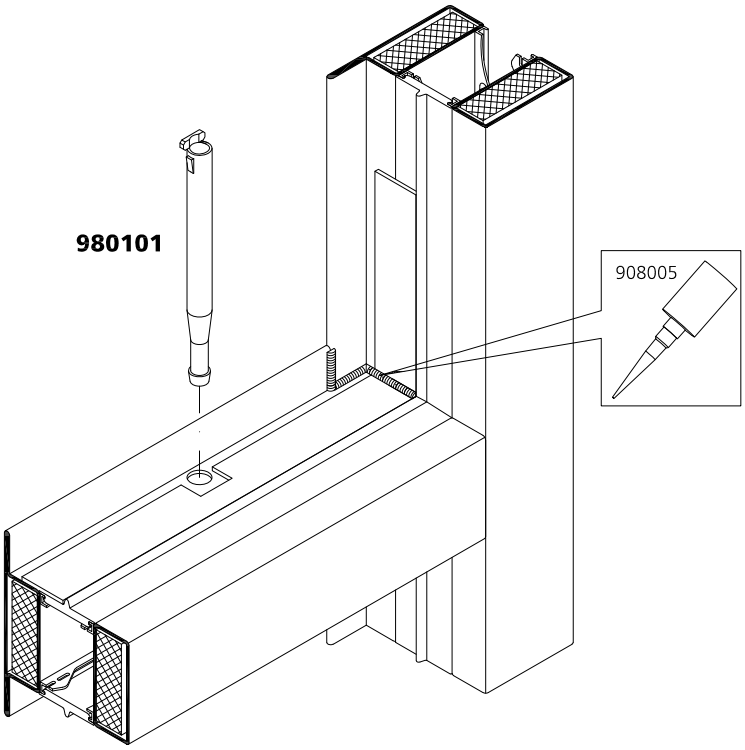


Dichtungseinbau
Einbau indirekte Entwässerung / Belüftung
Sprosse



Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit Dichtungsmasse **Art. Nr. 908005** abgeklebt.

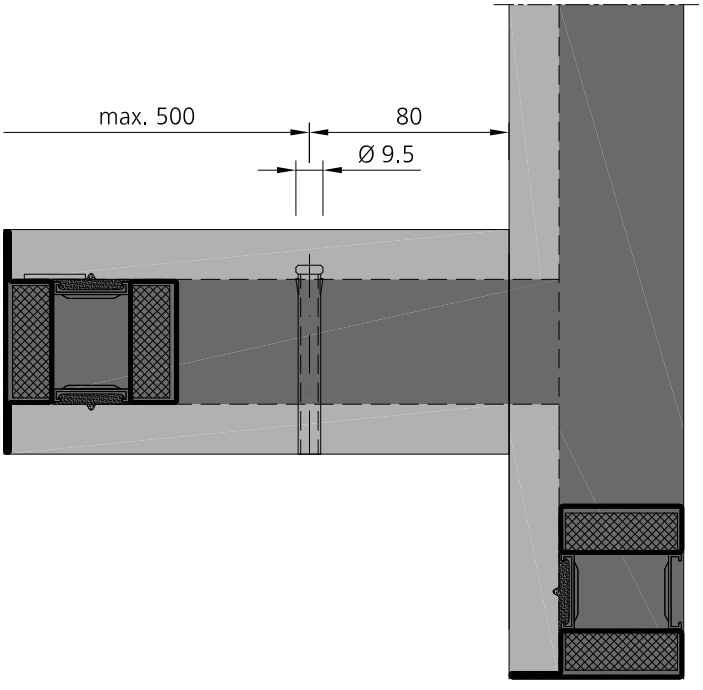
Montage du joint
Montage d'une évacuation/évacuation d'eau indirecte
Traverse



Coller le ruban de butyle **art. no. 988051** dans les angles avec le mastic **art. no. 908005**.

Installation of seal
Installation of indirect drainage / ventilation
Transom

The butyl tape **art. no. 988051** is strengthened in the corners with sealing compound **art. no. 908005**.



Das indirekte Entspannungsröhrchen **Art.Nr. 980101** wird durch das Rahmenprofil gesteckt und auf der Austrittseite bündig abgeschnitten.

Faire passer la tubulure de décompression indirecte **art. no. 980101** à travers le profilé de cadre et la couper sur le côté sortie en affleurement.

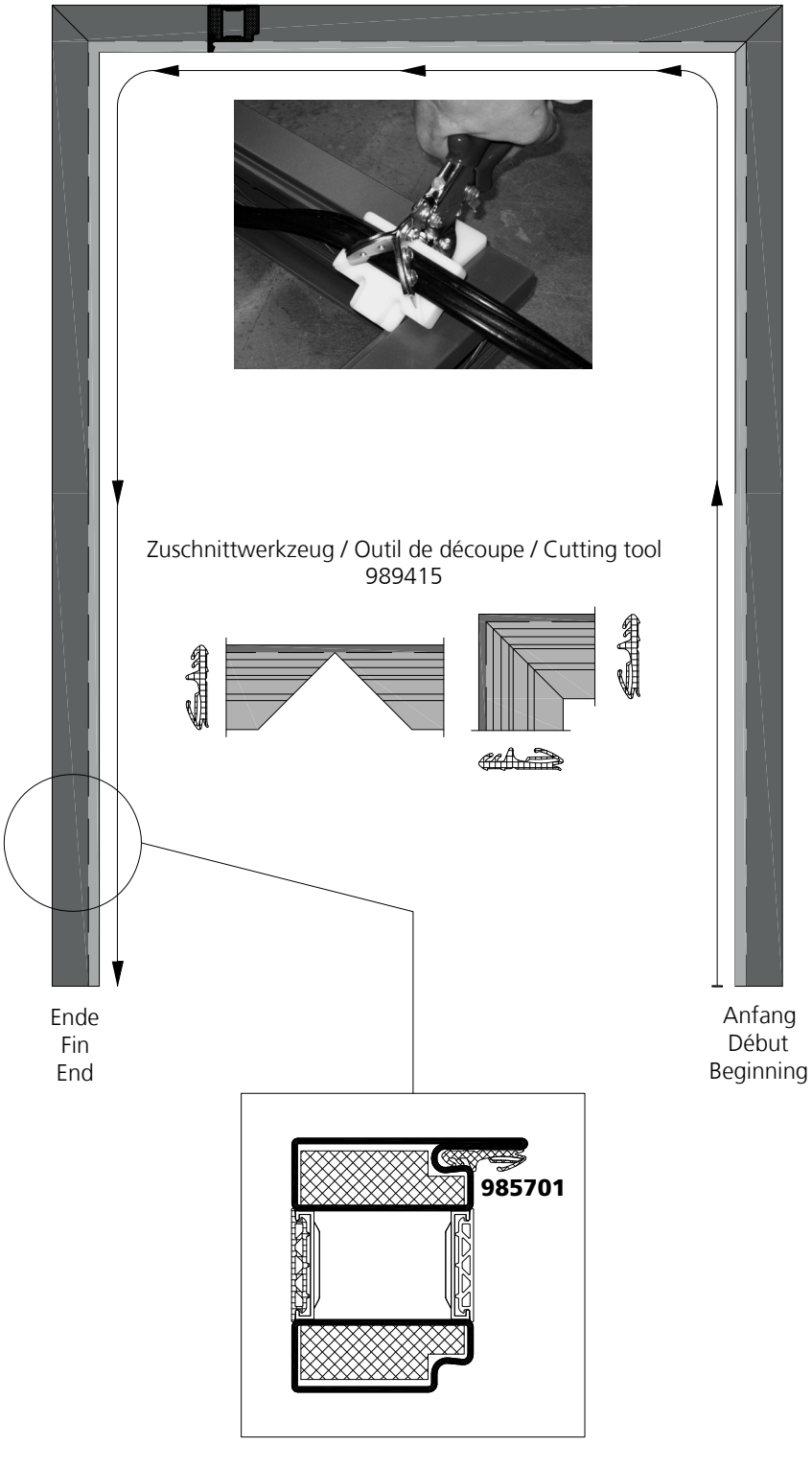
The indirect decompression pipe **art. no. 980101** is plugged in through the frame profile and cut off flush at the exit side.

Dichtungseinbau
Anschlagdichtung Türrahmen

Montage du joint
Joint de butée de cadre de porte

Installation of seal
Weatherstripping on door frame

Rahmen / Cadre / Frame

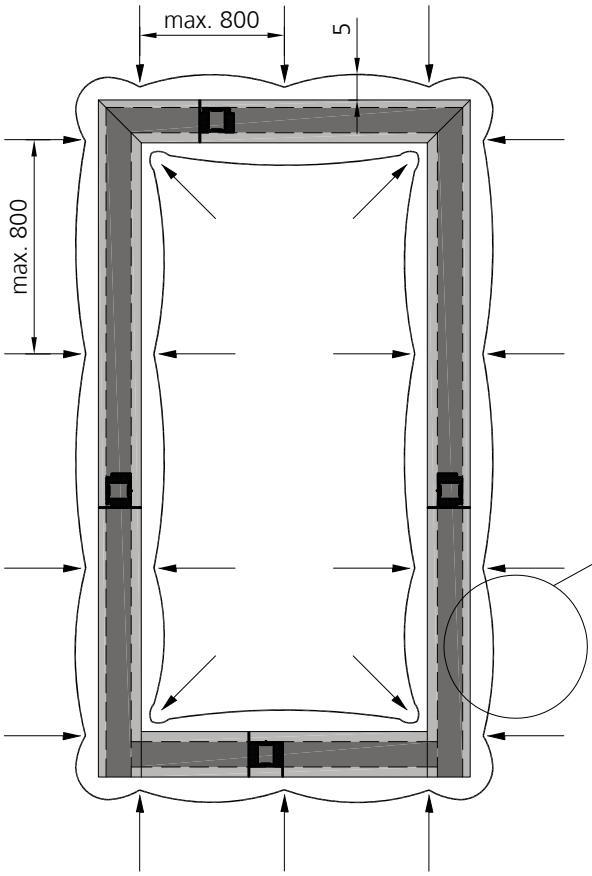


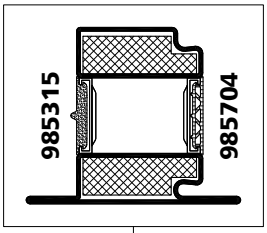
Dichtungseinbau
Falzabdeckung Türflügel

Montage du joint
Recouvrement de feuillure vantail de porte

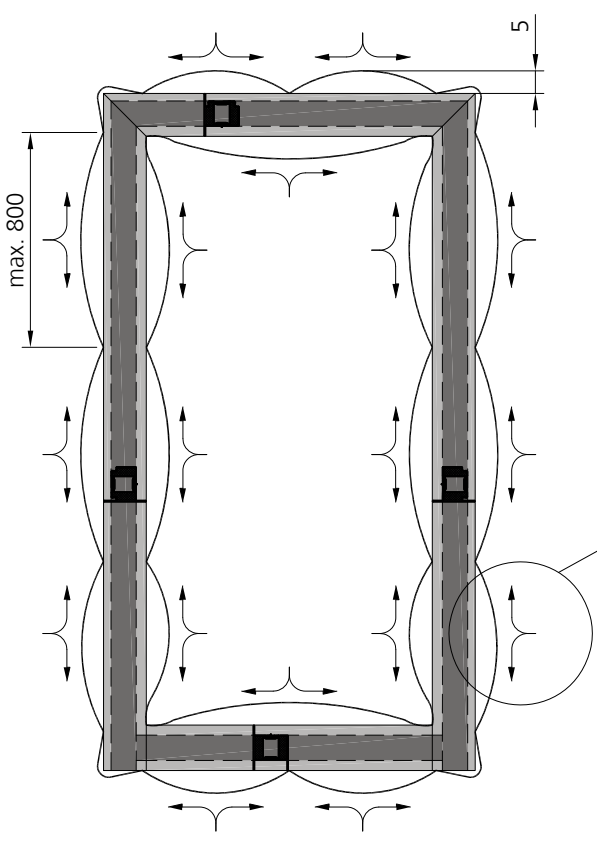
Installation of seal
Rebate cover door leaf

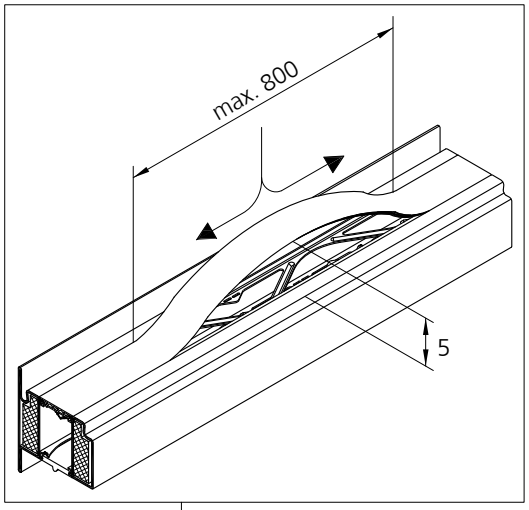
①





②



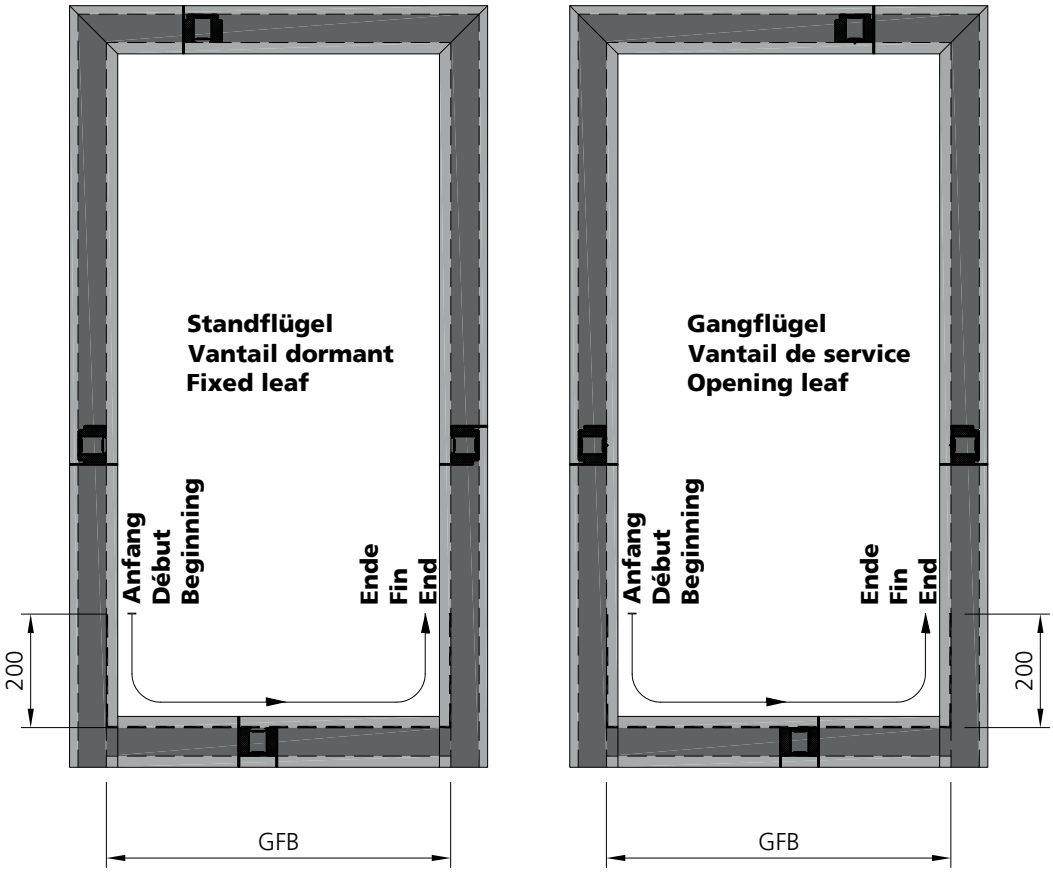


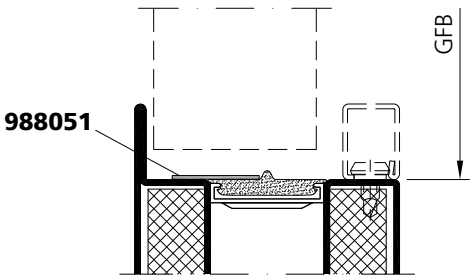
09/23

Dichtungseinbau
Falzabdichtung Türflügel

Montage du joint
Recouvrement de feuillure du vantail de porte

Installation of seal
Rebate seal on door leaf

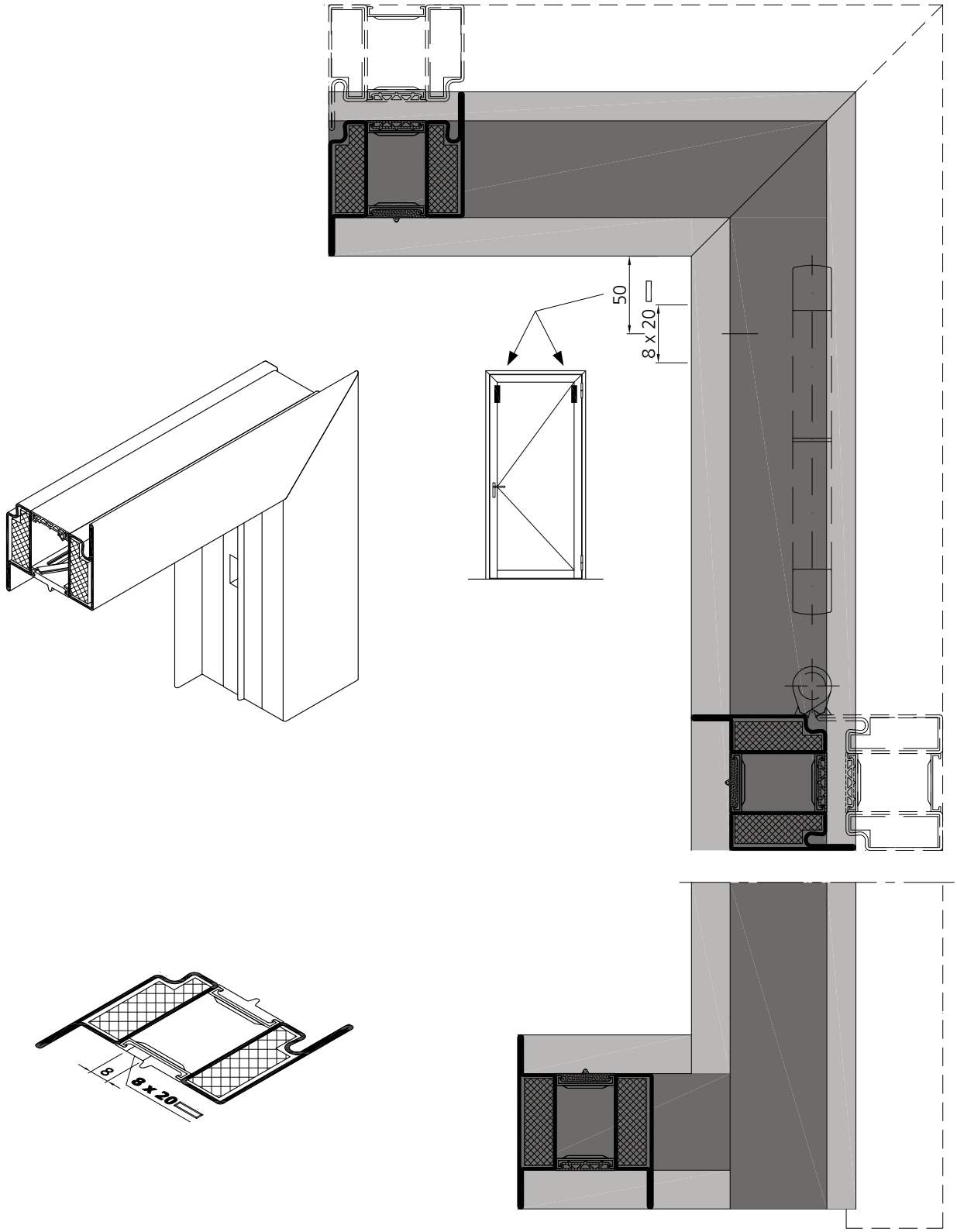




Dichtungseinbau
Entspannung Türflügel

Montage du joint
Décompression du vantail de porte

Installation of seal
Tension release door leaf



Ausklinkung 8 × 20 mm mittels Zuschnittwerkzeug Entwässerung
Art. Nr. 989411

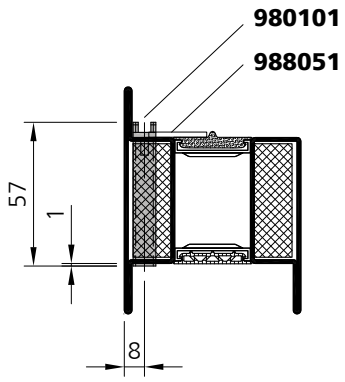
Poinçonner des ouvertures 8 × 20 mm pour le drainage avec l'outillage de découpe
art. no. 989411

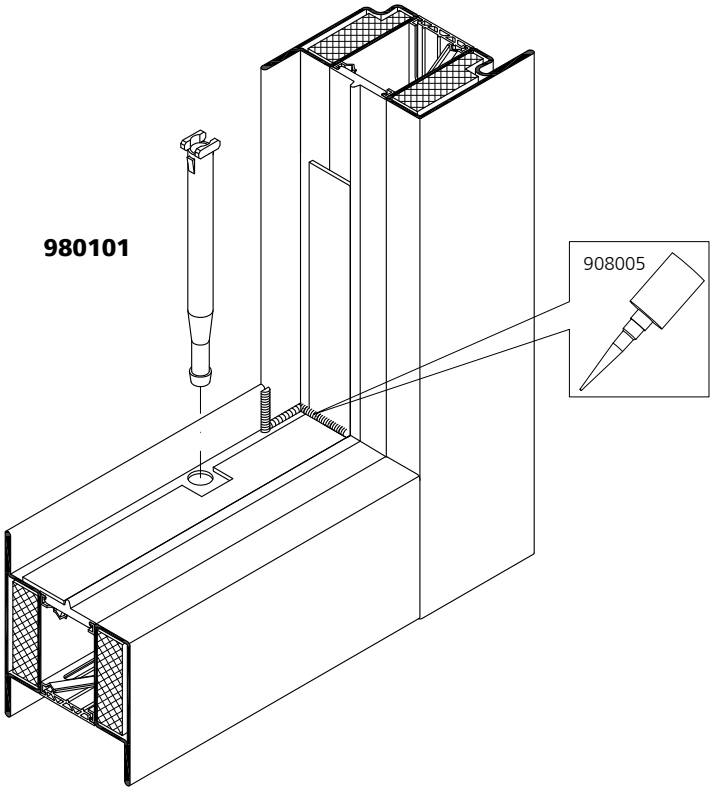
Notch 8 × 20 mm with cutter for drainage
art. no. 989411

Dichtungseinbau
Einbau indirekte Entwässerung / Belüftung Flügel

Montage du joint
Montage d'une évacuation/évacuation d'eau indirecte
Vantail

Installation of seal
Installation of indirect drainage/ventilation
Leaf

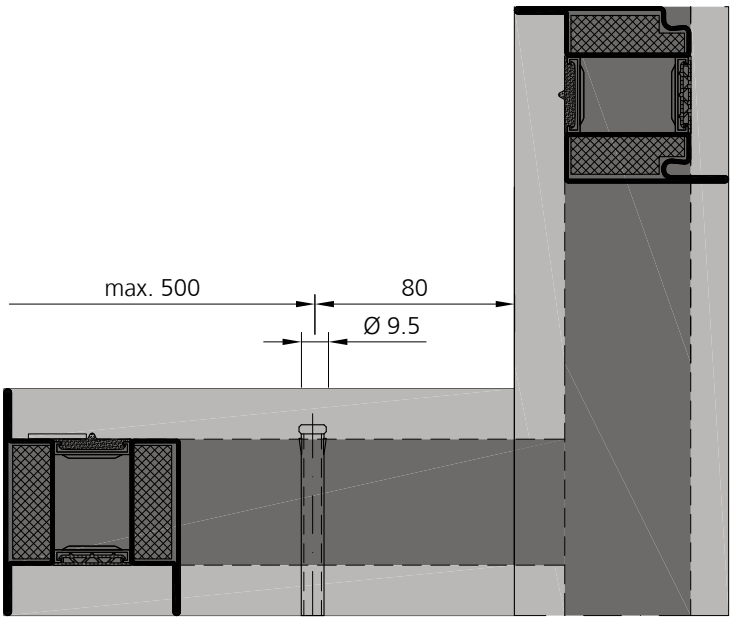




Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit Dichtungsmasse **Art. Nr. 908005** abgeklebt.

Coller le ruban de butyle **art. no. 988051** dans les angles avec le mastic **art. no. 908005.**

The butyl tape **art. no. 988051** is strengthened in the corners with sealing compound **art. no. 908005**.



Das indirekte Entspannungsröhrchen **Art.Nr. 980101** wird durch das Rahmenprofil gesteckt und auf der Austrittseite mit 1mm Überstand abgeschnitten.

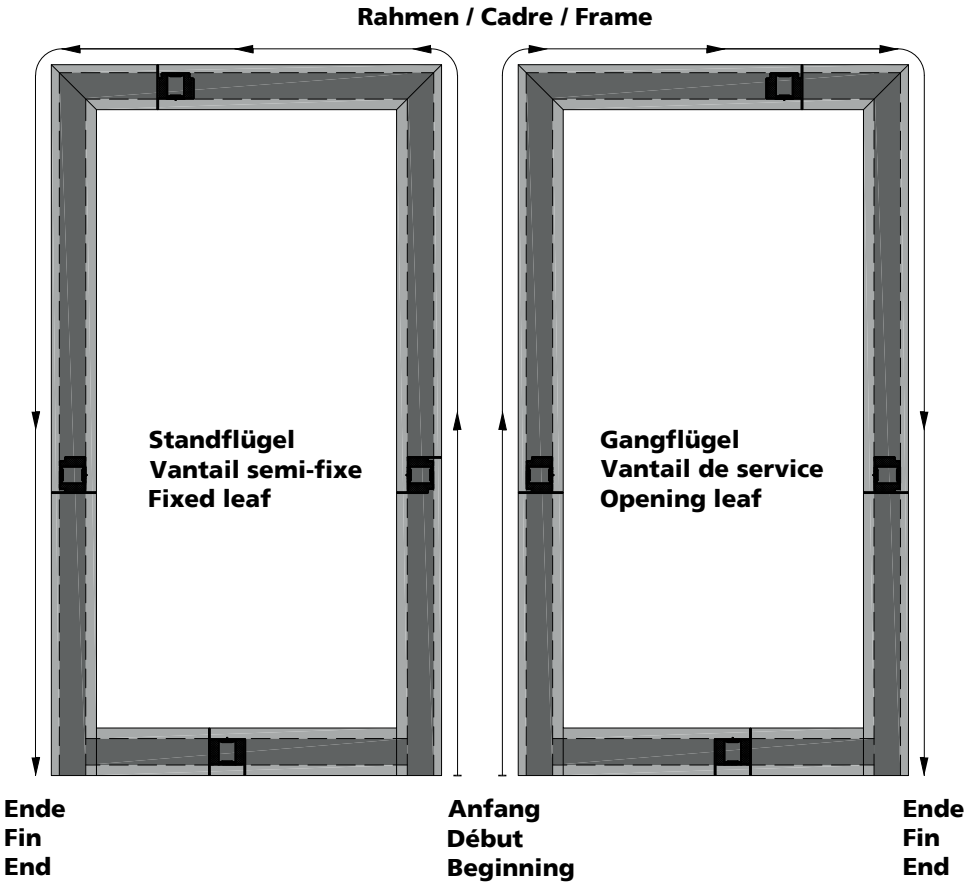
Faire passer la tubulure de décompression indirecte **art. no. 980101** à travers le profilé de cadre et la couper sortie avec une saillie de 1 mm.

The indirect decompression pipe **art. no. 980101** is plugged in through the frame profile and cut off at the exit side, leaving an overhang of 1mm.

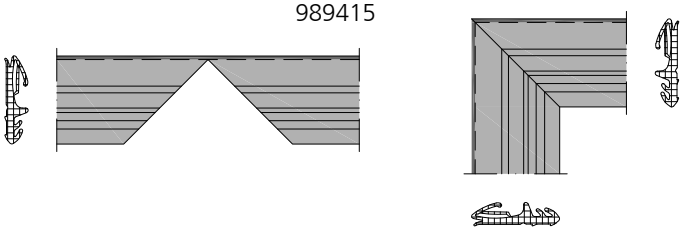
Dichtungseinbau
Anschlagdichtung Türflügel

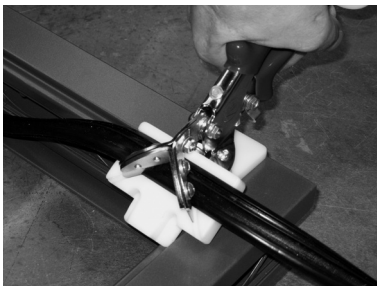
Montage du joint
Joint de butée de vantail de porte

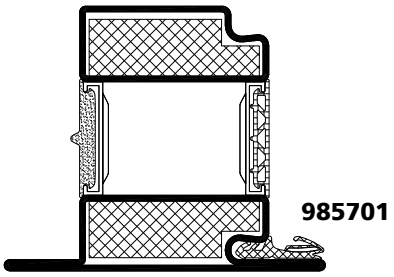
Installation of seal
Weatherstripping on door leaf



Zuschnittwerkzeug / Outil de découpe / Cutting tool
989415



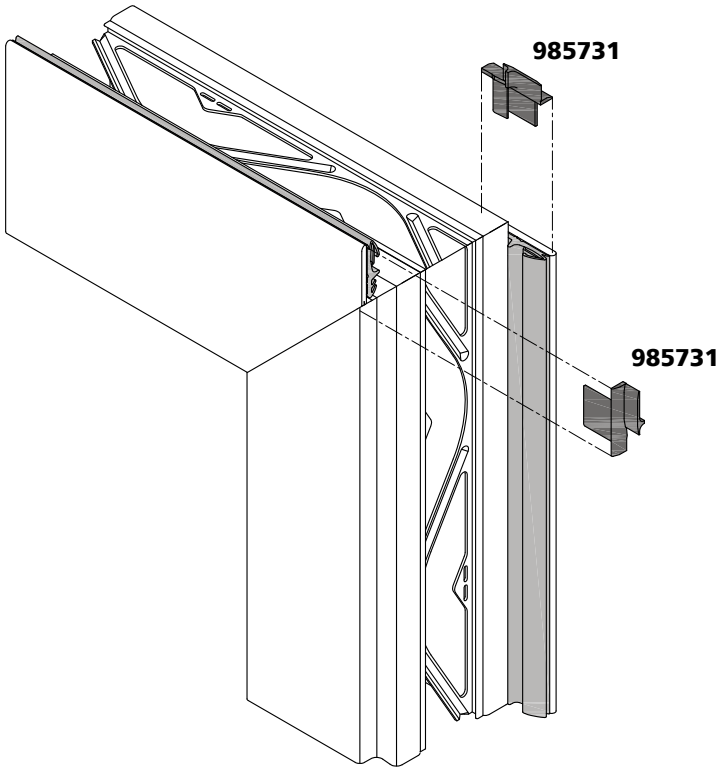




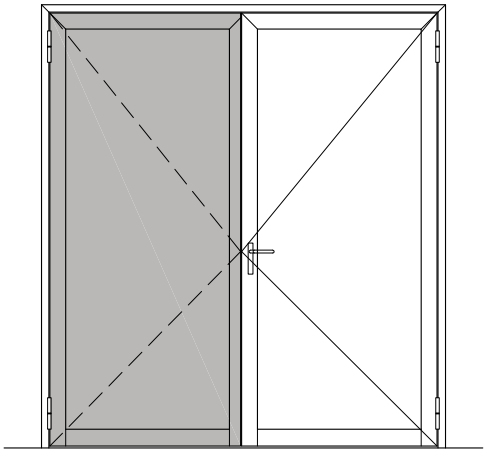
Dichtungseinbau
Endkappen Stulp Tür

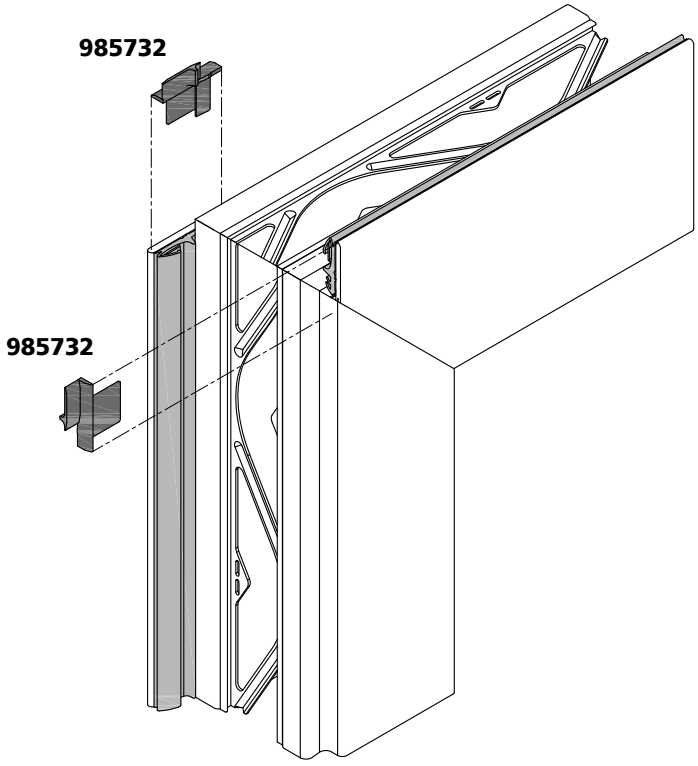
Montage du joint
Etanchéité porte

Installation of seal
Door face plate end flap

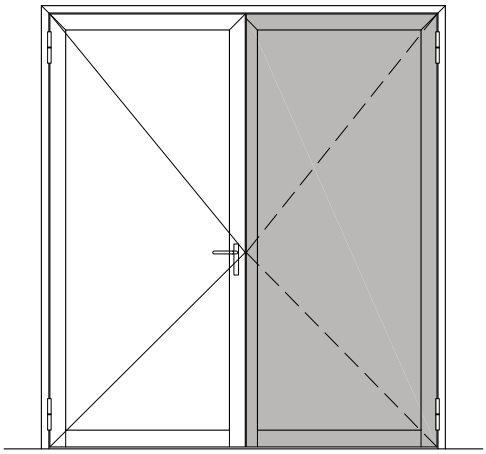


1. Standflügel vantail semi-fixe fixed leaf
2. Gangflügel vantail de service opening leaf





1. Gangflügel vantail de service opening leaf
2. Standflügel vantail semi-fixe fixed leaf



Die Dichtstücke Standflügel links / rechts mit geeignetem Dichtstoff verkleben.

Coller les pièces d'étanchéité du vantail dormant à gauche / à droite avec une colle appropriée.

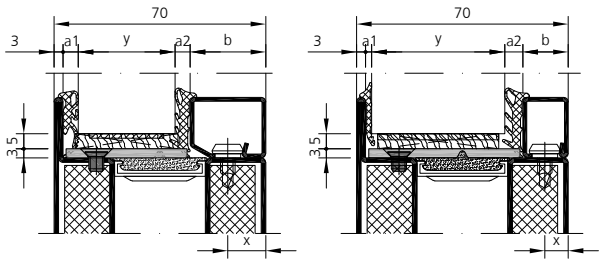
Bond the left/ right fixed leaf seal with suitable sealing.

Trockenverglasung
Bautiefe 70

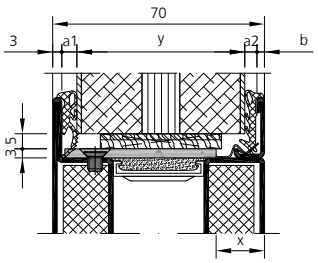
Vitrage à sec
Profondeur 70

Dry glazing
Depth 70

y = 28 - 47



y = 56 - 57



Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Aussendichtung Joint extérieur outer weaterstripping 905712 a1 = 2 [mm] 985702 a1 = 5 [mm]		Innendichtung Joint intérieur inner weatherstripping 905784 a2 = 3-4 [mm] 905785 a2 = 5-6 [mm] 905786 a2 = 7-8 [mm] y [mm]						Bohrmass x Trusquinage x Hole distance x
56	b = 2.5, 20	**901245**	-	5 [mm]	**56**	**-**	**-**	**-**	**-**	**-**	16 [mm]
			2 [mm]	-	**-**	**-**	**57**	**56**	**-**	**-**	
39 - 45	b = 15, 20	**901226** **901526**	-	5 [mm]	**44**	**43**	**42**	**41**	**40**	**39**	8 [mm]
			2 [mm]	-	**47**	**46**	**45**	**44**	**43**	**42**	
34 - 42	b = 20, 20	**901227** **901527**	-	5 [mm]	**39**	**38**	**37**	**36**	**35**	**34**	13 [mm]
			2 [mm]	-	**42**	**41**	**40**	**39**	**38**	**37**	
	b = 20, 20	**901204**	-	5 [mm]	**39**	**38**	**37**	**36**	**35**	**34**	10 [mm]
			2 [mm]	-	**42**	**41**	**40**	**39**	**38**	**37**	
29 - 37	b = 25, 20	**901228** **901528**	-	5 [mm]	**34**	**33**	**32**	**31**	**30**	**29**	13 [mm]
			2 [mm]	-	**37**	**36**	**35**	**34**	**33**	**32**	
	b = 25, 20	**901205**	-	5 [mm]	**34**	**33**	**32**	**31**	**30**	**29**	10 [mm]
			2 [mm]	-	**37**	**36**	**35**	**34**	**33**	**32**	
28 - 32	b = 30, 20	**901246** **901546**	-	5 [mm]	**29**	**28**	**-**	**-**	**-**	**-**	13 [mm]
			2 [mm]	-	**32**	**31**	**30**	**29**	**28**	**-**	
	b = 30, 20	**901206**	-	5 [mm]	**29**	**28**	**-**	**-**	**-**	**-**	10 [mm]
			2 [mm]	-	**32**	**31**	**30**	**29**	**28**	**-**	

Diese theoretischen Verglasungstabellen gelten nur fur flachenbundig gesetzte Glashalteleisten (Bohrmass x).
Bei versetzter Anordnung der Glashalteleisten sowie Toleranzen bei den Fullelementen sind Vorversuche durchzufuhren.

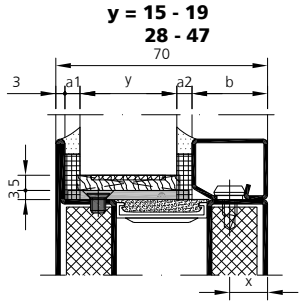
Ces tableaux theoriques de vitrage sont seulement valables pour des parcloses affleurees (trusquinage x).
Lors d'une disposition decalee des parcloses, ainsi que pour les tolerances concernant les elements de remplissage, des essais prealables doivent etre effectues.

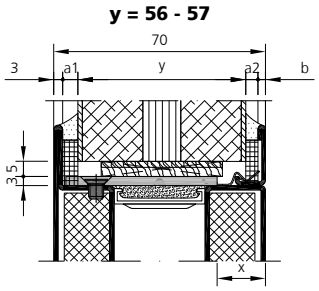
These theoretical glazing tables apply only to flush-fitting glazing beads (distance between holes x).
Where glazing beads are placed alternately and where there are tolerances in the infill element, a trial run is necessary before.

Nassverglasung
Bautiefe 70

Vitrage au silicone
Profondeur 70

Wet glazing
Depth 70



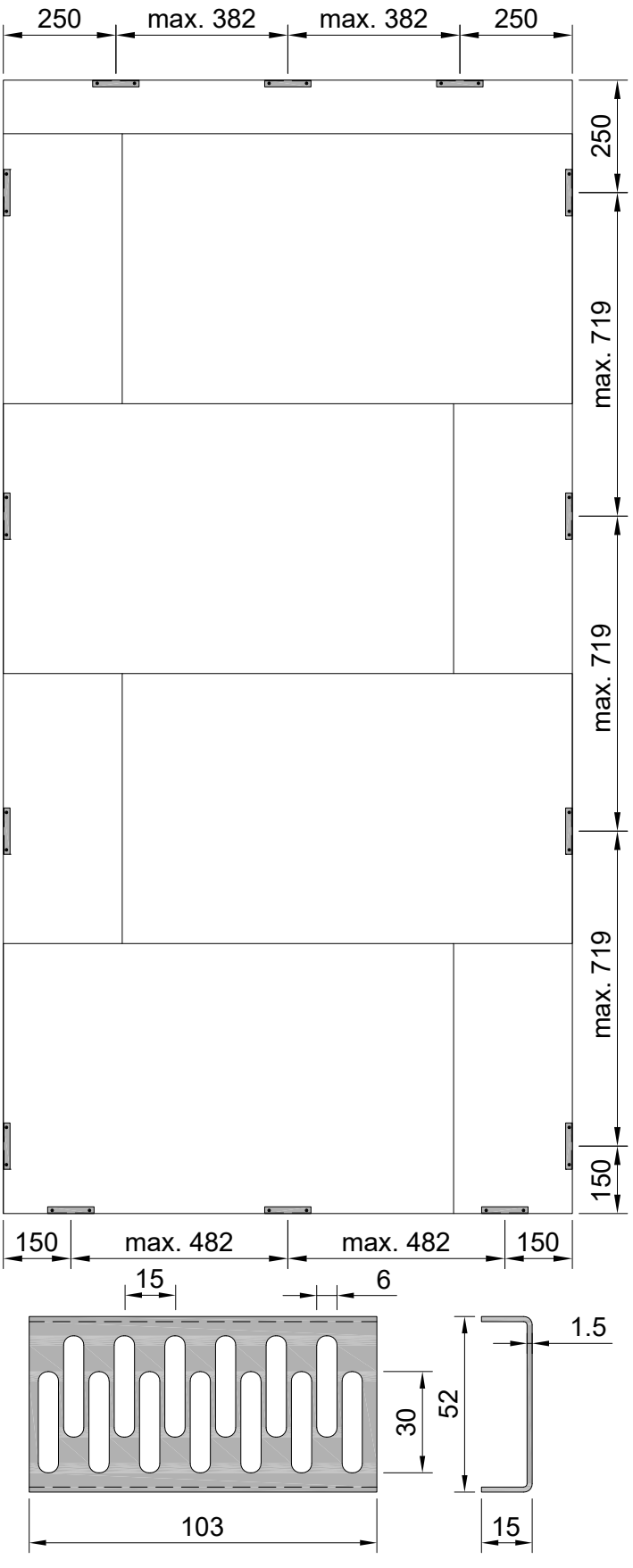


Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel b [mm] Stahl / Acier / Steel: Nr. Edelstahl /Acier Inox / Stainless steel: Nr.	Aussendichtung Joint extérieur outer weatherstr.	Innendichtung Joint intérieur inner weatherstripping 948003 948007 a2 = 3mm 948004 948008 a2 = 4mm 948005 948009 a2 = 5mm 948006 948010 a2 = 6mm y [mm]				Bohrmass x Trusquinage x Hole distance x
46 - 40	2.5 / 20 — 901245	a1 = 3mm	-	-	-	-	16 [mm]
		a1 = 4mm	-	-	-	-	
		a1 = 5mm	-	-	-	**57**	
		a1 = 6mm	-	-	**57**	**56**	
46 - 40	15 / 20 — 901226 901526	a1 = 3mm	**46**	**45**	**44**	**43**	10 [mm]
		a1 = 4mm	**45**	**44**	**43**	**42**	
		a1 = 5mm	**44**	**43**	**42**	**41**	
		a1 = 6mm	**43**	**42**	**41**	**40**	
41 - 35	20 / 20 / 20 — 901227 901204 901527	a1 = 3mm	**41**	**40**	**39**	**38**	13 [mm] 10 [mm]
		a1 = 4mm	**40**	**39**	**38**	**37**	
		a1 = 5mm	**39**	**38**	**37**	**36**	
		a1 = 6mm	**38**	**37**	**36**	**35**	
36 - 30	25 / 25 / 20 — 901228 901205 901528	a1 = 3mm	**36**	**35**	**34**	**33**	13 [mm] 10 [mm]
		a1 = 4mm	**35**	**34**	**33**	**32**	
		a1 = 5mm	**34**	**33**	**32**	**31**	
		a1 = 6mm	**33**	**32**	**31**	**30**	
31 - 28	30 / 30 / 20 — 901246 901206 901546	a1 = 3mm	**31**	**30**	**29**	**28**	13 [mm] 10 [mm]
		a1 = 4mm	**30**	**29**	**28**	-	
		a1 = 5mm	**29**	**28**	-	-	
		a1 = 6mm	**28**	-	-	-	
19	35 / 20 — 901247 901547	a1 = 3mm	-	-	-	-	10 [mm]
		a1 = 4mm	-	-	-	-	
		a1 = 5mm	-	-	-	-	
		a1 = 6mm	-	-	-	**19**	
19 - 15	40 / 20 — 901248 901548	a1 = 3mm	-	**19**	**18**	**17**	10 [mm]
		a1 = 4mm	**19**	**18**	**17**	**16**	
		a1 = 5mm	**18**	**17**	**16**	**15**	
		a1 = 6mm	**17**	**16**	**15**	-	

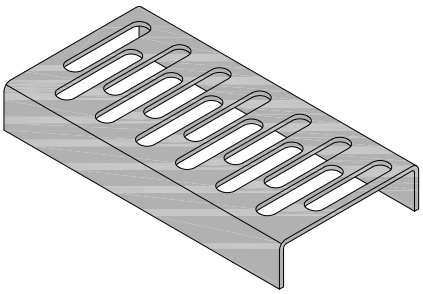
Trockenverglasung
Paneelverbinder

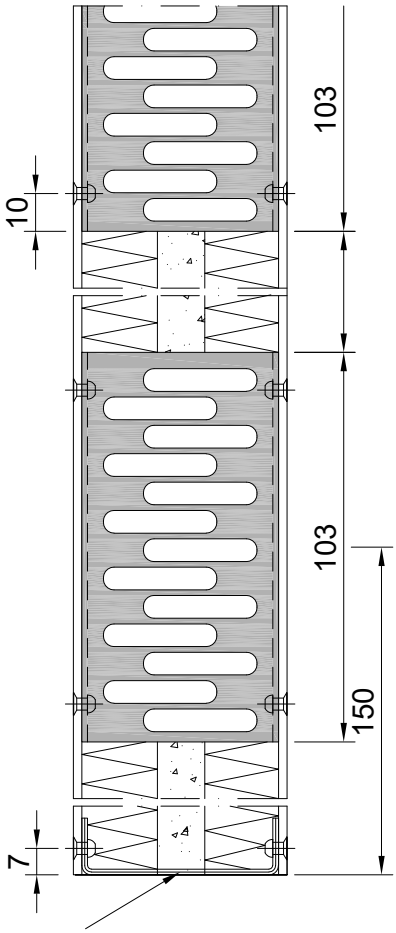
Vitrage à sec
Raccord de panneaux

Dry glazing
Panel connector



907008



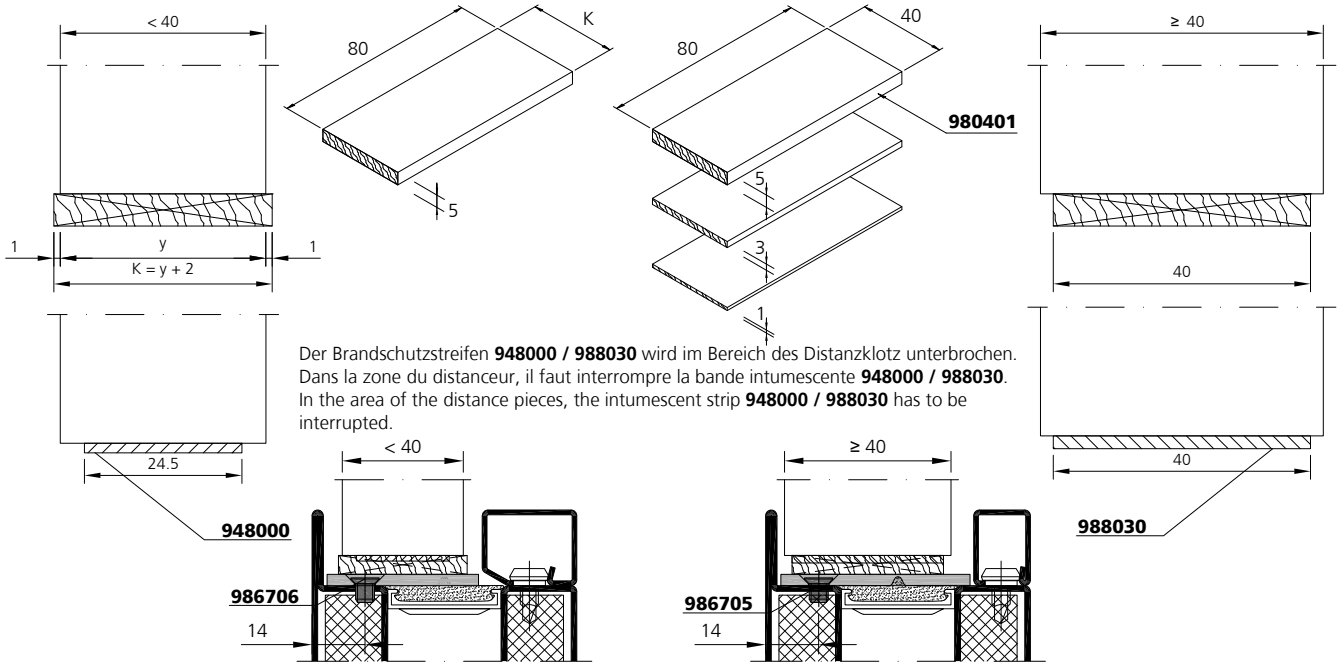


Im Bereich der U-Bügel 907008 Powerpaneel H2O 1.5 mm ausnehmen
Évider la Powerpaneel H2O sur 1.5 mm dans la zone des étriers 907008
In the area of the U-bracket 907008, take out the power panel H2O by 1.5 mm

Verglasung Bautiefe 70
Glasfalzbrücke

Vitrage profondeur 70
Pont feuillure du verre

Glazing structural depth 70
Glass rebate bridge



Der Brandschutzstreifen **948000 / 988030** wird im Bereich des Distanzklotz unterbrochen.
Dans la zone du distanceur, il faut interrompre la bande intumescente **948000 / 988030**.
In the area of the distance pieces, the intumescent strip **948000 / 988030** has to be interrupted.

Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Glasfalzbrücke 3 [mm] Pont feuillure en verre 3 [mm] Glass rebate bridge 3 [mm] Edelstahl Acier inox Stainless steel	Art. Nr. art. no. art. no.	Distanzstück 5 [mm] Distanceur 5 [mm] Distance piece 5 [mm] Hartholz Bois dur Hardwood	Eigenbeschaffung Propre approvisionnement In-house procurement
34 - 42	b = 20, 20	**901227** **901527**	40	**986706**	K	**980401**
	b = 20, 20	**901204**				
29 - 37	b = 25, 20	**901228** **901528**				
	b = 25, 20	**901205**				
28 - 32	b = 30, 20	**901246** **901546**				
	b = 30, 20	**901206**	35 5			
39 - 45	b = 15, 20	**901226** **901526**	50	**986705**	40	
56	b = 2.5, 20	**901245**				

Verglasung
Verklotzung
3-fach Isolierverglasung

Vitrage
Calage
Triple vitrage isolant

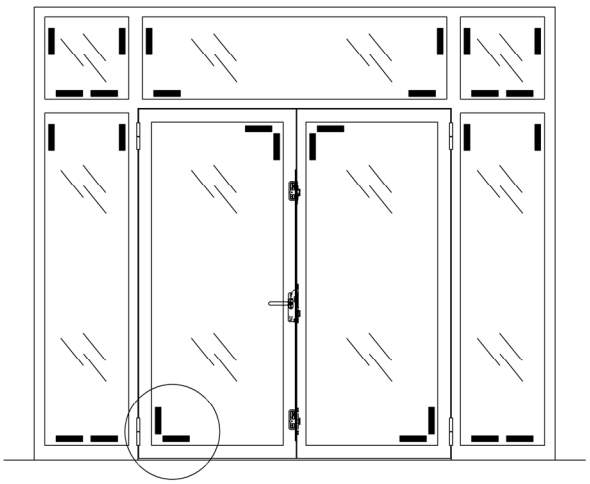
Glazing
Blocking
Triple insulating glazing

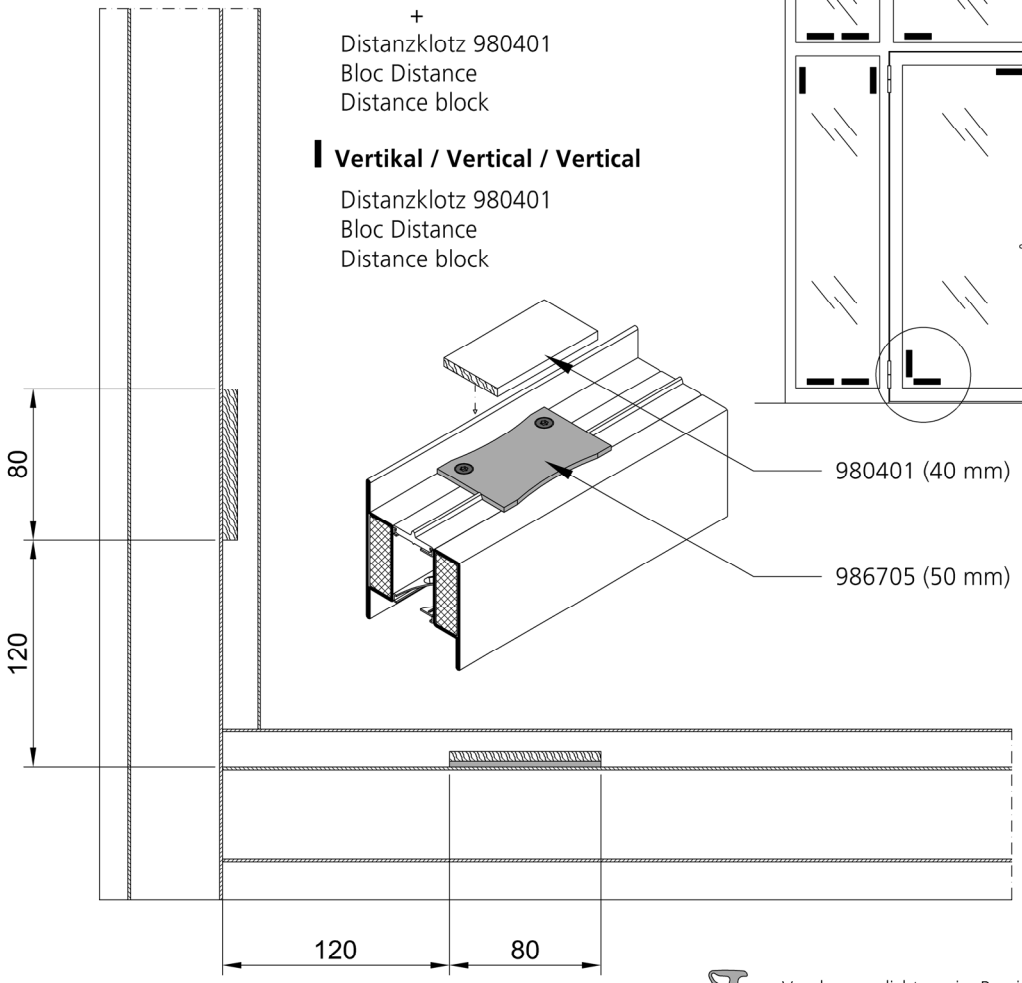
Horizontal / Horizontale / Horizontal

Artk.Nr. 986705
+
Distanzklotz 980401
Bloc Distance
Distance block

Vertikal / Vertical / Vertical

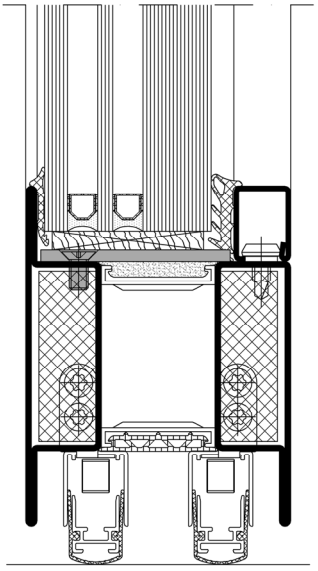
Distanzklotz 980401
Bloc Distance
Distance block

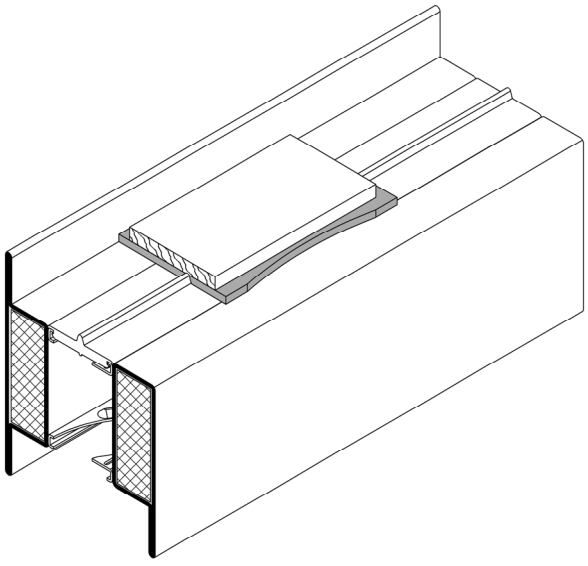






Verglasungsdichtung im Bereich der Glasfalzbrücke ausnehmen.
Entailler le joint de vitrage dans la zone du pont feuillure du verre.
Cut-out the glazing seal in the area of the glass rebate bridge.





Verglasung
Verklotzung
2-fach Isolierverglasung

Vitrage
Calage
Double vitrage isolant

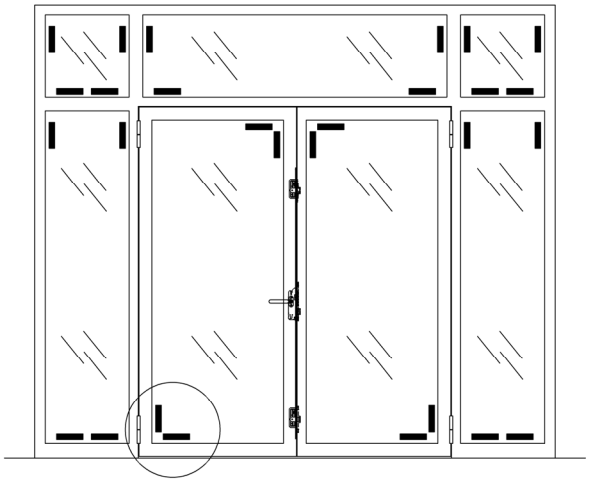
Glazing
Blocking
Double insulating glazing

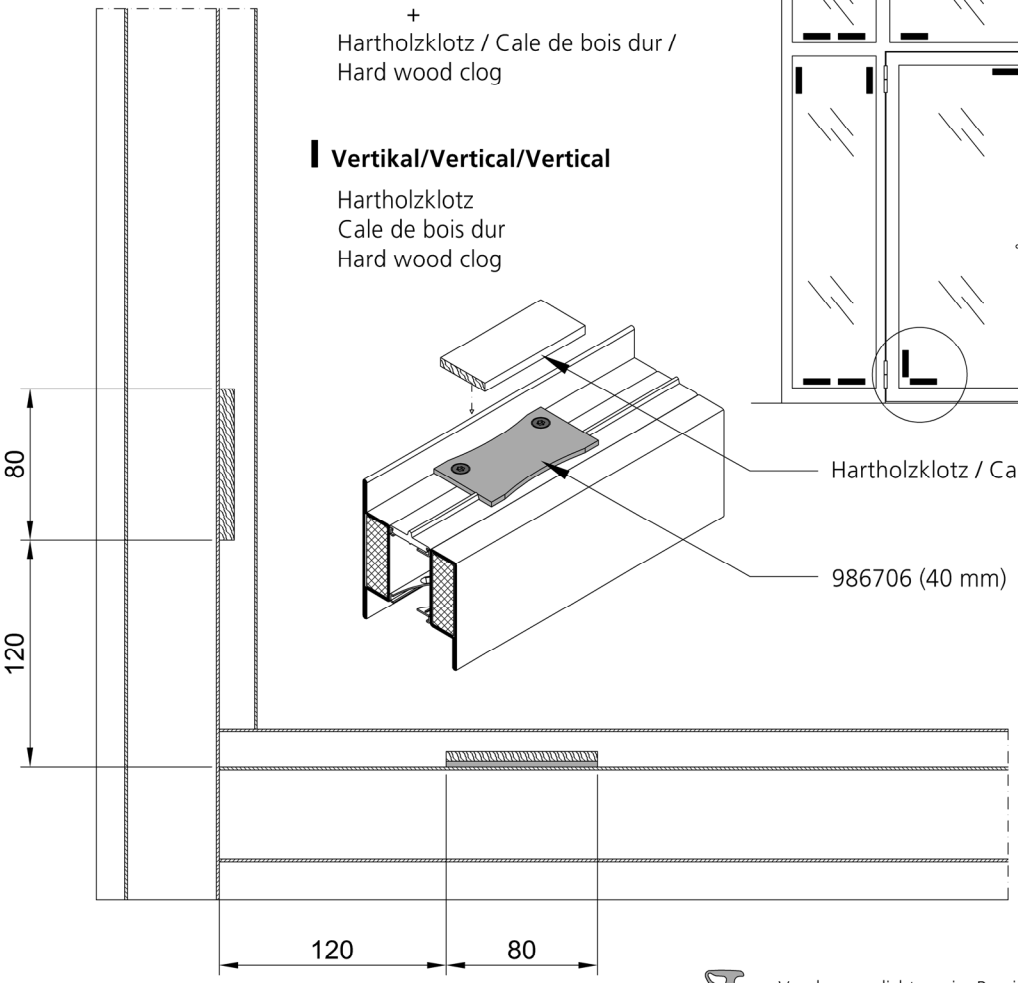
Horizontal/Horizontale/Horizontal

Art.Nr. 986706
+
Hartholzklotz / Cale de bois dur /
Hard wood clog

Vertikal/Vertical/Vertical

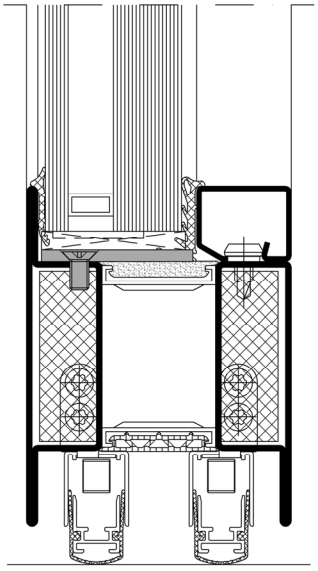
Hartholzklotz
Cale de bois dur
Hard wood clog

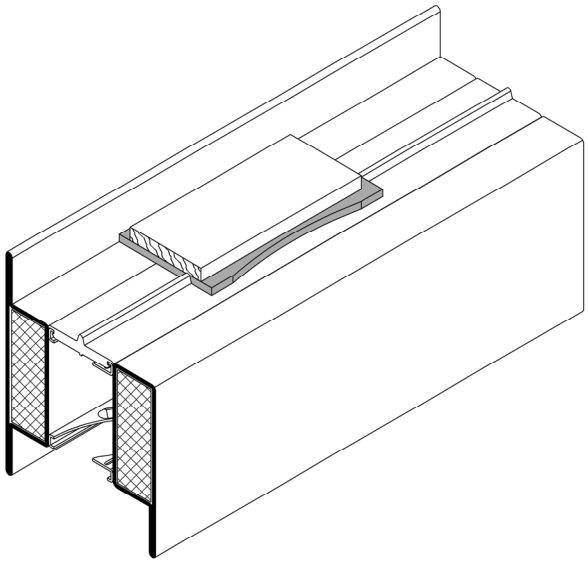






Verglasungsdichtung im Bereich der Glasfalzbrücke ausnehmen.
Entailler le joint de vitrage dans la zone du pont feuillure du verre.
Cut-out the glazing seal in the area of the glass rebate bridge.

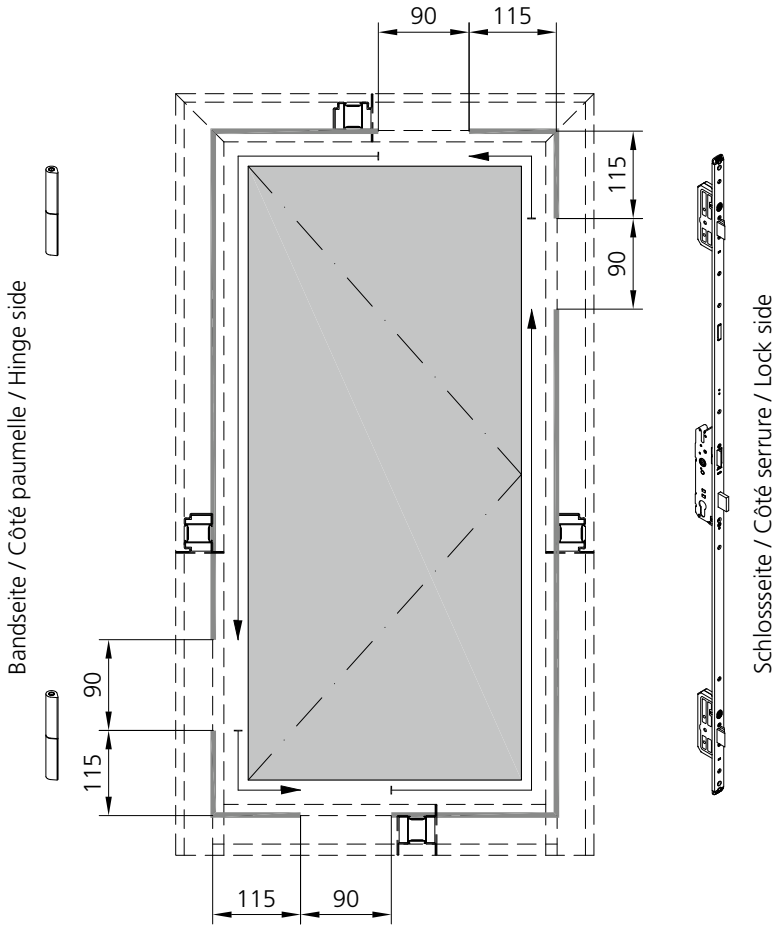




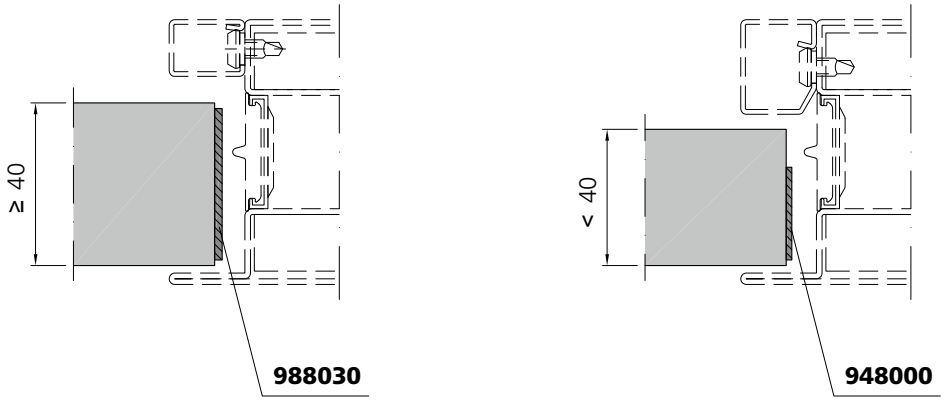
Verglasung
Brandschutzstreifen

Vitrage
Bande intumescente

Glazing
Intumescent strip



Der Brandschutzstreifen 988030 / 948000 wird im Bereich des Distanzklotz unterbrochen.
Dans la zone du calage, il faut interrompre la bande intumescente 988030 / 948000.
In the area of the distance pieces, the intumescent strip 988030 / 948000 has to be interrupted.

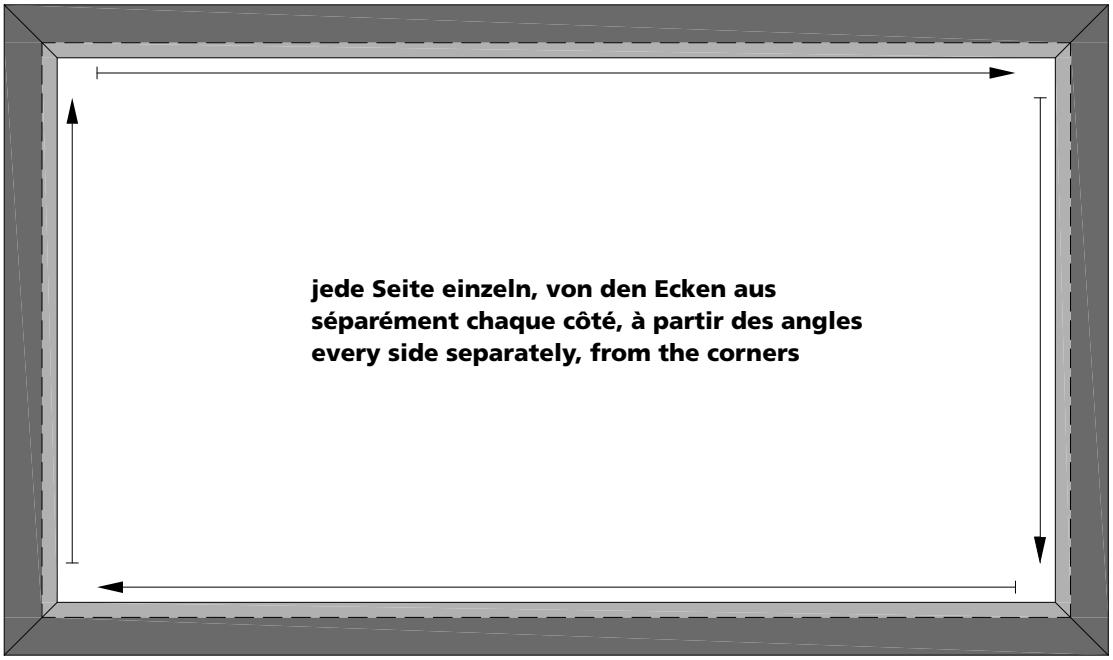


Verglasung
Verglasungsdichtung

Vitrage
Joint de vitrage

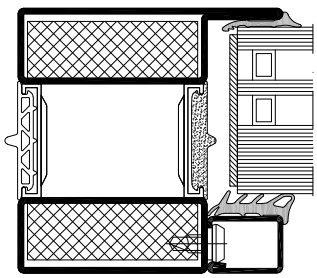
Glazing
Glazing seal

Flügel / Vantail / Leaf
Rahmen / Cadre / Frame



905712

985702



905784

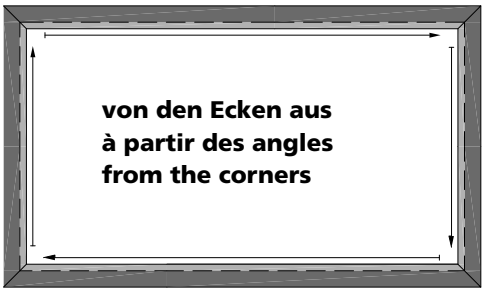
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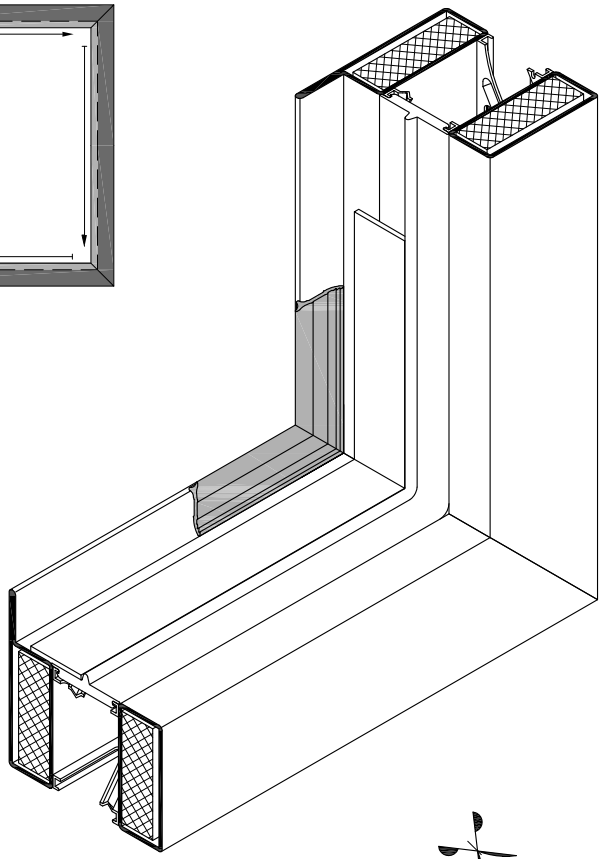
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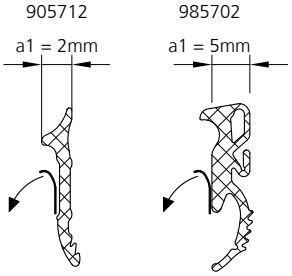
Verglasung
Verglasungsdichtung aussen

Vitrage
Joint de vitrage extérieur

Glazing
Outer glazing seal







Folie abziehen! Die Dichtung ist selbstklebend.

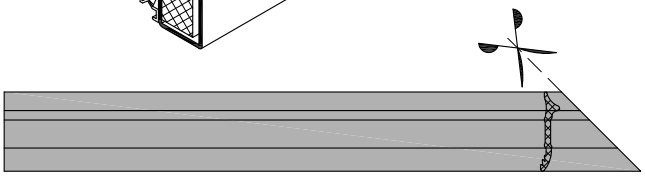
Retirer le film!
Le joint est autoadhésif.

Remove foil!
The seal is self-adhesive.

985702



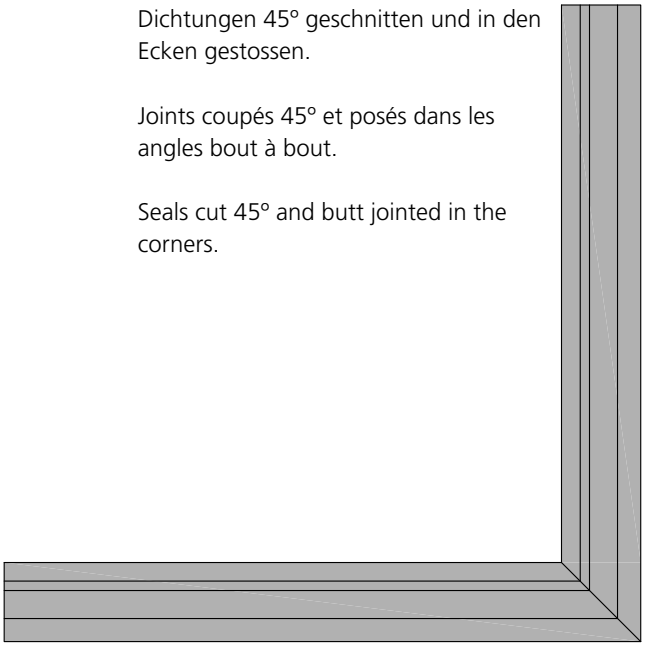
905712



Dichtungen 45° geschnitten und in den Ecken gestossen.

Joints coupés 45° et posés dans les angles bout à bout.

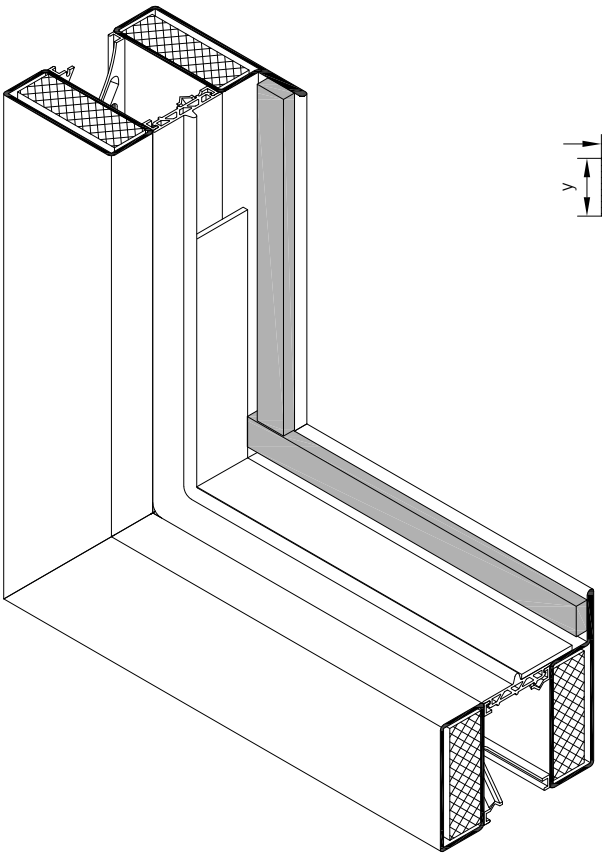
Seals cut 45° and butt jointed in the corners.

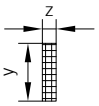


Verglasung
Nassverglasung aussen

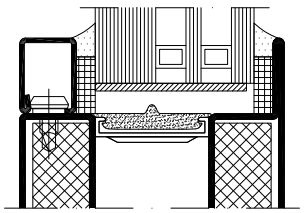
Vitrage
Vitrage à silicone extérieur

Glazing
Wet glazing outside





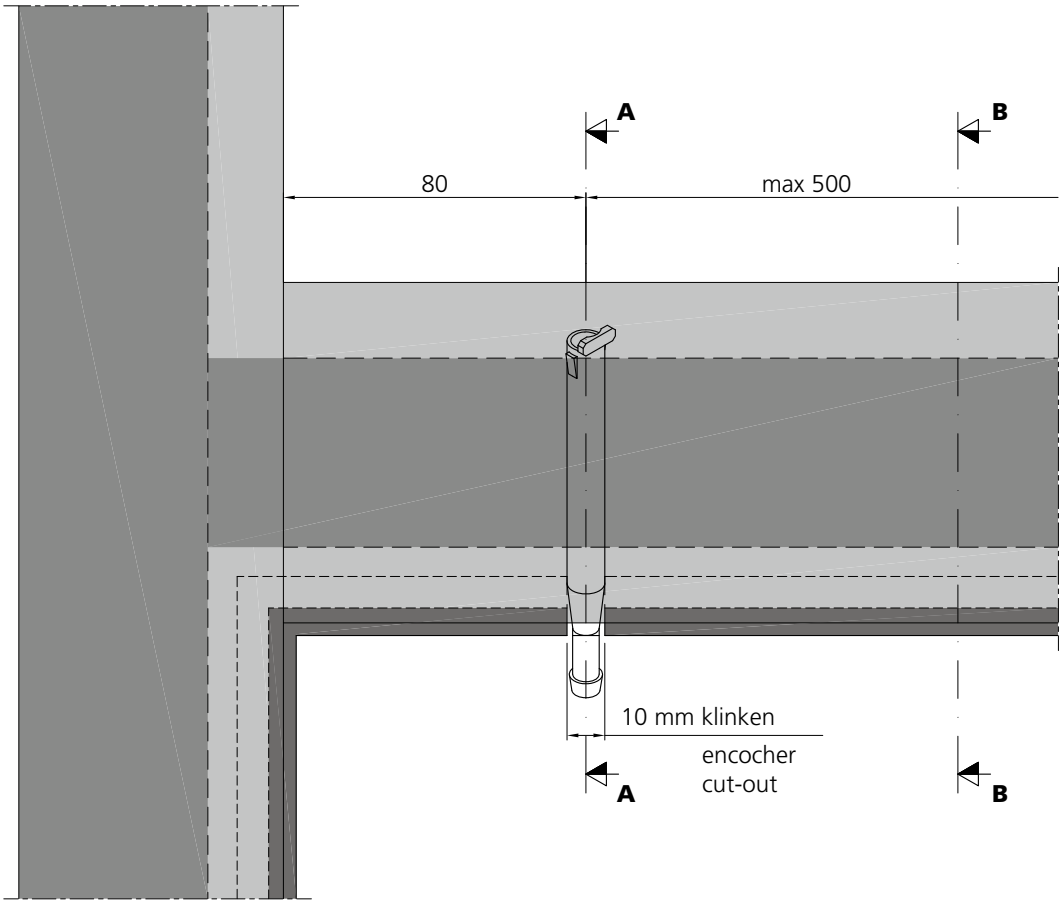
	Art. Nr.:	
z	**y =15mm**	**y =20mm**
3mm	948003	948007
4mm	948004	948008
5mm	948005	948009
6mm	948006	948010

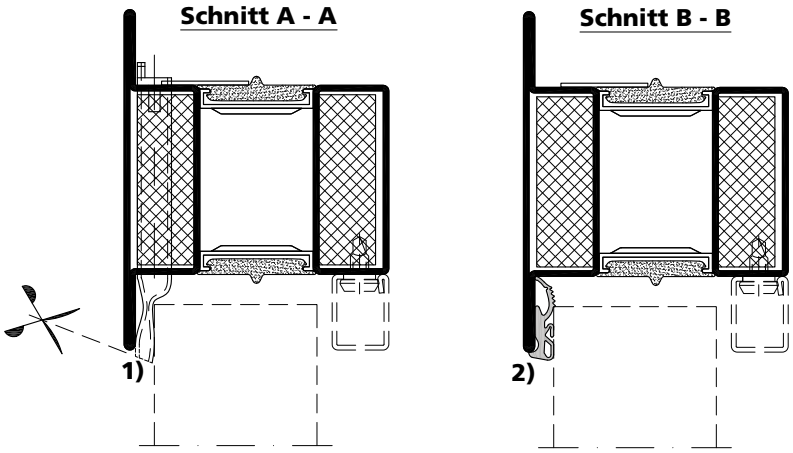


Verglasung
Verdeckt liegende Entwässerung

Vitrage
Evacuation d'eau cachée

Glazing
Hidden drainage





1) Im Bereich des Entspannungsröhrchens muss die Aussendichtung unterbrochen werden.
2) Verglasungsdichtung Art. Nr. 985702 wird im Bereich des Entspannungsröhrchens Art. Nr. 980101 unterbrochen.

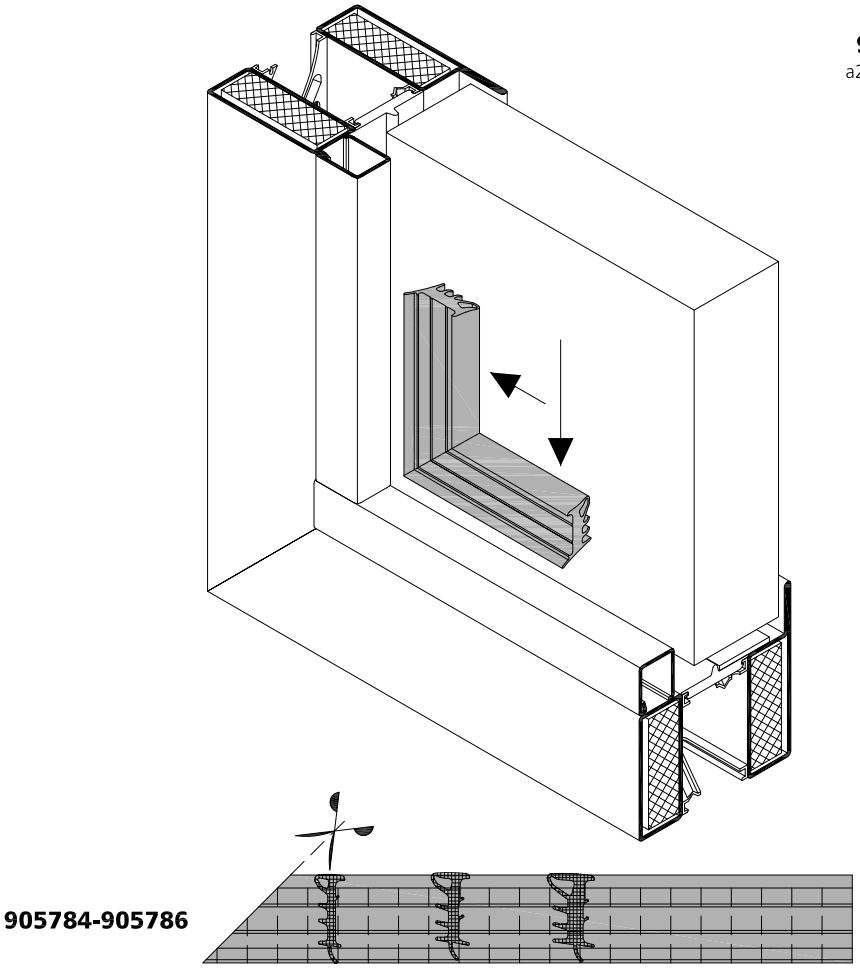
1) Dans la zone de la tubulure de décompression, il faut interrompre le joint extérieur.
2) Le joint de vitrage art. no. 985702 est interrompu dans la zone de la tubulure de décompression 980101.

1) In the areas of the compression pipe, the outer weatherstrip must be interrupted.
2) Glazing seal art. no. 985702 is interrupted in the area of the decompression pipe art. no. 980101.

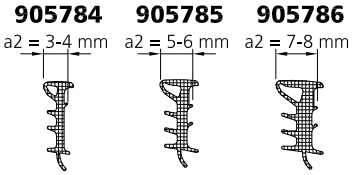
Verglasung
Verglasungsdichtung innen

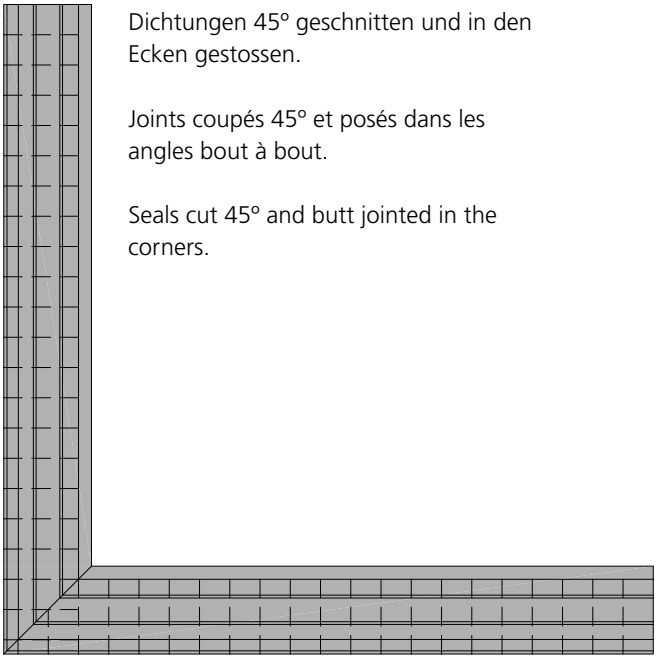
Vitrage
Joint de vitrage intérieur

Glazing
Inner glazing seal



905784-905786





Dichtungen 45° geschnitten und in den Ecken gestossen.

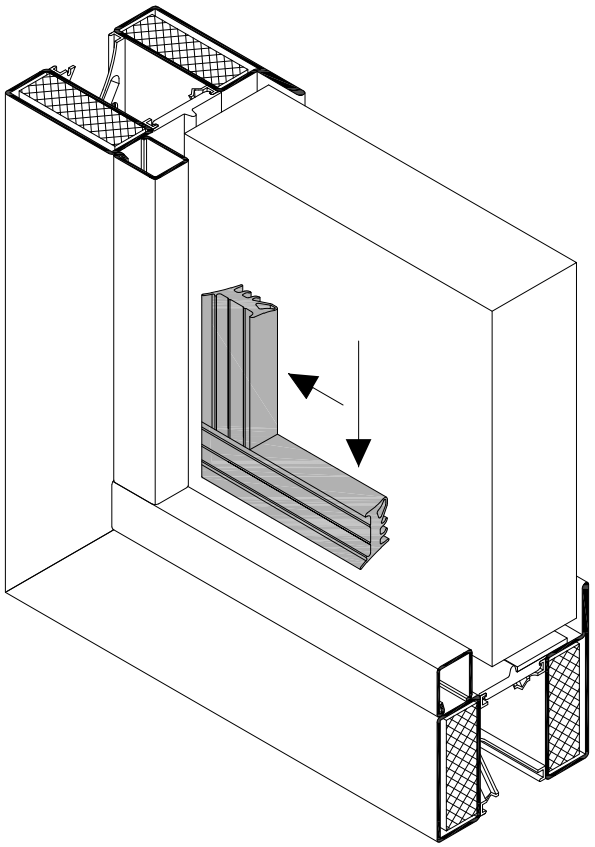
Joints coupés 45° et posés dans les angles bout à bout.

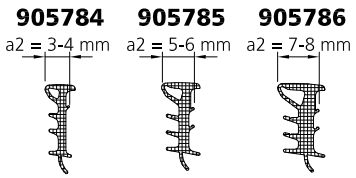
Seals cut 45° and butt jointed in the corners.

Verglasung
Verglasungsdichtung innen

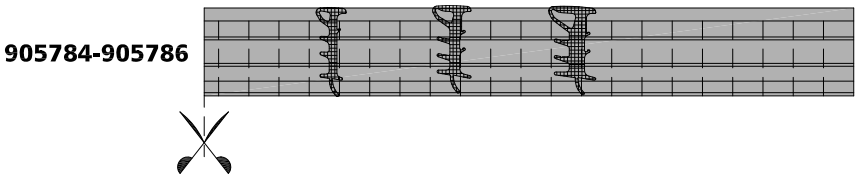
Vitrage
Joint de vitrage intérieur

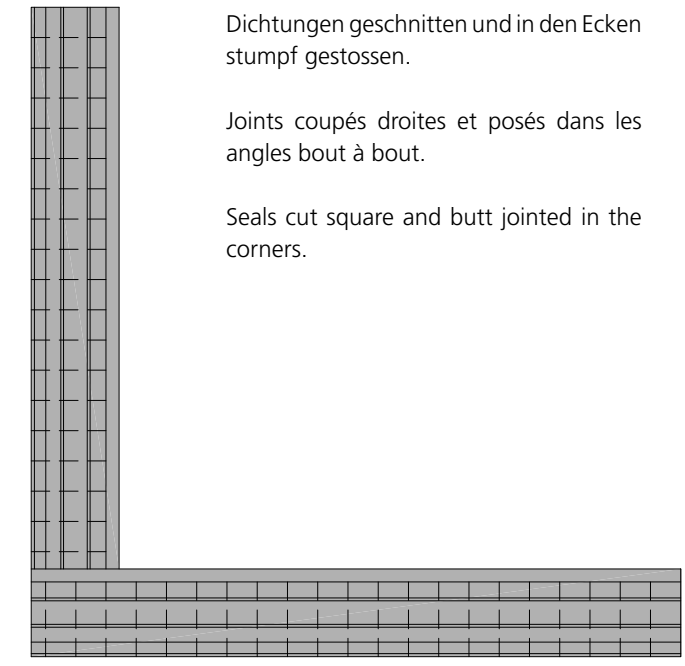
Glazing
Inner glazing seal





905784-905786





Dichtungen geschnitten und in den Ecken stumpf gestossen.

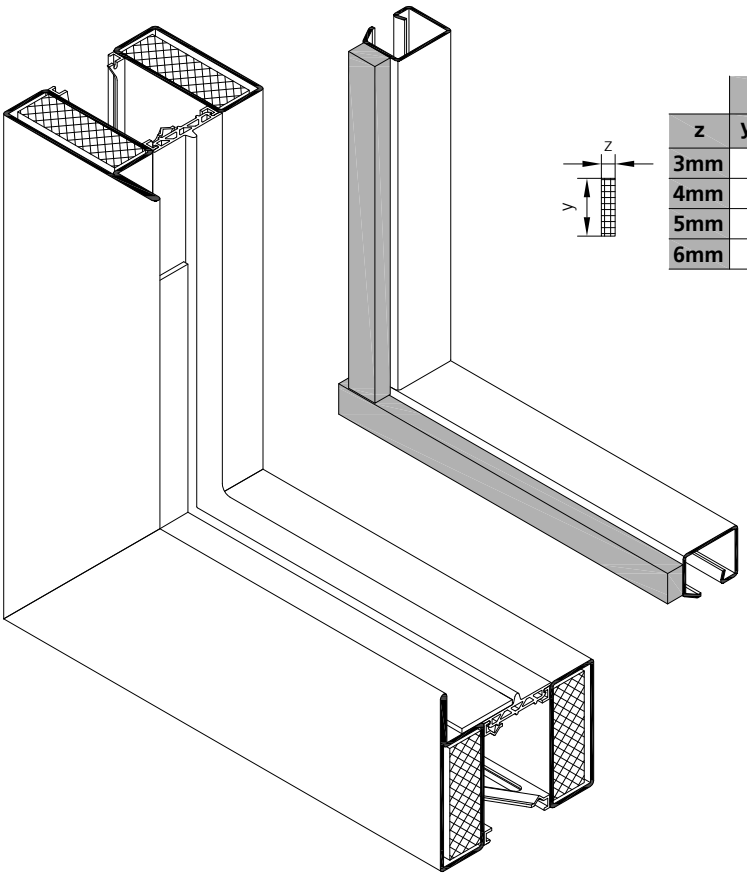
Joints coupés droites et posés dans les angles bout à bout.

Seals cut square and butt jointed in the corners.

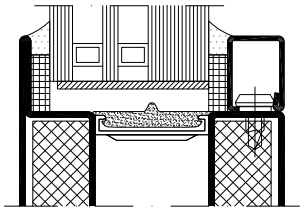
Verglasung
Nassverglasung innen

Vitrage
Vitrage à silicone intérieur

Glazing
Wet glazing inside



	Art. Nr.:	
z	**y =15mm**	**y =20mm**
3mm	948003	948007
4mm	948004	948008
5mm	948005	948009
6mm	948006	948010



Platz für Notizen

Espace pour les notes

Space for memos

		4
System unico EI30 Festverglasung		
Systemübersicht		4.1.1 - 4.1.2
Profile		4.2.1 - 4.2.6
Zubehör		4.3.1 - 4.3.8
Anwendungszeichnungen		4.4.1 - 4.4.14
	Systemschnitte	4.4.1 - 4.4.3
	Systempläne	4.4.4 - 4.4.5
	Wandanschlüsse	4.4.6 - 4.4.14
Verarbeitung Profile		4.5.1 - 4.5.16
Verarbeitung Zubehör		4.6.1 - 4.6.20

Système unico EI30 Vitrage fixe		
Tableau du système		4.1.1 - 4.1.2
Profilés		4.2.1 - 4.2.6
Accessoires		4.3.1 - 4.3.8
Coupes et plans		4.4.1 - 4.4.14
	Coupes du système	4.4.1 - 4.4.3
	Plans du système	4.4.4 - 4.4.5
	Raccords muraux	4.4.6 - 4.4.14
Mise en œuvre profilés		4.5.1 - 4.5.16
Mise en œuvre accessoires		4.6.1 - 4.6.20

System unico EI30 Fixed glazing		
Synopsis of system		4.1.1 - 4.1.2
Profiles		4.2.1 - 4.2.6
Accessories		4.3.1 - 4.3.8
Sections and plans		4.4.1 - 4.4.14
	System sections	4.4.1 - 4.4.3
	System plans	4.4.4 - 4.4.5
	Wall abutments	4.4.6 - 4.4.14
Processing profiles		4.5.1 - 4.5.16
Processing accessories		4.6.1 - 4.6.20

Zeichnungsdaten – dwg

Die in dieser Dokumentation gezeigten Schnitte und Pläne mit nachstehenden Bezeichnungen stehen als dwg-Daten unter **www.forster-profile.ch/downloads** zur Verfügung.

In der PDF-Version der Dokumentation sind diese Zeichnungen mit einem Link versehen.

un_ep_xxxx Einbaupläne
un_kd_xxxx Konstruktionsdetails
un_sd_xxxx Systemdetails
un_sp_xxxx Systempläne
un_vv_xxxx Verglasungsdetails
un_wa_xxxx Wandanschlüsse

Dessins en dwg

Les coupes et les plans présentés dans cette documentation avec les désignations ci-dessous sont disponibles au format DWG sous **www.forster-profile.ch/téléchargement.**

Dans la version PDF de la documentation, ces dessins sont dotés d'un lien.

un_ep_xxxx Plans de la mise en œuvre
un_kd_xxxx Détails de construction
un_sd_xxxx Coupes du système
un_sp_xxxx Plans du système
un_vv_xxxx Détails de vitrage
un_wa_xxxx Raccords muraux

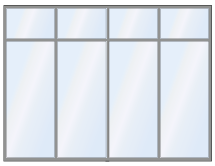
Drawing data – dwg

The sections and plans in this documentation with the below-mentioned designations are available as DWG files on **www.forster-profile.ch/downloads.**

In the PDF version of the documentation, these drawings are provided with a link.

un_ep_xxxx Processing plans
un_kd_xxxx Construction details
un_sd_xxxx System sections
un_sp_xxxx System plans
un_vv_xxxx Glazing details
un_wa_xxxx Wall abutments

Das System auf einen Blick



Ausgangsmaterial
- Stahl ZM (Zink Magnesium)
- Edelstahl geschliffen

Abmessungen
- Schmalste Profilquerschnitte: Kastenbreite 30 / 50 mm
- Wandstärke 1.5 mm

Harmonisierung
- Gleiche Ansicht wie Forster presto und Forster fuego light

Verarbeitung
- Äusserst wirtschaftliche Fertigung ohne Sondereinrichtung

Füllungen
- Transparent
- Opak (Paneele)

Nationale Zulassungen
- Verglasung EI30 Schweiz VKF 25566 / 25571
- Verglasung EI30 Frankreich FR-17-003240
- Verglasung F30 Deutschland beantragt

Le système en un coup d'œil

Matériau de base
- Acier ZM (zinc-magnésium)
- Acier inox meulé

Dimensions
- Finesse des profilés : largeur des corps 30 / 50 mm
- Épaisseur 1,5 mm

Harmonisation
- Faces vue identiques: Forster presto et Forster fuego light

Finitions
- Fabrication extrêmement économique sans outillage spécial

Remplissages
- Transparent
- Opaque (panneaux)

Homologations nationaux
- Vitrage EI30 Suisse VKF 25566 / 25571
- Vitrage EI30 France EFR-17-003240
- Vitrage F30 Allemagne demandé

The system at a glance

Base material
- Steel ZM (zinc-magnesium)
- Stainless steel grinded

Dimensions
- Extremely slim profile cross-sections: box width 30 / 50 mm
- Wall thickness 1,5 mm

Compatibility
- Same constructions widths as Forster presto and fuego light

Processing
- Extremely economical manufacture with no special machinery needed.

Fillings
- Transparent
- Opaque (panels)

National approvals
- Glazing EI30 Switzerland VKF 25566 / 25571
- Glazing EI30 France EFR-17-003240
- Glazing F30 applied for Germany

Für Festverglasungen gelten nationale Zulassungen.

Les homologations nationales s'appliquent aux vitrages fixes.

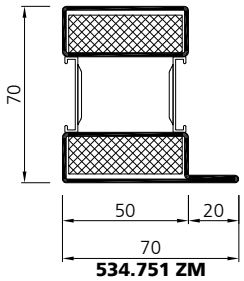
National approvals apply to fixed glazing.

EI30

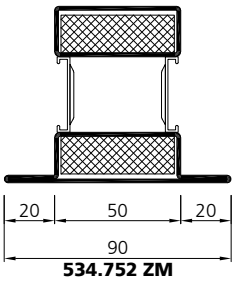
Stahl / Acier / Steel — Edelstahl / Acier inox / Stainless steel

VBUT 4.1.2

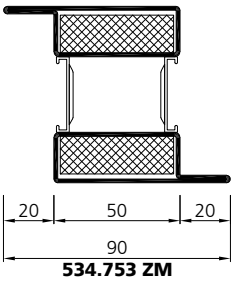
Systemübersicht — Tableau du système — Synopsis of system



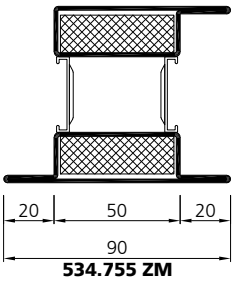
534.751 ZM
534.751 CrNi*



534.752 ZM
534.752 CrNi*

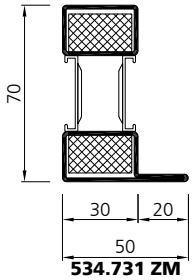


534.753 ZM
534.753 CrNi*

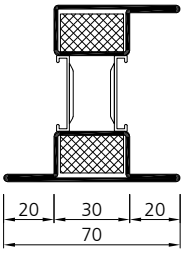


534.755 ZM
534.755 CrNi*

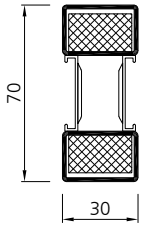
* auf Anfrage
sur demande
on request



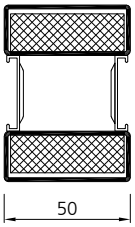
534.731 ZM
534.731 CrNi*



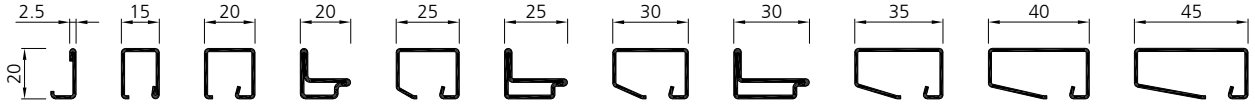
534.735 ZM*
534.735 CrNi*



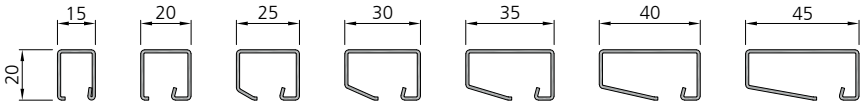
534.730 ZM
534.730 CrNi*



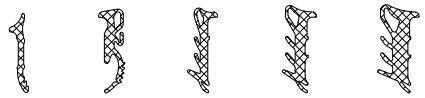
534.750 ZM
534.750 CrNi*



901245 **901226** **901227** **901204** **901228** **901205** **901246** **901206** **901247** **901248** **901249**



901526 **901527** **901528** **901546** **901547** **901548** **901549**



905712 2 mm
985702 5 mm
905784 3-4 mm
905785 5-6 mm
905786 7-8 mm



948003 3 mm
948004 4 mm
948005 5 mm
948006 6 mm



948007 3 mm
948008 4 mm
948009 5 mm
948010 6 mm



906574



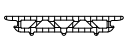
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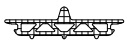
906577 (VE 100 Stk/pcs)
906578 (VE 1000 Stk/pcs)
906579 (Mag. 200 Stk/pcs)



906421



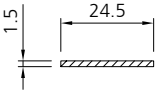
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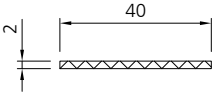
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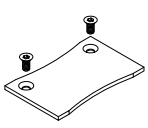
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948000



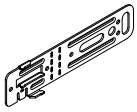
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986706



987081



987073



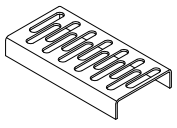
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900103



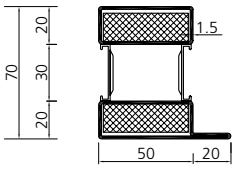
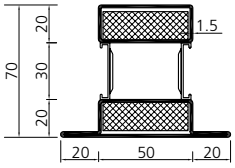
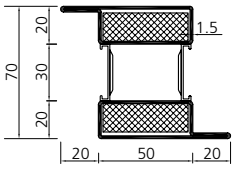
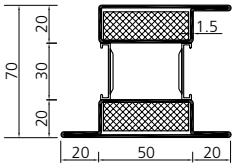
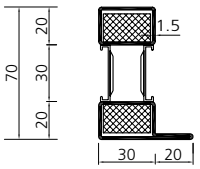
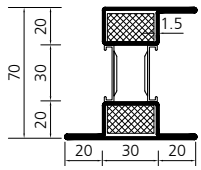
980101



907008

09/23

Profile Stahl
Profilés Acier
Profiles Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_z [cm⁴]	W_z [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**534.751**	ZM	6000	5.507			11.78	3.15	30.69	29.49	0.310
			- 1999 mm		20.40	7.65					
			2000 - 2499 mm		24.02	7.96					
			2500 - 2999 mm		26.26	8.12					
			3000 - 3499 mm		27.69	8.22					
			3500 - 3999 mm		28.64	8.27					
			4000 - 6000 mm		29.30	8.31					
	**534.752**	ZM	6000	5.942			20.57	4.57	27.37	45.00	0.350
			- 1999 mm		22.51	8.04					
			2000 - 2499 mm		26.76	8.37					
			2500 - 2999 mm		29.44	8.53					
			3000 - 3499 mm		32.32	8.63					
			3500 - 3999 mm		33.13	8.69					
			4000 - 6000 mm		33.70	8.73					
	**534.753 ***	ZM	6000	5.968			20.57	4.57	35.00	45.00	0.350
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**534.755**	ZM	6000	6.403			20.57	4.57	31.58	48.57	0.390
			- 1999 mm		26.27	11.04					
			2000 - 2499 mm		31.80	11.49					
			2500 - 2999 mm		35.40	11.72					
			3000 - 3499 mm		37.77	11.85					
			3500 - 3999 mm		38.12	11.93					
			4000 - 6000 mm		38.78	11.56					
	**534.731**	ZM	6000	3.839			4.44	1.58	29.11	19.38	0.270
			- 1999 mm		16.55	5.60					
			2000 - 2499 mm		18.95	5.78					
			2500 - 2999 mm		20.35	5.87					
			3000 - 3499 mm		21.21	5.92					
			3500 - 3999 mm		21.77	5.95					
			4000 - 6000 mm		22.15	5.95					
	**534.735**	ZM	6000	4.711			9.17	2.62	34.12	35.64	0.350
			- 1999 mm		23.28	9.04					
			2000 - 2499 mm		27.56	9.34					
			2500 - 2999 mm		30.21	9.48					
			3000 - 3499 mm		31.90	9.56					
			3500 - 3999 mm		33.03	9.61					
			4000 - 6000 mm		33.81	9.64					



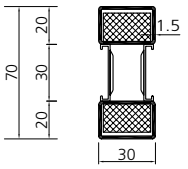
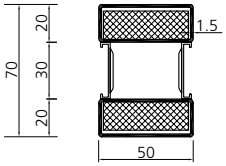
Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

m = Material
Matériau
Material

O = Umlaufende Oberfläche per Laufmeter
Surface périphérique par mètre courant
Outlying surface per running meter

* auf Anfrage / sur demande / on request

Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_z [cm⁴]	W_z [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**534.730**	ZM	6000	3.391			1.71	1.41	35.00	15.00	0.235
			- 1999 mm		13.34	5.00					
			2000 - 2499 mm		15.04	5.17					
			2500 - 2999 mm		16.01	5.25					
			3000 - 3499 mm		16.98	5.30					
			3500 - 3999 mm		17.24	5.33					
			4000 - 6000 mm		17.42	5.35					
	**534.750**	ZM	6000	5.046			6.09	2.44	35.00	25.00	0.315
			- 1999 mm		17.47	7.03					
			2000 - 2499 mm		20.31	7.33					
			2500 - 2999 mm		22.02	7.48					
			3000 - 3499 mm		23.10	7.57					
			3500 - 3999 mm		23.81	7.62					
			4000 - 6000 mm		24.30	7.63					



Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

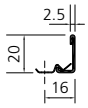
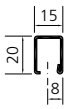
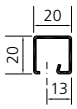
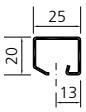
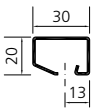
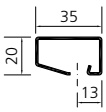
m = Material / Matériau / Material

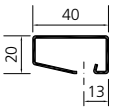
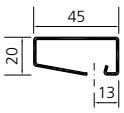
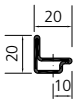
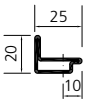
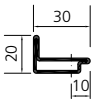
O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

Glashalteleisten aus Stahl

Parcloses en acier

Glazing beads of steel

Profile Profilés Profiles (1:4)						
Art. Nr. art. no.	**901245**	**901226**	**901227**	**901228**	**901246**	**901247**
m	ZM					
L [mm]	6000					
G [kg/m]	0.329	0.568	0.657	0.734	0.829	0.922
O [m²/m]	0.038	0.059	0.067	0.075	0.083	0.095

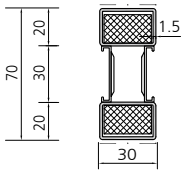
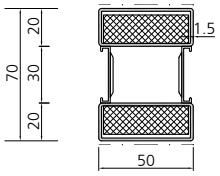
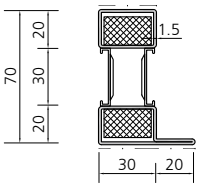
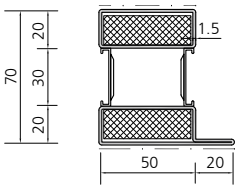
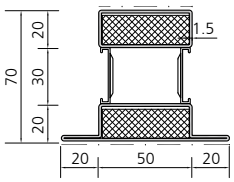
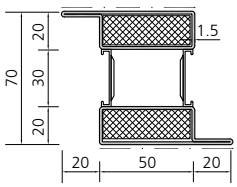
Profile Profilés Profiles (1:4)					
Art. Nr. art. no.	**901248**	**901249**	**901204**	**901205**	**901206**
m	ZM				
L [mm]	6000				
G [kg/m]	1.020	1.118	0.844	0.956	1.074
O [m²/m]	0.104	0.113	0.064	0.069	0.074

4

m = Material
Matériau
Material

O = Umlaufende Oberfläche per Laufmeter
Surface périphérique par mètre courant
Outlying surface per running meter

Profile Edelstahl — Profilés Acier inox — Profiles Stainless steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]	mo [cm]
	**534.730 CrNi***	CrNi 1.4301	6000	3.473			1.73	1.15	35.00	15.00	0.230	0.060
			- 1999 mm		14.07	5.10						
			2000 - 2499 mm		15.61	5.25						
			2500 - 2999 mm		16.47	5.32						
			3000 - 3499 mm		16.98	5.36						
			3500 - 3999 mm		17.30	5.25						
			4000 - 6000 mm		17.42	5.06						
	**534.750 CrNi***	CrNi 1.4301	6000	5.164			6.41	2.46	35.00	25.00	0.270	0.100
			- 1999 mm		18.62	7.17						
			2000 - 2499 mm		21.24	7.44						
			2500 - 2999 mm		22.76	7.57						
			3000 - 3499 mm		23.70	7.64						
			3500 - 3999 mm		24.31	6.66						
			4000 - 6000 mm		24.41	6.36						
	**534.731 CrNi***	CrNi 1.4301	6000	3.938			4.44	1.58	29.11	19.38	0.270	0.080
			- 1999 mm		17.55	5.71						
			2000 - 2499 mm		19.73	5.87						
			2500 - 2999 mm		20.97	5.95						
			3000 - 3499 mm		21.72	5.99						
			3500 - 3999 mm		22.20	5.96						
			4000 - 6000 mm		22.53	5.76						
	**534.751 CrNi***	CrNi 1.4301	6000	5.641			11.78	3.15	30.69	29.49	0.310	0.120
			- 1999 mm		21.83	7.81						
			2000 - 2499 mm		25.20	8.08						
			2500 - 2999 mm		27.21	8.22						
			3000 - 3499 mm		28.46	8.30						
			3500 - 3999 mm		29.28	7.37						
			4000 - 6000 mm		29.26	7.04						
	**534.752 CrNi***	CrNi 1.4301	6000	6.084			20.57	4.57	27.37	45.00	0.350	0.140
			- 1999 mm		24.18	8.21						
			2000 - 2499 mm		28.17	8.50						
			2500 - 2999 mm		30.58	8.64						
			3000 - 3499 mm		32.09	8.72						
			3500 - 3999 mm		33.09	7.96						
			4000 - 6000 mm		33.72	7.48						
	**534.753 CrNi***	CrNi 1.4301	6000	6.118			11.78	3.15	35.00	45.00	0.350	0.140
			- 1999 mm		25.61	10.73						
			2000 - 2499 mm		29.99	11.11						
			2500 - 2999 mm		32.67	11.29						
			3000 - 3499 mm		34.37	11.40						
			3500 - 3999 mm		35.49	10.65						
			4000 - 6000 mm		35.65	9.09						

* auf Anfrage / sur demande / on request

geschliffen, Korn 220-240, mit Schutzfolie
meulé, grain 220-240, avec film adhésif
grinded, 220-240 grain, with adhesive protection tape



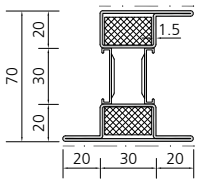
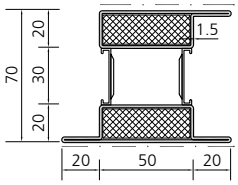
Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

mo = Schleifbare Oberfläche / Surface ponçable / Grindable surface

Profile Edelstahl — Profilés Acier inox — Profiles Stainless steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]	mo [cm]
	**534.735 CrNi***	CrNi 1.4301	6000	4.729			9.17	2.62	25.04	35.00	0.310	0.100
			- 1999 mm		19.89	6.06						
			2000 - 2499 mm		22.58	6.22						
			2500 - 2999 mm		24.13	6.31						
			3000 - 3499 mm		25.07	6.35						
			3500 - 3999 mm		25.68	6.37						
			4000 - 6000 mm		26.09	6.17						
	**534.755 CrNi***	CrNi 1.4301	6000	6.561			20.57	4.57	31.58	48.57	0.390	0.160
			- 1999 mm		28.40	11.25						
			2000 - 2499 mm		33.63	11.64						
			2500 - 2999 mm		36.89	11.84						
			3000 - 3499 mm		38.98	11.89						
			3500 - 3999 mm		39.45	11.81						
			4000 - 6000 mm		39.91	11.55						

* auf Anfrage / sur demande / on request

4

— · — · — geschliffen, Korn 220-240, mit Schutzfolie
meulé, grain 220-240, avec film adhésif
grinded, 220-240 grain, with adhesive protection tape



Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

m = Material / Matériau / Material

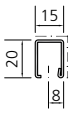
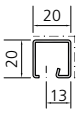
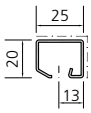
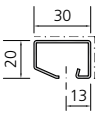
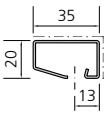
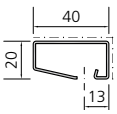
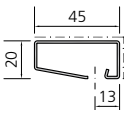
O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

mo = Schleifbare Oberfläche / Surface ponçable / Grindable surface

Glashalteleisten aus Edelstahl

Parcloses en acier inox

Glazing beads of stainless steel

Profile **Profilés** **Profiles** **(1:4)**							
Art. Nr. **art. no.**	**901526**	**901527**	**901528**	**901546**	**901547**	**901548**	**901549**
m	CrNi 1.4301						
L **[mm]**	6000						
G **[kg/m]**	0.572	0.661	0.735	0.834	0.927	1.026	1.124
O **[m²/m]**	0.059	0.067	0.075	0.083	0.093	0.104	0.113
mo **[m²/m]**	0.035	0.040	0.045	0.050	0.055	0.060	0.065

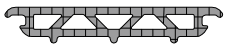
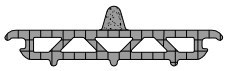
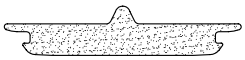
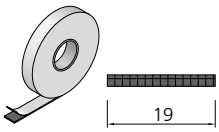
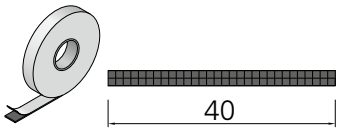
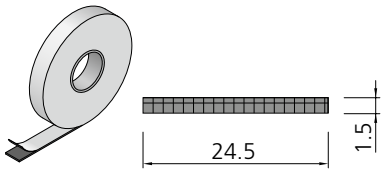
O = Umlaufende Oberfläche per Laufmeter
Surface périphérique par mètre courant
Outlying surface per running meter

mo = Schleifbare Oberfläche
Surface ponçable
Grindable surface

Zubehör
Dichtungen

Accessoires
Joints

Accessories
Weatherstrippings

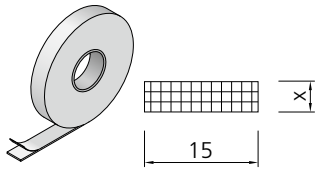
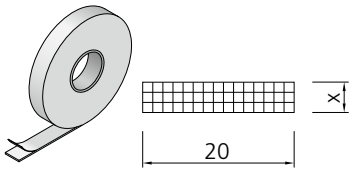
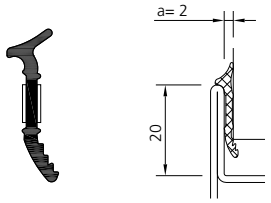
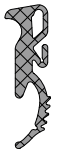
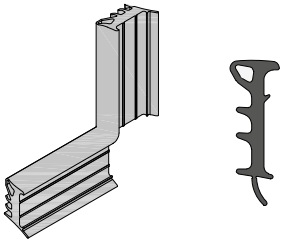
Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Falzabdeckung aus CR schwarz Recouvrement de feuillure en CR noir Rebate cover CR black	100 m	**985704**
	Falzabdeckung aus CR schwarz Recouvrement de feuillure en CR noir Rebate cover CR black Einsatz Glasfalz Utilisation feuillure verre Use glass rebate	100 m	**985705**
	Falzabdeckung Hi aus PE grau Recouvrement de feuillure Hi en PE gris Rebate cover Hi PE gray	100 m	**985315**
	Falzdichtband Ruban d'étanchéité de feuillure Rebate sealing tape 19 x 1.5 mm	60 m (1 Rolle à 60 m) (1 rouleau à 60 m) (1 roll à 60 m)	**988051**
	Brandschutzstreifen Einsatz Glasfalz, einseitig klebend Bande intumescente pour feuillure du verre, collant d'un côté Intumescent strip for glass rebate, one side self adhesive	25 m	**988030**
	Brandschutzstreifen (grau) Einsatz Glasfalz, einseitig klebend Bande intumescente (gris) pour feuillure du verre, collant d'un côté Intumescent strip (grey) for glass rebate, one side self adhesive	25 m	**948000**

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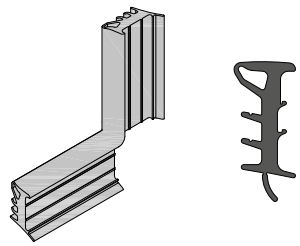
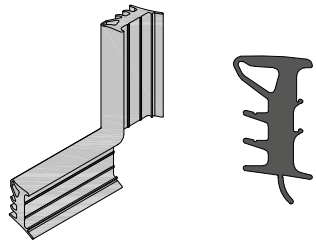
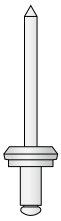
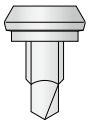
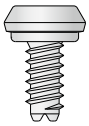
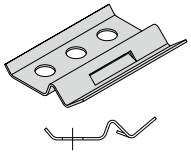
Zubehör
Dichtungen

Accessoires
Joints

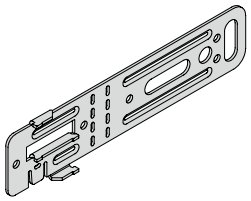
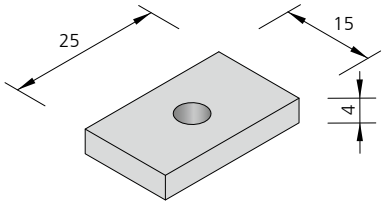
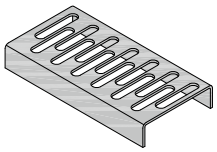
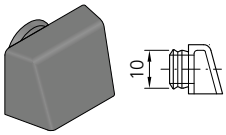
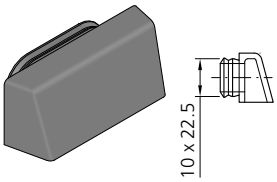
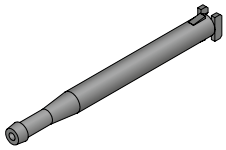
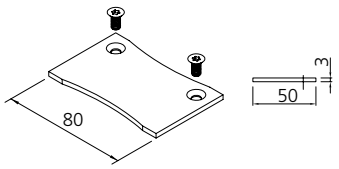
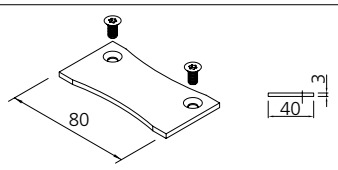
Accessories
Weatherstrippings

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Brandschutz-Verglasungsband 15 mm einseitig selbstklebend, keramikfaserfrei, weiss Bandes de vitrage résistant au feu 15 mm autocollant 1 face, sans fibre céramique, blanc Fire resistant glazing tape 15 mm unilateral self-adhesive, ceramic fibre free, white		
	x = 3 mm	20 m	**948003**
	x = 4 mm	20 m	**948004**
	x = 5 mm	20 m	**948005**
	x = 6 mm	20 m	**948006**
	Brandschutz-Verglasungsband 20 mm einseitig selbstklebend, keramikfaserfrei, weiss Bandes de vitrage résistant au feu 20 mm autocollant 1 face, sans fibre céramique, blanc Fire resistant glazing tape 20 mm unilateral self-adhesive, ceramic fibre free, white		
	x = 3 mm	20 m	**948007**
	x = 4 mm	20 m	**948008**
	x = 5 mm	20 m	**948009**
	x = 6 mm	20 m	**948010**
	Verglasungsdichtung aussen CR, schwarz, selbstklebend, Fugenbreite 2 mm Joint de vitrage extérieur CR, noir, auto adhésif, largeur de joint 2 mm Glazing seals outside CR, black, self-adhesive, joint widths 2 mm	100 m	**905712**
	Verglasungsdichtung aussen CR, schwarz, selbstklebend, Fugenbreite 5 mm Joint de vitrage extérieur CR, noir, auto adhésif, largeur de joint 5 mm Glazing seals outside CR, black, self-adhesive, joint widths 5 mm	100 m	**985702**
	Verglasungsdichtung innen CR, schwarz, für Fugenbreite 3 und 4 mm mit Gleitlack, silikonfrei Joint de vitrage intérieur CR, noir, largeur de joint de 3 et 4 mm avec laque lubrifiante, sans silicone Inner glazing seal CR, black, for joint widths of 3 and 4 mm antifriction coating, silicon free	100 m	**905784**

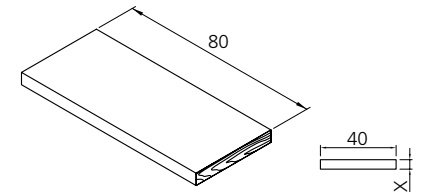
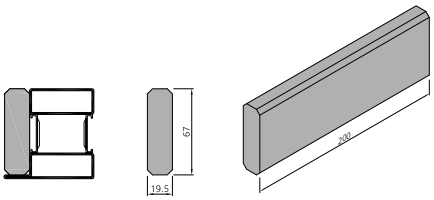
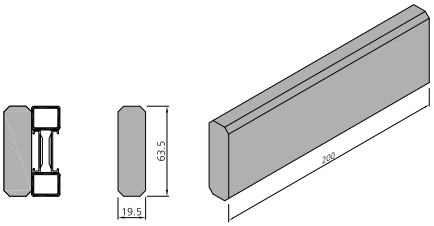
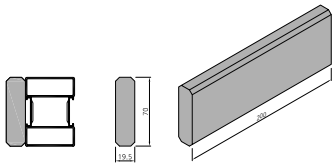
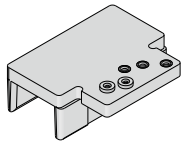
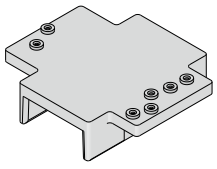
Zubehör | Accessoires | Accessories

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Verglasungsdichtung innen CR, schwarz, für Fugenbreite 5 und 6 mm mit Gleitlack, silikonfrei Joint de vitrage intérieur CR, noir, largeur de joint de 5 et 6 mm avec laque lubrifiante, sans silicone Inner glazing seal CR, black, for joint widths of 5 and 6 mm antifriction coating, silicon free	100 m	**905785**
	Verglasungsdichtung innen CR, schwarz, für Fugenbreite 7 und 8 mm mit Gleitlack, silikonfrei Joint de vitrage intérieur CR, noir, largeur de joint de 7 et 8 mm avec laque lubrifiante, sans silicone Inner glazing seal CR, black, for joint widths of 7 and 8 mm antifriction coating, silicon free	75 m	**905786**
	Klemmknopf-Niet Edelstahl 1.4567 Bouton de fixation rivet pop acier inox 1.4567 Stud fastener, pop-rivet stainless steel 1.4567	100 Stk./pcs	**906574**
	Klemmknopfschraube selbstbohrend für Glashalteleisten, Stahl chromatiert Bouton de fixation autoforeur pour parcloses, acier chromaté Stud fastener self drilling for glazing beads, chromated steel	100 Stk./pcs 1000 Stk./pcs Mag. 200 Stk./pcs	**906577** **906578** **906579**
	Klemmknopfschraube selbstfurchend Edelstahl 1.4404 Bouton de fixation autotaraudeur acier inox 1.4404 Stud fastener self-tapping stainless steel 1.4404	100 Stk./pcs	**906583**
	Feder für Glashalteleisten mit Haltehaken, Edelstahl Ressort pour parcloses avec crochet de retenue, acier inox Spring for glazing beads with retaining clamp, stainless steel Hinweis: keine zerstörungsfreie Demontage der Glashalteleiste möglich Remarque: pas de démontage possible des parcloses sans destruction Notice: non-destructive removing of glazing beads not possible	100 Stk./pcs	**906421**

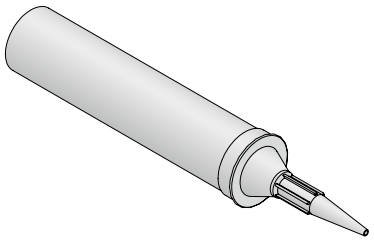
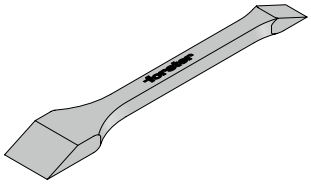
Zubehör — Accessoires — Accessories

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Eindrehanker Stahl bandverzinkt Ancre à tourner Acier galvanisé en continu Turn in anchor Steel continuously galvanized	50 Stk./pcs	**987073**
	Unterlagsscheibe für Elementstoss und Wandbefestigung Edelstahl, M5 Gewinde Rondelle pour raccord d'assemblage et fixation mural Acier inox, M5 filetage Washer for site joint and wall mounts Stainless steel, M5 thread	10 Stk./pcs	**987081**
	Paneelverbinder Raccord de panneaux Panel connector	12 Stk./pce	**907008**
	Wasserablauftülle Ø 10 mm, PA 6, schwarz Douille d'écoulement Ø 10 mm, PA 6, noir Draining pipe Ø 10 mm, PA 6, black	10 Stk./pcs	**900100**
	Wasserablauftülle Langloch 22.5 x 10 mm, PA 6, schwarz Douille d'écoulement trou oblong 22.5 x 10 mm, PA 6, noir Draining pipe oblong hole 22.5 x 10 mm, PA 6, black	10 Stk./pcs	**900103**
	Entspannungs- und Entwässerungsröhrchen für verdeckte Entspannung und Entwässerung Tubulure invisible de décompression et d'évacuation d'eau Decompression and drainage pipe for hidden decompression and drainage	10 Stk./pcs	**980101**
	Glasfalzbrücke, breit, 50 mm Pont feuillure du verre, large, 50 mm Glass rebate bridge, wide, 50 mm	5 Stk./pcs	**986705**
	Glasfalzbrücke, breit, 40 mm Pont feuillure du verre, large, 40 mm Glass rebate bridge, wide, 40 mm	5 Stk./pcs	**986706**

Verarbeitungshilfen Aides à la mise en œuvre Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Set Distanzstücke Hartholz Kit distanceurs Bois dur Set distance pieces Hardwood X = 1 mm 16 Stk./pcs X = 3 mm 16 Stk./pcs X = 5 mm 16 Stk./pcs	1 Stk./pce	**980401**
	Sägehilfe für Rahmenprofile Kunststoff (POM) Cale de débitage pour profilés de cadre Matière plastique (POM) Sawing aid for frame profile Plastics (POM)	2 Stk./pcs	**988011**
	Sägehilfe für Blechprofile Kunststoff (POM) Cale de débitage pour profilés en tôle Matière plastique (POM) Sawing aid for steel sheet profiles Plastics (POM)	2Stk./pcs	**988014**
	Sägehilfe für Rahmenprofile Kunststoff (POM) Cale de débitage pour profilés de cadre Matière plastique (POM) Sawing aid for frame profile Plastics (POM)	2 Stk./pcs	**988015**
	Bohrlehre Gabarit de perçage Drilling template Befestigungsfeder, Art.Nr. 906420/906421 Klemmknopf, Art. Nr. 906583 Klemmniete, Art. Nr. 906574 ressort de fixation, art. no. 906420/906421 bouton-pression, art. no. 906583 rivet de serrage, art. no. 906574 fastening spring, art. no. 906420/906421 stud fastener, art. no. 906583 clamping rivet, art. no. 906574	1 Stk./pce	**909105**
	Bohrlehre Gabarit de perçage Drilling template Klemmknopf, Art. Nr. 906577/906578 Befestigungsfeder, Art.Nr. 906420/906421 bouton-pression, art. no. 906577/906578 ressort de fixation, art. no. 906420/906421 stud fastener, art. no. 906577/906578 fastening spring, art. no. 906420/906421	1 Stk./pce	**909104**

Verarbeitungshilfen — Aides à la mise en œuvre — Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Bohrschrauben-Setzgerät (230 V) komplett, inklusive Koffer Appareil à poser les vis autotaraudeuses (230 V) complet, avec coffret Power driver for self-cutting screws (230 V) complete incl. case	1 Stk/pce	**909203**
	Schrauben-Vorsatzgerät (Ersatz) Adaptateur pour tournevis (rechange) Power driver adapter (replacement)	1 Stk/pce	**909204**
	Schrauben-Einsatz (passend zu Art. Nr. 909203) Jeu de tournevis (pour art. no. 909203) Screwdriver bit (fitting art. no. 909203)	2 Stk/pcs	**909205**
	Primer für Glas und Aluminium-Profil Dose à 236 ml Primer pour verre et profilé en aluminium Boîte de 236 ml Primer for glass and aluminium profile Can at 236 ml	1 Stk/pce	**908205**
	Dichtungsmasse für Dichtungsüberlappungen zum Abdichten der Kreuzpunkte, auf Hybriodpolymerbasis, schwarz, Inhalt Kartusche 290 ml Mastic pour chevauchements de joints, destiné à l'étanchéité des croisements, à base de polymère hybride, noir, contenance de cartouche 290 ml Sealing compound for weatherstripping overlapping to seal the crossing points, based on hybriodpolymere, black, content cartridge 290 ml	12 Kartuschen Cartouches Cartridges 1 Kartusche Cartouche Cartridge	**908001** **908005**
	Glaskelle Main en bois pour vitrage Glazing wedge	1 Stk/pce	**909218**

Verarbeitungshilfen | Aides à la mise en œuvre | Processing aids

Abbildung Figure Figure	Bezeichnung Désignation Designation	Verkaufseinheit Unité de vente Sales unit	Art. Nr. art. no. art. no.
	Einrollwerkzeug für Dichtung Art. Nr. 985704, 985705, 985315 Rouleau pour joint art. no. 985704, 985705, 985315 Rolling tool for seal art. no. 985704, 985705, 985319	1 Stk./pce	**989000**
	Einrollwerkzeug für Dichtung Art. Nr. 985703, 905784, 905785, 905786 Rouleau pour joint art. no. 985703, 905784, 905785, 905786 Rolling tool for seal art. no. 985703, 905784, 905785, 905786	1 Stk./pce	**909007**
	Zuschnittwerkzeug Mitteldichtung Outil de découpe pour joint central Cutting tools central seal	1 Stk./pce	**989410**
	Zuschnittwerkzeug Entwässerung Outil de découpe pour évacuation d'eau Cutting tool drainage	1 Stk./pce	**989411**
	Ersatz Lochklingen Lames de rechange Replacement blades	4 Stk./pcs	**989413**

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Platz für Notizen

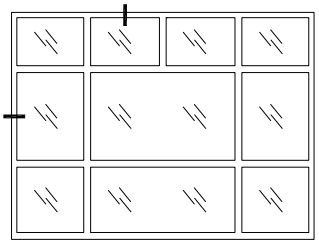
Espace pour les notes

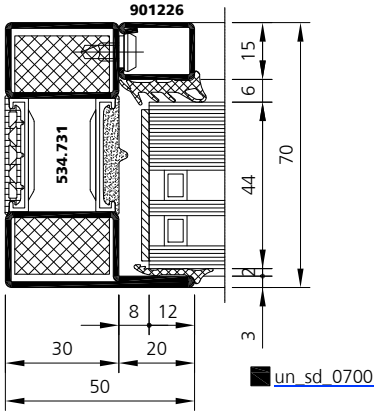
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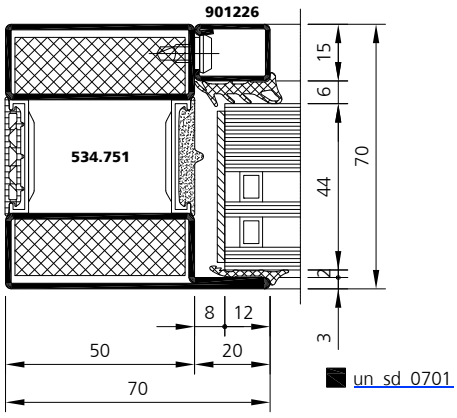
Systemschnitte

Coupes du système

System sections



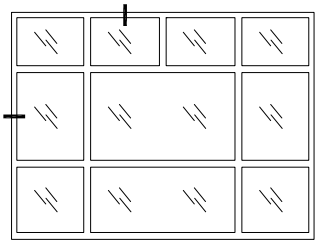


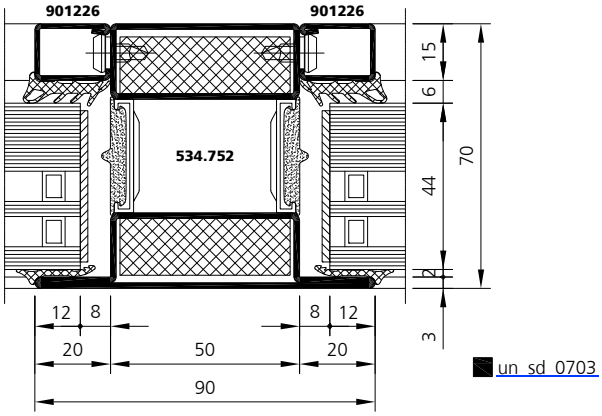


Systemschnitte

Coupes du système

System sections



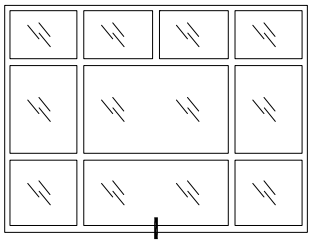


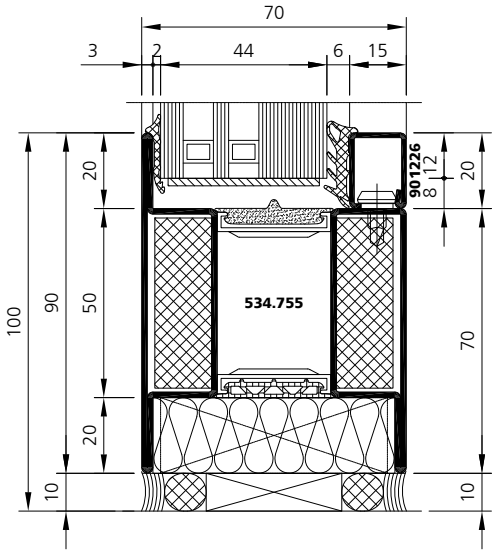
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Systemschnitte

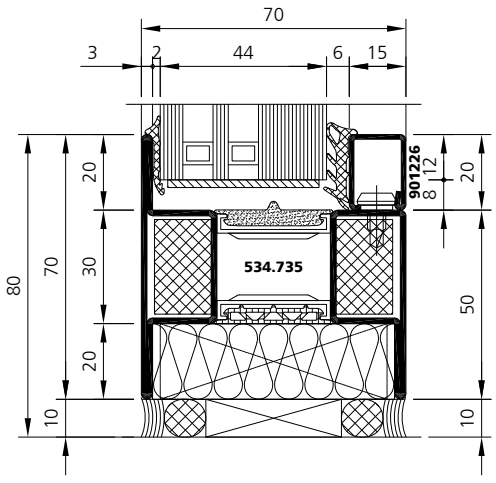
Coupes du système

System sections





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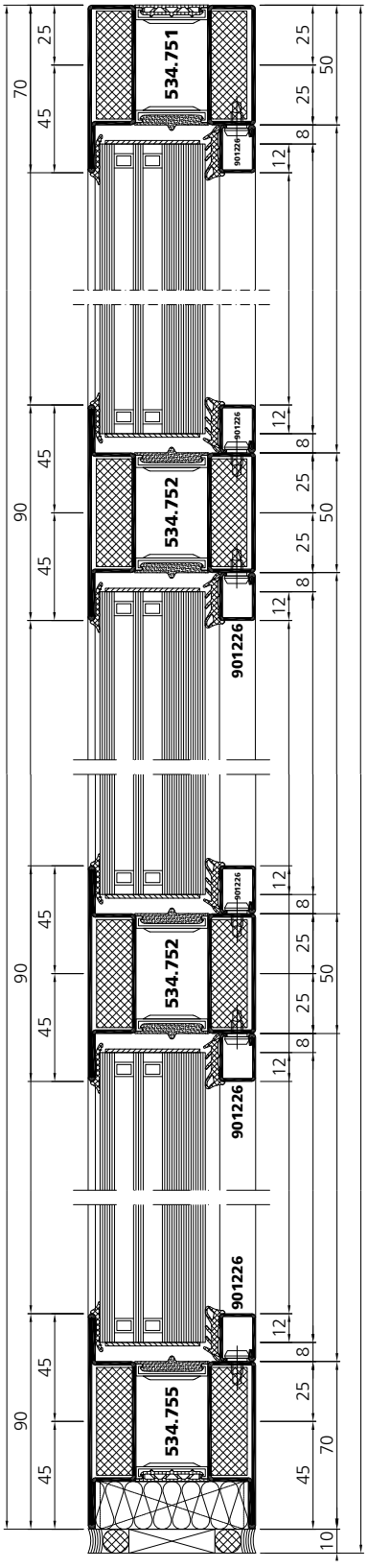


un_sd_0731

Systempläne | Plans du système | System plans

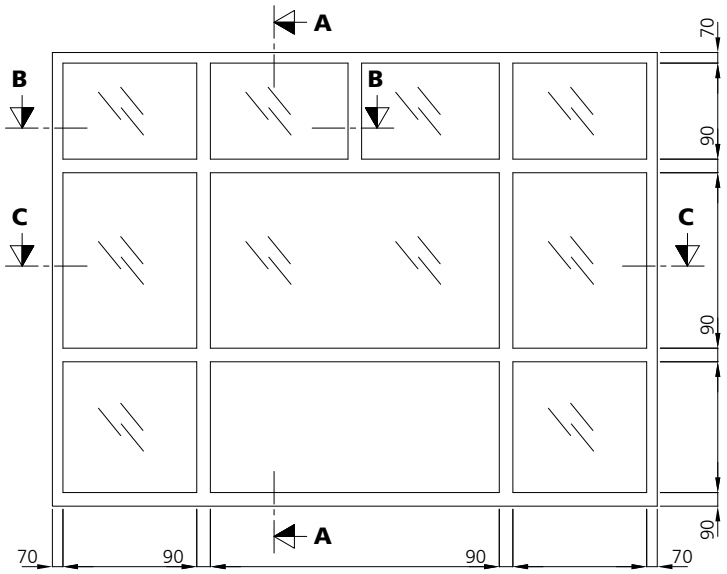
un_sp_0442

A - A

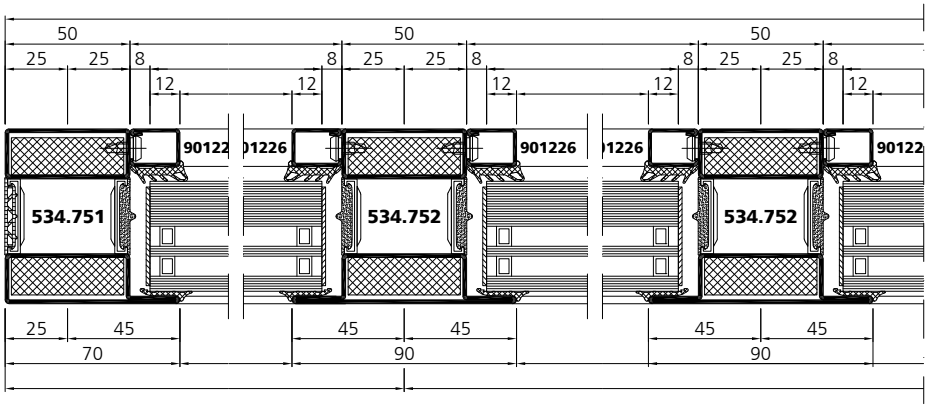


Systempläne | Plans du système | System plans

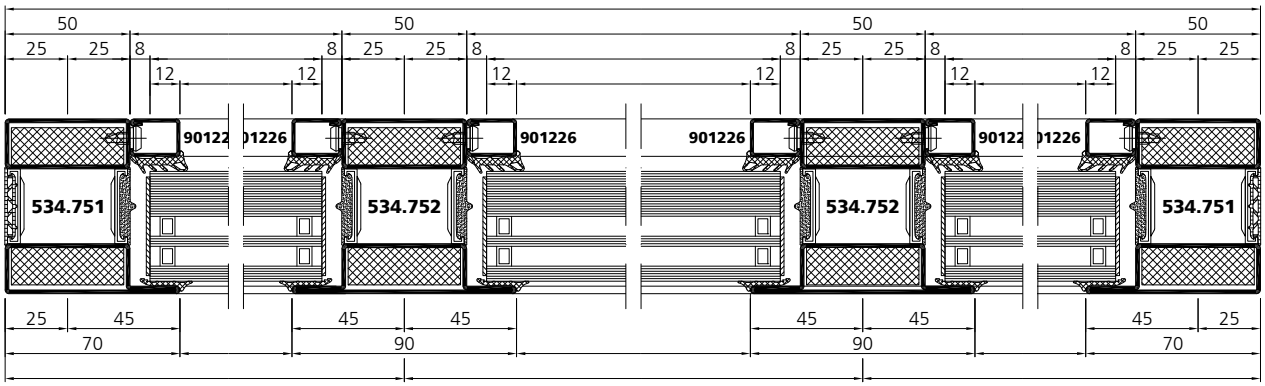
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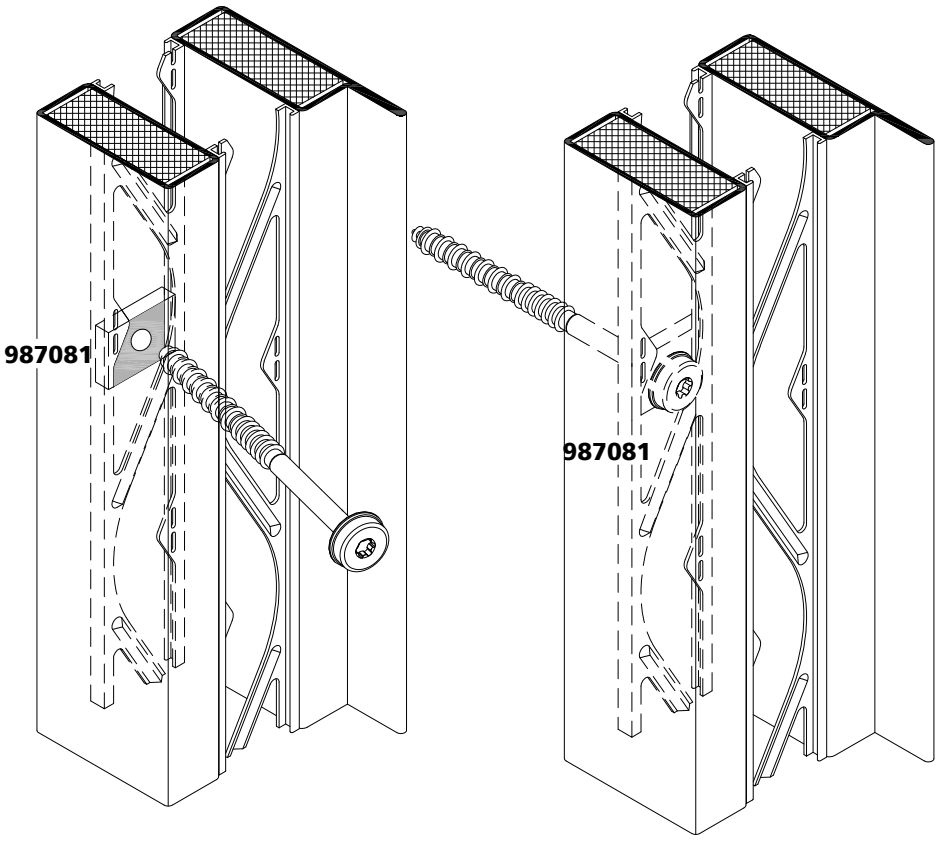
B - B



C - C



Wandbefestigung — Fixation murale — Wall mounts



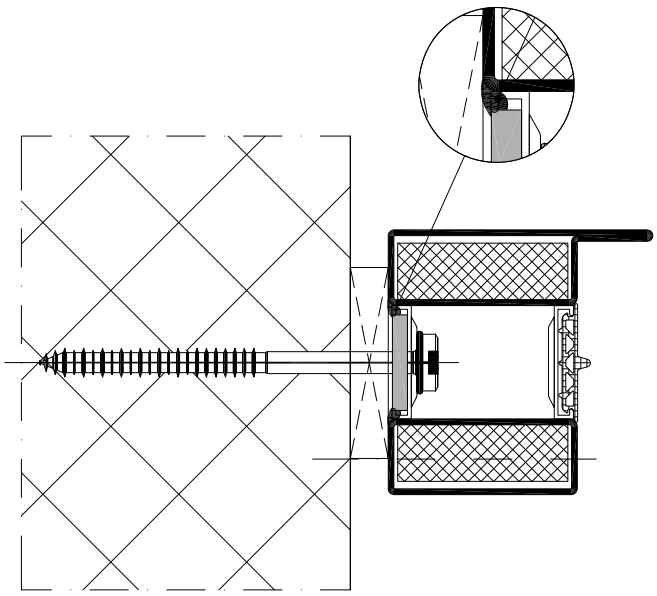
987081
Gewinde M5*
filetage M5*
thread M5*

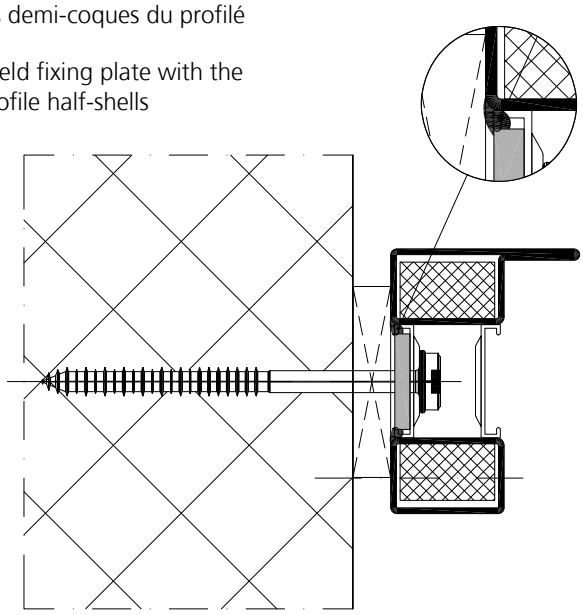
*Aufbohren
auf 10.5mm
Pergage
jusqu'a10.5mm
Drillout
up to 10.5mm

Befestigungsplatte mit
Profilhalbschale verschweissen

Plaque de fixation souder avec
les demi-coques du profilé

Weld fixing plate with the
profile half-shells

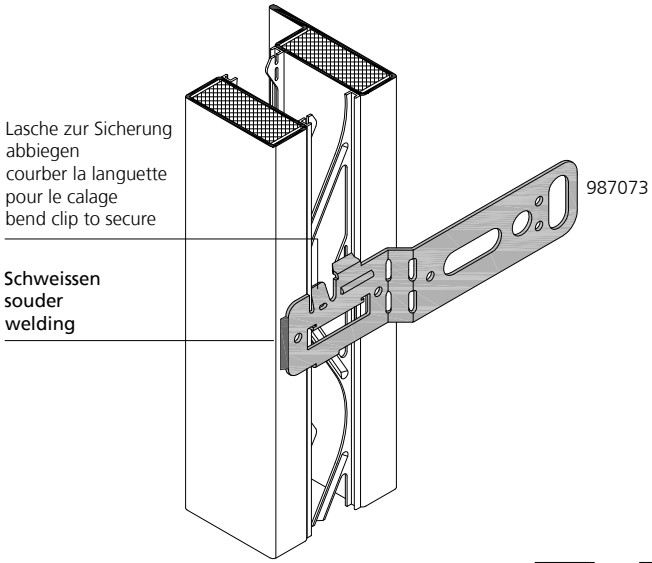




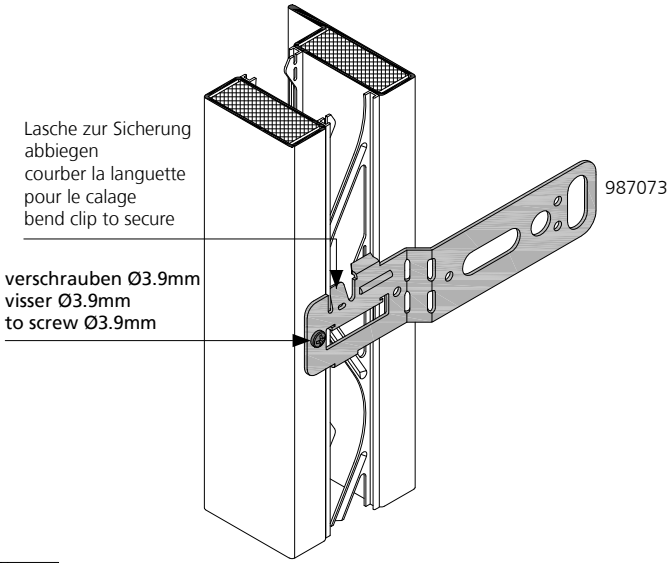
** wahlweise durch Profilschale befestigt
à choix fixation à travers lr profilé
fixing optionally through the profile

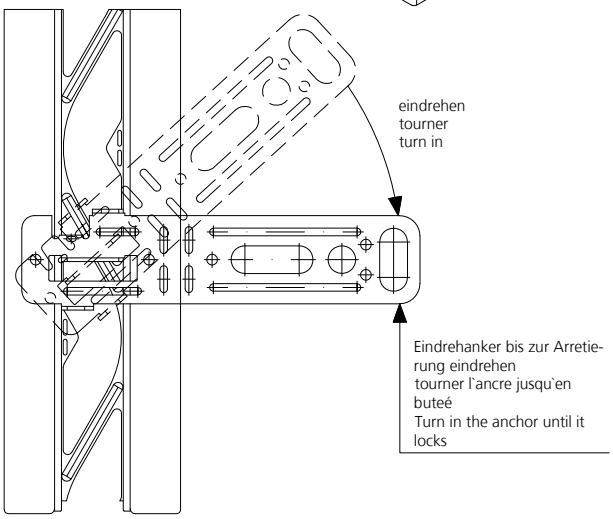
Wandbefestigung | Fixation murale | Wall mounts

Variante 1 / Variante 1 / Variant 1



Variante 2 / Variante 2 / Variant 2





4

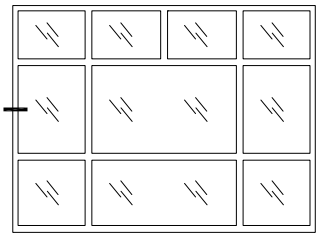
Wandanschlüsse (un_wa)
Nummernschlüssel

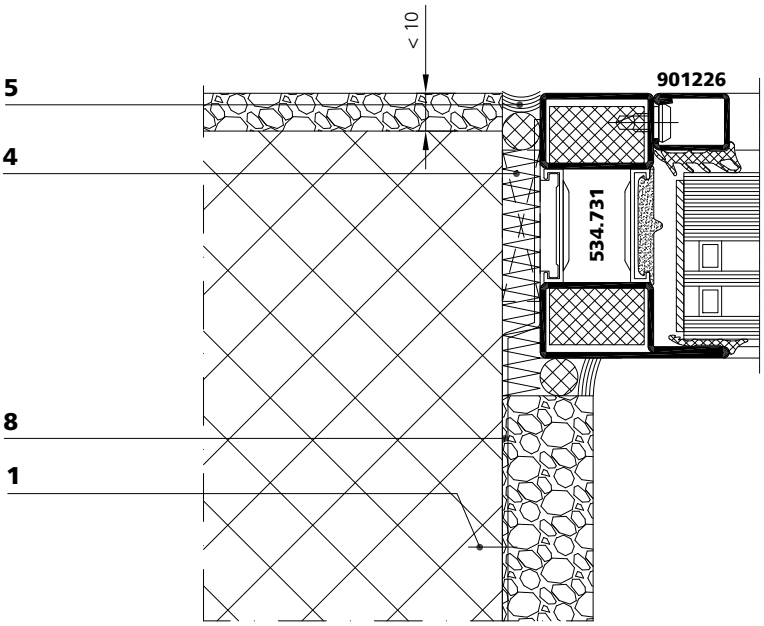
Raccords muraux (un_wa)
Légende

Wall abutments (un_wa)
Legend

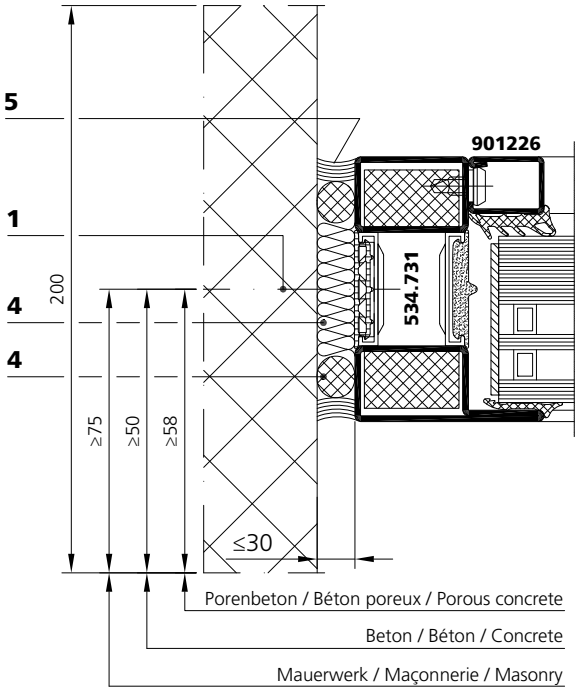
1	**Befestigungsmittel** (an Massivbauteile z.B. Mauerwerk, Beton) Wahlweise: • zugelassener KS/St-Dübel ø 10 mm mit dazugehörender Stahlschraube • Universalschraube 'HILTI HUS' • Heco Multi Monti	**Elément de fixation** (sur pièces en massif, par ex. maçonnerie, béton) Au choix: • Cheville en acier/KS homologuée ø 10 mm avec vis en acier correspondante • Vis universelle 'HILTI HUS' • Heco Multi Monti	**Means or fastening** (to solid components e.g. masonry, concrete) Either: • Approved KS/St plug ø 10 mm with related steel screw • Universal screw 'HILTI HUS' • Heco Multi Monti
4	**Füllmaterial** Anschlüsse/Hohlräume mit nichtbrennbarem Material hinterfüttern (z.B. Steinwolle, Mörtel, "Promatec H" oder mittels Brandschutz-Fugenschnur)	**Produit de remplissage** Charger les raccords/cavités de produit ininflammable (par ex. laine minérale, mortier, "Promatec H" ou un bouche-joint anti-feu)	**Filling material** Fill joints/cavities with fire-proof material (e.g. mineral wool, mortar, "Promatec H" or using fire protection joint cord)
5	**Dichtmaterial** Wahlweise Standard-Silikon, Acryl oder PU	**Produit d'étanchéité** Au choix silicone standard, PU ou acrylique	**Sealing material** Either standard-silicone, acrylic or PU
6	**Folie** Dampfdiffusionsoffen Henkel Terofol SD3, Verklebung mit Henkel Terotech KDS	**Film d'étanchéité** Perméabilité à la diffusion de vapeur Henkel Terofol SD3, coller avec Henkel Terotech KDS	**Film** Open to steam diffusion Henkel Terofol SD3, glue with Henkel Terotech KDS
8	**EIndrehanker 987073** aus Stahl bandverzinkt, Materialstärke min. 5 mm (wahlweise geschraubt oder geschweisst)	**Ancre à tourner 987073** en acier galvanisé en continu, épaisseur min. 5 mm (au choix vissées ou soudées)	**Turn in anchor 987073** Made of steel continuously galvanized, material thickness min. 5 mm (either screw fastened or welded)

Bauanschlüsse | Raccords muraux | Wall abutments





- un_wa_0150 (534.731)
- un_wa_0209 (534.751)

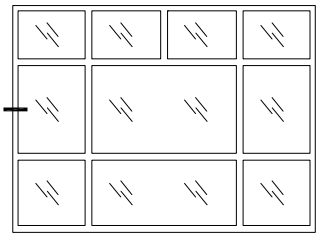


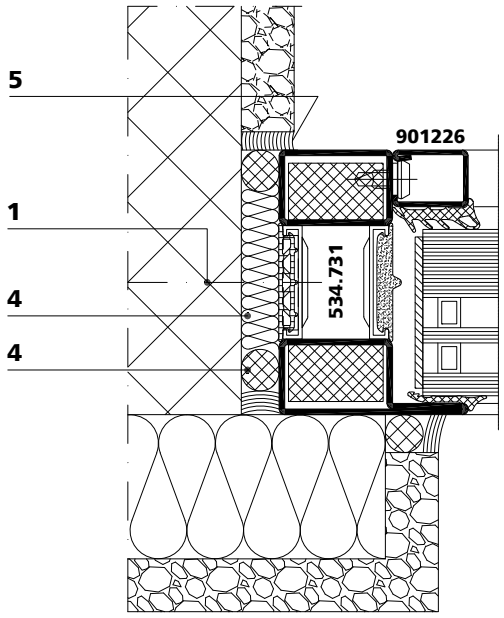
- un_wa_0151 (534.731)
- un_wa_0197 (534.751)

Bauanschlüsse

Raccords muraux

Wall abutments



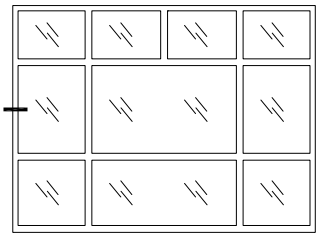


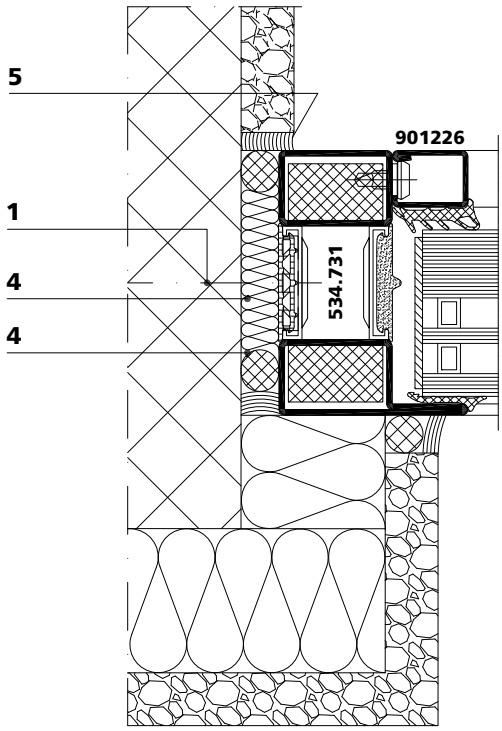
un_wa_0154 (534.731)
un_wa_0194 (534.751)

Bauanschlüsse

Raccords muraux

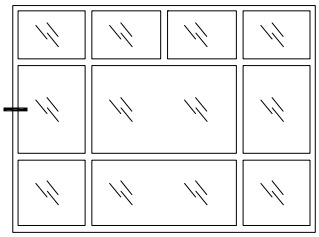
Wall abutments

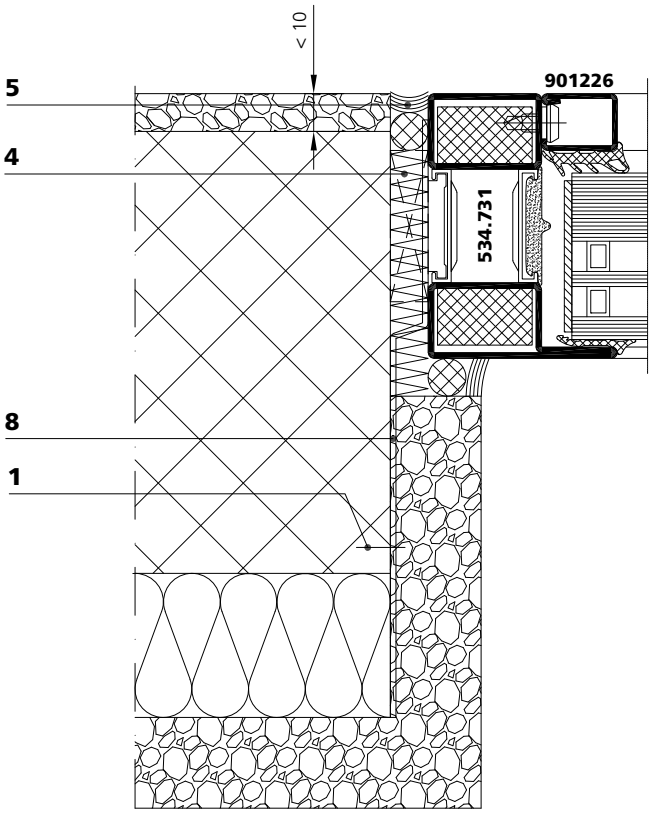




un_wa_0156 (534.731)
un_wa_0155 (534.751)

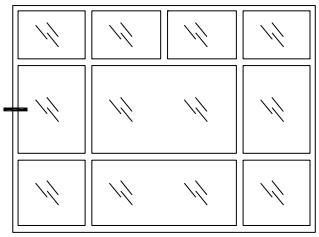
Bauanschlüsse | Raccords muraux | Wall abutments

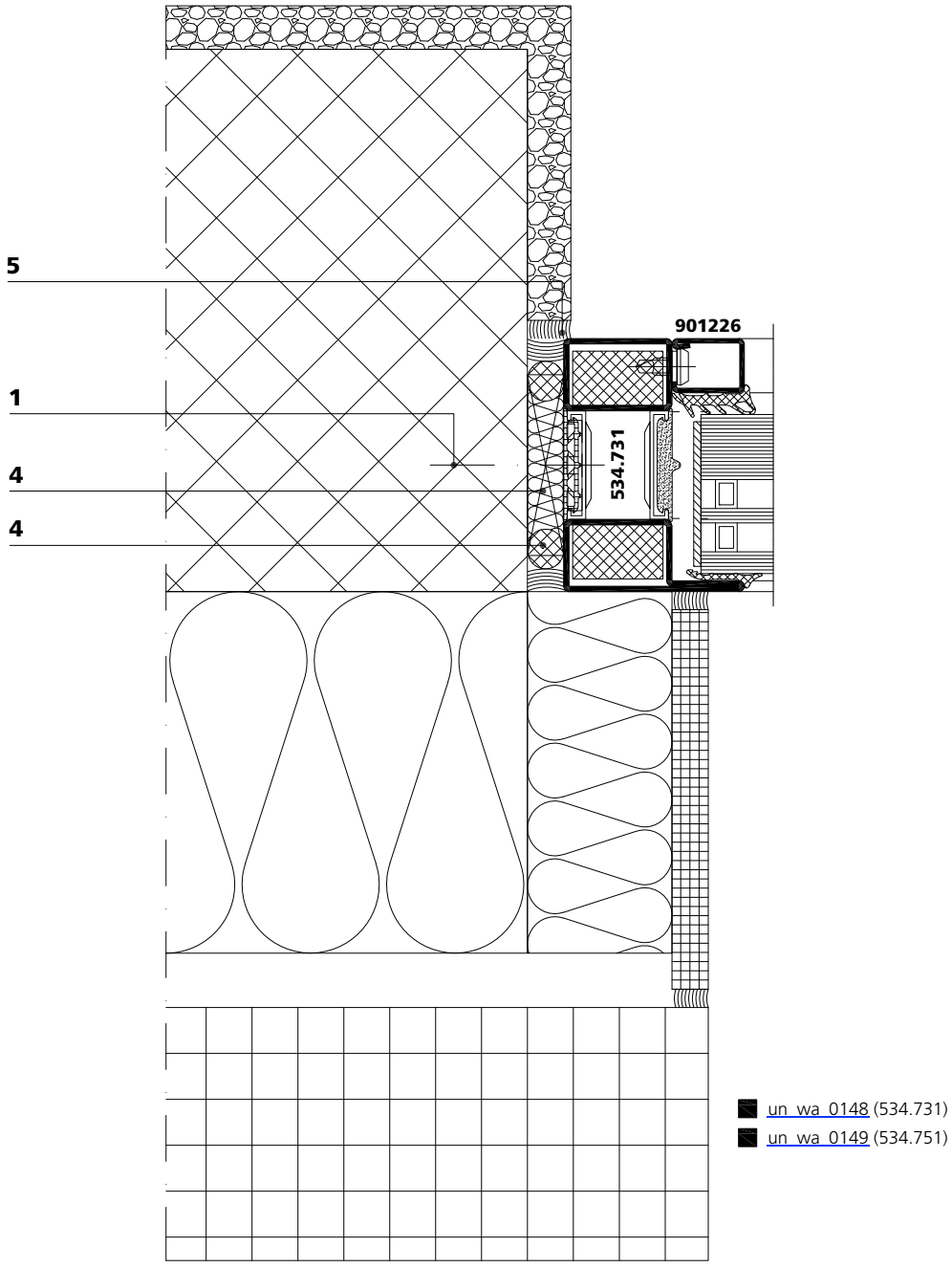




un_wa_0157 (534.731)
un_wa_0179 (534.751)

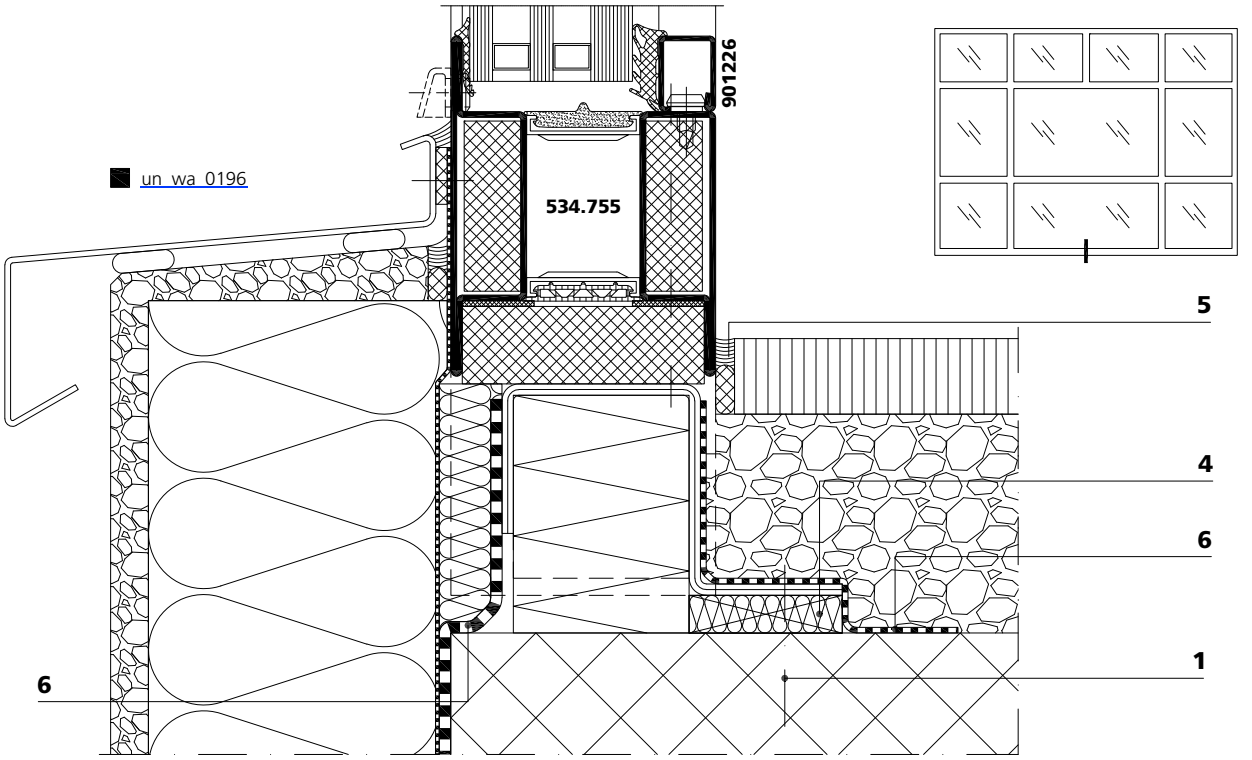
Bauanschlüsse | Raccords muraux | Wall abutments

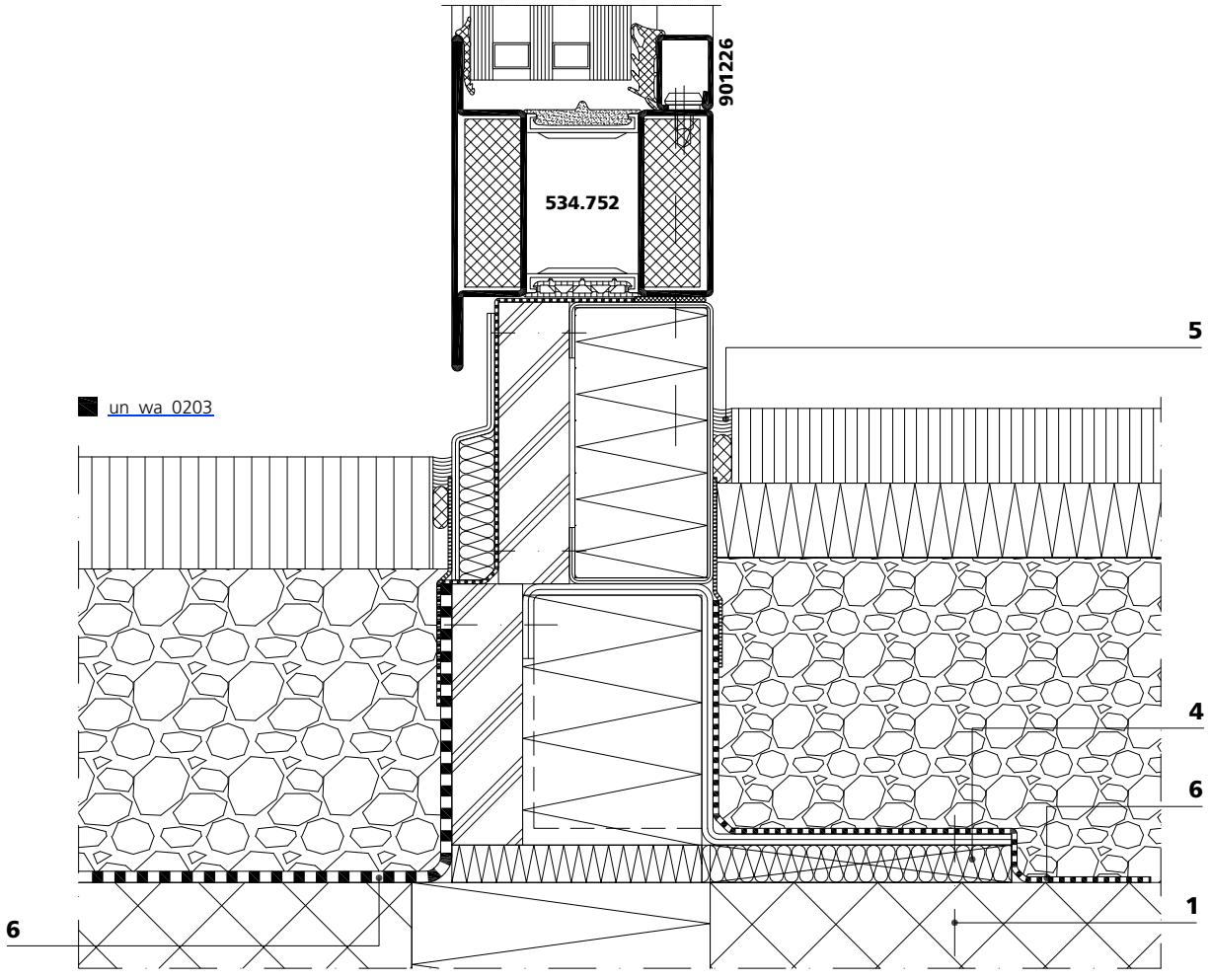




un_wa_0148 (534.731)
un_wa_0149 (534.751)

Bauanschlüsse | Raccords muraux | Wall abutments

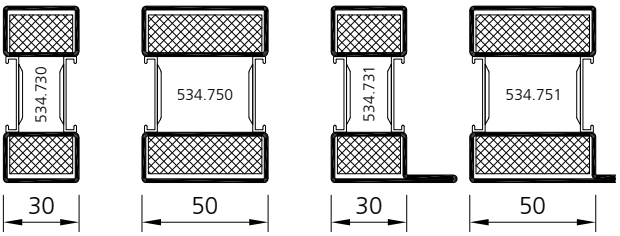


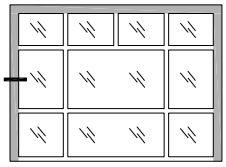


Profilaufdopplung
Festverglasung

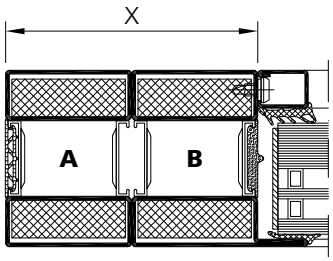
Doublage du profilé
Vitrage fixe

Profile doubling
Fxed glazing





Im grauen Bereich sind Profilaufdoppelungen möglich.
Des doublages de profilé sont possibles dans la partie grise.
In the grey area, profile doubling is possible.

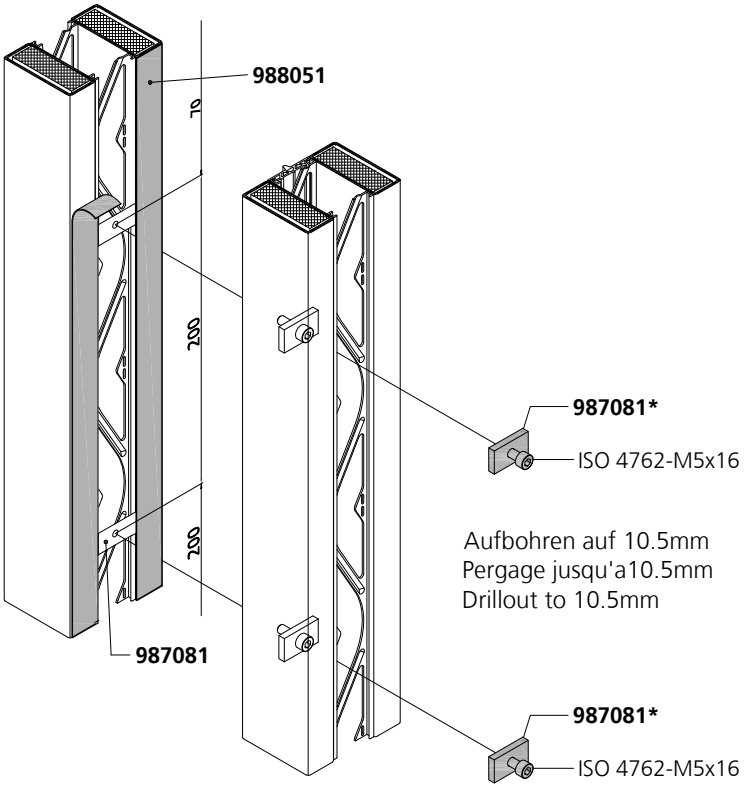


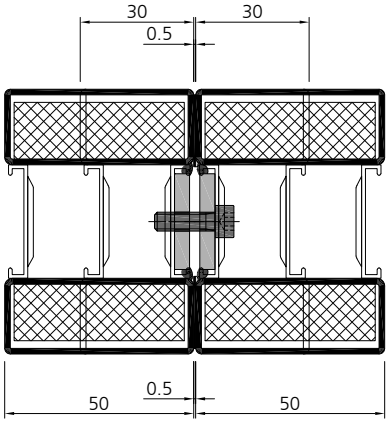
Mass X	Profil Typ A	Profil Typ B
60 mm	534.730	534.731
80 mm	534.750	534.731
80 mm	534.730	534.751
100 mm	534.750	534.751

Profilaufdopplung

Doublage du profilé

Profile doubling

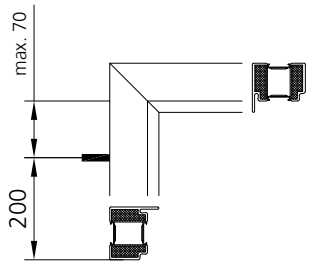




***Befestigungsplatte mit Profilhalbschale verschweissen**

Plate de fixation souder avec les demi-coques du profilé

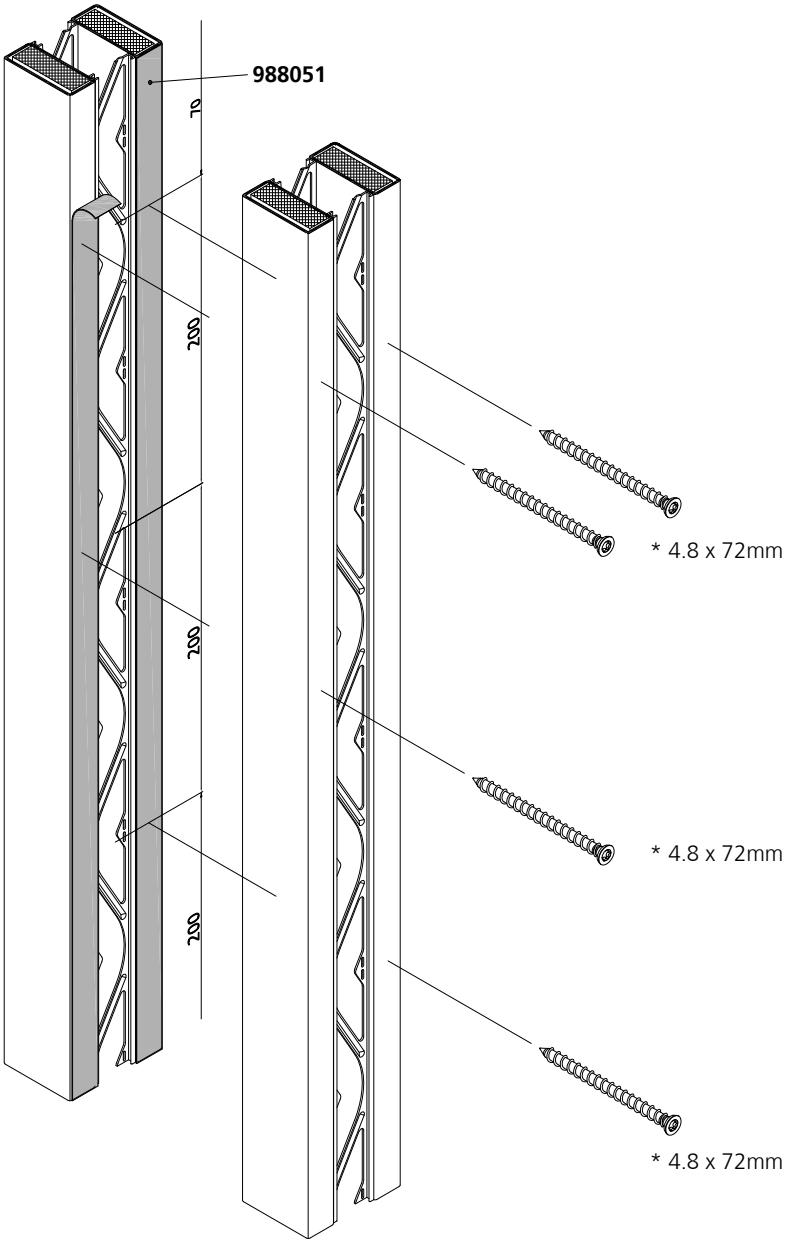
Weld fixing plate with the profile half-shells

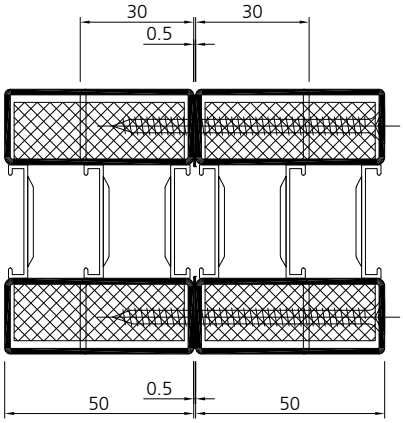


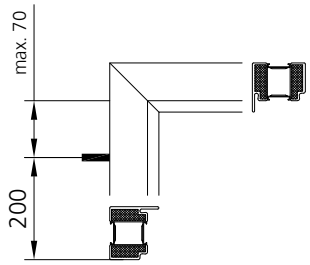
Profilaufdopplung

Doublage du profilé

Profile doubling







*** 100 mm aus der Ecke (2x) und dann alle 200 mm wechselseitig. Die Länge der Schraube ist anzupassen.**

100 mm depuis l'angle (2 fois), puis tous les 200 mm en changeant de côté. La longueur des vis doit être ajustée.

100 mm from the corner (2x) and then every 200 mm on alternating sides. The length of the screw must be adjusted accordingly.

4

Elementstoss

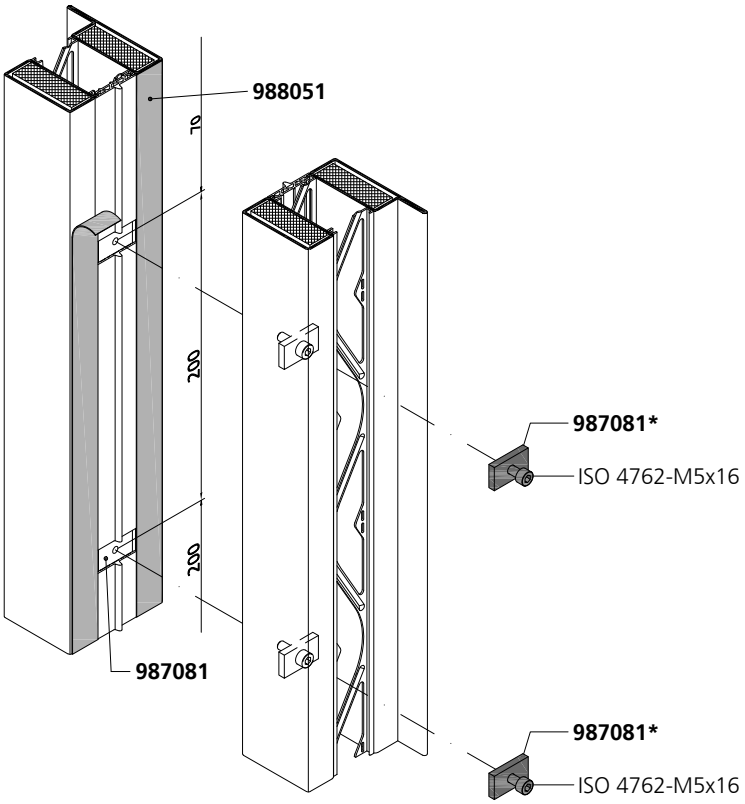
Raccord d'assemblage

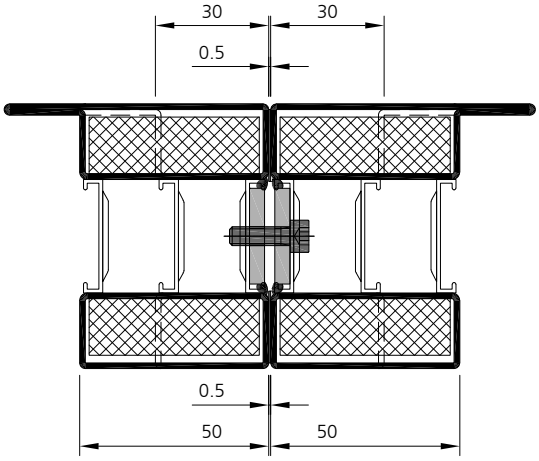
Site joint

Hinweis
Nur als vertikaler Elementstoss geprüft

Remarque
Seulement testé comme raccord d'assemblage vertical

Note
Onlytested as vertical site joint

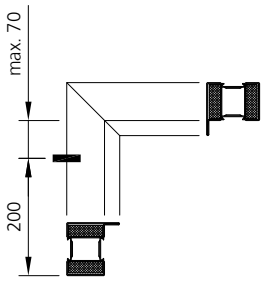


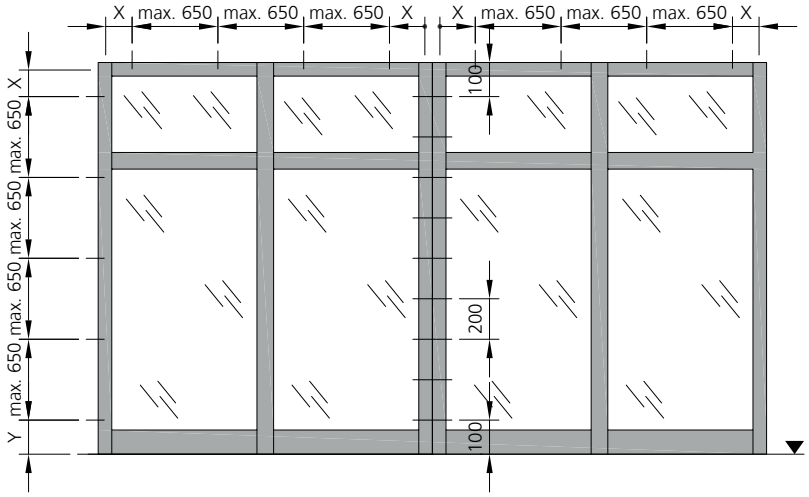


***Befestigungsplatte mit Profilhalbschale verschweissen**

Plate de fixation souder avec les demi-coques du profilé

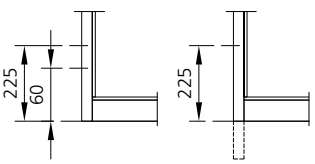
Weld fixing plate with the profile half-shells





Mass X
Dimension X
Dimension X = 75 ±20

Mass Y
Dimension Y
Dimension Y = 225 / 60 ±20

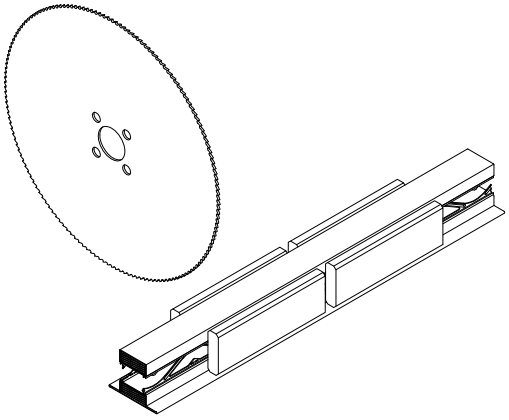


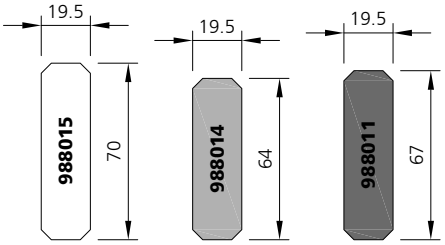
09/23

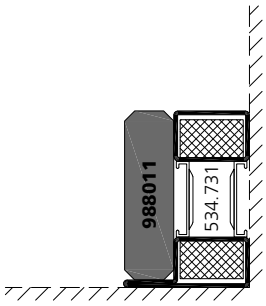
Zuschnitt
Schneidehilfen

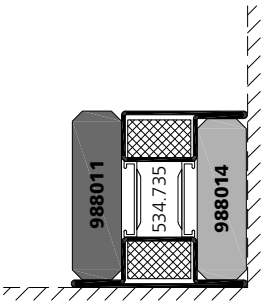
Débitage
Cales de débitage

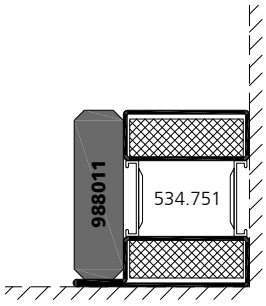
Cutting
Cutting aids

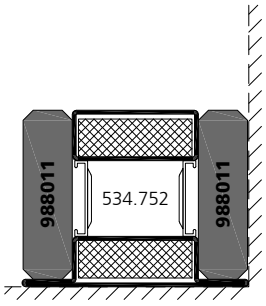


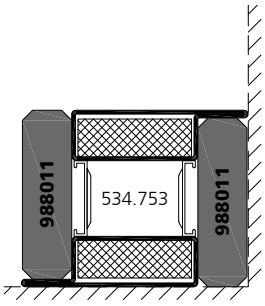


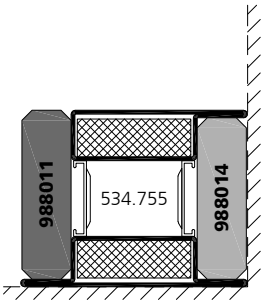


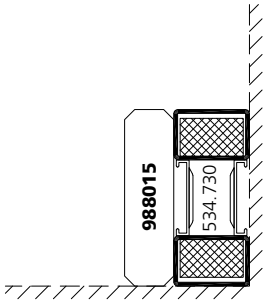


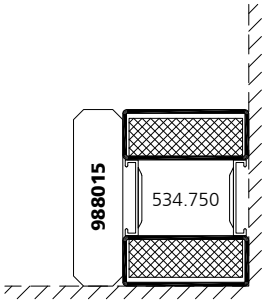










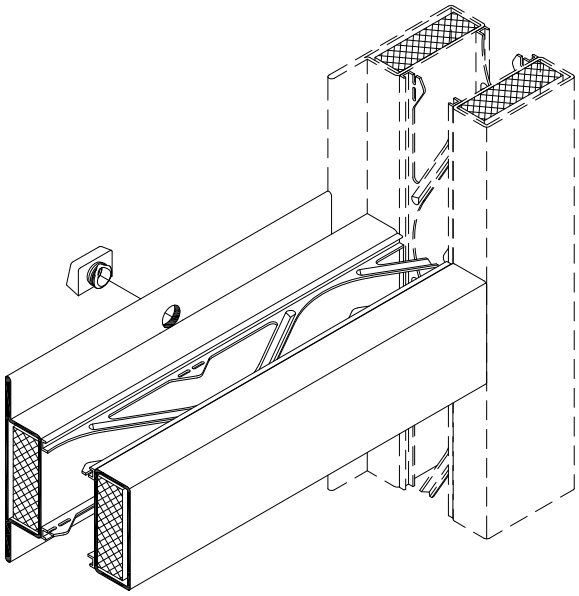


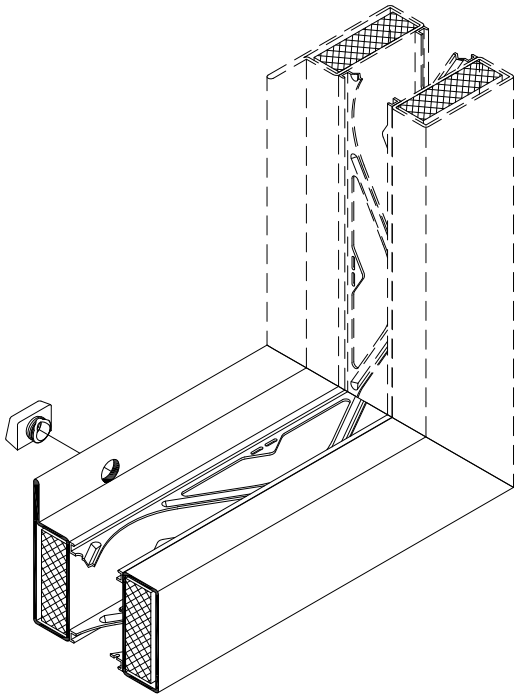
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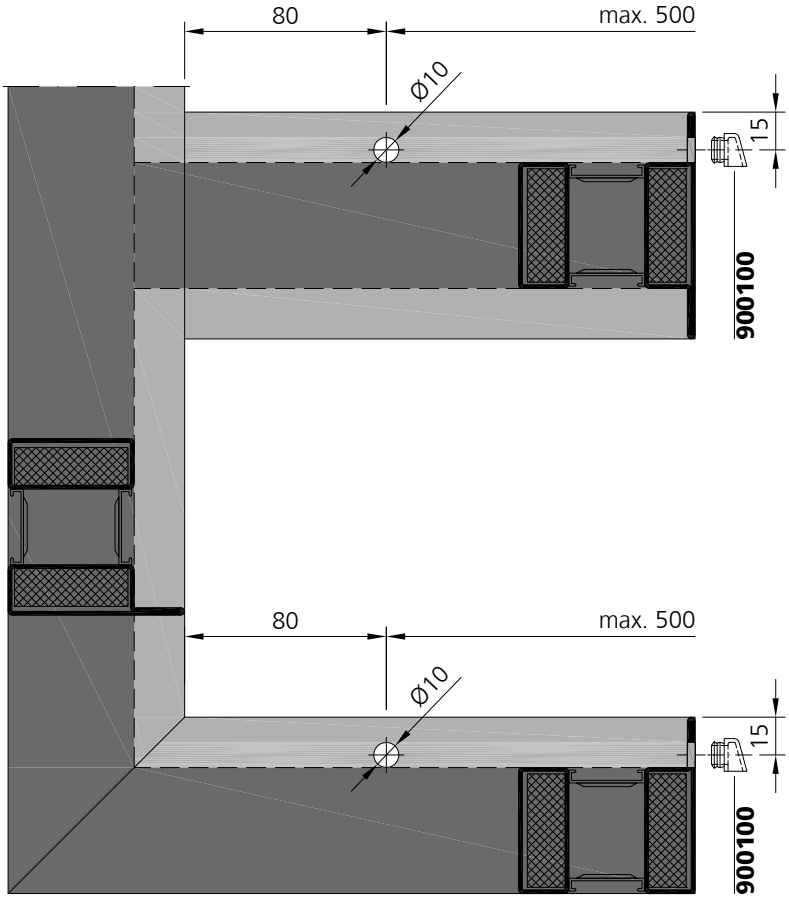
Profilbearbeitung
Einbau direkte Entwässerung
Rahmen / Sprosse

Mise en œuvre des profilés
Montage d'une évacuation d'eau directe
Cadre / traverse

Profile processing
Installation of direct drainage
Frame / transom



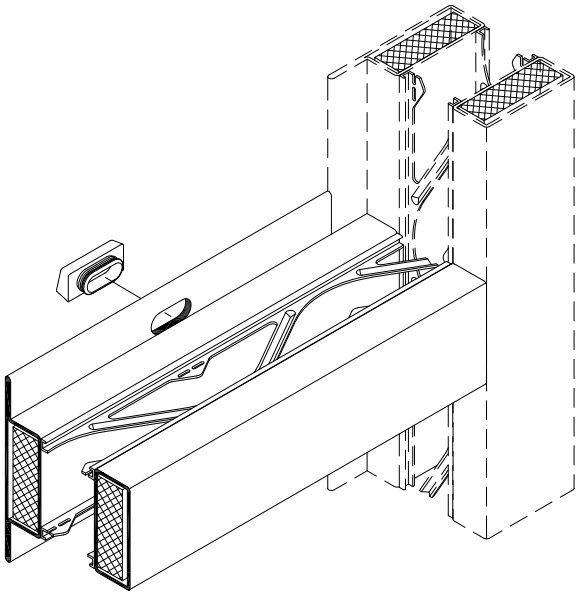


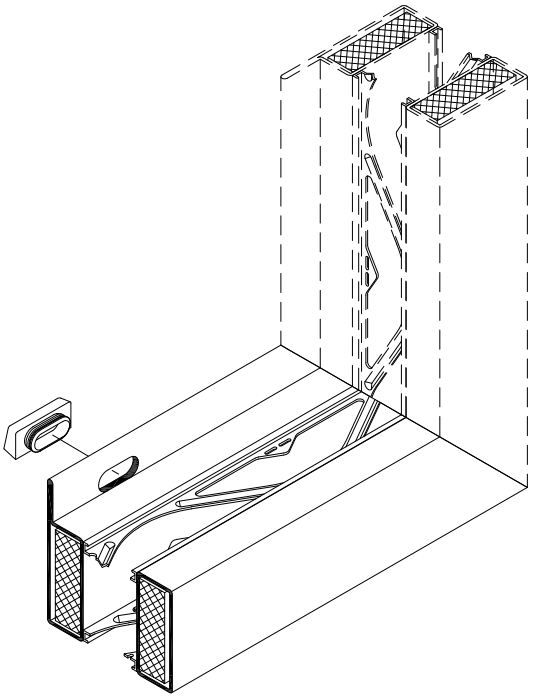


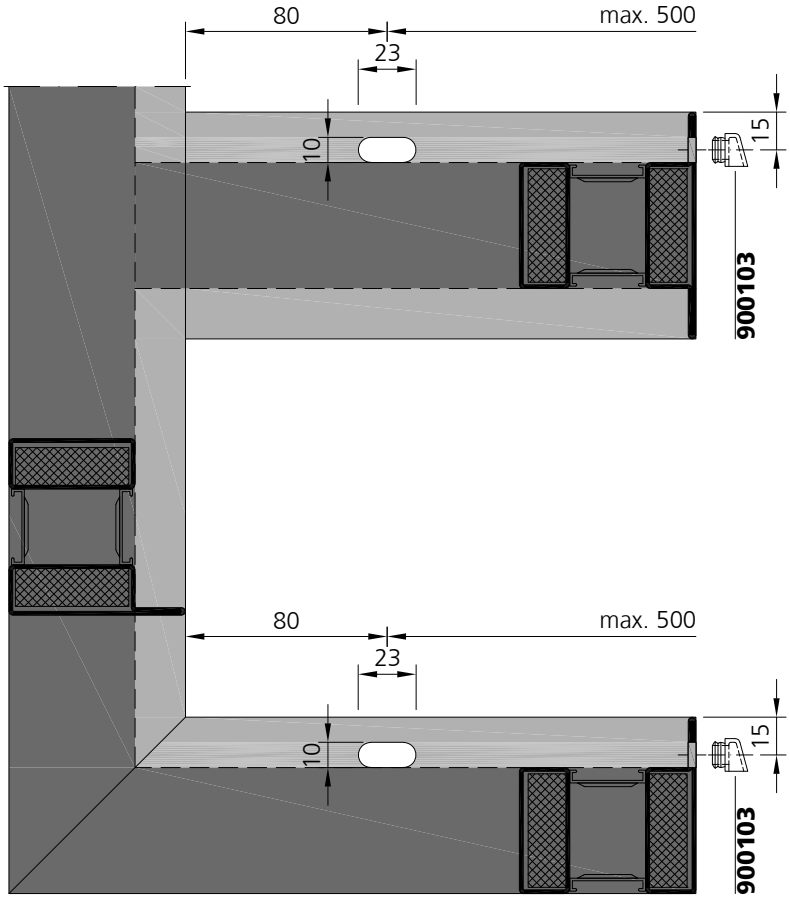
Profilbearbeitung
Einbau direkte Entwässerung
Rahmen / Sprosse

Mise en œuvre des profilés
Montage d'une évacuation d'eau directe
Cadre / traverse

Profile processing
Installation of direct drainage
Frame / transom



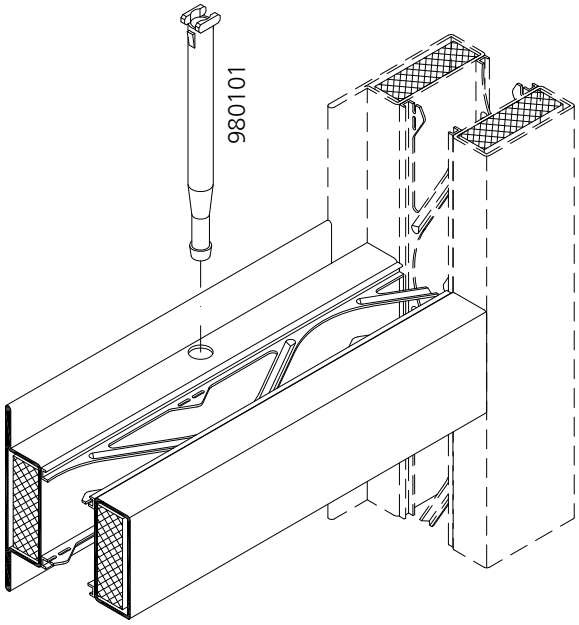


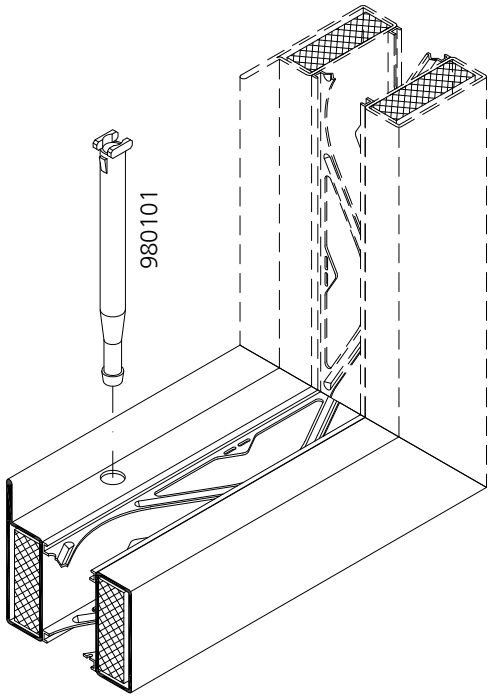


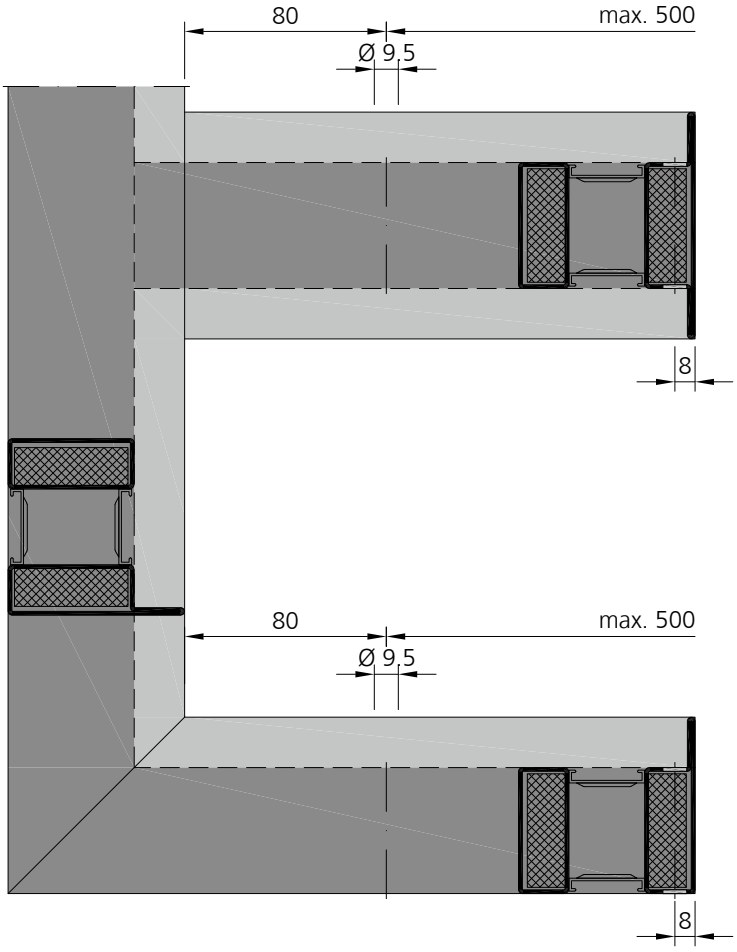
Profilbearbeitung
Einbau indirekte Entwässerung
Rahmen / Sprosse

Mise en œuvre des profilés
Montage d'une évacuation d'eau indirecte
Cadre / traverse

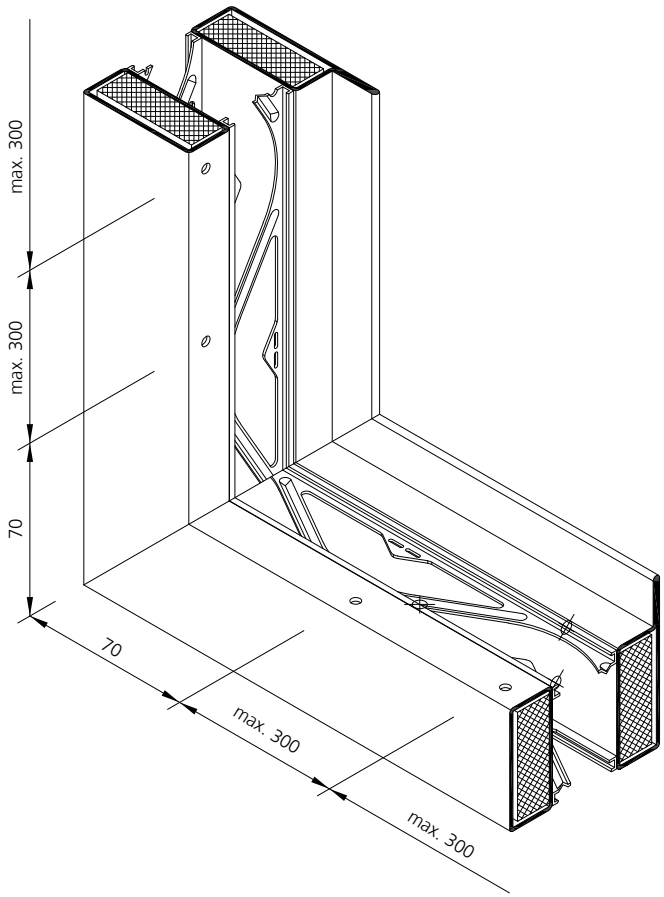
Profile processing
Installation of indirect drainage
Frame / transom

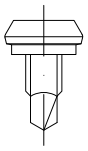






Anordnung Klemmknöpfe | Pose des boutons de serrage | Setting Studs



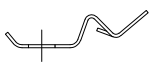


906577 (VE/100 Stk./pcs)
906578 (VE/1000 Stk./pcs)
906579 (VE/Mag. 200 Stk./pcs)

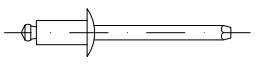
Klemmknöpfe
Bohrschraubensetzgerät Art. Nr. 909203 alternativ Bohrlehre Art. Nr. 909104, Bohrdurchmesser 3.5 mm

Boutons en acier
Appareil à poser les vis art no 909203 alternatif gabarit de perçage art. no. 909104, diamètre de perçage 3.5 mm

Steel studs
Power driver for screws art. no. 909203 alternative drilling template art. no. 909104, drilling diametre 3.5 mm



906421



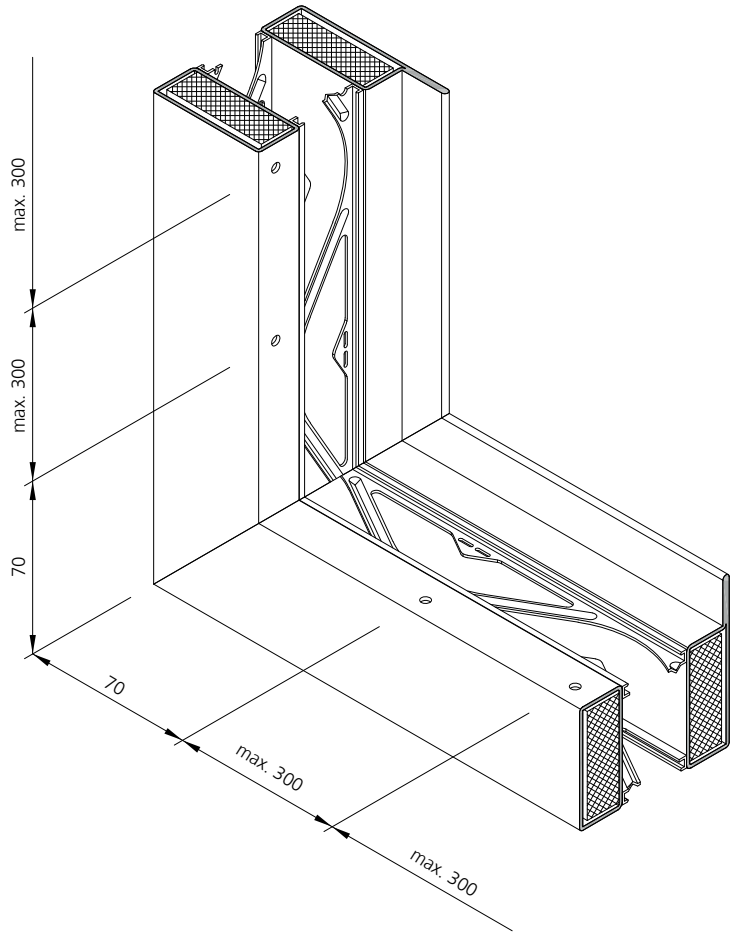
Ø 3.2 x 1.5 - 3 mm

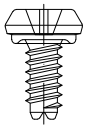
Feder
Bohrlehre Art.Nr. 909105, Bohrdurchmesser 3.3 mm Befestigung mit handelsüblichem Blindniet aus Stahl verzinkt, Ø 3.2 mm- Klemmlänge 1.5 - 3 mm

Ressort
Gabarit de percage art no 909105, diamètre de perçage 3.3 mm fixation avec rivet borgne du commerce en acier galvanisé, Ø 3.2 mm, longueur de serrage 1.5 - 3 mm

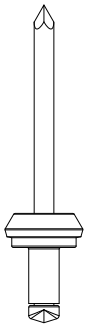
Spring
Drilling template art.no. 909105, drilling diametre 3.3 mm assembly with commercial blind rivets galvanized steel Ø 3.2 mm clamping length 1.5 - 3 mm

Anordnung Klemmknöpfe Pose des boutons de serrage Setting Studs





906583 (VE/100 Stk./pcs)
CrNi 1.4404



906574 (VE/100 Stk./pcs)
CrNi 1.4567
für Profile CrNi 1.4301
pour profilés en acier inox 1.4301
for profiles in stainless steel 1.4301

Bohrung Klemmknopf-Schraube und Klemmknopf-Niet
Bohrschraubensetzgerät Art.Nr. 909203 und Set Spiralbohrer Art.Nr. 909216 alternativ mit Bohrlehre Art.Nr. 909105, Bohrdurchmesser 4.1 mm

Forage des boutons de fixation à vis et des boutons de fixation
Appareil à poser les vis art no 909203 et kit mèche hélicoidal art no 909216, alternative avec gabarit de perçage art no 909105, diamètre percé 4.1 mm

Drilling of stud fastener screw, stud fastener pop rivet
Power driver for screws art.no. 909203 and spiral bit set art.no. 909216, alternatively with drilling template art. no. 909105, drilling diametre 4.1 mm

Schweissempfehlung
Rahmen

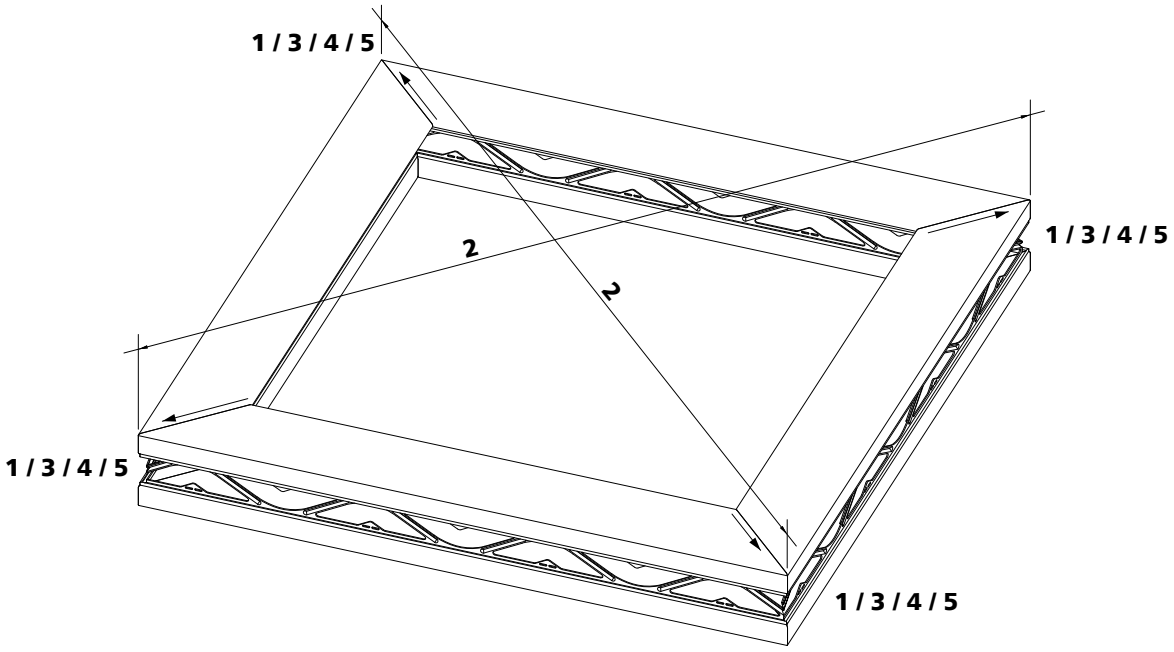
1 Ecken Haftschweissen
2 Diagonalen messen
3 Sichtflächen heften
4 Ecken schweissen
5 Sichtflächen schweissen

Soudage
Cadre

1 Souder les angles par adhérence
2 Mesurer les diagonales
3 Attacher les surfaces visibles
4 Souder les angles
5 Souder les surfaces visibles

Welding procedure
Frame

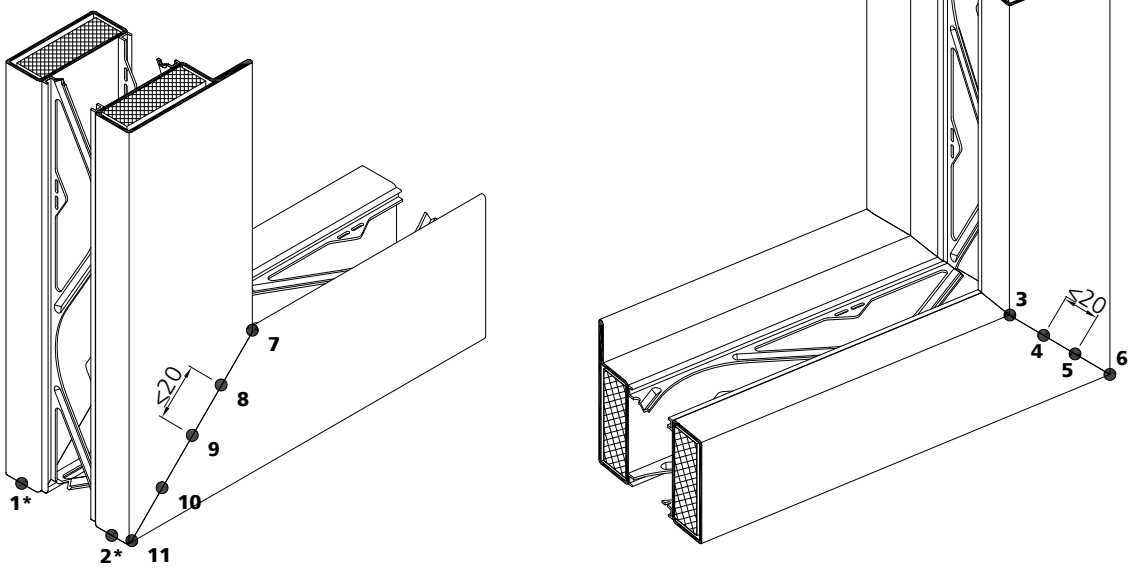
1 Tack weld the corners
2 Measure diagonals
3 Tack visible parts
4 Weld corners
5 Weld visible parts



Schweissempfehlung / Soudage / Welding procedure

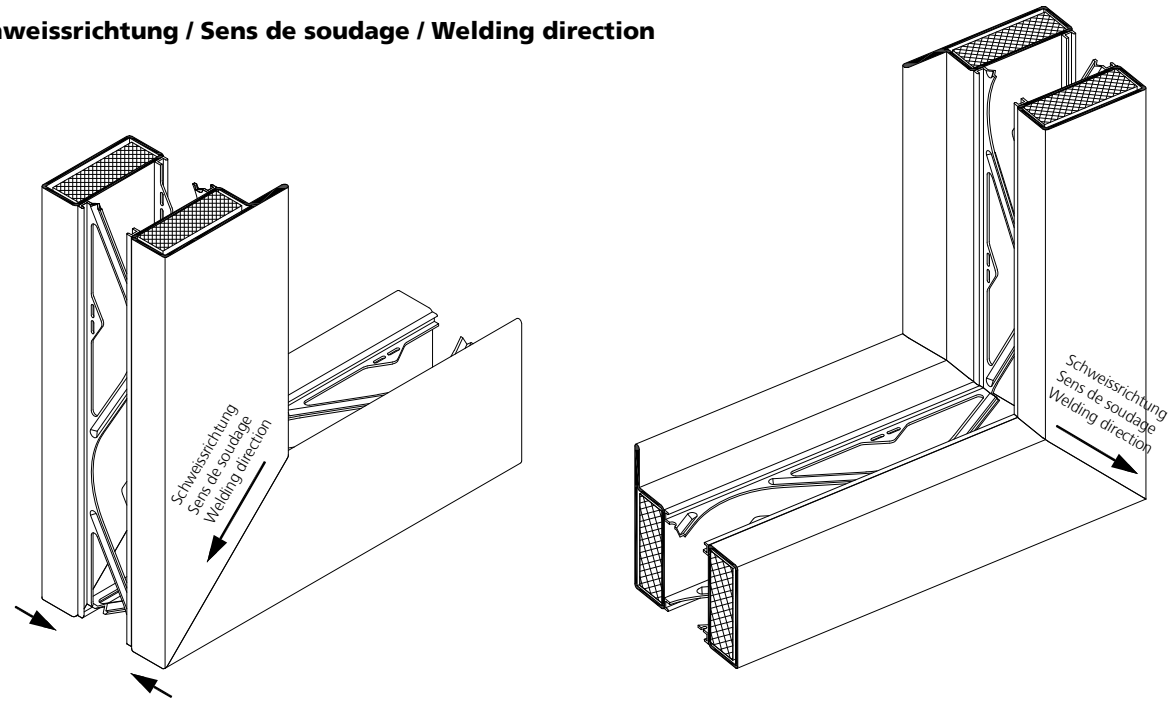
Rahmen / Cadre / Frame

Haftpunkte / Points d'adhérence / Tacking points



* **anschliessend Diagonale kontrollieren**
contrôler ensuite la diagonale
then check the diagonal

Schweissrichtung / Sens de soudage / Welding direction

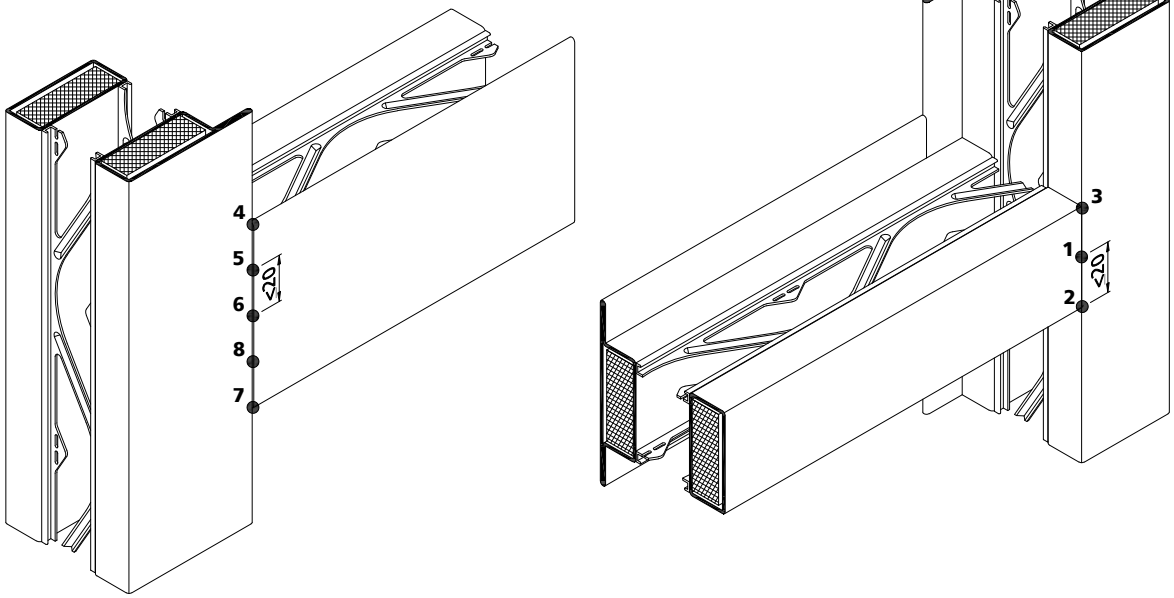


Schweissempfehlung
Sprosse

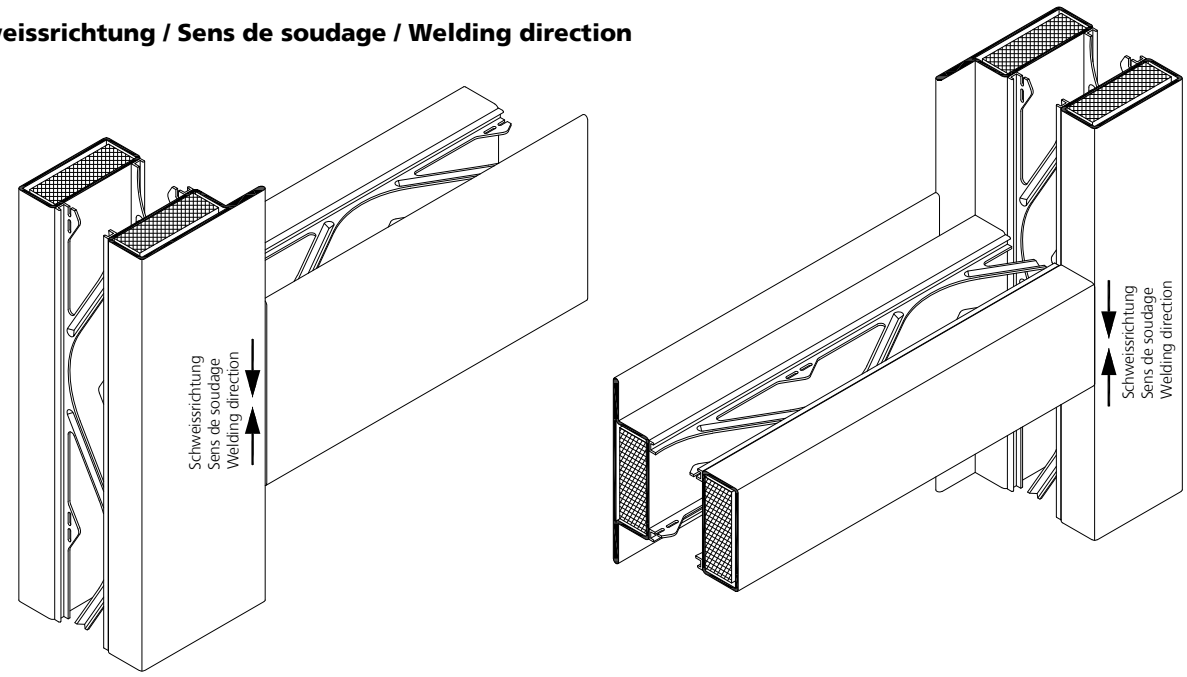
Soudage
Traverse

Welding procedure
Transom

Haftpunkte / Points d'adhérence / Tacking points



Schweissrichtung / Sens de soudage / Welding direction

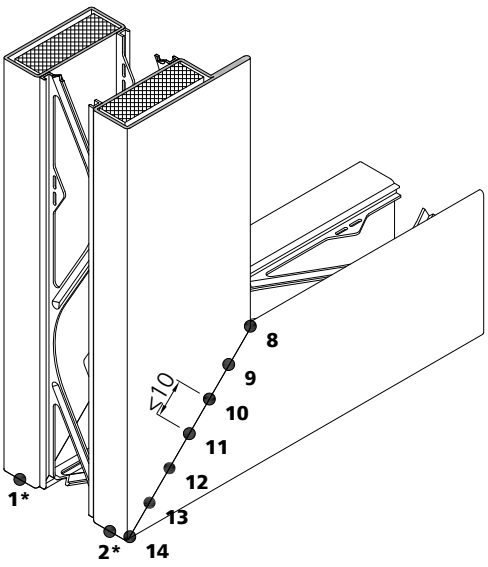


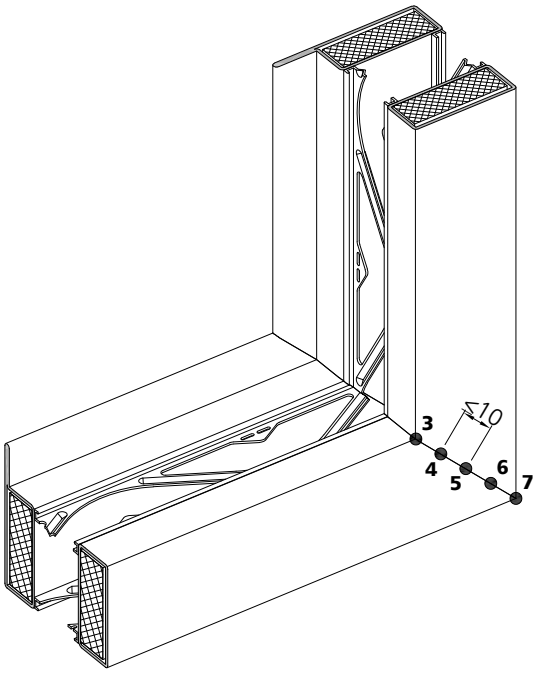
Schweissempfehlung
Rahmen

Soudage
Cadre

Welding procedure
Frame

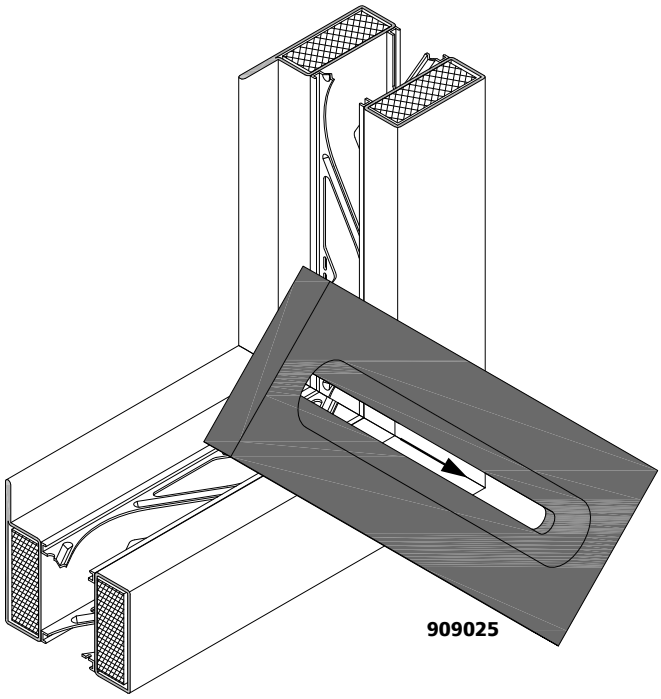
Haftpunkte / Points d'adhérence / Tacking points

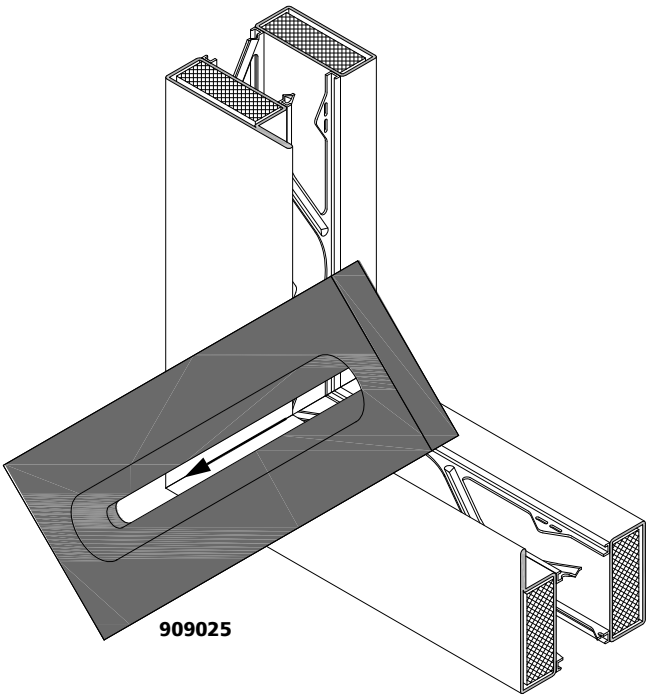




*** anschliessend Diagonale kontrollieren**
contrôler ensuite la diagonale
then check the diagonal

Schweissrichtung / Sens de soudage / Welding direction



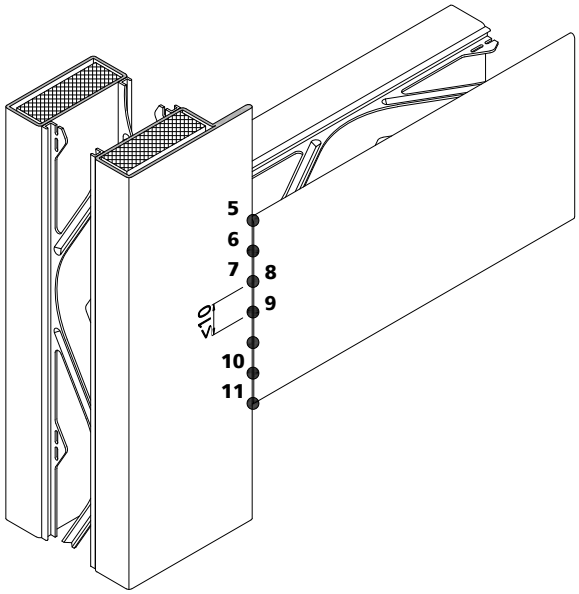


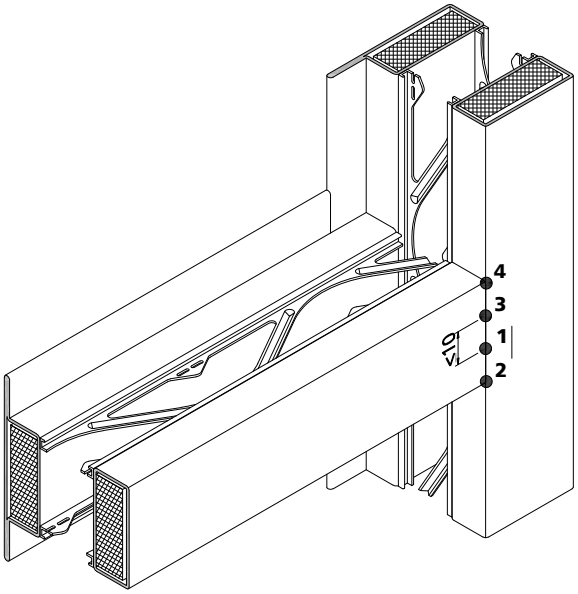
Schweissempfehlung
Sprosse

Soudage
Traverse

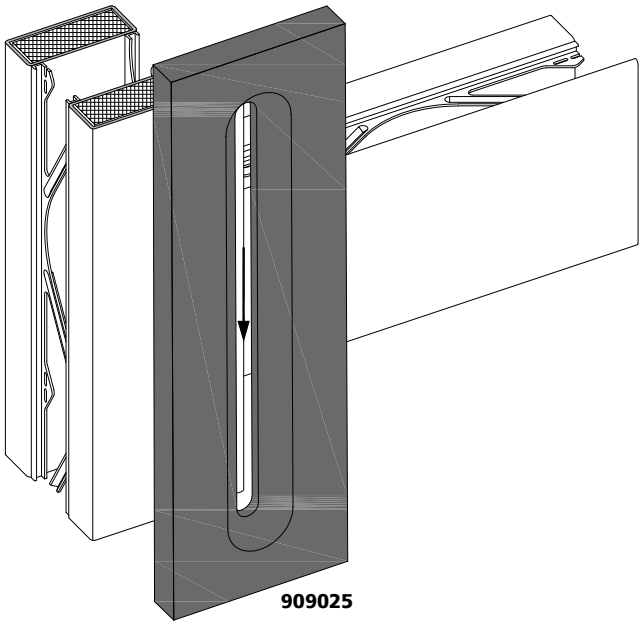
Welding procedure
Transom

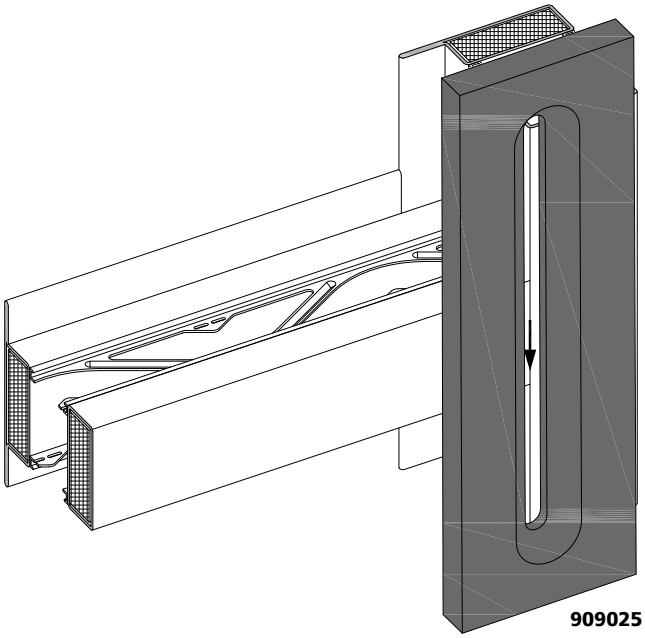
Haftpunkte / Points d'adhérence / Tacking points





Schweissrichtung / Sens de soudage / Welding direction





Platz für Notizen

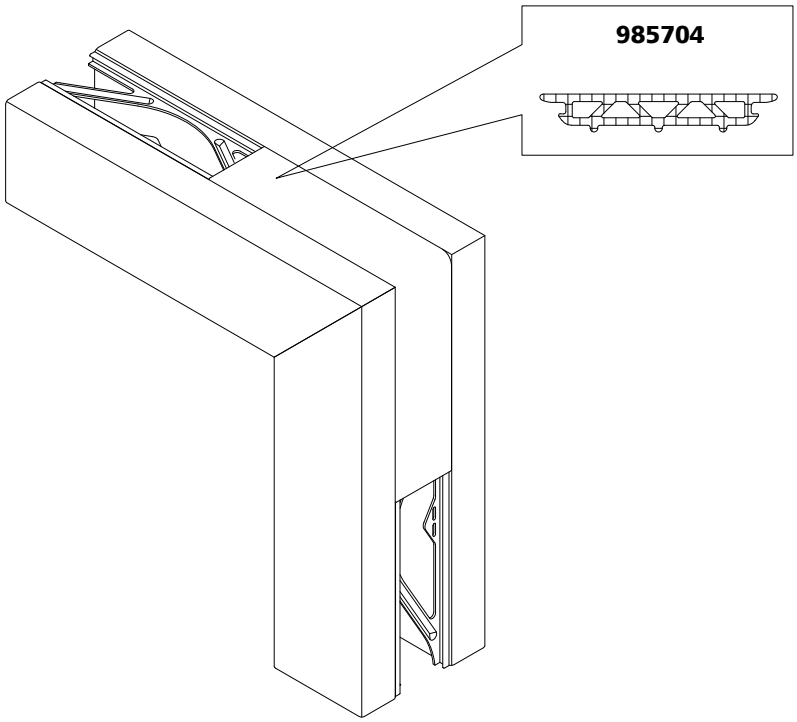
Espace pour les notes

Space for memos

Dichtungseinbau
Falzabdeckung Rahmen

Montage du joint
Recouvrement de feuillure du cadre

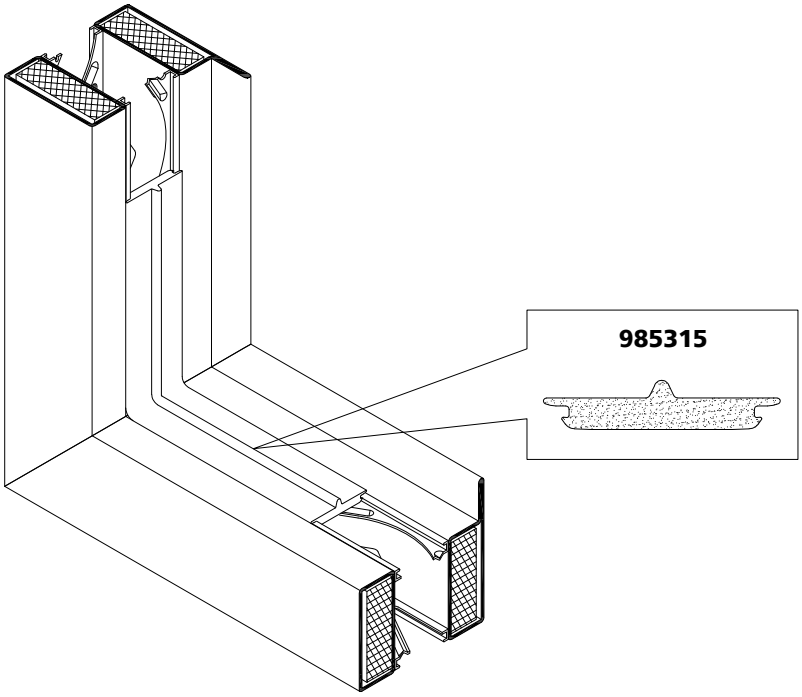
Installation of seal
Rebate cover frame



Die Dichtung **985704** wird um die Aussenecke herum durchgehend geführt.

Poser en continu le recouvrement de feuillure **985704** autour des angles exterieurs.

The seal **985704** is placed continiously around the outer corner.



Die Dichtung **985315** wird in der Innenecke durchgehend geführt.

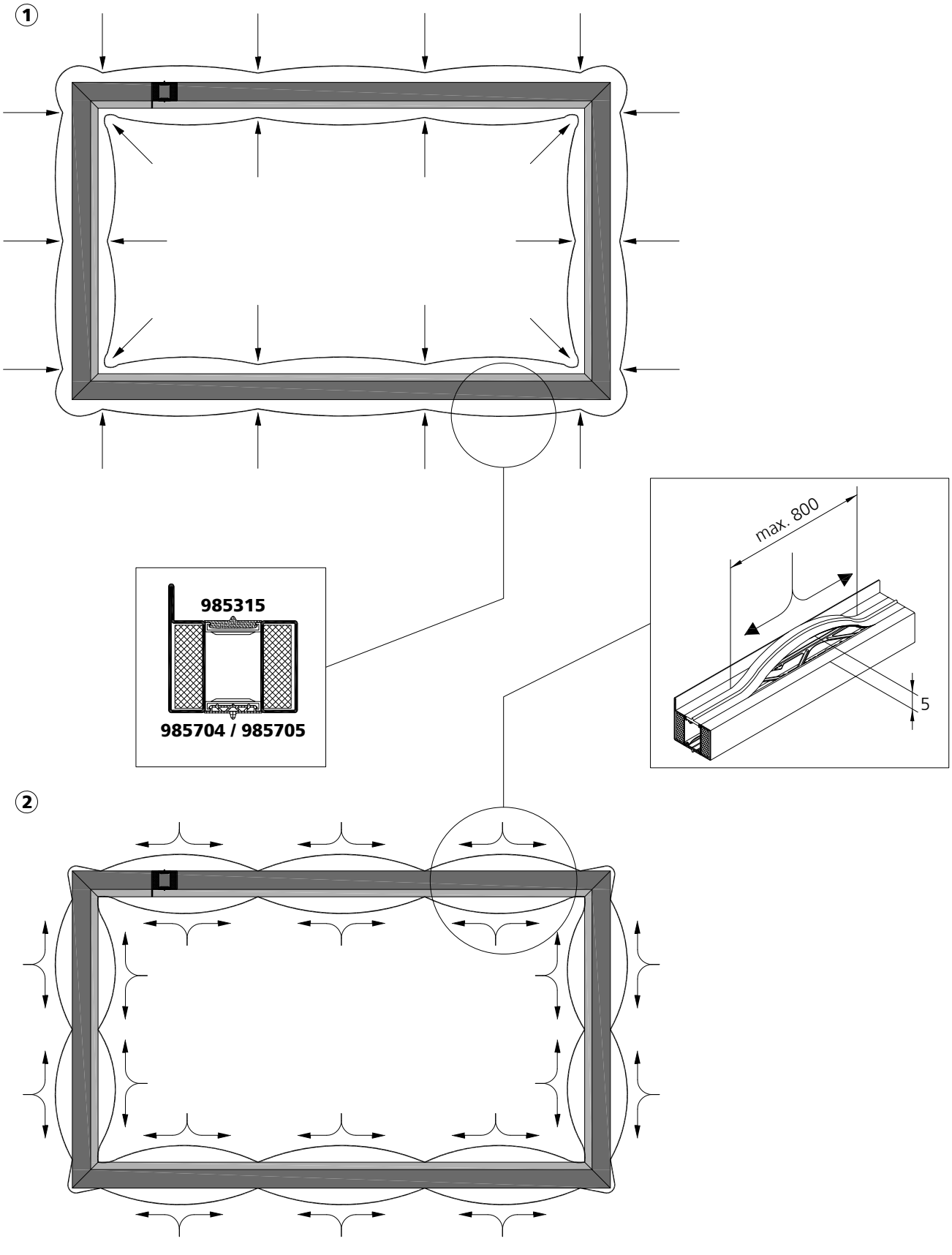
Poser en continu le recouvrement de feuillure **985315** dans les angles interieurs.

The seal **985315** is placed continiously around the inner corner.

Dichtungseinbau
Falzabdeckung Rahmen

Montage du joint
Recouvrement de feuillure du cadre

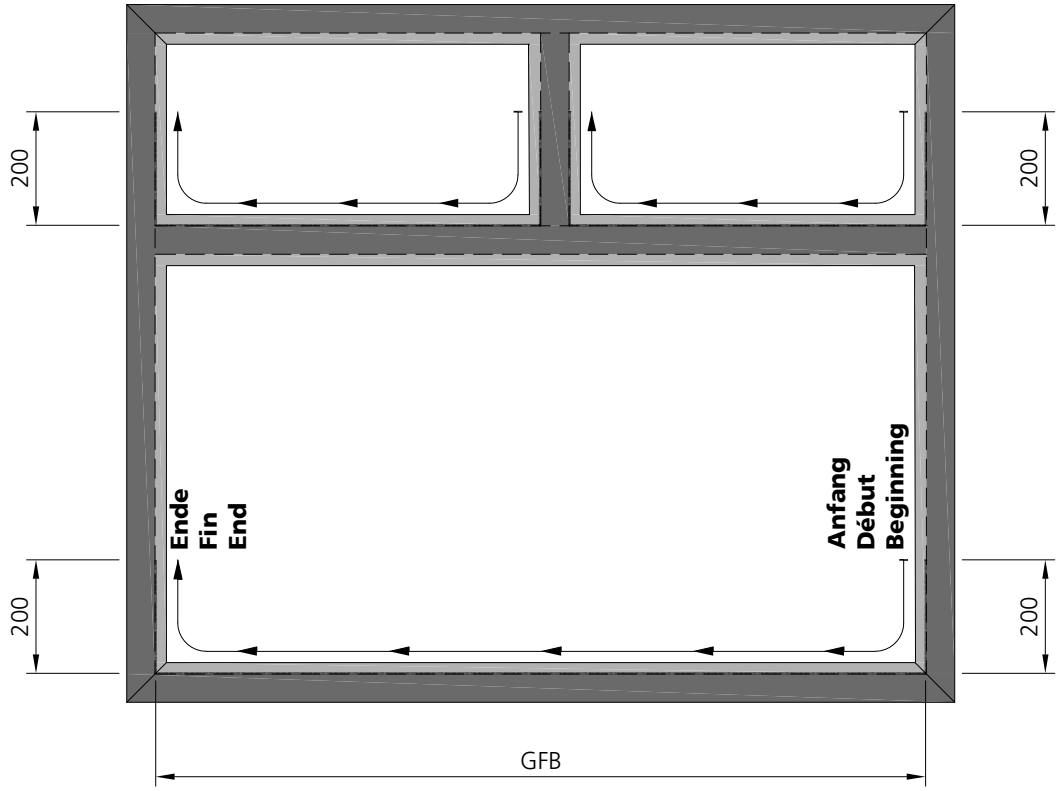
Installation of seal
Rebate cover frame

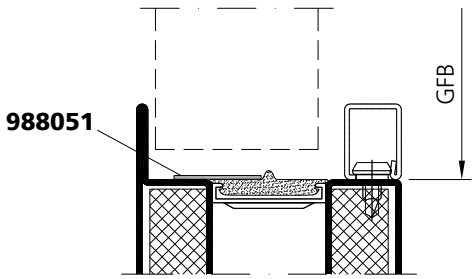


Dichtungseinbau
Falzabdeckung Festfeld

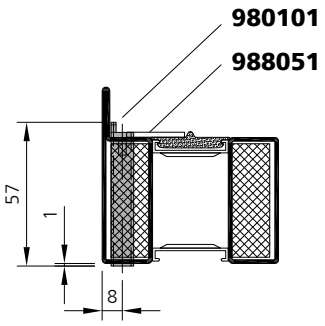
Montage du joint
Etanchement de feuillure du vitrage fixe

Installation of seal
Rebate seal on fixed glazing



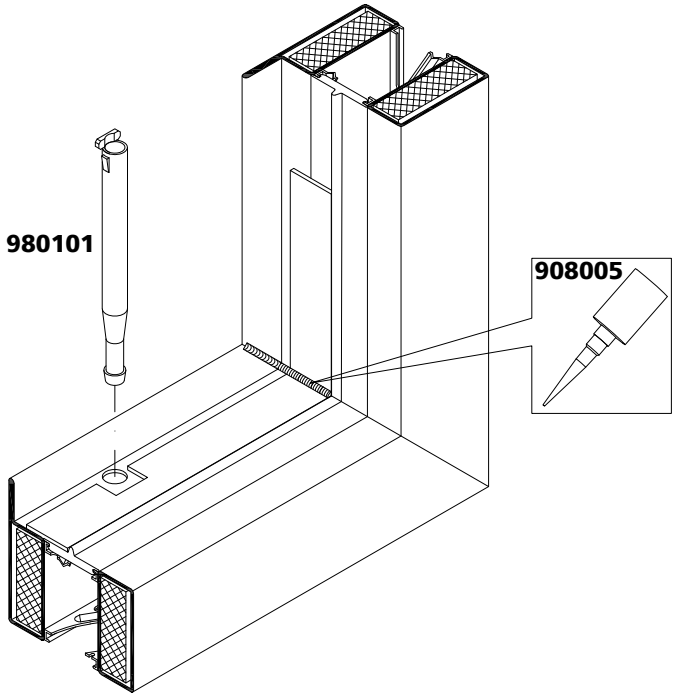


Dichtungseinbau
Einbau indirekte Entwässerung / Belüftung
Rahmen



Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit **Art. Nr. 908005** abgeklebt.

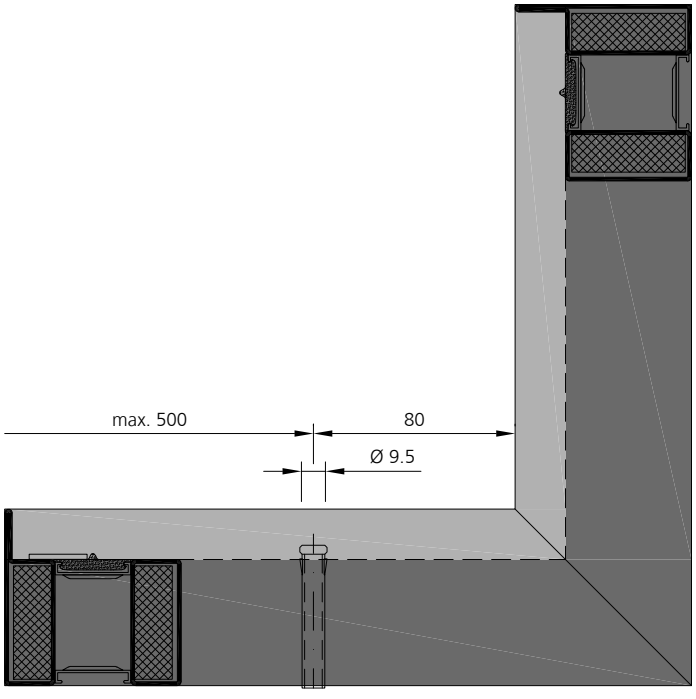
Montage du joint
Montage d'une évacuation/évacuation d'eau indirecte
Cadre



Coller le ruban de butyle **art. no. 988051** dans les angles avec le produit **art. no. 908005.**

Installation of seal
Installation of indirect drainage / ventilation
Frame

The butyl tape **art. no. 988051** is bond additionally in the corners with **art. no. 908005.**



Das indirekte Entspannungsröhrchen **Art. Nr. 980101** wird durch das Rahmenprofil gesteckt und auf der Austrittseite mit 1 mm Überstand abgeschnitten.

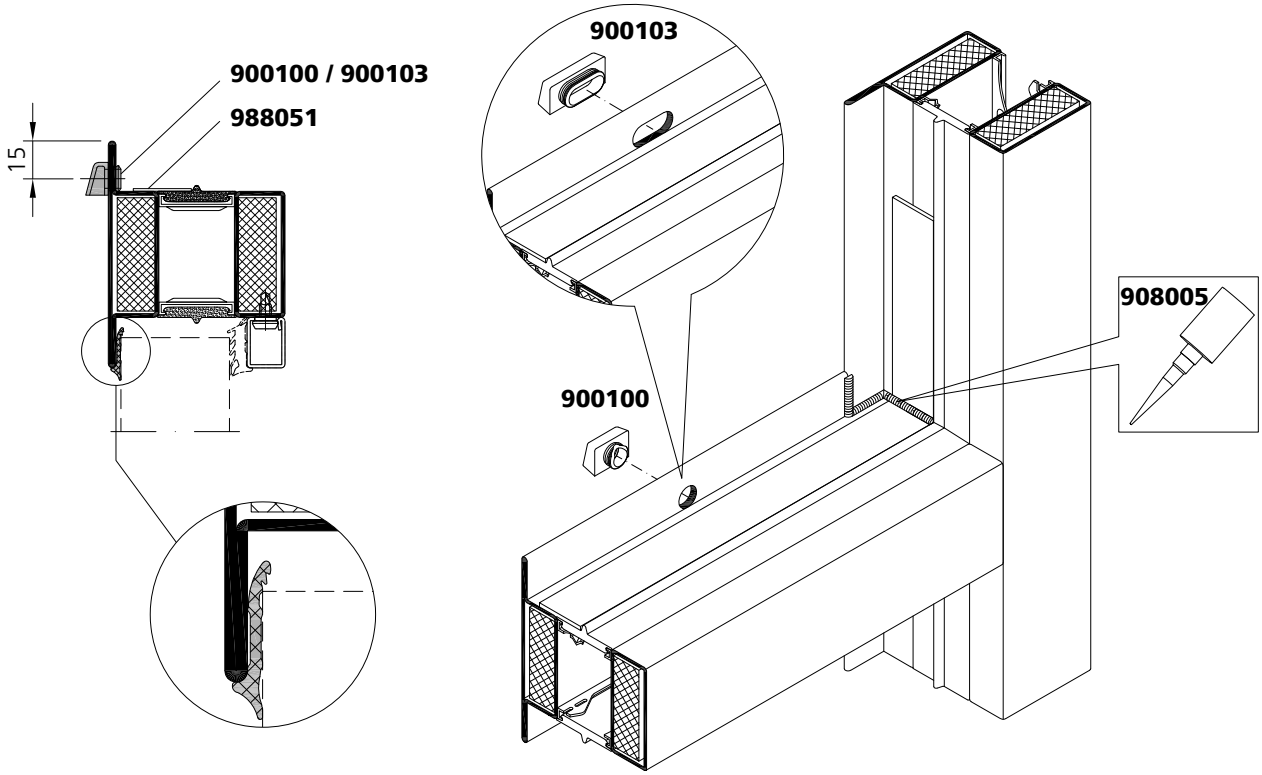
Faire passer la tubulure de décompression indirecte **art. no. 980101** à travers le profilé de cadre et la couper sur le côté sortie avec une saillie de 1 mm.

The indirect decompression pipe **art. no. 980101** is plugged in through the frame profile and cut off at the exit side, leaving an overhang of 1mm.

Dichtungseinbau
Einbau direkte Entwässerung / Belüftung
Sprosse

Montage du joint
Montage d'une ventilation/évacuation d'eau directe
Traverse

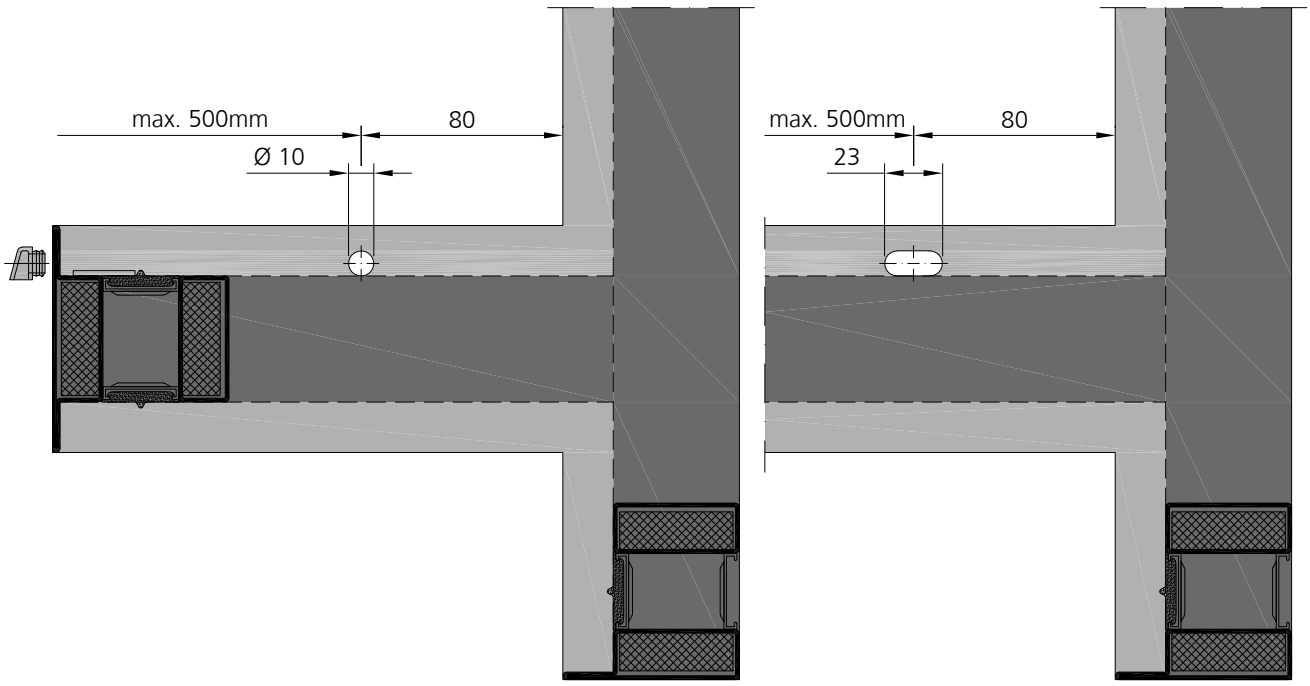
Installation of seal
Installation of direct drainage/ventilation
Transom



Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit **Art. Nr. 908005** abgeklebt.

Coller le ruban de butyle **art. no. 988051** dans les angles avec le produit **art. no. 908005.**

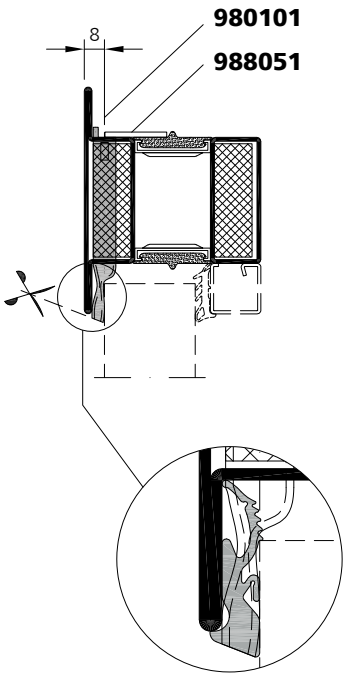
The butyl tape **art. no. 988051** is bond additionally in the corners with **art. no. 908005.**

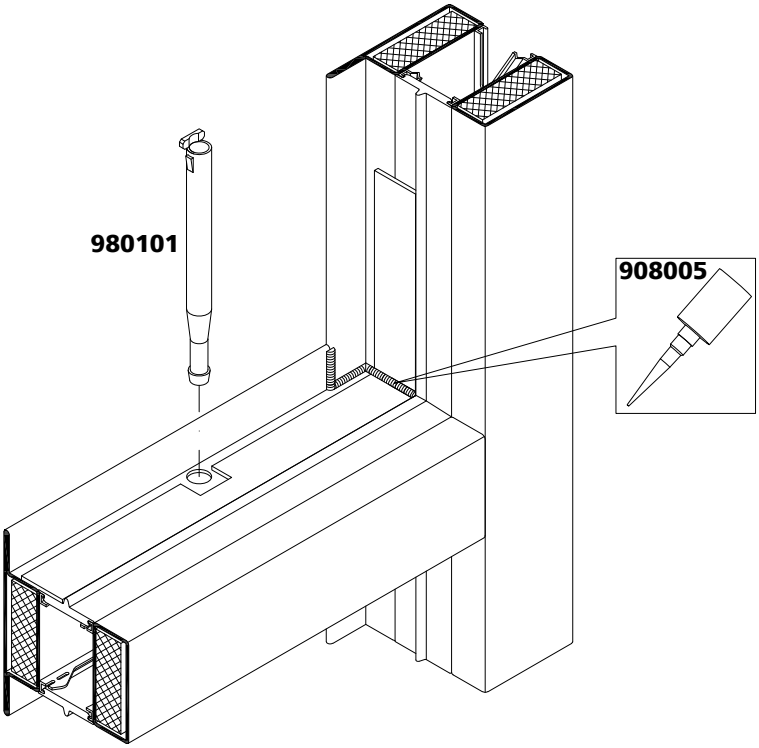


Dichtungseinbau
Einbau indirekte Entwässerung / Belüftung
Sprosse

Montage du joint
Montage d'une évacuation/évacuation d'eau indirecte
Traverse

Installation of seal
Installation of indirect drainage / ventilation
Transom

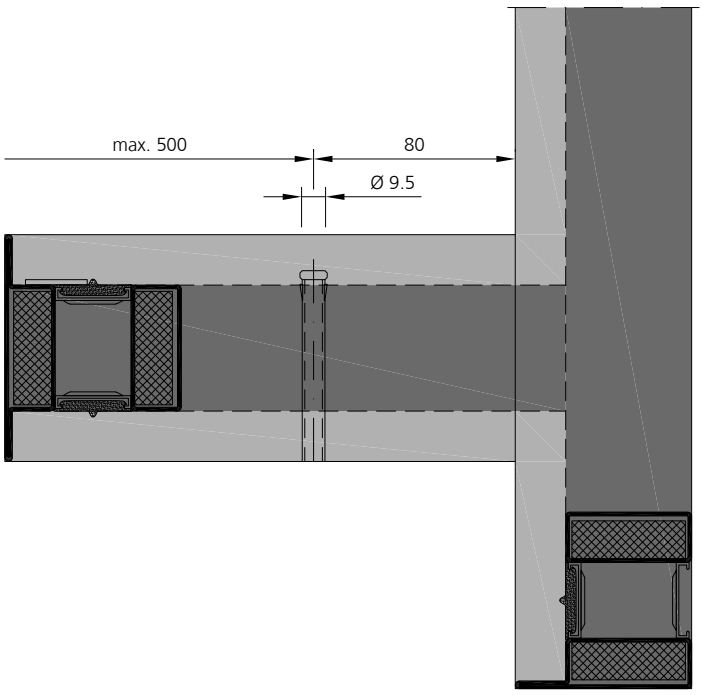




Das Butylband **Art. Nr. 988051** wird in den Ecken zusätzlich mit **Art. Nr. 908005** abgeklebt.

Coller le ruban de butyle **art. no. 988051** dans les angles avec le produit **art. no. 908005.**

The butyl tape **art. no. 988051** is bond additionally in the corners with **art. no. 908005.**



Das indirekte Entspannungsröhrchen **Art. Nr. 980101** wird durch das Rahmenprofil gesteckt und auf der Austrittseite bündig abgeschnitten.

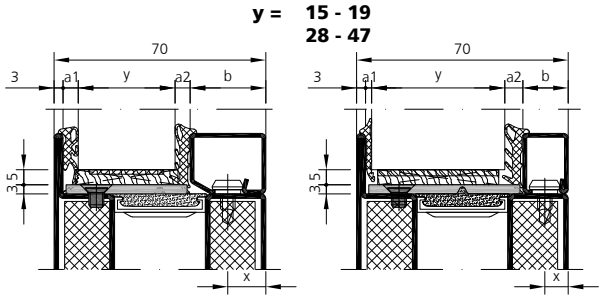
Faire passer la tubulure de décompression indirecte **art. no. 980101** a travers le profile de cadre et la couper sur le cote sortie en affleurement.

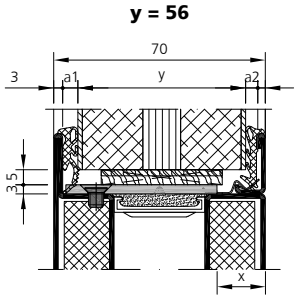
The indirect decompression pipe **art. no. 980101** is plugged in through the frame profile and cut off flush at the exit side.

Trockenverglasung
Bautiefe 70

Vitrage à sec
Profondeur 70

Dry glazing
Depth 70





Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Aussendichtung Joint extérieur outer weaterstripping 905712 (a1 = 2 [mm]) 985702 (a1 = 5 [mm])		Innendichtung Joint intérieur inner weatherstripping 905784 (a2 = 3-4 [mm]) 905785 (a2 = 5-6 [mm]) 905786 (a2 = 7-8 [mm]) y [mm]						Bohrmass x Trusquinage x Hole distance x
56	b = 2.5, 20	**901245**	-	5 [mm]	**56**	**-**	**-**	**-**	**-**	**-**	16 [mm]
			2 [mm]	-	**-**	**-**	**-**	**56**	**-**	**-**	
39 - 47	b = 15, 20	**901226** 901526	-	5 [mm]	**44**	**43**	**42**	**41**	**40**	**39**	8 [mm]
			2 [mm]	-	**47**	**46**	**45**	**44**	**43**	**42**	
34 - 42	b = 20, b = 20, 20	**901227** **901204** 901527	-	5 [mm]	**39**	**38**	**37**	**36**	**35**	**34**	13 [mm]
			2 [mm]	-	**42**	**41**	**40**	**39**	**38**	**37**	
29 - 37	b = 25, b = 25, 20	**901228** **901205** 901528	-	5 [mm]	**34**	**33**	**32**	**31**	**30**	**29**	13 [mm]
			2 [mm]	-	**37**	**36**	**35**	**34**	**33**	**32**	
28 - 32	b = 30, b = 30, 20	**901246** **901206** 901526	-	5 [mm]	**29**	**28**	**-**	**-**	**-**	**-**	13 [mm]
			2 [mm]	-	**32**	**31**	**30**	**29**	**28**	**-**	
19	b = 35, 20	**901247** 901547	-	5 [mm]	**-**	**-**	**-**	**-**	**-**	**19**	13 [mm]
			2 [mm]	-	**-**	**-**	**-**	**-**	**-**	**-**	
15 - 19	b = 40, 20	**901248** 901548	-	5 [mm]	**19**	**18**	**17**	**16**	**15**	**-**	13 [mm]
			2 [mm]	-	**-**	**-**	**-**	**19**	**18**	**17**	
15 - 17	b = 45, 20	**901249** 901549	-	5 [mm]	**-**	**-**	**-**	**-**	**-**	**-**	13 [mm]
			2 [mm]	-	**17**	**16**	**15**	**-**	**-**	**-**	

Diese theoretischen Verglasungstabellen gelten nur fur flachenbundig gesetzte Glashalteleisten (Bohrmass x).
Bei versetzter Anordnung der Glashalteleisten sowie Toleranzen bei den Fullelementen sind Vorversuche durchzufuhren.

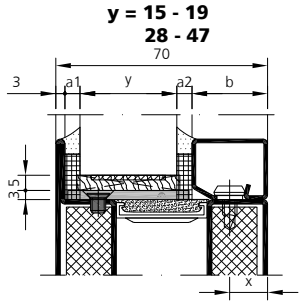
Ces tableaux theoriques de vitrage sont seulement valables pour des parcloses affleurees (trusquinage x).
Lors d'une disposition decalee des parcloses, ainsi que pour les tolerances concernant les elements de remplissage, des essais prealables doivent etre effectues.

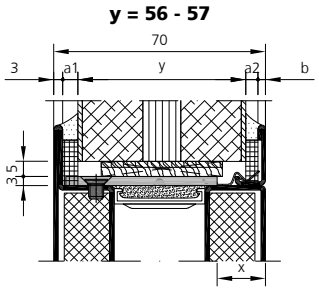
These theoretical glazing tables apply only to flush-fitting glazing beads (distance between holes x).
Where glazing beads are placed alternately and where there are tolerances in the infill element, a trial run is necessary before.

Nassverglasung
Bautiefe 70

Vitrage au silicone
Profondeur 70

Wet glazing
Depth 70



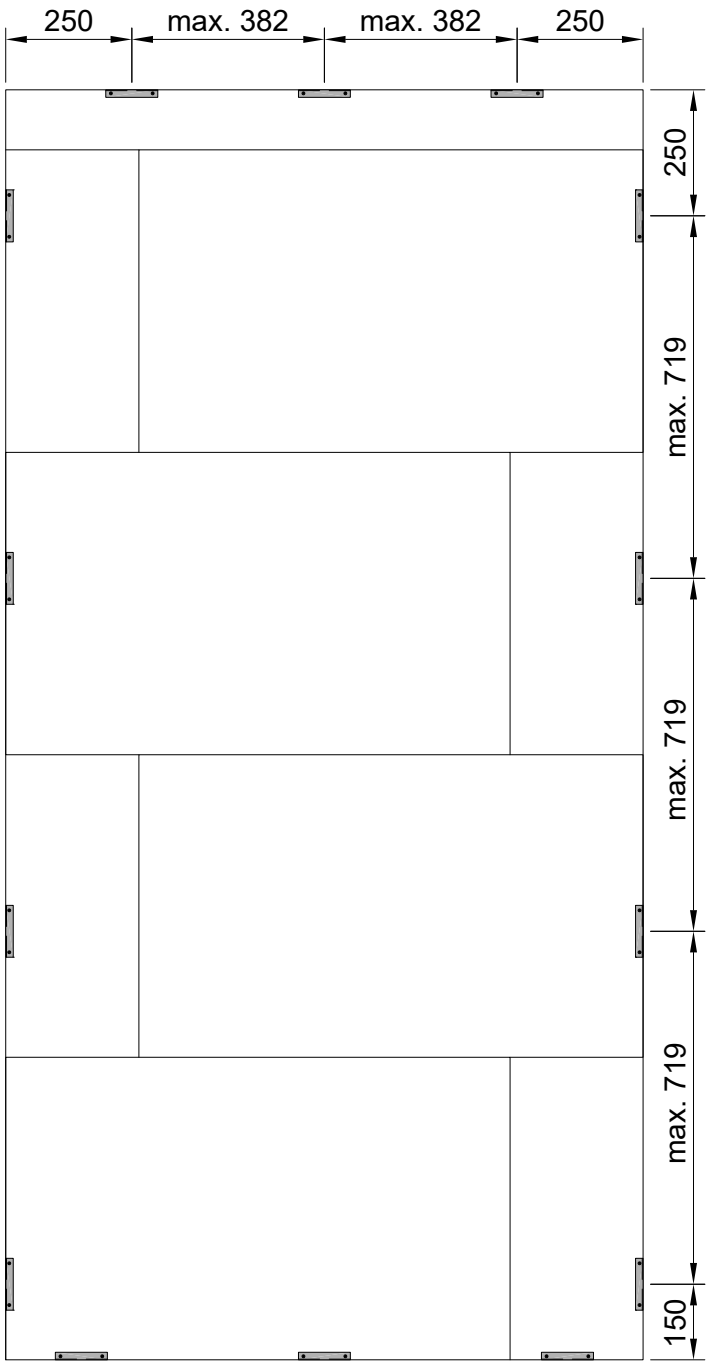


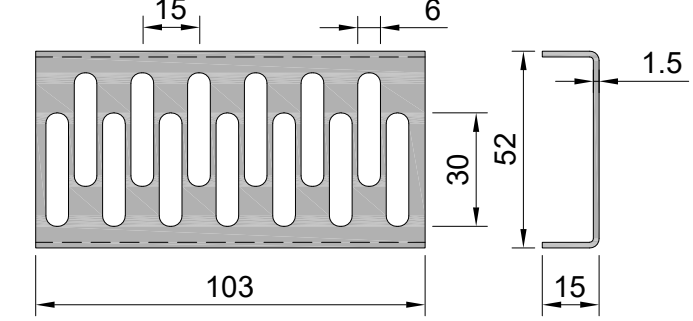
Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel b [mm] Stahl / Acier / Steel: Nr. Edelstahl /Acier Inox / Stainless steel: Nr.	Aussendichtung Joint extérieur outer weatherstr.	Innendichtung Joint intérieur inner weatherstripping 948003 948007 a2 = 3mm 948004 948008 a2 = 4mm 948005 948009 a2 = 5mm 948006 948010 a2 = 6mm y [mm]				Bohrmass x Trusquinage x Hole distance x
46 - 40	2.5 / 20 — 901245	a1 = 3mm	-	-	-	-	16 [mm]
		a1 = 4mm	-	-	-	-	
		a1 = 5mm	-	-	-	**57**	
		a1 = 6mm	-	-	**57**	**56**	
46 - 40	15 / 20 — 901226 901526	a1 = 3mm	**46**	**45**	**44**	**43**	10 [mm]
		a1 = 4mm	**45**	**44**	**43**	**42**	
		a1 = 5mm	**44**	**43**	**42**	**41**	
		a1 = 6mm	**43**	**42**	**41**	**40**	
41 - 35	20 / 20 / 20 — 901227 901204 901527	a1 = 3mm	**41**	**40**	**39**	**38**	13 [mm] 10 [mm]
		a1 = 4mm	**40**	**39**	**38**	**37**	
		a1 = 5mm	**39**	**38**	**37**	**36**	
		a1 = 6mm	**38**	**37**	**36**	**35**	
36 - 30	25 / 25 / 20 — 901228 901205 901528	a1 = 3mm	**36**	**35**	**34**	**33**	13 [mm] 10 [mm]
		a1 = 4mm	**35**	**34**	**33**	**32**	
		a1 = 5mm	**34**	**33**	**32**	**31**	
		a1 = 6mm	**33**	**32**	**31**	**30**	
31 - 28	30 / 30 / 20 — 901246 901206 901546	a1 = 3mm	**31**	**30**	**29**	**28**	13 [mm] 10 [mm]
		a1 = 4mm	**30**	**29**	**28**	-	
		a1 = 5mm	**29**	**28**	-	-	
		a1 = 6mm	**28**	-	-	-	
19	35 / 20 — 901247 901547	a1 = 3mm	-	-	-	-	10 [mm]
		a1 = 4mm	-	-	-	-	
		a1 = 5mm	-	-	-	-	
		a1 = 6mm	-	-	-	**19**	
19 - 15	40 / 20 — 901248 901548	a1 = 3mm	-	**19**	**18**	**17**	10 [mm]
		a1 = 4mm	**19**	**18**	**17**	**16**	
		a1 = 5mm	**18**	**17**	**16**	**15**	
		a1 = 6mm	**17**	**16**	**15**	-	

Trockenverglasung
Paneelverbinder

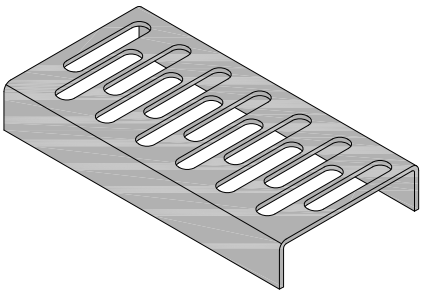
Vitrage à sec
Raccord de panneaux

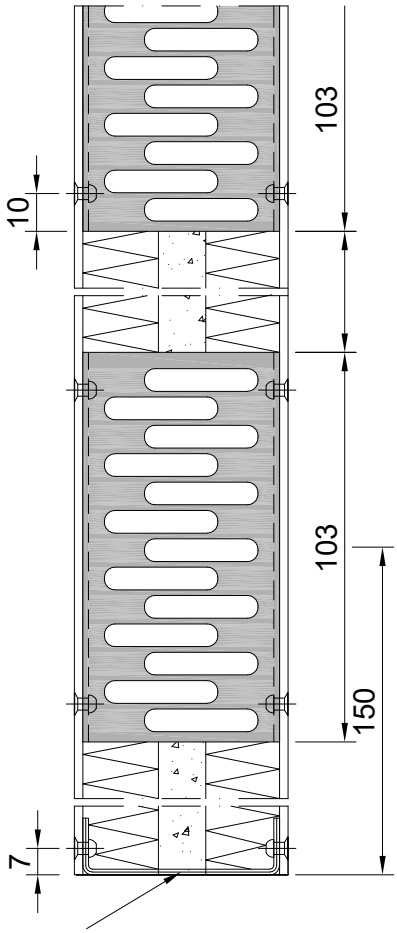
Dry glazing
Panel connector





907008





Im Bereich der U-Bügel 907008 Powerpaneel H2O 1.5 mm ausnehmen
Évider la Powerpaneel H2O sur 1.5 mm dans la zone des étriers 907008
In the area of the U-bracket 907008, remove the power panel H2O by 1.5 mm

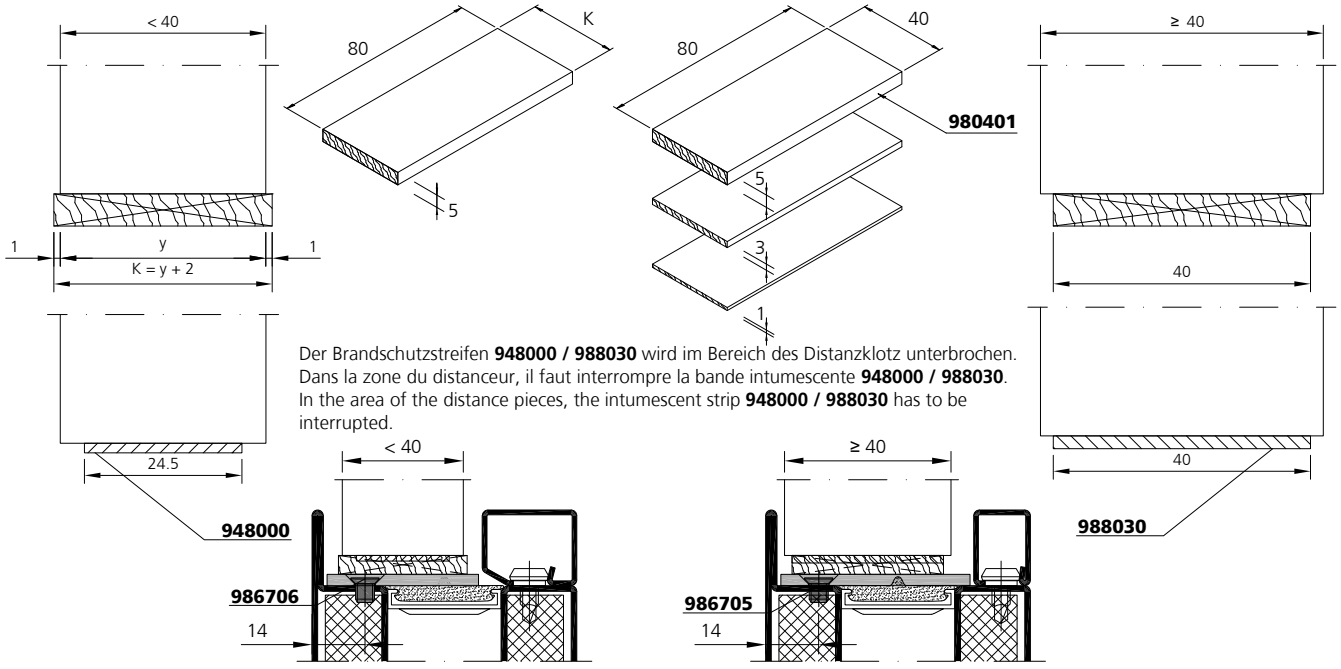
4

09/23

Verglasungsvarianten
Glasfalzbrücke
Bautiefe 70 mm

Variantes de vitrages
Pont feuillure pour verre
Profondeur 70 mm

Alternative glazing versions
Glass rebate bridge
Depth 70 mm



Der Brandschutzstreifen **948000 / 988030** wird im Bereich des Distanzklotz unterbrochen.
Dans la zone du distanceur, il faut interrompre la bande intumescente **948000 / 988030**.
In the area of the distance pieces, the intumescent strip **948000 / 988030** has to be interrupted.

Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Glasfalzbrücke 3 [mm] Pont feuillure en verre 3 [mm] Glass rebate bridge 3 [mm] Edelstahl Acier inox Stainless steel	Art. Nr. art. no. art. no.	Distanzstück 5 [mm] Distanceur 5 [mm] Distance piece 5 [mm] Hartholz Bois dur Hardwood	
39 - 40	b = 15, 20	**901226** 901526	40	**986706**	K	Eigenbeschaffung Propre approvisionnement In-house procurement
34 - 40	b = 20, b = 20, 20	**901227** **901204** 901527				
29 - 37	b = 25, b = 25, 20	**901228** **901205** 901528				
28 - 32	b = 30, b = 30, 20	**901246** **901206** 901546				
19	b = 35, 20	**901247** 901547				
15 - 19	b = 40, 20	**901248** 901548				
15 - 17	b = 45, 20	**901249** 901549				
56	b = 2.5, 20	**901245**	50	**986705**	40	**980401**
40 - 46	b = 15, 20	**901226** 901526				
40 - 42	b = 20, b = 20, 20	**901227** **901204** 901527				

09/23

Verglasung
Verklotzung
2-fach Isolierverglasung

Vitrages
Calage
Double vitrage isolant

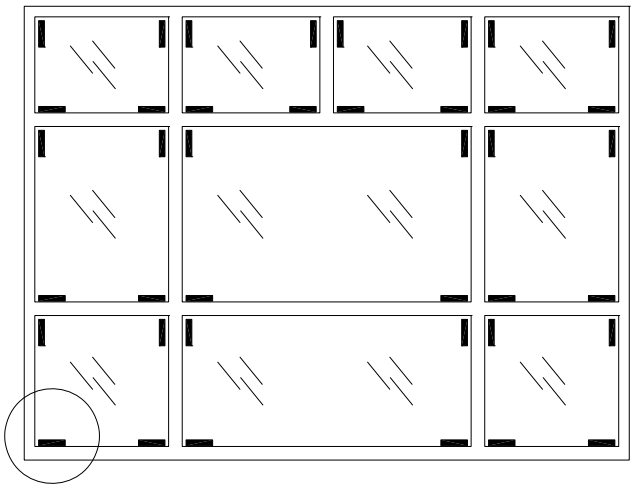
Glazing
Blocking
Double insulating glazing

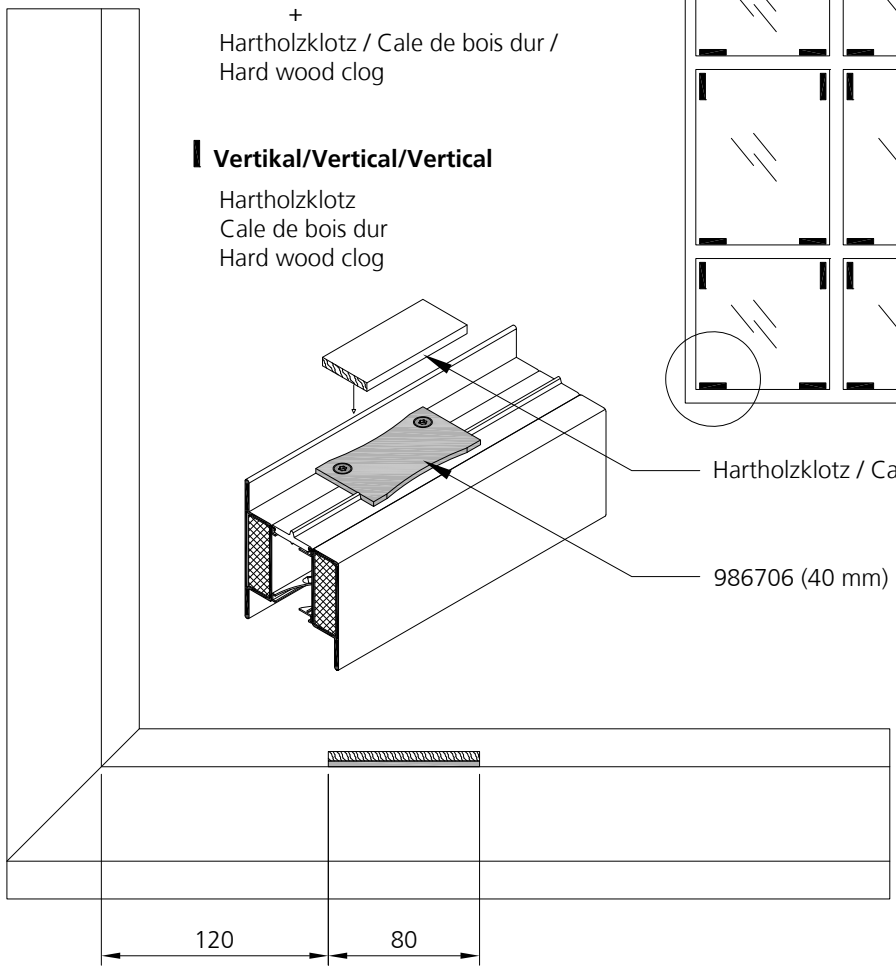
Horizontal/Horizontale/Horizontal

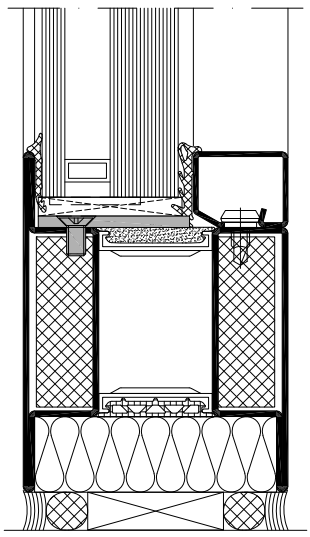
Art.Nr. 986706
+
Hartholzklotz / Cale de bois dur /
Hard wood clog

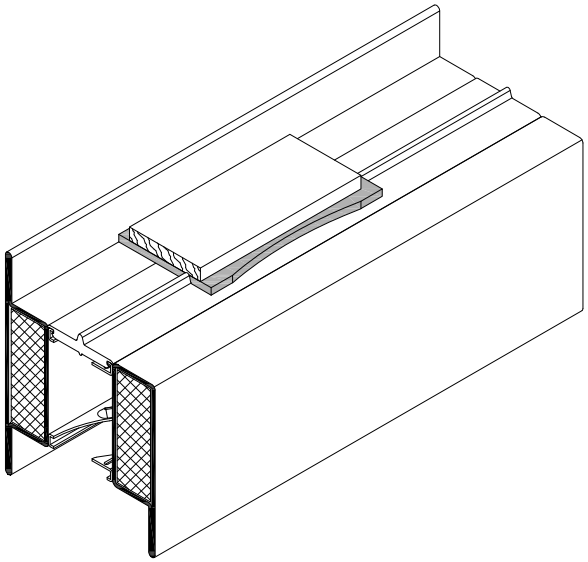
Vertikal/Vertical/Vertical

Hartholzklotz
Cale de bois dur
Hard wood clog









Verglasung
Verklotzung
3-fach Isolierverglasung

Vitrages
Calage
Triple vitrage isolant

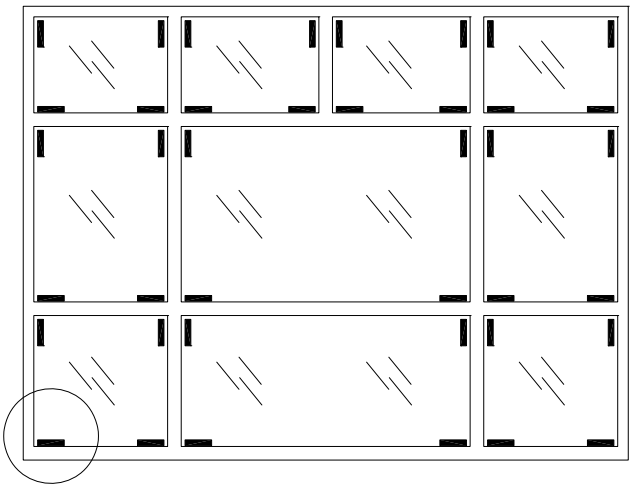
Glazing
Blocking
Triple insulating glazing

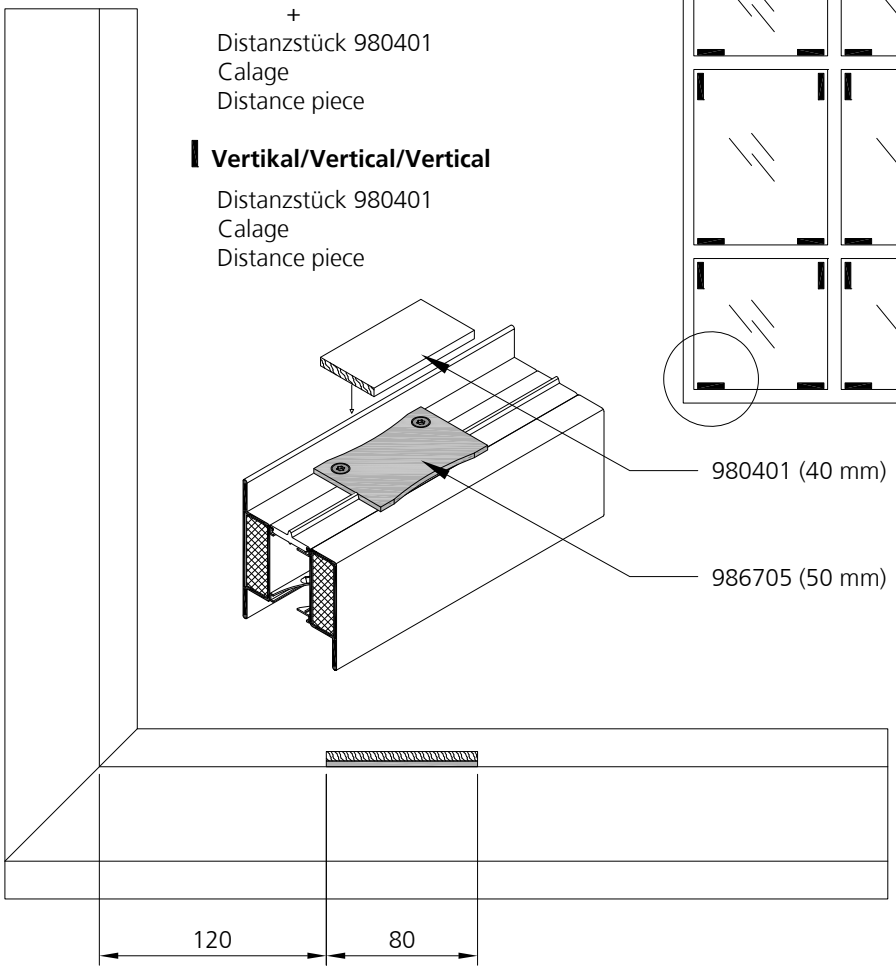
Horizontal/Horizontale/Horizontal

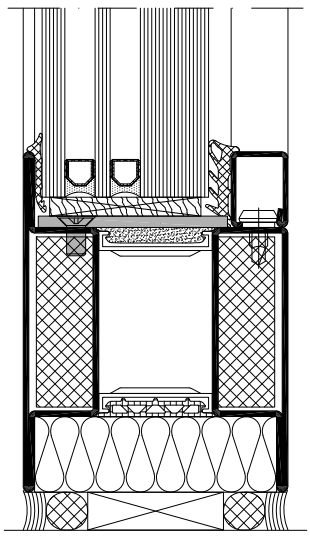
Art.Nr. 986705
+
Distanzstück 980401
Calage
Distance piece

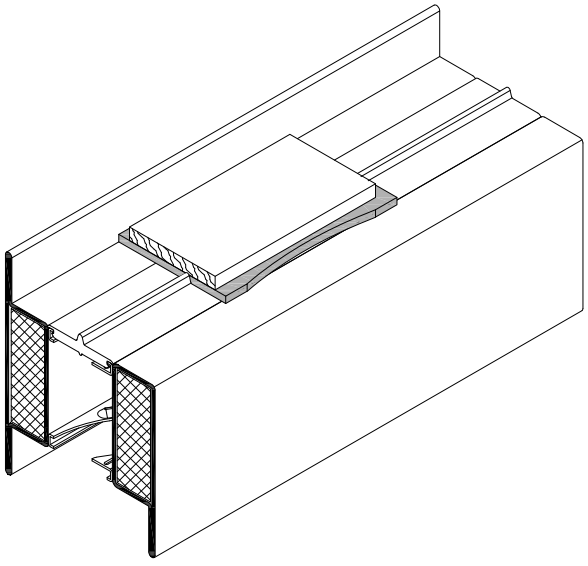
Vertikal/Vertical/Vertical

Distanzstück 980401
Calage
Distance piece





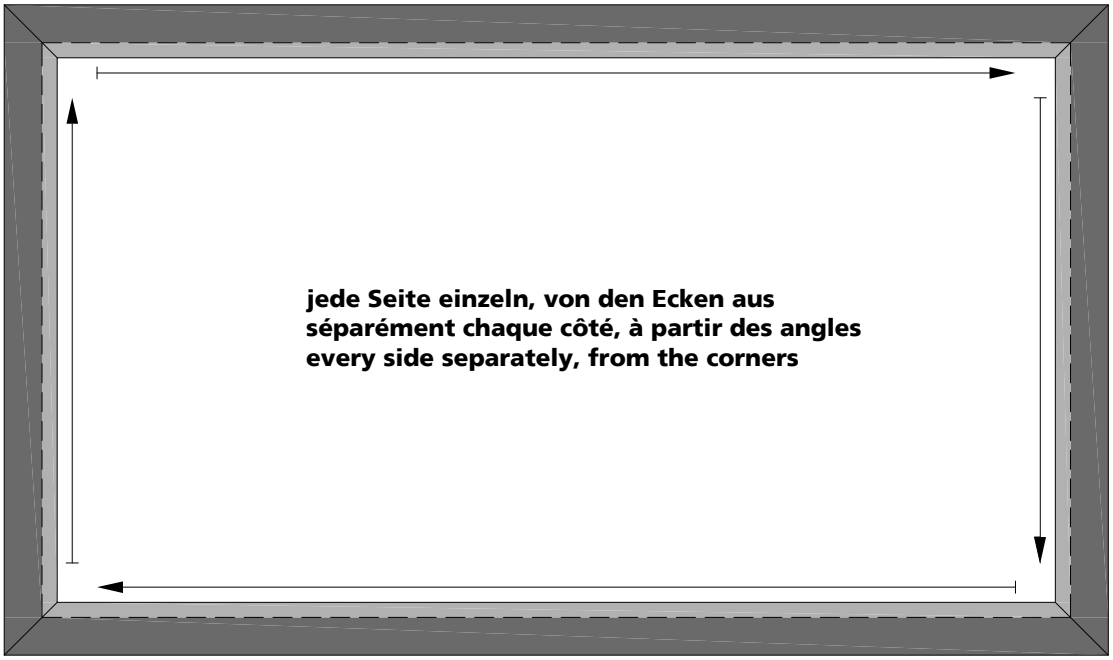




Verglasung
Verglasungsdichtungen
Rahmen

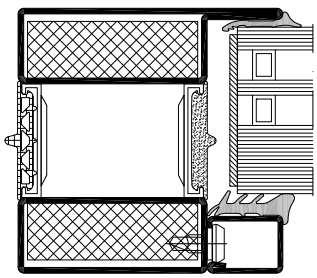
Vitrages
Joint de vitrage
Cadre

Glazing
Glazing seal
Frame



905712

985702



905784

905785

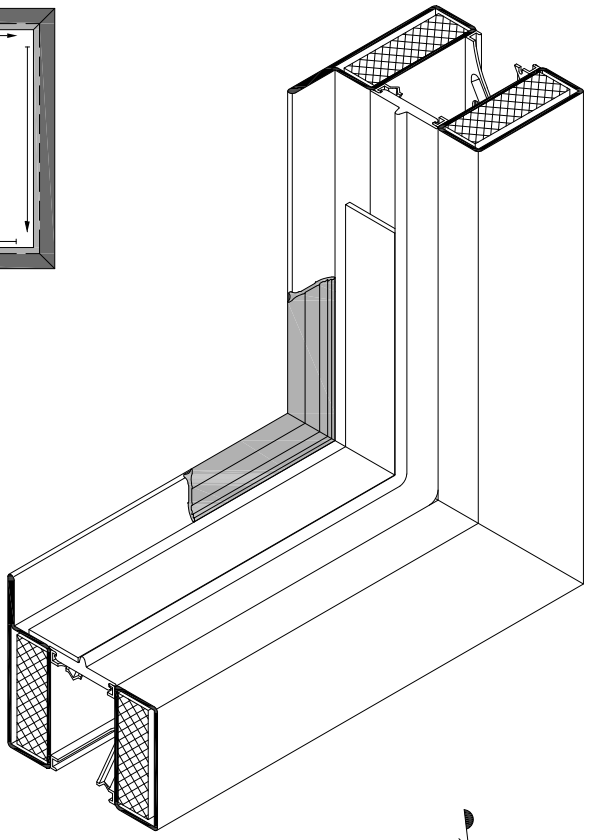
905786

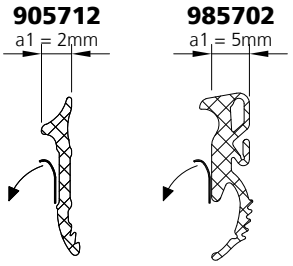
Verglasung
Verglasungsdichtungen aussen

Vitrages
Joint de vitrage extérieur

Glazing
Glazing seal outer



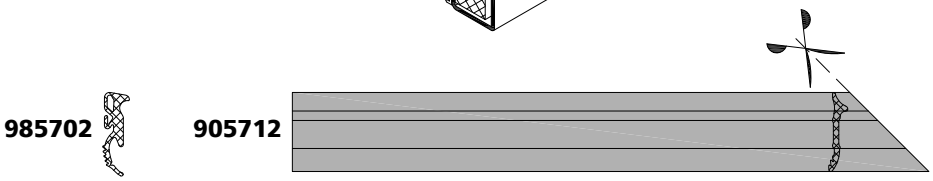




Folie abziehen! Die Dichtung ist selbstklebend.

Retirer le film!
Le joint est autoadhesif.

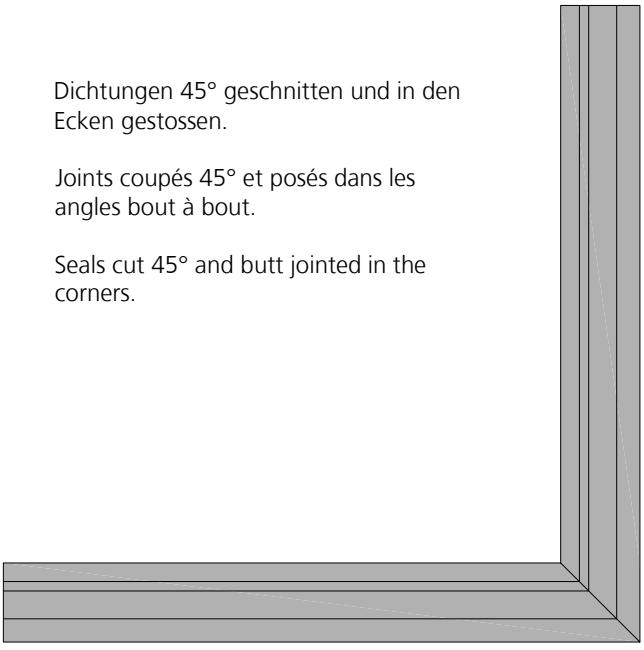
Remove foil!
The seal is self-adhesive.



Dichtungen 45° geschnitten und in den Ecken gestossen.

Joints coupés 45° et posés dans les angles bout à bout.

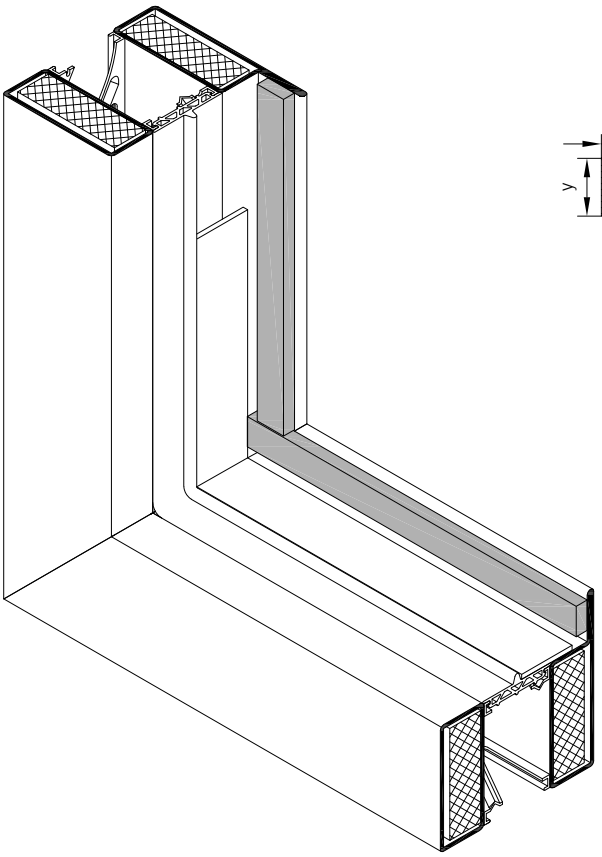
Seals cut 45° and butt jointed in the corners.

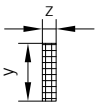


Verglasung
Nassverglasung aussen

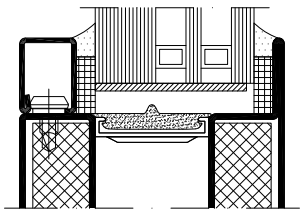
Vitrage
Vitrage à silicone extérieur

Glazing
Wet glazing outside





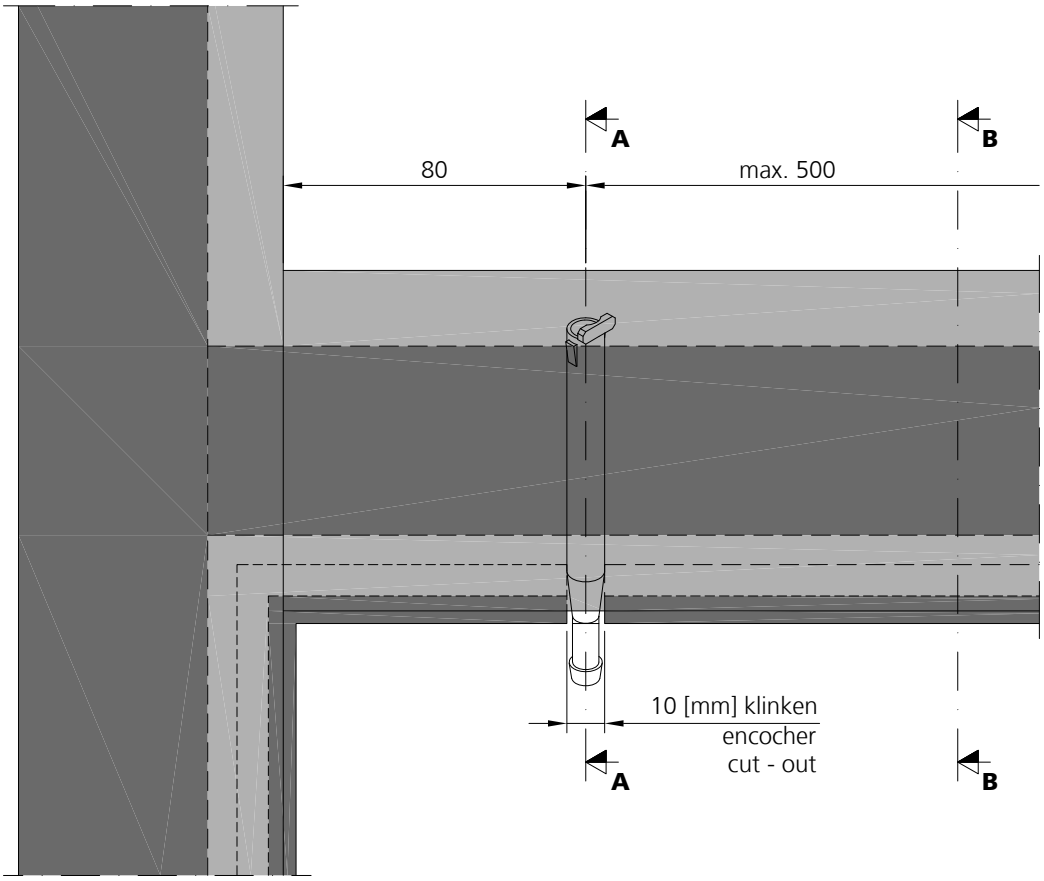
	Art. Nr.:	
z	**y =15mm**	**y =20mm**
3mm	948003	948007
4mm	948004	948008
5mm	948005	948009
6mm	948006	948010

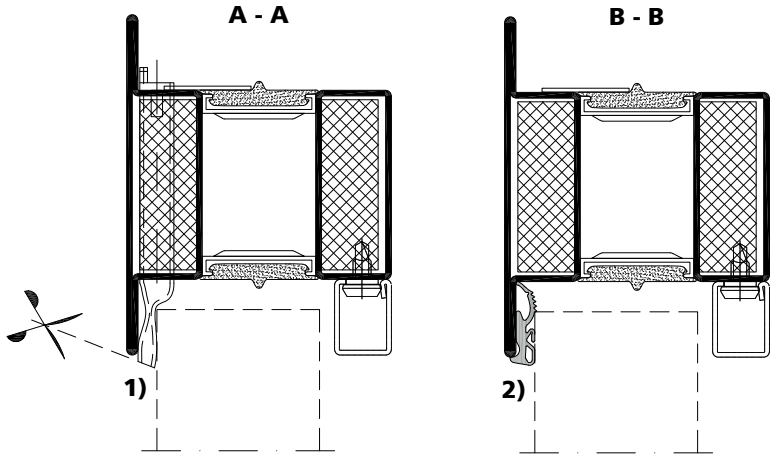


Verglasung
Verdeckt liegende Entwässerung

Vitrage
Evacuation d'eau cachée

Glazing
Hidden drainage





1) Im Bereich des Entspannungsröhrchens muss die Aussendichtung unterbrochen werden.
2) Verglasungsdichtung **Art. Nr. 985702** wird im Bereich des Entspannungsröhrchens **Art. Nr. 980101** unterbrochen.

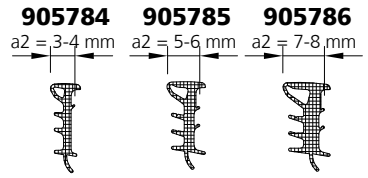
1) Dans la zone de la tubulure de décompression, il faut interrompre le joint extérieur.
2) Le joint de vitrage **art. no. 985702** est interrompu dans la zone de la tubulure de décompression **art. no. 980101**.

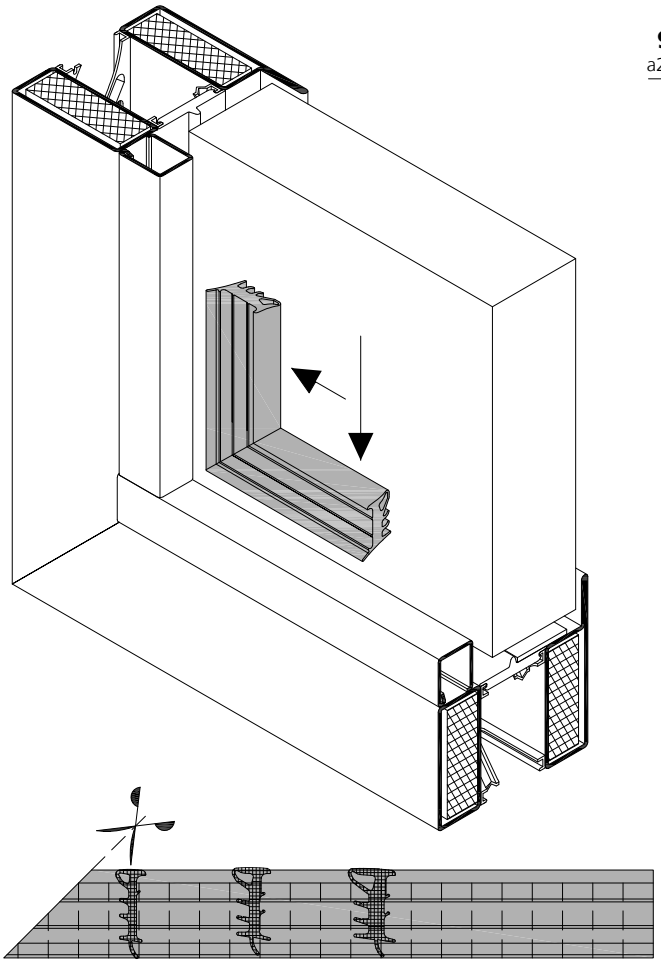
1) In the areas of the compression pipe, the outer weatherstrip must be interrupted.
2) Glazing seal **art. no. 985702** is interrupted in the area of the decompression pipe **art. no. 980101**.

Verglasung
Verglasungsdichtungen innen

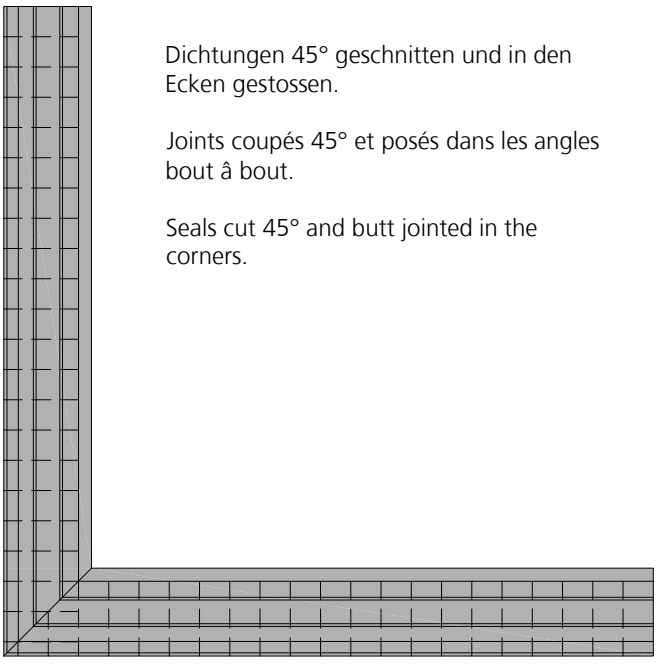
Vitrages
Joint de vitrage intérieur

Glazing
Glazing seal inner





905784 - 905786



Dichtungen 45° geschnitten und in den Ecken gestossen.

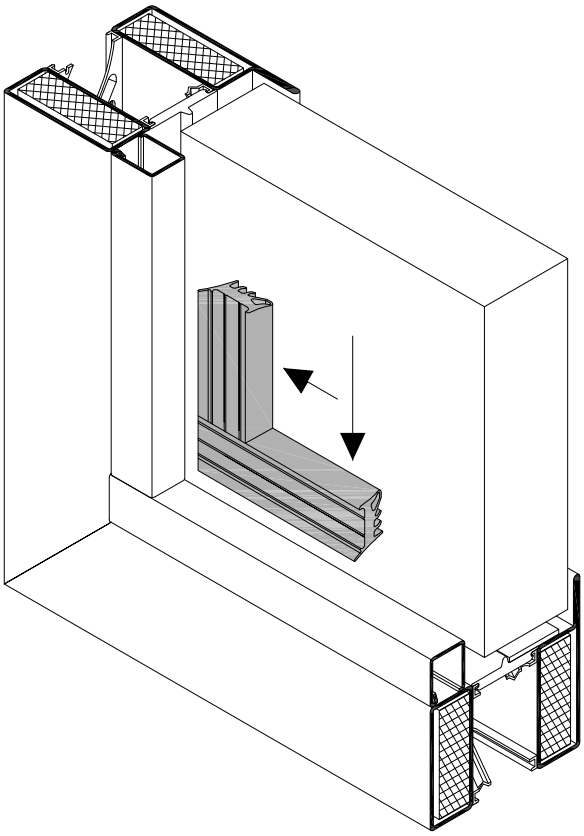
Joints coupés 45° et posés dans les angles bout â bout.

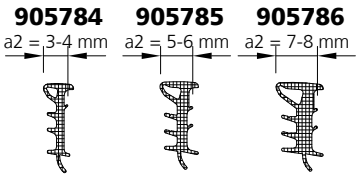
Seals cut 45° and butt jointed in the corners.

Verglasung
Verglasungsdichtungen innen

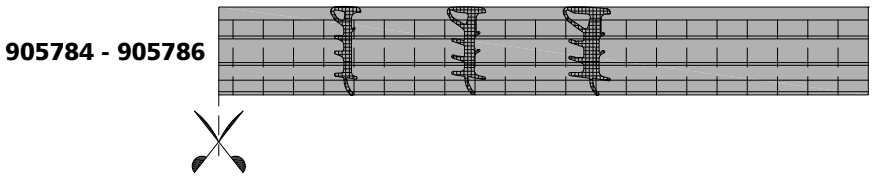
Vitrages
Joint de vitrage intérieur

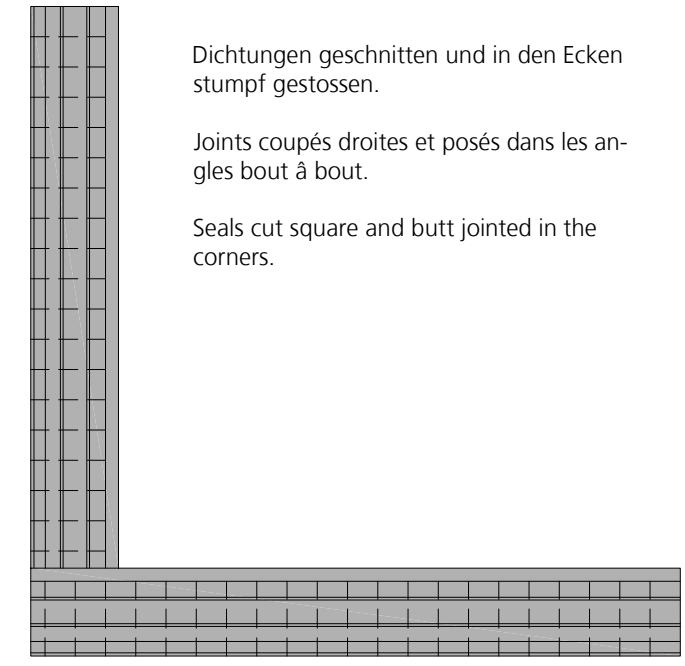
Glazing
Glazing seal inner





905784 - 905786





Dichtungen geschnitten und in den Ecken stumpf gestossen.

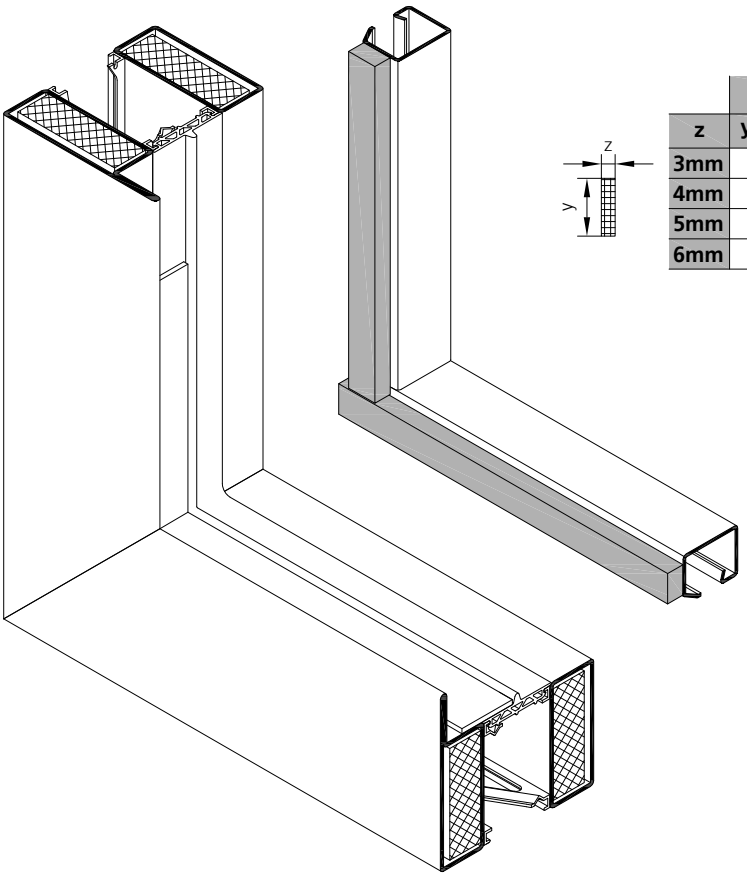
Joints coupés droites et posés dans les angles bout â bout.

Seals cut square and butt jointed in the corners.

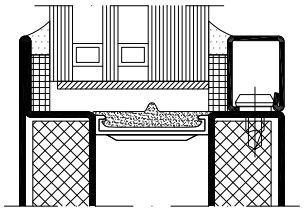
Verglasung
Nassverglasung innen

Vitrage
Vitrage à silicone intérieur

Glazing
Wet glazing inside



	Art. Nr.:	
z	**y =15mm**	**y =20mm**
3mm	948003	948007
4mm	948004	948008
5mm	948005	948009
6mm	948006	948010



Platz für Notizen

Espace pour les notes

Space for memos

	5
System unico S_{200} Rauchschutztür	
Systemübersicht	5.1.1 - 5.1.4
Verglasungsvarianten	5.2.1 - 5.2.4
Système unico S_{200} Porte pare-fumée	
Tableau du système	5.1.1 - 5.1.4
Variantes de vitrages	5.2.1 - 5.2.4
System unico S_{200} Smoke protection door	
Synopsis of system	5.1.1 - 5.1.4
Alternative glazing versions	5.2.1 - 5.2.4

Zeichnungsdaten – dwg

Die in dieser Dokumentation gezeigten Schnitte und Pläne mit nachstehenden Bezeichnungen stehen als dwg-Daten unter **www.forster-profile.ch/downloads** zur Verfügung.

In der PDF-Version der Dokumentation sind diese Zeichnungen mit einem Link versehen.

un_ep_xxxx Einbaupläne
un_kd_xxxx Konstruktionsdetails
un_sd_xxxx Systemdetails
un_sp_xxxx Systempläne
un_vv_xxxx Verglasungsdetails
un_wa_xxxx Wandanschlüsse

Dessins en dwg

Les coupes et les plans présentés dans cette documentation avec les désignations ci-dessous sont disponibles au format DWG sous **www.forster-profile.ch/téléchargement.**

Dans la version PDF de la documentation, ces dessins sont dotés d'un lien.

un_ep_xxxx Plans de la mise en œuvre
un_kd_xxxx Détails de construction
un_sd_xxxx Coupes du système
un_sp_xxxx Plans du système
un_vv_xxxx Détails de vitrage
un_wa_xxxx Raccords muraux

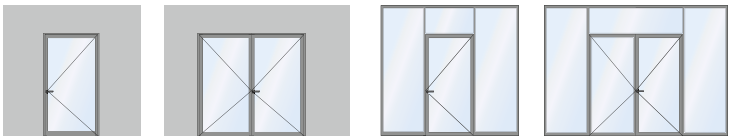
Drawing data – dwg

The sections and plans in this documentation with the below-mentioned designations are available as DWG files on **www.forster-profile.ch/downloads.**

In the PDF version of the documentation, these drawings are provided with a link.

un_ep_xxxx Processing plans
un_kd_xxxx Construction details
un_sd_xxxx System sections
un_sp_xxxx System plans
un_vv_xxxx Glazing details
un_wa_xxxx Wall abutments

Das System auf einen Blick



Ausgangsmaterial
- Stahl ZM (Zink Magnesium)
- Edelstahl geschliffen

Abmessungen
- Schmalste Profilquerschnitte: Kastenbreite 30 / 50 mm
- Blendrahmen-/Flügelmass ab 110 mm
- Bautiefe Flügel und Rahmen 70 mm, flächenbündig
- Wandstärke 1.5 mm

Harmonisierung
- Gleiche Ansicht wie Forster presto und Forster fuego light

Öffnungsarten
- Anschlagtüren nach innen und nach aussen öffnend
- Antipaniktüren

Schloss und Beschlag
- Auf das System abgestimmte Beschläge, auch für Fluchttüren nach EN 179 und EN 1125
- Elegante Edelstahl-Griffgarnituren und schlanke Rollentürbänder
- Aufgesetzte Türschliesser in Kopf-Normalmontage innen/aussen
- Integrierte, unsichtbare Türbänder

Schutz und Sicherheit
- CE-Kennzeichnung nach EN 16034 Rauchschutz
- CE-Kennzeichnung nach EN 14351-1

Verarbeitung
- Standardprofile ungefüllt
- Standarddichtungen für die Verglasung und Türanschlag
  (Siehe unico Ordner Tür 1 988300)

Füllungen
- Transparent
- Opak (Paneele)

Für Festverglasungen gelten nationale Zulassungen.

Le système en un coup d'œil

Matériau de base
- Acier ZM (zinc-magnésium)
- Acier inox meulé

Dimensions
- Finesse des profilés : largeur des corps 30 / 50 mm
- Dimensions du cadre dormant / vantail à partir de 110 mm
- Profondeur du vantail et dormant de 70 mm, affleuré
- Épaisseur 1,5 mm

Harmonisation
- Faces vue identiques: Forster presto et Forster fuego light

Genres d'ouvertures
- Portes à battues ouvrant vers l'intérieur et vers l'extérieur
- Portes anti-panique

Serrures et quincailleries
- Quincailleries harmonisées au système, aussi pour portes de secours selon EN 179 et EN 1125
- Garnitures de poignées en acier inox aux formes élégantes et paumelles de portes élancées
- Ferme-portes apparents en montage normal et inversé intérieur/extérieur
- Paumelles intégrées invisibles

Protection et sécurité
- Marquage CE selon EN 16034 pare-fumée
- Marquage CE selon EN 14351-1

Finitions
- Profilés standard non remplis
- Joints standard pour le vitrage et le butoir de porte
  (Siehe unico Ordner Tür 1 988300)

Remplissages
- Transparent
- Opaque (panneaux)

Les homologations nationales s'appliquent aux vitrages fixes.

The system at a glance

Base material
- Steel ZM (zinc-magnesium)
- Stainless steel grinded

Dimensions
- Extremely slim profile cross-sections: box width 30 / 50 mm
- Outer frame / leaf size from 110 mm
- Structural depth leaf and frame 70 mm, flush-fitting
- Wall thickness 1,5 mm

Compatibility
- Same constructions widths as Forster presto and fuego light

Types of openings
- Leaf doors opening inwards and outwards
- Panic version door

Locks and Fittings
- Fittings to match the system, also for emergency doors according to EN 179 and EN 1125
- Attractively shaped stainless steel handles set and slender roller door hinges
- Attached door closers in standard transom mounting indoors/outdoors
- Integrated, concealed hinges

Protection and safety
- CE-Marking according to EN 16034 smoke protection
- CE-Marking according to EN 14351-1

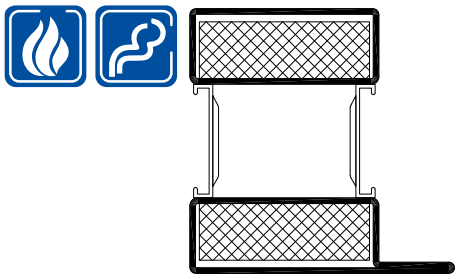
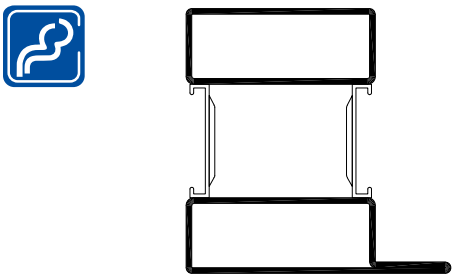
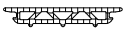
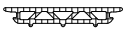
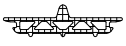
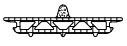
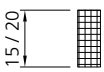
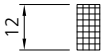
Processing
- Standard profiles unfilled
- Standard seals for the glazing and door stop
  (Siehe unico Ordner Tür 1 988300)

Fillings
- Transparent
- Opaque (panels)

National approvals apply to fixed glazing.

Systemübersicht — Tableau du système — Synopsis of system

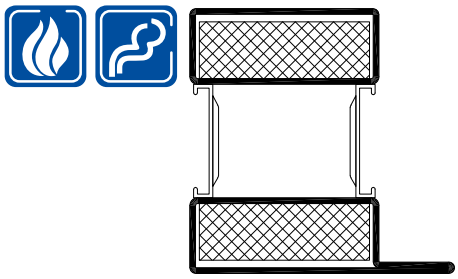
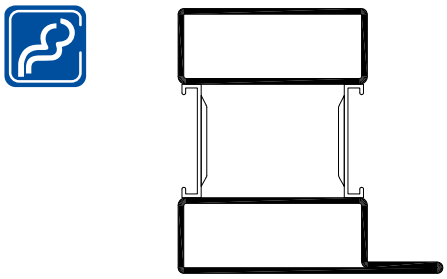
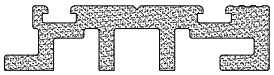
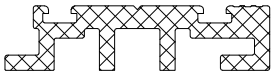
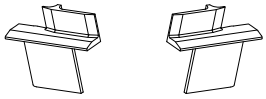
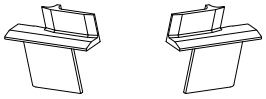
Der Einbau der CR-Dichtungen ist mit demjenigen der EPDM-Dichtungen identisch.
Le montage des joints CR est identique à celui des joints EPDM.
The mounting of the CR sealings is identical to that of EPDM sealings.

Brandschutztür / Portes coupe-feu / Fire resitant doors		Rauchschutztür / Portes pare-fumées / Smoke resitant doors	
			
905712	 2 mm	905312	 2 mm
985702	 5 mm	985302	 5 mm
905784	 3-4 mm		
905785	 5-6 mm	905385	 5-6 mm
905786	 7-8 mm	905386	 7-8 mm
		905387	 9-10 mm
985704		985304	
985705		985305	
15mm / 20mm **948003** 3mm **948007** 3mm **948004** 4mm **948008** 4mm **948005** 5mm **948009** 5mm **948006** 6mm **948010** 6mm	 15 / 20	988002 4mm 988003 5mm 988004 6mm 988006 8mm	 12

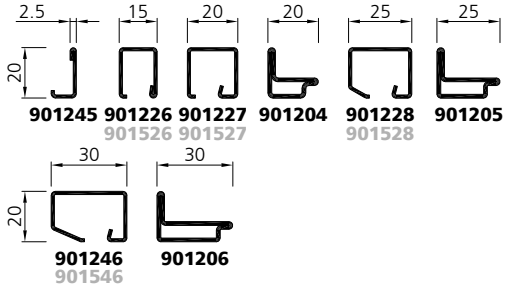
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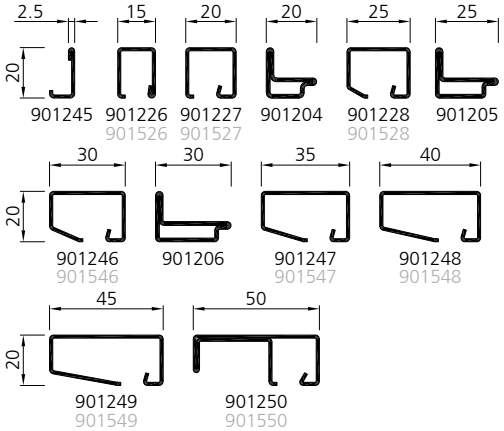
Systemübersicht | Tableau du système | Synopsis of system

Der Einbau der CR-Dichtungen ist mit demjenigen der EPDM-Dichtungen identisch.
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Brandschutztür / Portes coupe-feu / Fire resitant doors		Rauchschutztür / Portes pare-fumées / Smoke resitant doors	
			
985701		985301	
985721		985321	
984851		984801	
984850		984800	
985731 **985732**		985631 985632	

Glashalteleisten / Parcloses / Glazing beads





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09/23

Platz für Notizen

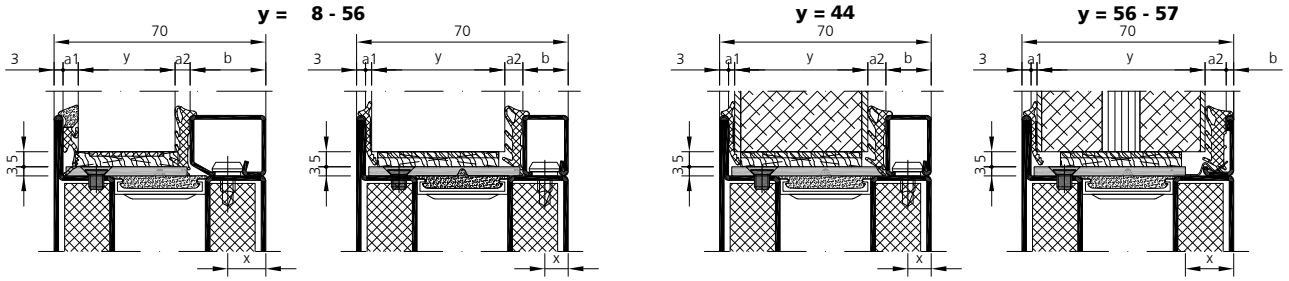
Espace pour les notes

Space for memos

Trockenverglasung
Bautiefe 70

Vitrage à sec
Profondeur 70

Dry glazing
Depth 70



Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Aussendichtung Joint extérieur outer weaterstripping 905312 a1 = 2 [mm]	985302 a1 = 5 [mm]	Innendichtung Joint intérieur inner weatherstripping 905385 a2 = 5-6 [mm]	905386 a2 = 7-8 [mm]	905387 a2 = 9-10 [mm]	y [mm]					Bohrmass x Trusquinage x Hole distance x
49 - 57	b = 2.5, 20	**901245**	-	5 [mm]	**54**	**53**	**52**	**51**	**50**	**49**	16 [mm]		
			2 [mm]	-	**57**	**56**	**55**	**54**	**53**	**52**			
37 - 45	b = 15, 20	**901226** **901526**	-	5 [mm]	**42**	**41**	**40**	**39**	**38**	**37**	8 [mm]		
			2 [mm]	-	**45**	**44**	**43**	**42**	**41**	**40**			
32 - 40	b = 20, b = 20, 20	**901227** **901204** **901527**	-	5 [mm]	**37**	**36**	**35**	**34**	**33**	**32**	13/10 [mm]		
			2 [mm]	-	**40**	**39**	**38**	**37**	**36**	**35**			
27 - 35	b = 25, b = 25, 20	**901228** **901205** **901528**	-	5 [mm]	**32**	**31**	**30**	**29**	**28**	**27**	13/10 [mm]		
			2 [mm]	-	**35**	**34**	**33**	**32**	**31**	**30**			
22 - 30	b = 30, b = 30, 20	**901246** **901206** **901546**	-	5 [mm]	**27**	**26**	**25**	**24**	**23**	**22**	13/10 [mm]		
			2 [mm]	-	**30**	**29**	**28**	**27**	**26**	**25**			
17 - 25	b = 35, 20	**901247** **901547**	-	5 [mm]	**22**	**21**	**20**	**19**	**18**	**17**	13 [mm]		
			2 [mm]	-	**25**	**24**	**23**	**22**	**21**	**20**			
12 - 20	b = 40, 20	**901248** **901548**	-	5 [mm]	**17**	**16**	**15**	**14**	**13**	**12**	13 [mm]		
			2 [mm]	-	**20**	**19**	**18**	**17**	**16**	**15**			
8 - 15	b = 45, 20	**901249** **901549**	-	5 [mm]	**12**	**11**	**10**	**9**	**8**	**-**	13 [mm]		
			2 [mm]	-	**15**	**14**	**13**	**12**	**11**	**10**			
8 - 10	b = 50, 20	**901207** **901507**	-	5 [mm]	**-**	**-**	**-**	**-**	**-**	**-**	13 [mm]		
			2 [mm]	-	**10**	**9**	**8**	**-**	**-**	**-**			

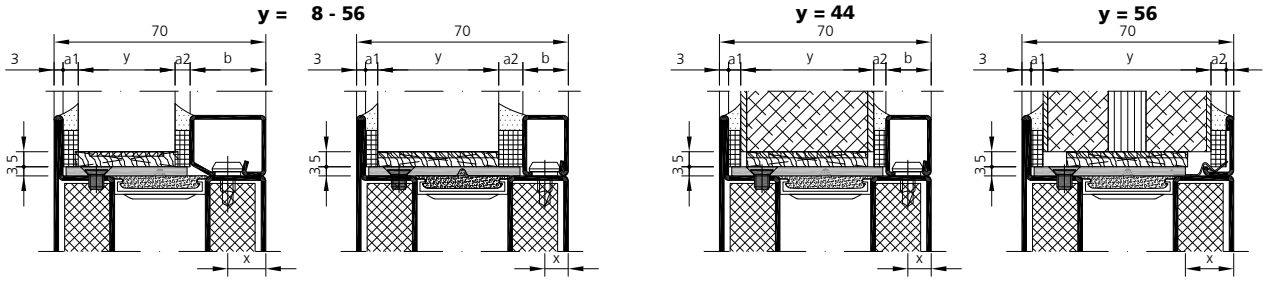
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09/23

Nassverglasung
Bautiefe 70

Vitrage au silicone
Profondeur 70

Wet glazing
Depth 70

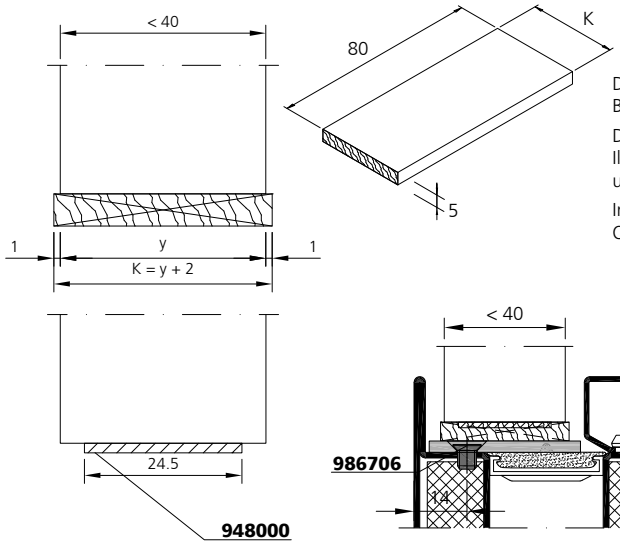


Glasdicke / Epaisseur de verre / Glass thickness y [mm]	Glashalteleiste Stahl / Parclose acier / Glazing beads steel	Stahl Nr. / Acier no. / Steel no.	Aussendichtung / Joint extérieur / outer weaterstr.	Innendichtung / Joint intérieur / inner weatherstripping 988002 a2 = 4 mm	988003 a2 = 5 mm	988004 a2 = 6 mm	988006 a2 = 8 mm	Bohrmass x / Trusquinage x / Hole distance x
				y [mm]				
56 - 48	b = 2.5	**901245**	a1 = 4 mm	**56**	**55**	**54**	**52**	16 [mm]
			a1 = 5 mm	**55**	**54**	**53**	**51**	
			a1 = 6 mm	**54**	**53**	**52**	**50**	
			a1 = 8 mm	**52**	**51**	**50**	**48**	
36 - 44	b = 15	**901226**	a1 = 4 mm	**44**	**43**	**42**	**40**	8 [mm]
			a1 = 5 mm	**43**	**42**	**41**	**39**	
			a1 = 6 mm	**42**	**41**	**40**	**38**	
			a1 = 8 mm	**40**	**39**	**38**	**36**	
31 - 39	b = 20 b = 20	**901227 901204**	a1 = 4 mm	**39**	**38**	**37**	**35**	13/10 [mm]
			a1 = 5 mm	**38**	**37**	**36**	**34**	
			a1 = 6 mm	**37**	**36**	**35**	**33**	
			a1 = 8 mm	**35**	**34**	**33**	**31**	
26 - 34	b = 25 b = 25	**901228 901205**	a1 = 4 mm	**34**	**33**	**32**	**30**	13/10 [mm]
			a1 = 5 mm	**33**	**32**	**31**	**29**	
			a1 = 6 mm	**32**	**31**	**30**	**28**	
			a1 = 8 mm	**30**	**29**	**28**	**26**	
21 - 29	b = 30 b = 30	**901246 901206**	a1 = 4 mm	**29**	**28**	**27**	**25**	13/10 [mm]
			a1 = 5 mm	**28**	**27**	**26**	**24**	
			a1 = 6 mm	**27**	**26**	**25**	**23**	
			a1 = 8 mm	**25**	**24**	**23**	**21**	
16 - 24	b = 35	**901247**	a1 = 4 mm	**24**	**23**	**22**	**20**	13 [mm]
			a1 = 5 mm	**23**	**22**	**21**	**19**	
			a1 = 6 mm	**22**	**21**	**20**	**18**	
			a1 = 8 mm	**20**	**19**	**18**	**16**	
11 - 19	b = 40	**901248**	a1 = 4 mm	**19**	**18**	**17**	**15**	13 [mm]
			a1 = 5 mm	**18**	**17**	**16**	**14**	
			a1 = 6 mm	**17**	**16**	**15**	**13**	
			a1 = 8 mm	**15**	**14**	**13**	**11**	
8 - 14	b = 45	**901249**	a1 = 4 mm	**14**	**13**	**12**	**10**	13 [mm]
			a1 = 5 mm	**13**	**12**	**11**	**9**	
			a1 = 6 mm	**12**	**11**	**10**	**8**	
			a1 = 8 mm	**10**	**9**	**8**	-	
8 - 9	b = 50	**901207**	a1 = 4 mm	**9**	**8**	-	-	13 [mm]
			a1 = 5 mm	**8**	-	-	-	
			a1 = 6 mm	-	-	-	-	
			a1 = 8 mm	-	-	-	-	

Verglasungsvarianten
Glasfalzbrücke
Bautiefe 70 mm

Variantes de vitrages
Pont feuillure pour verre
Profondeur 70 mm

Alternative glazing versions
Glass rebate bridge
Depth 70 mm



Der Brandschutzstreifen **948000** wird im Bereich des Distanzklotz unterbrochen.
Bei Gläser unter 25mm muss der Brandschutzstreifen **948000** zugeschnitten werden.

Dans la zone du distanceur, il faut interrompre la bande intumescente **948000**.
Il convient de découper la bande intumescente **948000** lorsque les vitrages présentent une épaisseur inférieure à 25mm.

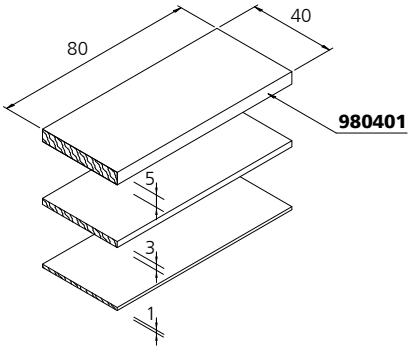
In the area of the distance pieces, the intumescent strip **948000** has to be interrupted.
On glazing of less than 25 mm, the intumescent strip **948000** must be cut to size.

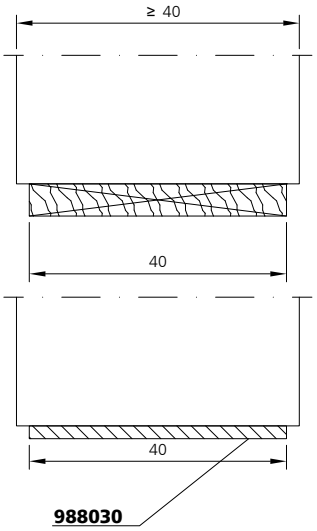
Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Glasfalzbrücke 3 [mm] Pont feuillure en verre 3 [mm] Glass rebate bridge 3 [mm] Edelstahl Acier inox Stainless steel	Art. Nr. art. no. art. no.	Distanzstück 5 [mm] Distanceur 5 [mm] Distance piece 5 [mm] Hartholz Bois dur Hardwood	
32 - 40	b = 20 b = 20 20	**901227** **901204** 901527				
27 - 35	b = 25 b = 25 20	**901228** **901205** 901528	40			
22 - 30	b = 30 20	**901246** 901546				
	b = 30 20	**901206**	35 5	**986706**	K	Eigenbeschaffung Propre approvisionnement In-house procurement
17 - 25	b = 35 20	**901247** 901547				
12 - 20	b = 40 20	**901248** 901548	30 10			
8 - 15	b = 45 20	**901249** 901549	25 15			
8 - 10	b = 50 20	**901207** 901507	40			

Verglasungsvarianten
Glasfalzbrücke
Bautiefe 70 mm

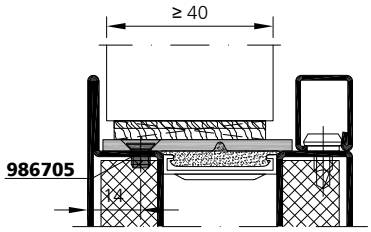
Variantes de vitrages
Pont feuillure pour verre
Profondeur 70 mm

Alternative glazing versions
Glass rebate bridge
Depth 70 mm





Der Brandschutzstreifen **988030** wird im Bereich des Distanzklotz unterbrochen.
Dans la zone du distanceur, il faut interrompre la bande intumescente **988030**.
In the area of the distance pieces, the intumescent strip **988030** has to be interrupted.



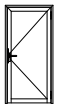
Glasdicke Epaisseur de verre Glass thickness y [mm]	Glashalteleiste Stahl/Edelstahl Parclose acier/acier inox Glazing beads steel/stainless steel Stahl / Acier / Steel: Nr. Edelstahl / Acier Inox / Stainless steel: Nr.		Glasfalzbrücke 3 [mm] Pont feuillure en verre 3 [mm] Glass rebate bridge 3 [mm] Edelstahl Acier inox Stainless steel	Art. Nr. art. no. art. no.	Distanzstück 5 [mm] Distanceur 5 [mm] Distance piece 5 [mm] Hartholz Bois dur Hardwood	
37 - 45	b = 15, 20	**901226** **901526**	50	**986705**	40	**980401**
49 - 57	b = 2.5, 20	**901245**				

		6
System unico EI30 Blechtür		
Systemübersicht		6.1.1 - 6.1.8
Profile		6.2.1 - 6.2.6
Beschläge		6.3.1 - 6.3.4
Anwendungszeichnungen		6.4.1 - 6.4.18
	Systemschnitte	6.4.1 - 6.4.11
	Systempläne	6.4.12 - 6.4.17
	Wandanschlüsse	6.4.18
Verarbeitung Profile		6.5.1 - 6.5.10
Verarbeitung Beschläge		6.6.1 - 6.6.2
Verarbeitung Zubehör		6.7.1 - 6.7.2

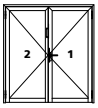
Système unico EI30 Porte tôlée		
Tableau du système		6.1.1 - 6.1.8
Profilés		6.2.1 - 6.2.6
Quincaillerie		6.3.1 - 6.3.4
Coupes et plans		6.4.1 - 6.4.18
	Coupes du système	6.4.1 - 6.4.11
	Plans du système	6.4.12 - 6.4.17
	Raccords muraux	6.4.18
Mise en œuvre profilés		6.5.1 - 6.5.10
Mise en œuvre quincaillerie		6.6.1 - 6.6.2
Mise en œuvre accessoires		6.7.1 - 6.7.2

System unico EI30 Sheet metal door		
Synopsis of system		6.1.1 - 6.1.8
Profiles		6.2.1 - 6.2.6
Fittings		6.3.1 - 6.3.4
Sections and plans		6.4.1 - 6.4.18
	System sections	6.4.1 - 6.4.11
	System plans	6.4.12 - 6.4.17
	Wall abutments	6.4.18
Processing profiles		6.5.1 - 6.5.10
Processing fittings		6.6.1 - 6.6.2
Processing accessories		6.7.1 - 6.7.2

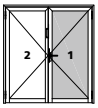
Symbole



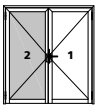
1-flügelige Tür ohne Antipanik-Funktion
Porte à 1 vantail sans fonction anti-panique
Single-leaved door without anti-panic-function



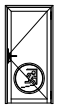
2-flügelige Tür ohne Antipanik-Funktion
Porte à 2 vantaux sans fonction anti-panique
Double-leaved door without anti-panic-function



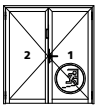
2-flügelige Tür, Verwendung Forster Artikel auf Gangflügel
Porte à 2 vantaux, utilisation des articles Forster sur le vantail de service
Double-leaved door, use Forster articles for opening leaf



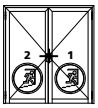
2-flügelige Tür, Verwendung Forster Artikel auf Standflügel
Porte à 2 vantaux, utilisation des articles Forster sur le vantail semi-fixe
Double-leaved door, use Forster articles for fixed leaf



1-flügelige Tür mit Antipanik-Funktion
Porte à 1 vantail avec fonction anti-panique
Single-leaved door with anti-panic-function



2-flügelige Tür mit Antipanik-Funktion auf Gangflügel
Porte à 2 vantaux avec fonction anti-panique sur le vantail de service
Double-leaved door with anti-panic-function only on opening leaf



2-flügelige Tür mit Antipanik-Funktion auf Stand- und Gangflügel
Porte à 2 vantaux avec fonction anti-panique sur le vantail de service et le vantail semi-fixe
Double-leaved door with anti-panic-function on opening and fixed leaf

Symboles

Symbols



Türen ohne Antipanik-Anforderung
Portes sans exigence anti-panique
Doors without anti-panic requirement



Türen mit Antipanik-Anforderung
Portes avec exigence anti-panique
Doors with anti-panic requirement



Artikel gemäss Norm EN 179
Référence selon norme EN 179
Article according to EN 179



Artikel gemäss Norm EN 1125
Référence selon norme EN 1125
Article according to EN 1125

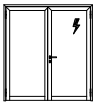
Symbole



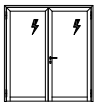
Position E-Öffner
Position ouverture électrique
Position electric door opener



1-flügelige Tür mit E-Öffner
Porte à 1 vantail avec ouverture électrique
Single-leaved door with electro door opener



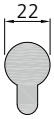
2-flügelige Tür mit E-Öffner auf Gangflügel
Porte à 2 vantaux avec ouverture électrique sur le vantail de service
Double-leaved door with electric door opener only on active leaf



2-flügelige Tür mit E-Öffner auf Stand- und Gangflügel
Porte à 2 vantaux avec ouverture électrique sur le vantail de service et vantail semi-fixe
Double-leaved door with electro door opener on active and inactive leaf



Profilzylinder (PZ)
Cylindre profilé (CP)
Profile cylinder (PC)



Rundzylinder (RZ)
Cylindre rond (CR)
Round cylinder (RC)

ZV

Abkürzung für Zusatzverriegelung
Abréviation de verrouillage supplémentaire
Abbreviation for additional locking

Symboles

Symbols

Zeichnungsdaten – dwg

Die in dieser Dokumentation gezeigten Schnitte und Pläne mit nachstehenden Bezeichnungen stehen als dwg-Daten unter **www.forster-profile.ch/downloads** zur Verfügung.

In der PDF-Version der Dokumentation sind diese Zeichnungen mit einem Link versehen.

un_ep_xxxx Einbaupläne
un_kd_xxxx Konstruktionsdetails
un_sd_xxxx Systemdetails
un_sp_xxxx Systempläne
un_vv_xxxx Verglasungsdetails
un_wa_xxxx Wandanschlüsse

Dessins en dwg

Les coupes et les plans présentés dans cette documentation avec les désignations ci-dessous sont disponibles au format DWG sous **www.forster-profile.ch/téléchargement.**

Dans la version PDF de la documentation, ces dessins sont dotés d'un lien.

un_ep_xxxx Plans de la mise en œuvre
un_kd_xxxx Détails de construction
un_sd_xxxx Coupes du système
un_sp_xxxx Plans du système
un_vv_xxxx Détails de vitrage
un_wa_xxxx Raccords muraux

Drawing data – dwg

The sections and plans in this documentation with the below-mentioned designations are available as DWG files on **www.forster-profile.ch/downloads.**

In the PDF version of the documentation, these drawings are provided with a link.

un_ep_xxxx Processing plans
un_kd_xxxx Construction details
un_sd_xxxx System sections
un_sp_xxxx System plans
un_vv_xxxx Glazing details
un_wa_xxxx Wall abutments

Platz für Notizen

Espace pour les notes

Space for memos

Das System auf einen Blick

Forster unico –
flächenbündig verblechte Tür EI30

Ausgangsmaterial
- Stahl verzinkt (ZM)
- Blechdicke 2,5mm / 3mm

Profilmasse
- Sonderprofile mit 63.5 mm Bautiefe

Schloss und Beschlag
- Systemabgestimmte Beschläge
- Formschöne Edelstahl-Griffgarnituren, schlanke Rollentürbänder und verdecktliegende Bänder
- Integrierte, verdecktliegende Türschliesssysteme (Flügelgewicht beachten)

Verarbeitung
- Äusserst wirtschaftliche Fertigung ohne Sondereinrichtung
- Deckbleche geschweisst/ geschraubt/ genietet

Merkmale
- Runde und eckige Glasausschnitte möglich / Glas austauschbar
- Einbau verblechte Türe in transparenter Festverglasung möglich
- Mineralwoll-Füllung 85 kg/m^3

Le système en un coup d'œil

Forster unico –
porte tôlee affleurée EI30

Matériau de base
- Profilés en acier zingué (ZM)
- Épaisseur de tôle 2,5mm/ 3mm

Dimensions des profilés
- Profilés spécial d'une profondeur de 63.5 mm

Serrures et ferrures
- Quincaillerie harmonisée au système
- Garnitures de poignées en acier inox aux formes élégantes, paumelles à souder élancées et paumelles cachées
- Systèmes de ferme-porte intégrés et cachés (Respecter le poids du vantail)

Finitions
- Mise en œuvre extrêmement économique sans outillage spécial
- Plaques de recouvrement soudées/ vissées/ rivetées

Caractéristiques
- Oculus ronds et rectangulaires possibles / Verre échangeable
- Pose possible de portes tolées dans de la cloison fixe vitrée
- Remplissage en laine minérale 85 kg/m^3

The system at a glance

Forster unico –
Flush mounted sheet metal door EI30

Base material
- Profiles in galvanised steel (ZM)
- Sheet thickness 2,5mm/ 3mm

Profile dimensions
- Special profiles with 63.5 mm depth

Locks and Fittings
- Fittings to match the system
- Attractively shaped stainless steel handles set, slender weld-on door hinges and concealed hinges
- Integrated and concealed door closing systems (Observe leaf weight)

Processing
- Extremely economical manufacturing, no special machinery needed
- Cover plates welded/ screwed/ riveted

Properties
- Round and square glass cutouts possible Glass interchangeable
- Installation of sheet metal doors in transparent fixed glazing possible
- Mineral wool filling 85 kg/m^3

Wichtig !

Einzelne in diesem Ordner gezeigten Anwendungsbeispiele und Verarbeitungshinweise entsprechen nicht den in Ihrem Land gültigen Brandschutznormen.

Massgebend sind ausschliesslich die für Ihr Land gültigen Zulassungen.

Important !

Les exemples de mise en œuvre présentés ci-après ne sont pas tous conformes à la réglementation en vigueur dans votre pays.

En conséquence, nous vous demandons de vous reporter aux procès-verbaux de classement en cours de validité dans votre pays.

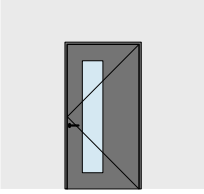
Important !

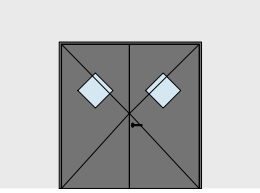
Some of the construction details and processing guidelines, mentioned in this file, do not correspond to the fire protecting standards in your country.

Only the certificates valid in your country are relevant. Please check with your specific countries representatives.

Technische Merkmale

Bauarten





- Verblechte Tür EI30
- Einbau in Verglasung EI30 / EI60

Abmessungen

Verblechte Tür

- 1-flügelig: lichter Durchgang max. 1370 × 2715 mm (B × H)
- 2-flügelig: lichter Durchgang max. 2760 × 2715 mm (B × H)

Lichte Fläche Glaseinsätze

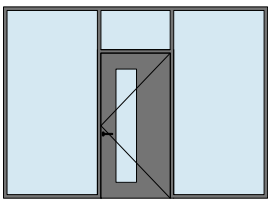
- Rund: Ø 600 mm
- Quadratisch: 666 x 666 mm
- Rechteckig: 980 x 2340 mm (BxH)

Verglasung

- Pilkington Pyrostop
- Vetrotech Contraflam 30

Données techniques

Variantes de construction



- Porte tôlee EI30
- Cloison EI30 / EI60

Dimensions

Porte tôlée

- 1 vantail: passage libre max. 1370 mm × 2715 (l × h)
- 2 vantaux: passage libre max. 2760 × 2715 mm (l × h)

Surface libre des vitrages

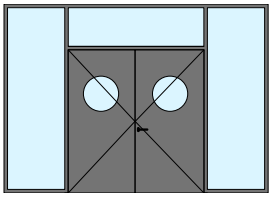
- Rond: Ø 600 mm
- Carré: 666 x 666 mm
- Rectangulaire: 980 x 2340 mm (LxH)

Cloisons

- Pilkington Pyrostop
- Vetrotech Contraflam 30

Technical details

Construction variations



- Sheet metal door EI30
- Glazing EI30 / EI60

Dimensions

Sheet metal door

- 1 leaf: inside width max. 1370 × 2715 mm (w × h)
- 2 leafs: inside width max. 2760 × 2715 mm (w × h)

Clear surface on glass inserts

- Round: Ø 600 mm
- Square: 666 x 666 mm
- Rectangular: 980 x 2340 mm (WxH)

Glazings

- Pilkington Pyrostop
- Vetrotech Contraflam 30

Wichtig !

Einzelne in diesem Ordner gezeigten Anwendungsbeispiele und Verarbeitungshinweise entsprechen nicht den in Ihrem Land gültigen Brandschutznormen.

Massgebend sind ausschliesslich die für Ihr Land gültigen Zulassungen.

Important !

Les exemples de mise en œuvre présentés ci-après ne sont pas tous conformes à la réglementation en vigueur dans votre pays.

En conséquence, nous vous demandons de vous reporter aux procès-verbaux de classement en cours de validité dans votre pays.

Important !

Some of the construction details and processing guidelines, mentioned in this file, do not correspond to the fire protecting standards in your country.

Only the certificates valid in your country are relevant. Please check with your specific countries representatives.

Übersicht Eigenschaften nach EN 16034

Tableau des caractéristiques selon EN 16034

Synopsis of characteristics according to EN 16034

Geprüfte Eigenschaften Caractéristiques testées Tested characteristics		Normen Normes Standards	Türen – Klasse / Wert Portes – Classe / Valeur Doors – Class / Value	Blechtüren – Klasse / Wert Porte tôlees – Classe / Valeur Sheet metal doors – Class / Value
	Brandschutz Résistance aux feu Fire resistance	**EN 1634-1** **EN 13501-2**	**$EI_2$30**	**$EI_2$30**
	Rauchschutz Etanchéité à la fumée Smoke control	**EN 1634-3** **EN 13501-2**	**S_a / S_{200}**	**npd**
	Fähigkeit zur Freigabe Capacité au déclenchement Ability to release	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Dauerhaftigkeit der Fähigkeit zur Freigabe Endurance de la capacité au déclenchement Durablility of he ability to release	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Selbstschliessung Fermeture automatique Self-closing	**EN 16034** **EN 13501-2**	**C**	**npd**
	Dauerhaftigkeit der Selbstschliessung gegenüber Qualitätsverlust Endurance de la fermeture automatique contre la dégradation Durability of self-closing against degradation	**EN 1191** **EN 16034**	**5** (200'000 Zyklen / cycles)	**5** (200'000 Zyklen / cycles)
	Dauerhaftigkeit der Selbstschliessung gegenüber Alterung (Korrosion) Endurance de la fermeture automatique contre le vieillissement (corrosion) Durability of self-closing against ageing (corrosion)	**EN 16034**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**

6

npd - keine Eigenschaft geprüft / performance non déterminée / no performance determined

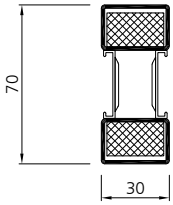
Übersicht Eigenschaften nach EN 14351-1

Tableau des caractéristiques selon EN 14351-1

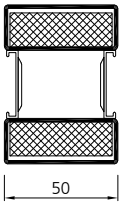
Synopsis of characteristics according to EN 14351-1

Geprüfte Eigenschaften Caractéristiques testées Tested characteristics		Normen Normes Standards	Türen – Klasse / Wert Portes – Classe / Valeur Doors – Class / Value
Nach EN 14351-1	**Selon EN 14351-1**		**According to EN 14351-1**
	Widerstand bei Windlast Résistance au vent Resistance to wind load	**EN 12211** **EN 12210**	**bis / jusqu'à / up to** **B3 / C3**
	Schlagregendichtheit Etanchéité à la pluie battante Watertightness	**EN 1027** **EN 12208**	**bis / jusqu'à / up to** **3A**
	Stossfestigkeit Résistance au chocs Impact resistance	**EN 13049**	**1 (200 Pa)**
	Fähigkeit zur Freigabe Capacité au déclenchement Ability to release	**EN 179** **EN 1125**	**Anforderung erfüllt** **Exigence remplie** **Requirements fulfilled**
	Schallschutz Performance acoustique Acoustic performance	**EN 717-1**	**bis / jusqu'à / up to** **Rw 46 dB**
	Wärmedurchgangskoeffizient Coefficient de transmission thermique Thermal transmittance	**EN 10077-1**	**bis / jusqu'à / up to** **U_D 1.3 [W/(m²·K)]**
	Luftdurchlässigkeit Perméabilité à l'air Air permeability	**EN 1026** **EN 12207**	**bis / jusqu'à / up to** **4 (600 Pa)**
	Bedienkräfte Forces de manœuvre Operating forces	**EN 12217** **EN 12046-2**	**3**
	Mechanische Festigkeit Résistance mécanique Mechanical strength	**EN 947-950** **EN 1192**	**3**
	Barrierefreiheit Absence d'entrave au passage Barrier-free	**DIN 18040**	**Schwellenlose Ausführung /** **Execution sans seuil** **Execution without threshold**
	Differenzklimaverhalten Comportement entre climats différents Behaviour between different climates	**EN 12219** **EN 1121**	**3(d) / 3(e)**

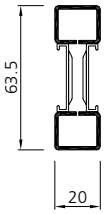
Systemübersicht — Tableau du système — Synopsis of system



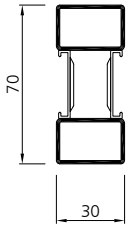
534.730 ZM



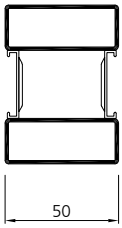
534.750 ZM



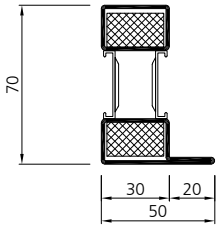
530.620**
530.620 ZM**



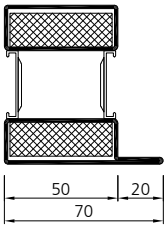
531.730**
531.730 ZM**



531.750**
531.750 ZM**



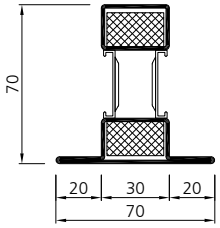
534.731 ZM



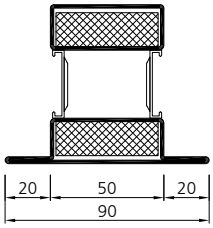
534.751 ZM

**** nur für Schwelle**
seulement pour seuil
only for bottom rail

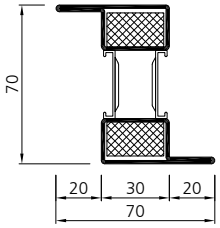
*** auf Anfrage**
sur demande
on request



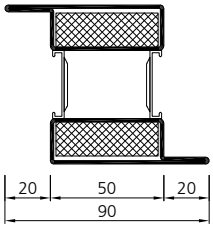
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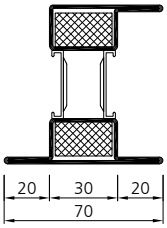
534.752 ZM



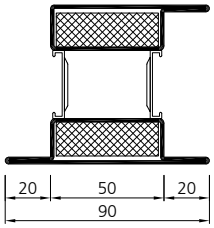
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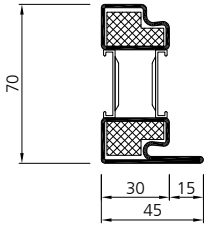
534.753 ZM



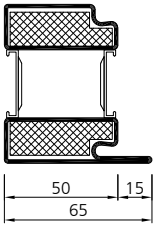
534.735 ZM *



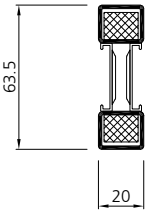
534.755 ZM



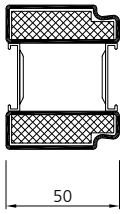
535.731 ZM*



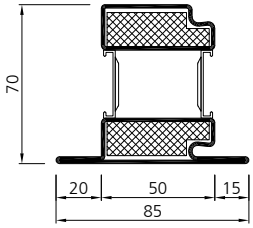
535.751 ZM



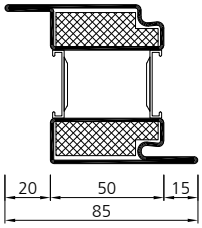
534.620 ZM



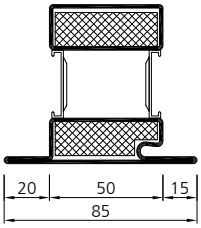
535.650 ZM



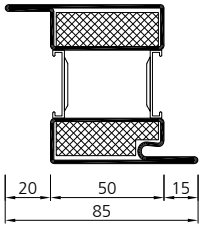
535.752 ZM



535.753 ZM



538.752 ZM



538.753 ZM

Systemübersicht | Tableau du système | Synopsis of system



907662
907664
(15 mm)



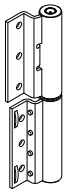
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907668
(15 mm)



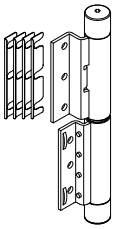
907663
(17 mm)



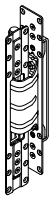
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(17 mm)



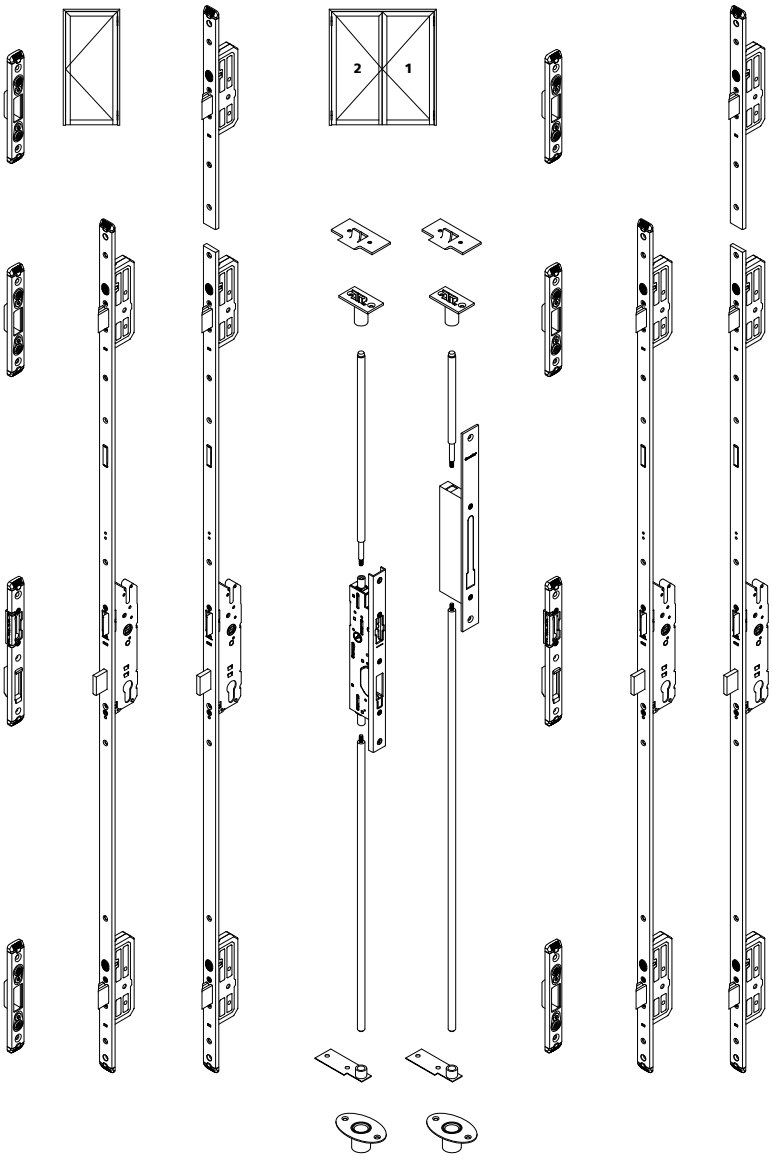
987612 - 987613
987623 - 987624
(12 mm)



987680
987681
(13.5 mm)

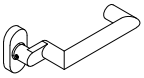


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907350



907351



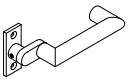
907356



907352 **907353**



907327



907326



907329



907337



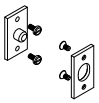
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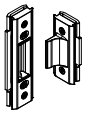
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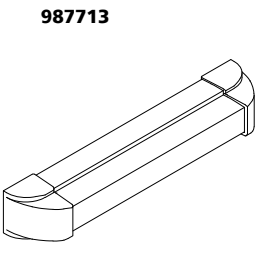
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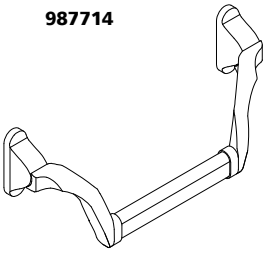
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987714

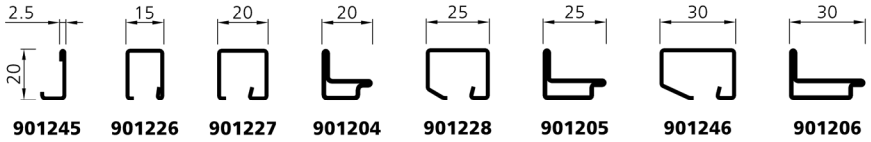


987207 - 987210

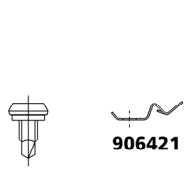


907286 - 907289

Systemübersicht | Tableau du système | Synopsis of system

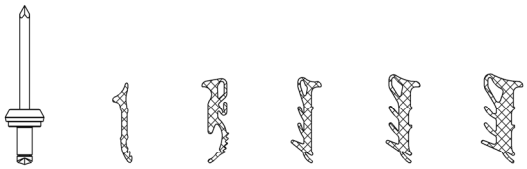


901245 **901226** **901227** **901204** **901228** **901205** **901246** **901206**



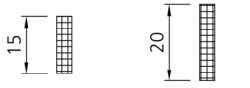
906577 (VE 100 Stk/pcs)
906578 (VE 1000 Stk/pcs)
906579 (Mag. 200 Stk/pcs)

906421



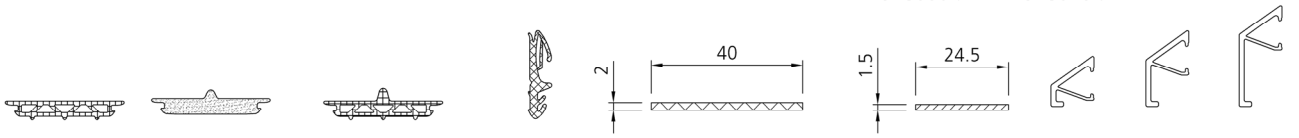
906574

905712 2 mm
985702 5 mm
905784 3-4 mm
905785 5-6 mm
905786 7-8 mm



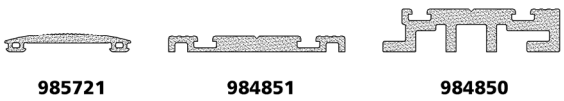
948003 3 mm
948004 4 mm
948005 5 mm
948006 6 mm

948007 3 mm
948008 4 mm
948009 5 mm
948010 6 mm

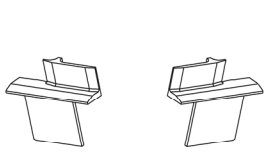


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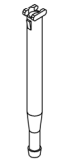
903300 20 mm
903301 30 mm
903302 40 mm



985721 **984851** **984850**



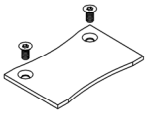
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985732



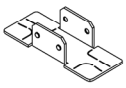
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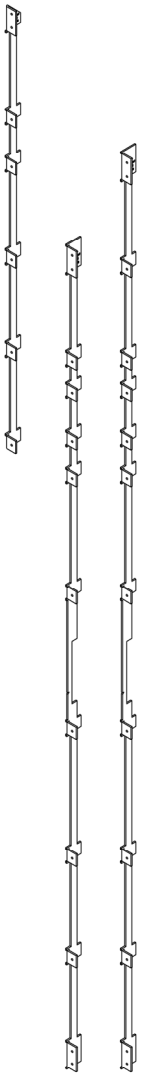
900100
900103



986705
986706



906300



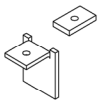
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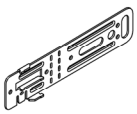
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987073

6

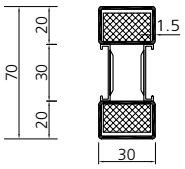
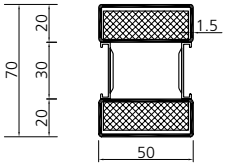
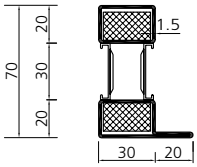
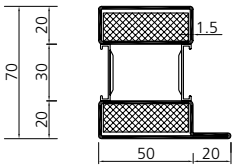
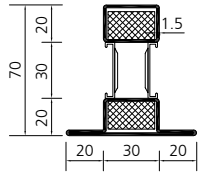
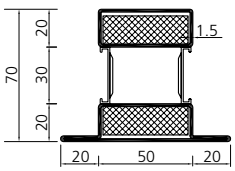
08/23

Platz für Notizen

Espace pour les notes

Space for memos

Profile / Stahl — Profilés / Acier — Profiles / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**534.730**	ZM	6000	3.391			1.71	1.41	35.00	15.00	0.235
				- 1999 mm	13.34	5.00					
				2000 - 2499 mm	15.04	5.17					
				2500 - 2999 mm	16.01	5.25					
				3000 - 3499 mm	16.98	5.30					
				3500 - 3999 mm	17.24	5.33					
				4000 - 6000 mm	17.42	5.35					
	**534.750**	ZM	6000	5.046			6.09	2.44	35.00	25.00	0.315
				- 1999 mm	17.47	7.03					
				2000 - 2499 mm	20.31	7.33					
				2500 - 2999 mm	22.02	7.48					
				3000 - 3499 mm	23.10	7.57					
				3500 - 3999 mm	23.81	7.62					
				4000 - 6000 mm	24.30	7.63					
	**534.731**	ZM	6000	3.839			4.44	1.58	29.11	19.38	0.270
				- 1999 mm	16.55	5.60					
				2000 - 2499 mm	18.95	5.78					
				2500 - 2999 mm	20.35	5.87					
				3000 - 3499 mm	21.21	5.92					
				3500 - 3999 mm	21.77	5.95					
				4000 - 6000 mm	22.15	5.95					
	**534.751**	ZM	6000	5.507			11.78	3.15	30.69	29.49	0.310
				- 1999 mm	20.40	7.65					
				2000 - 2499 mm	24.02	7.96					
				2500 - 2999 mm	26.26	8.12					
				3000 - 3499 mm	27.69	8.22					
				3500 - 3999 mm	28.64	8.27					
				4000 - 6000 mm	29.30	8.31					
	**534.732***	ZM	6000	4.263			9.17	2.62	25.04	35.00	0.310
				- 1999 mm	18.68	5.93					
				2000 - 2499 mm	21.60	6.12					
				2500 - 2999 mm	23.34	6.21					
				3000 - 3499 mm	24.42	6.27					
				3500 - 3999 mm	25.13	6.30					
				4000 - 6000 mm	25.62	6.32					
	**534.752**	ZM	6000	5.942			20.57	4.57	27.37	45.00	0.350
				- 1999 mm	22.51	8.04					
				2000 - 2499 mm	26.76	8.37					
				2500 - 2999 mm	29.44	8.53					
				3000 - 3499 mm	32.32	8.63					
				3500 - 3999 mm	33.13	8.69					
				4000 - 6000 mm	33.70	8.73					



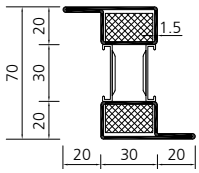
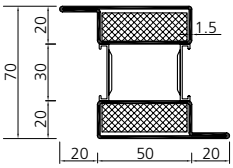
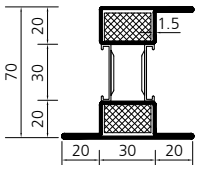
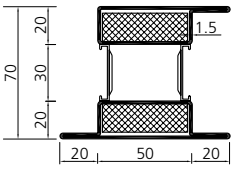
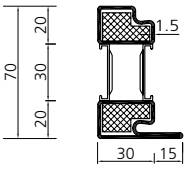
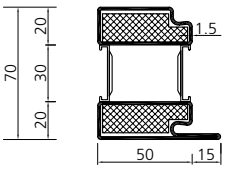
Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

* auf Anfrage / sur demande / on request

Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**534.733***	ZM	6000	4.269			4.44	1.58	35.00	35.00	0.310
			- 1999 mm		20.57	8.58					
			2000 - 2499 mm		24.02	8.85					
			2500 - 2999 mm		26.10	8.99					
			3000 - 3499 mm		27.41	9.07					
			3500 - 3999 mm		28.27	9.12					
			4000 - 6000 mm		28.87	9.15					
	**534.753**	ZM	6000	5.968			20.57	4.57	35.00	45.00	0.350
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**534.735**	ZM	6000	4.711			9.17	2.62	34.12	35.64	0.350
			- 1999 mm		23.28	9.04					
			2000 - 2499 mm		27.56	9.34					
			2500 - 2999 mm		30.21	9.48					
			3000 - 3499 mm		31.90	9.56					
			3500 - 3999 mm		33.03	9.61					
			4000 - 6000 mm		33.81	9.64					
	**534.755**	ZM	6000	6.403			20.57	4.57	31.58	48.57	0.390
			- 1999 mm		26.27	11.04					
			2000 - 2499 mm		31.80	11.49					
			2500 - 2999 mm		35.40	11.72					
			3000 - 3499 mm		37.77	11.85					
			3500 - 3999 mm		38.12	11.93					
			4000 - 6000 mm		38.78	11.56					
	**535.731**	ZM	6000	3.738			4.44	1.58	27.97	17.99	0.280
			- 1999 mm		16.55	5.60					
			2000 - 2499 mm		18.95	5.78					
			2500 - 2999 mm		20.35	5.87					
			3000 - 3499 mm		21.21	5.92					
			3500 - 3999 mm		21.77	5.95					
			4000 - 6000 mm		22.15	5.95					
	**535.751**	ZM	6000	5.408			11.78	3.15	29.78	28.68	0.320
			- 1999 mm		20.40	7.65					
			2000 - 2499 mm		24.02	7.96					
			2500 - 2999 mm		26.26	8.12					
			3000 - 3499 mm		27.69	8.22					
			3500 - 3999 mm		28.64	8.27					
			4000 - 6000 mm		29.30	8.31					

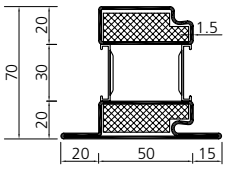
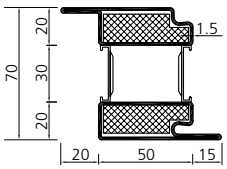
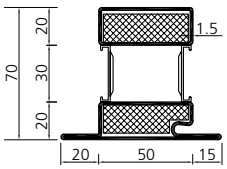
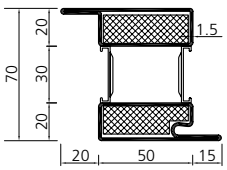
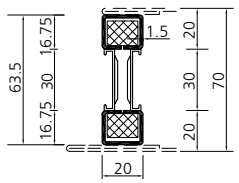
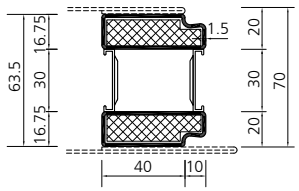


Schwerpunktabstand / Distance au centre de gravité / Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**535.752**	ZM	6000	5.851			20.57	4.57	26.65	44.39	0.350
			- 1999 mm		22.51	8.04					
			2000 - 2499 mm		26.76	8.37					
			2500 - 2999 mm		29.44	8.53					
			3000 - 3499 mm		32.32	8.63					
			3500 - 3999 mm		33.13	8.69					
			4000 - 6000 mm		33.70	8.73					
	**535.753**	ZM	6000	5.849			11.78	3.15	34.08	44.39	0.350
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**538.752**	ZM	6000	5.952			20.57	4.57	44.10	35.00	0.361
			- 1999 mm		22.51	8.04					
			2000 - 2499 mm		26.76	8.37					
			2500 - 2999 mm		29.44	8.53					
			3000 - 3499 mm		32.32	8.63					
			3500 - 3999 mm		33.13	8.69					
			4000 - 6000 mm		33.70	8.73					
	**538.753**	ZM	6000	5.970			11.78	3.15	44.10	36.10	0.361
			- 1999 mm		23.80	10.53					
			2000 - 2499 mm		28.74	10.97					
			2500 - 2999 mm		31.44	11.19					
			3000 - 3499 mm		33.37	11.32					
			3500 - 3999 mm		34.67	11.37					
			4000 - 6000 mm		35.58	10.95					
	**534.620**	ZM	6000	2.257			0.60	0.60	31.75	10.00	0.200
			- 1999 mm		9.70	3.67					
			2000 - 2499 mm		10.71	3.77					
			2500 - 2999 mm		11.26	3.82					
			3000 - 3499 mm		11.59	3.85					
			3500 - 3999 mm		11.79	3.86					
			4000 - 6000 mm		11.93	3.87					
	**535.650**	ZM	6000	4.042			5.78	2.31	31.75	24.47	0.260
			- 1999 mm		15.70	6.67					
			2000 - 2499 mm		18.25	6.95					
			2500 - 2999 mm		19.78	7.09					
			3000 - 3499 mm		20.74	7.17					
			3500 - 3999 mm		21.38	7.22					
			4000 - 6000 mm		21.81	7.23					

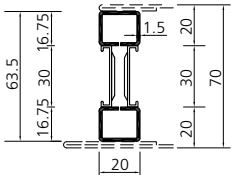
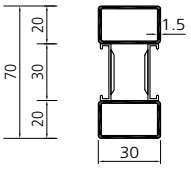
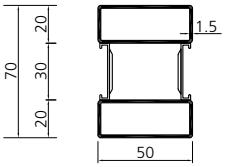


Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

m = Material / Matériau / Material

O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

Profile / Profilés / Profiles
Stahl / Acier / Steel

Profile / Profilés / Profiles (1:4)	Art. Nr. art. no.	m	L [mm]	G [kg/m]	I_y [cm⁴]	W_y [cm³]	I_x [cm⁴]	W_x [cm³]	e_y [mm]	e_z [mm]	O [m²/m]
	**530.620****	ZM	6000	1.835			0.60	0.60	31.75	10.00	0.200
			- 1999 mm		9.70	3.67					
			2000 - 2499 mm		10.71	3.77					
			2500 - 2999 mm		11.26	3.82					
			3000 - 3499 mm		11.59	3.85					
			3500 - 3999 mm		11.79	3.86					
			4000 - 6000 mm		11.93	3.87					
	**531.730****	ZM	6000	2.460			1.71	1.41	35.00	15.00	0.235
			- 1999 mm		13.34	5.00					
			2000 - 2499 mm		15.04	5.17					
			2500 - 2999 mm		16.01	5.25					
			3000 - 3499 mm		16.98	5.30					
			3500 - 3999 mm		17.24	5.33					
			4000 - 6000 mm		17.42	5.35					
	**531.750****	ZM	6000	3.408			6.09	2.44	35.00	25.00	0.315
			- 1999 mm		17.47	7.03					
			2000 - 2499 mm		20.31	7.33					
			2500 - 2999 mm		22.02	7.48					
			3000 - 3499 mm		23.10	7.57					
			3500 - 3999 mm		23.81	7.62					
			4000 - 6000 mm		24.30	7.63					

** Nur für Schwelle / seulement pour le seuil / only for threshold



Schwerpunktabstand
Distance au centre de gravité
Distance of center of gravity

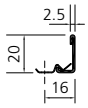
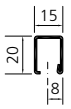
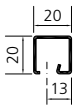
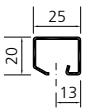
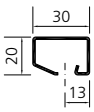
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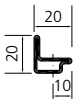
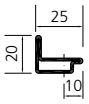
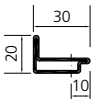
O = Umlaufende Oberfläche per Laufmeter / Surface périphérique par mètre courant / Outlying surface per running meter

Glashalteleisten aus Stahl

Parcloses en acier

Glazing beads of steel

Profile Profilés Profiles (1:4)					
Art. Nr. art. no.	**901245**	**901226**	**901227**	**901228**	**901246**
m	ZM				
L [mm]	6000				
G [kg/m]	0.329	0.568	0.657	0.734	0.829
O [m²/m]	0.038	0.059	0.067	0.075	0.083

Profile Profilés Profiles (1:4)			
Art. Nr. art. no.	**901204**	**901205**	**901206**
m	ZM		
L [mm]	6000		
G [kg/m]	0.844	0.956	1.074
O [m²/m]	0.064	0.069	0.074

m = Material
Matériau
Material

O = Umlaufende Oberfläche per Laufmeter
Surface périphérique par mètre courant
Outlying surface per running meter

Platz für Notizen

Espace pour les notes

Space for memos

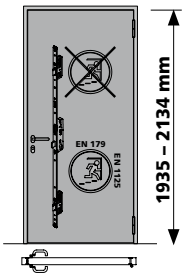
Übersicht Beschlageinbau Disposition de la quincaillerie Placement of fittings

EN 179 Notausgangsverschlüsse
Fermetures sorties d'urgences
Emergency exit devices

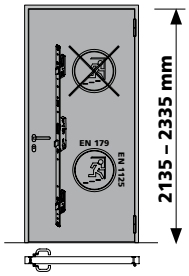
EN 1125 Paniktürverschlüsse
Fermetures anti-paniques
Panic exit devices

22 17
RZ / CR / RC PZ / CP / PC

3-Punkt-Verriegelung Verrouillage 3 points 3 point locking

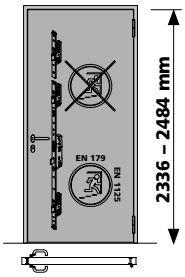


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PZ/CP/PC = un_ep_0390

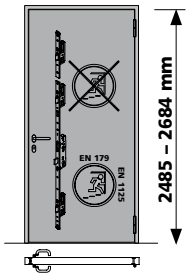


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PZ/CP/PC = un_ep_0391

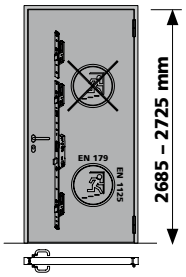
4-Punkt-Verriegelung Verrouillage 4 points 4 point locking



RZ/CR/RC = un_ep_0433
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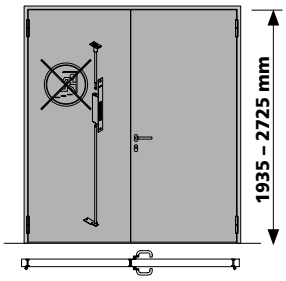


RZ/CR/RC = un_ep_0434
PZ/CP/PC = un_ep_0394

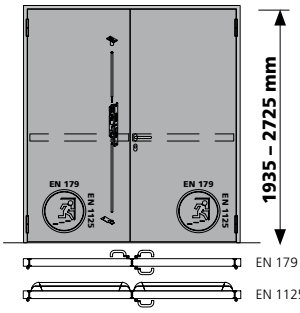


RZ/CR/RC = un_ep_0435
PZ/CP/PC = un_ep_0395

Standflügelverriegelung Verrouillage du vantail semi-fixe Fixed leaf lock



un_ep_0239



un_ep_0389

6

Übersicht Beschlageinbau — Disposition de la quincaillerie — Placement of fittings

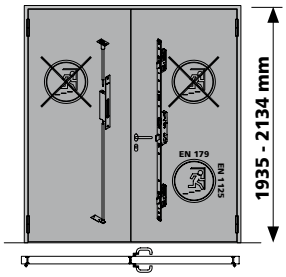
EN 179 Notausgangsverschlüsse / Fermetures sorties d'urgences / Emergency exit devices

EN 1125 Paniktürverschlüsse / Fermetures anti-paniques / Panic exit devices

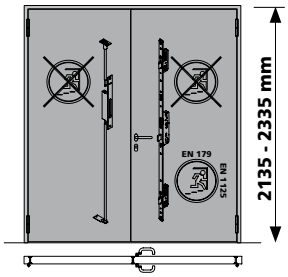
22 17

RZ / CR / RC PZ / CP / PC

3-Punkt-Verriegelung — Verrouillage 3 points — 3 point locking

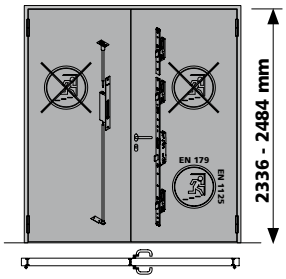


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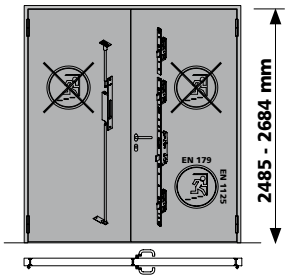


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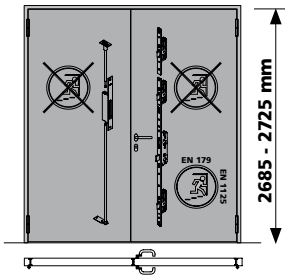
4-Punkt-Verriegelung — Verrouillage 4 points — 4 point locking



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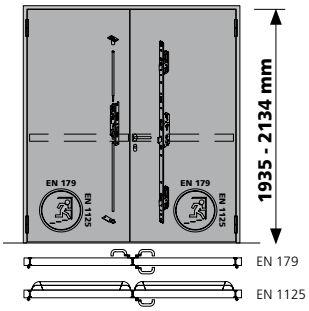


RZ/CR/RC = un ep 0441
PZ/CP/PC = un ep 0401

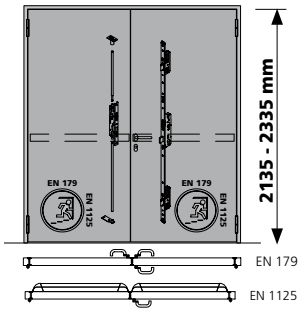


RZ/CR/RC = un ep 0442
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3-Punkt-Verriegelung – Antipanik — Verrouillage 3 points – anti-panique — 3 point locking – anti-panic

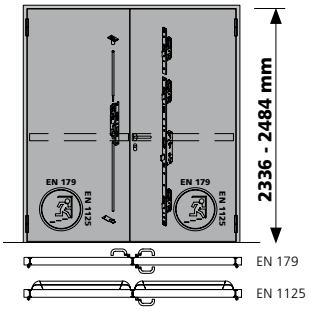


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PZ/CP/PC = un ep 0404

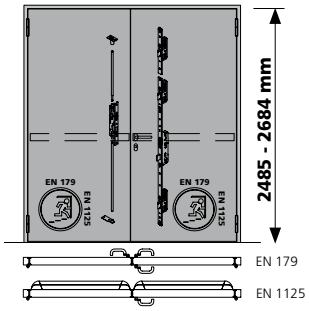


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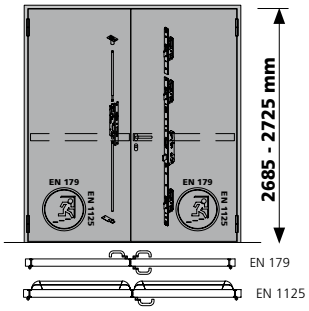
4-Punkt-Verriegelung – Antipanik — Verrouillage 4 points – anti-panique — 4 point locking – anti-panic



RZ/CR/RC = un ep 0447
PZ/CP/PC = un ep 0407



RZ/CR/RC = un ep 0448
PZ/CP/PC = un ep 0408



RZ/CR/RC = un ep 0449
PZ/CP/PC = un ep 0409

Beschläge

Bestellseiten für Schlösser, Einzelteile, Bänder, Mittelbandbolzen, Zubehöre und Dichtungen siehe Kapitel 3.3.10

Ferrements

Concernant les pages de commande pour les serrures, les pièces détachées, les paumelles, les tourillons de paumelles centrales, les accessoires et les joints, voir le chapitre 3.3.10

Fittings

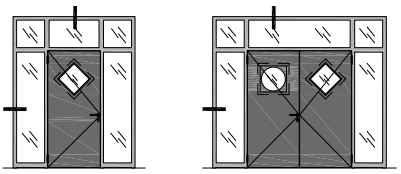
The pages for ordering locks, individual parts, hinges, middle hinge pins, accessories and seals can be found in chapter 3.3.10

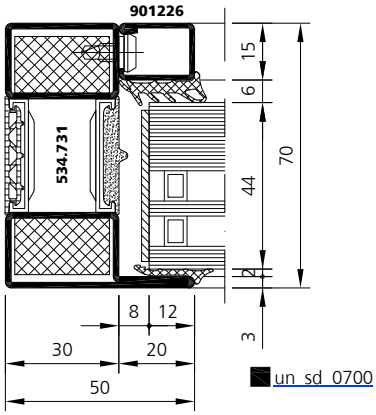
Platz für Notizen

Espace pour les notes

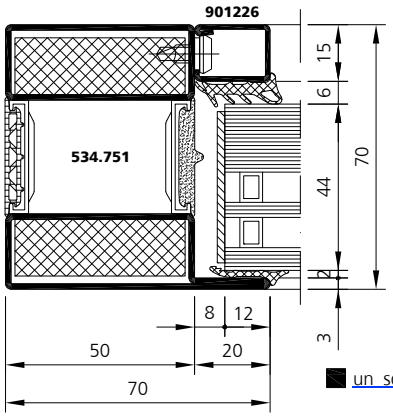
Space for memos

Systemschnitte | Coupes du système | System sections

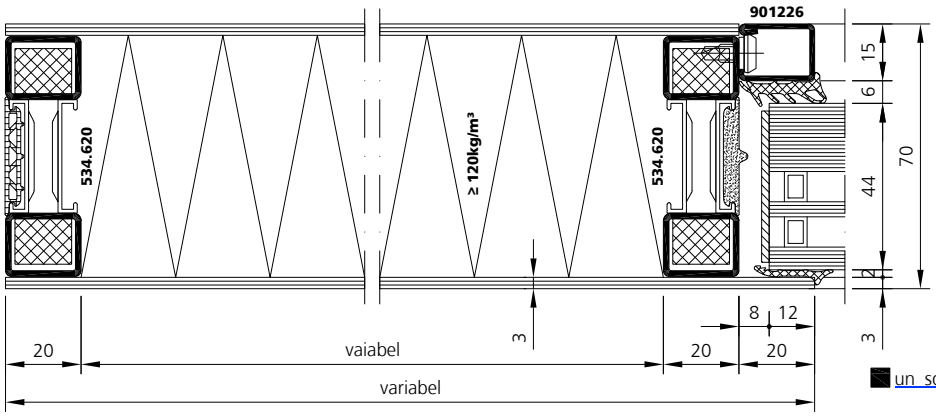




un_sd_0700



un_sd_0701



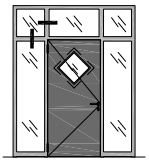
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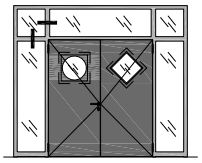
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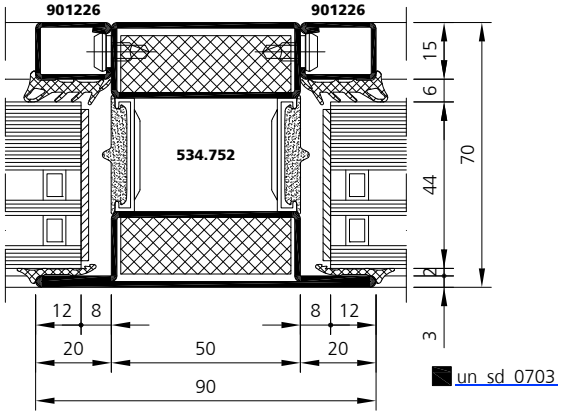
Systemschnitte

Coupes du système

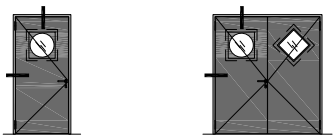
System sections

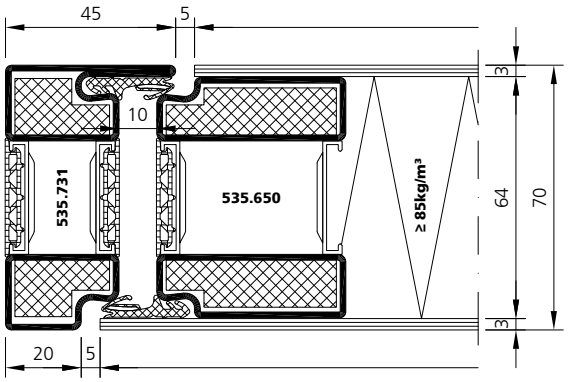




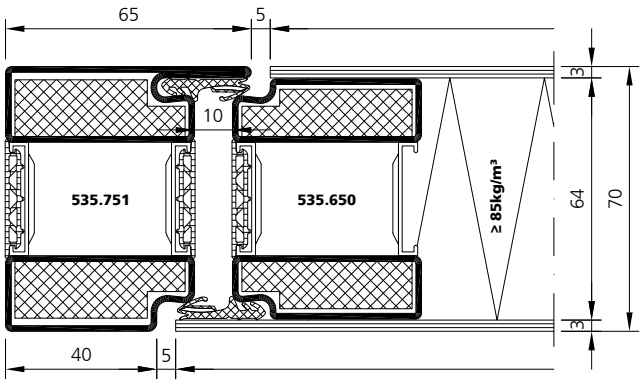


Systemschnitte | Coupes du système | System sections

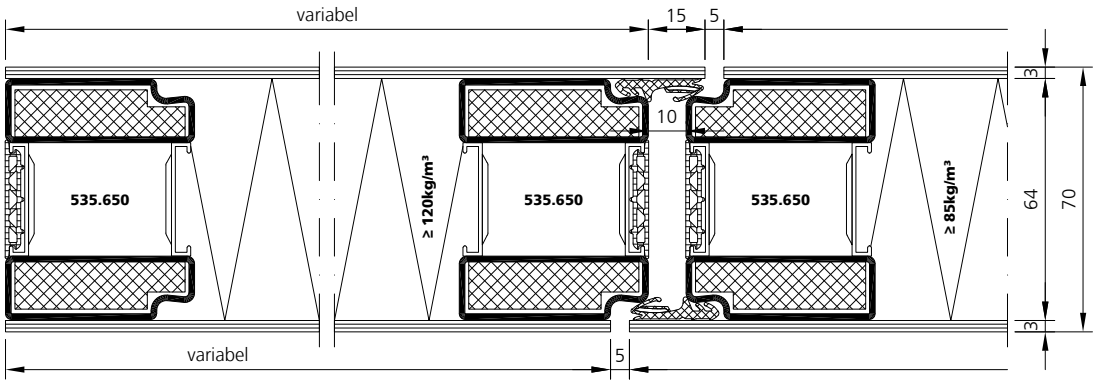




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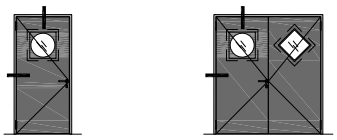
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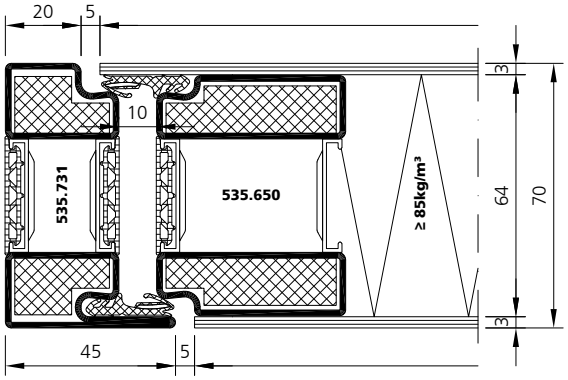


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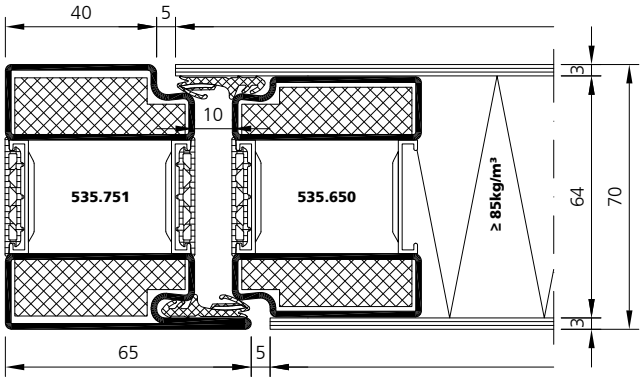
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Systemschnitte | Coupes du système | System sections

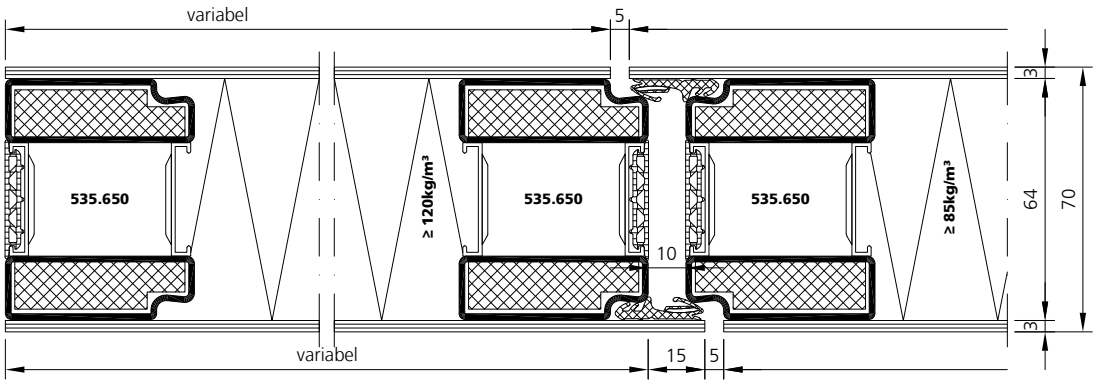




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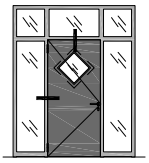


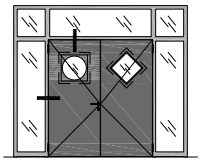
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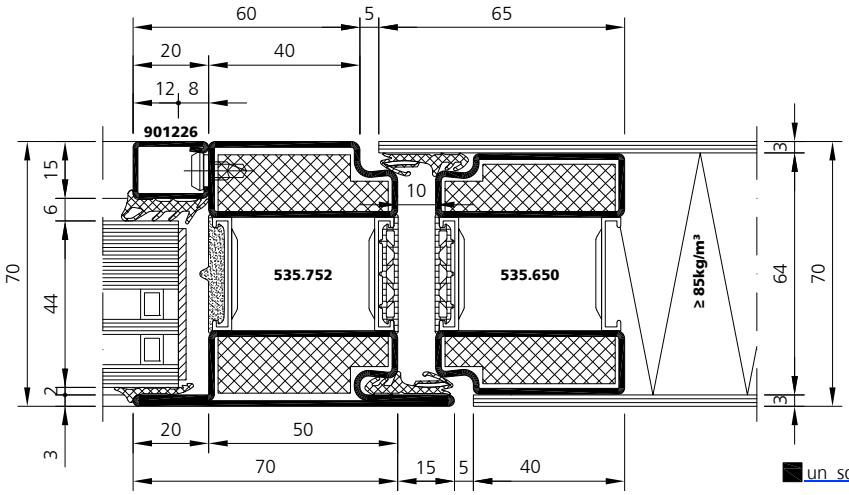


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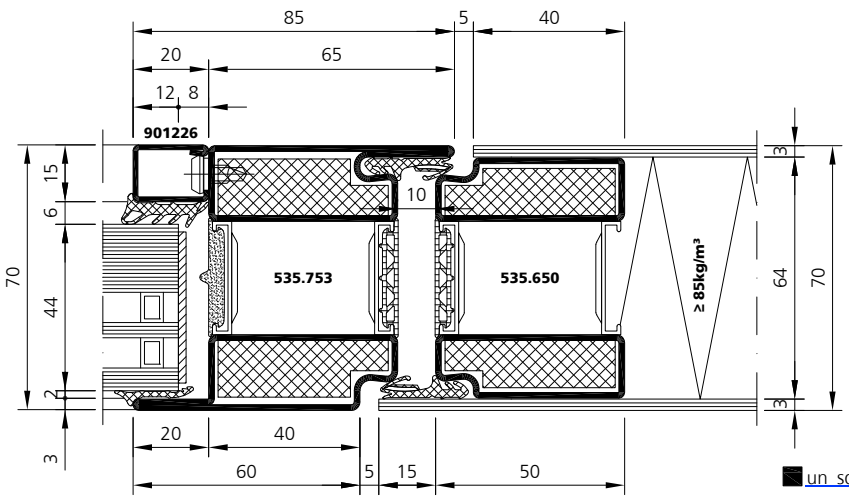
Systemschnitte | Coupes du système | System sections







un_sd_0718



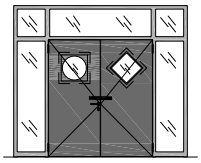
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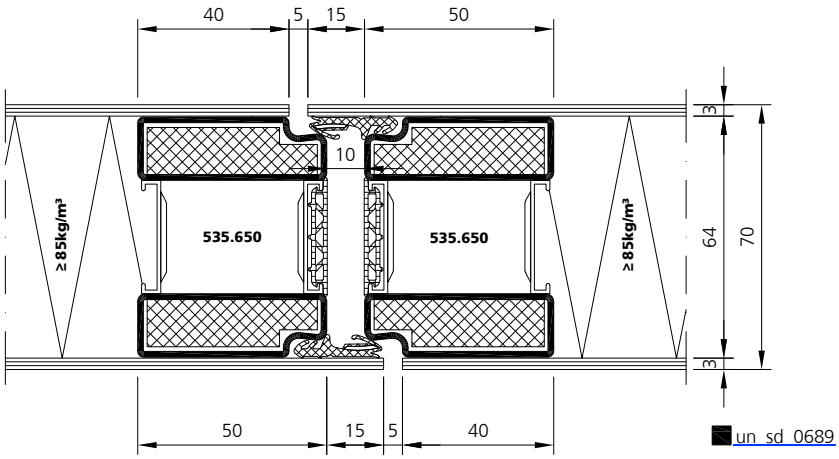
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Systemschnitte

Coupes du système

System sections

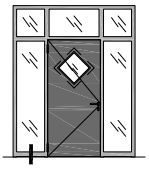


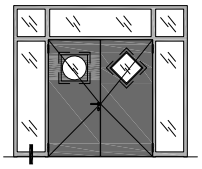


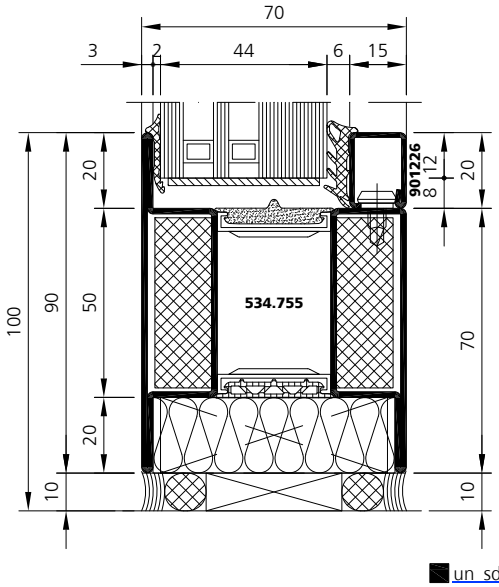
Systemschnitte

Coupes du système

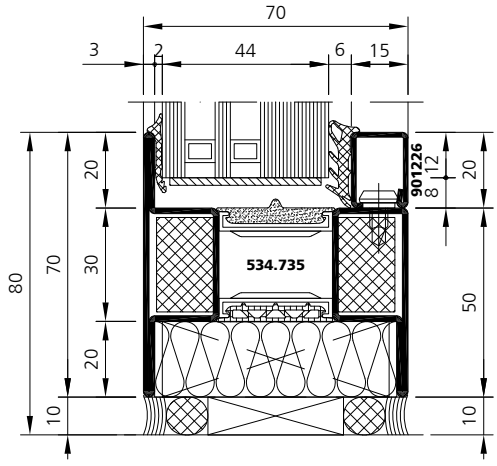
System sections







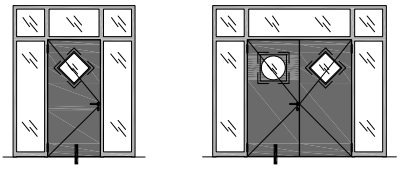
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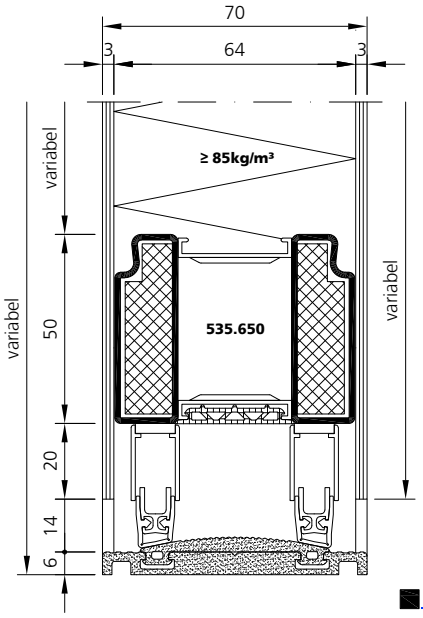


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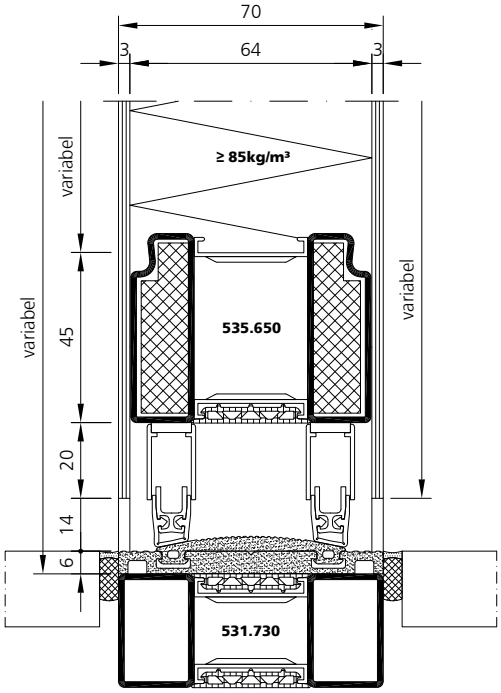
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Systemschnitte | Coupes du système | System sections

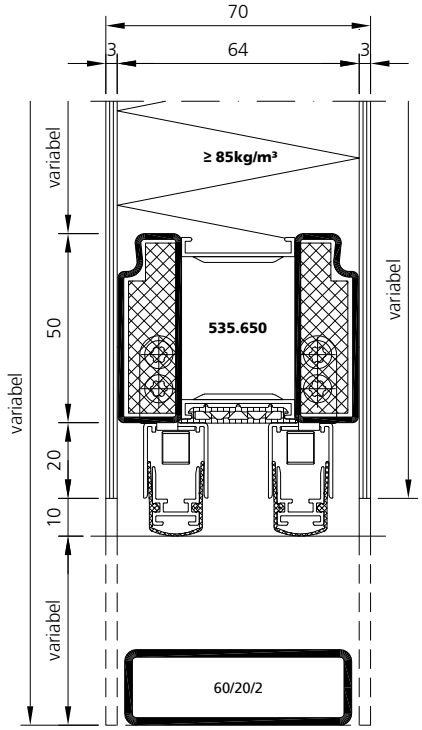




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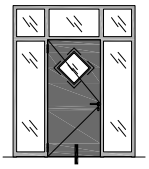
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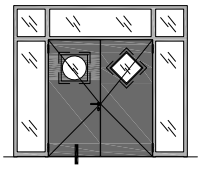


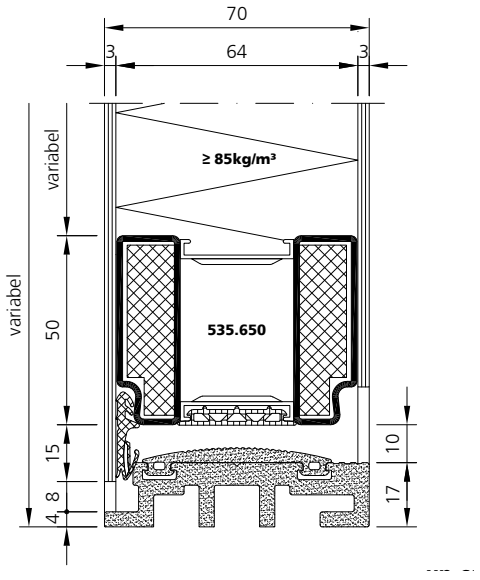
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09/23

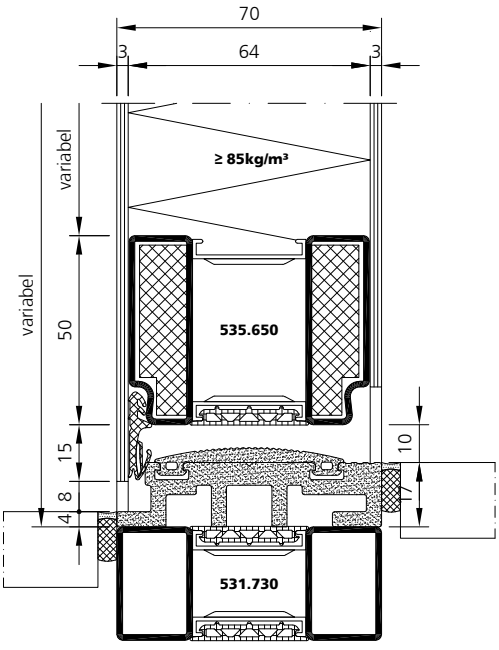
Systemschnitte | Coupes du système | System sections







un_sd_0723



un_sd_0726

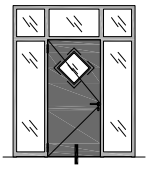
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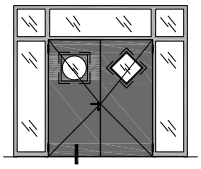
08/23

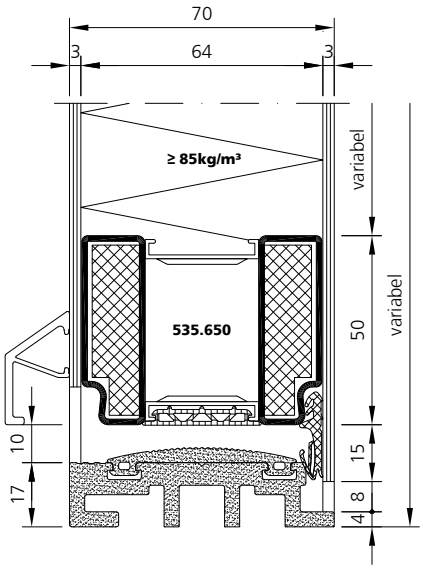
Systemschnitte

Coupes du système

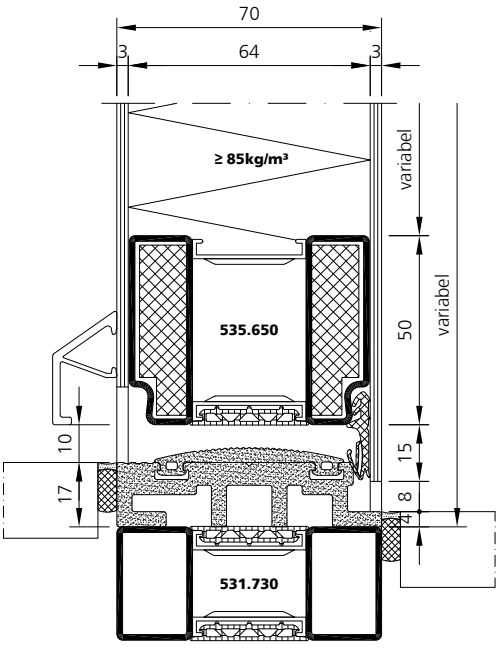
System sections







un_sd_0694



un_sd_0695

Platz für Notizen

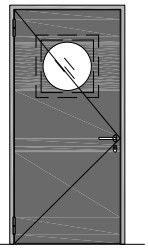
Espace pour les notes

Space for memos

Systempläne | Plans du système | System plans

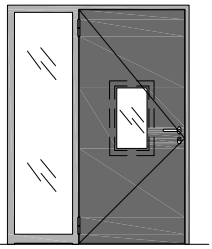
Stahl / Acier / Steel

1



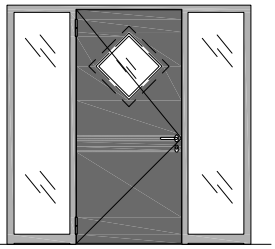
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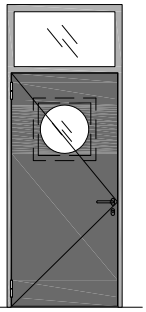
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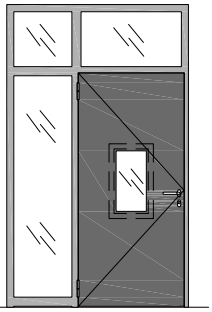
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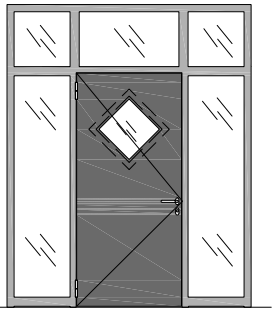
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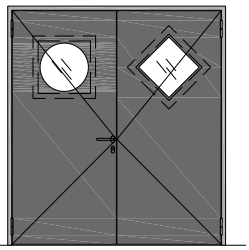
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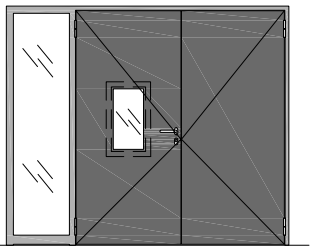
Systempläne | Plans du système | System plans

7



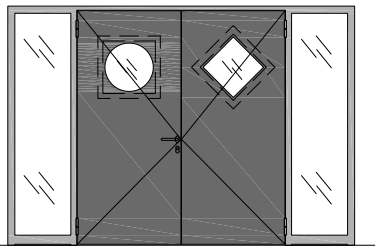
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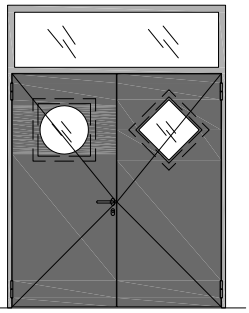
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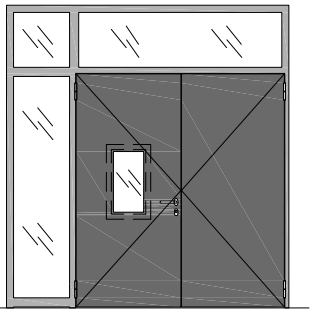
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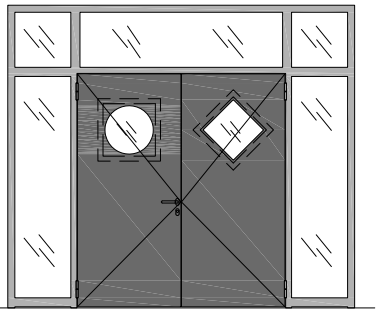
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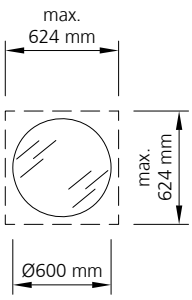
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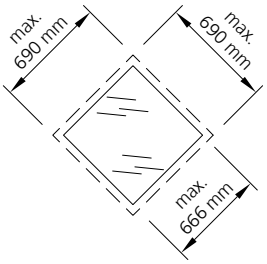


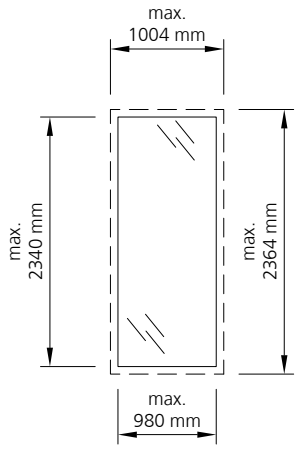
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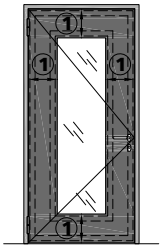
Flügel/Vantail/Leaf:
Glasfläche im Licht: / Face de verre visible: / Visible glass area:
max. 0.282 m² / 0.443 m² / 2.293 m²

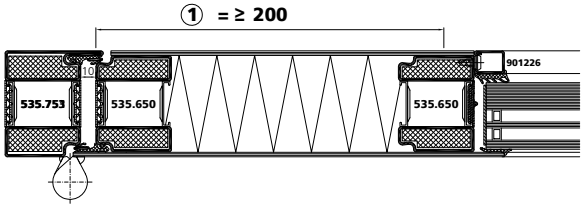


nur Einfachglas
Verre trempré seulement
Single pane glass only









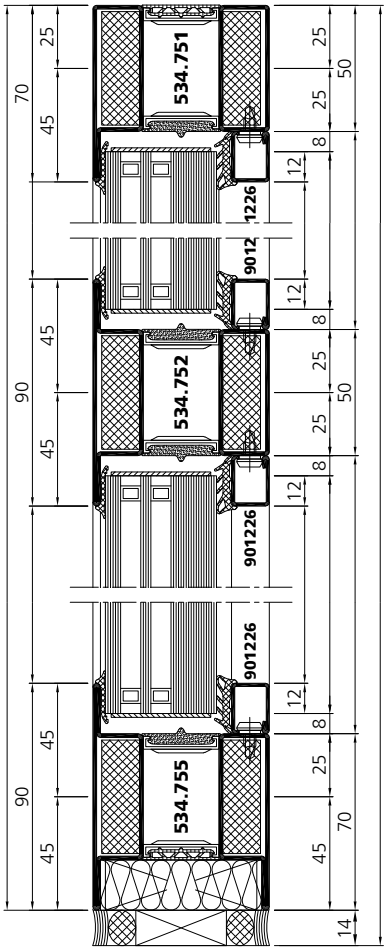
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08/23

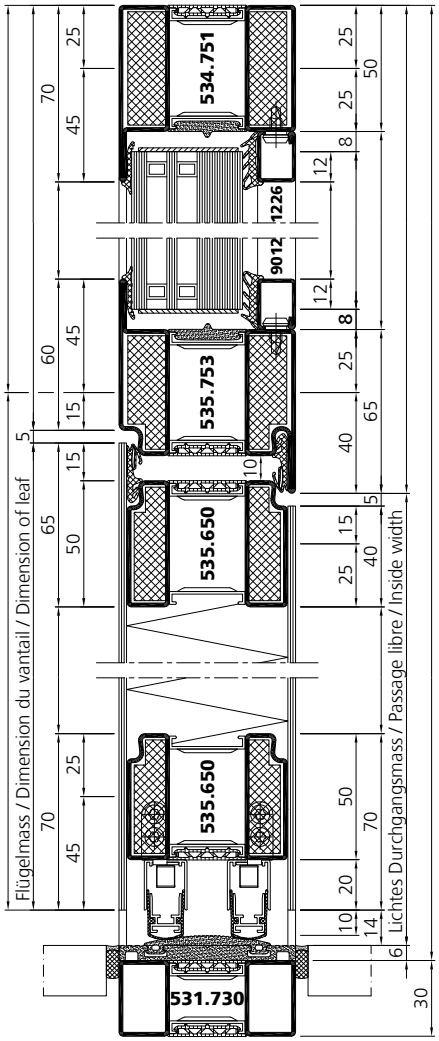
Systempläne | Plans du système | System plans

un_sp_0443

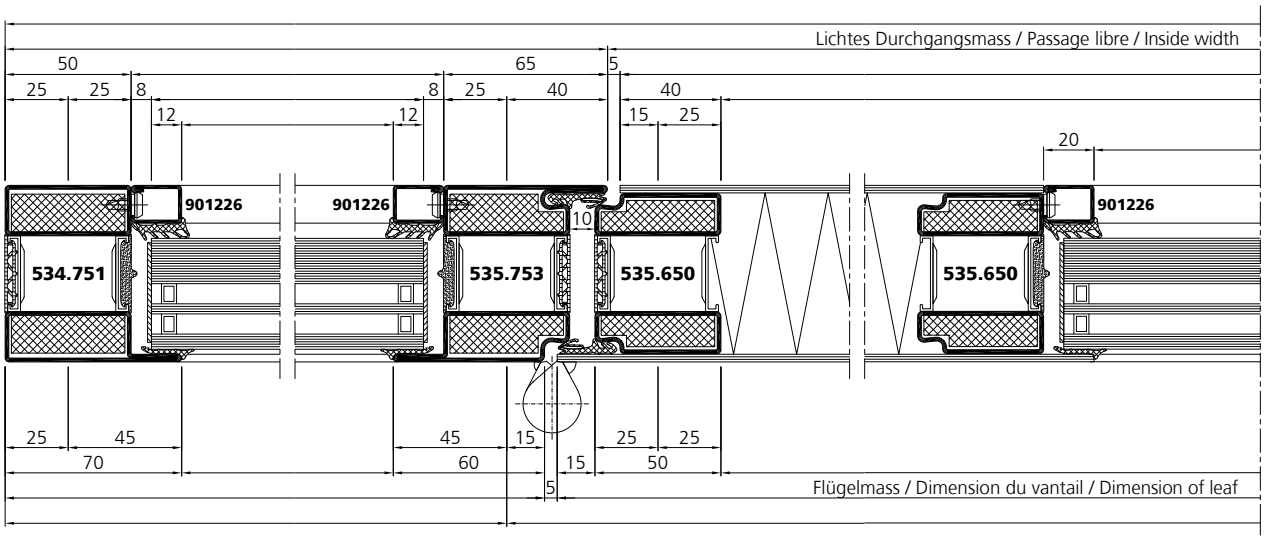
A - A



B - B

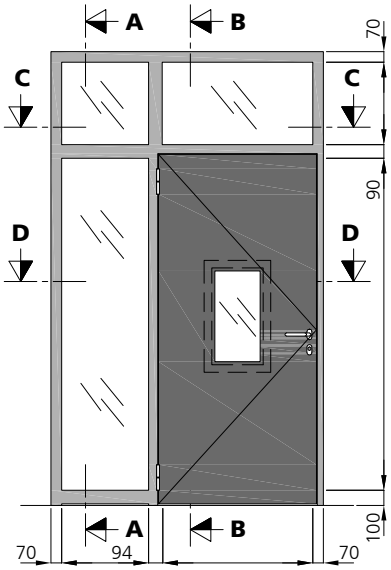


D - D

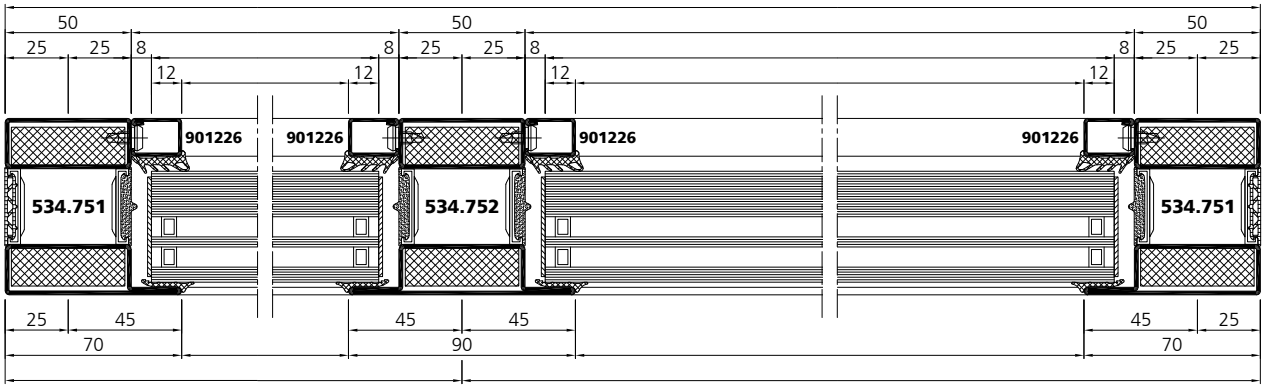


Systempläne | Plans du système | System plans

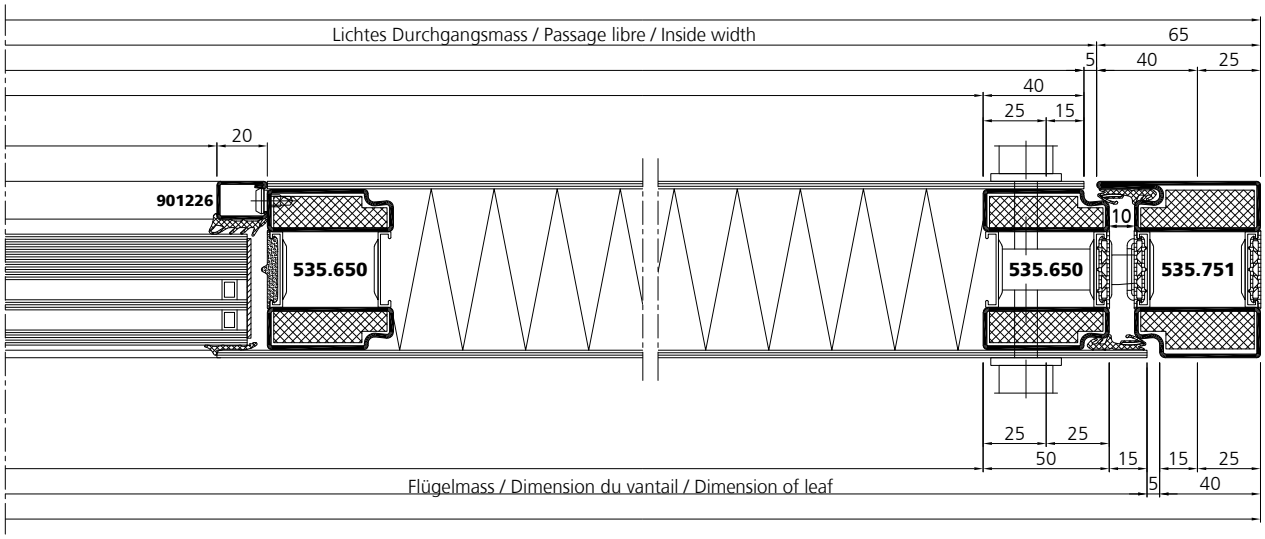
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C - C



D - D



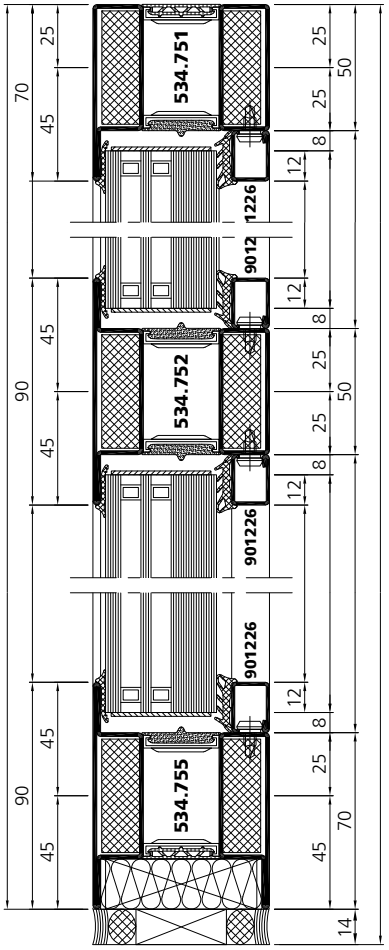
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08/23

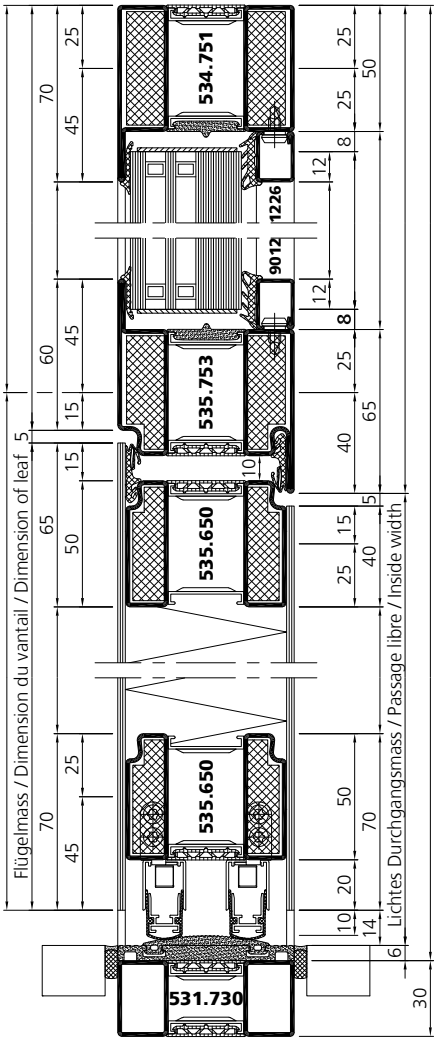
Systempläne | Plans du système | System plans

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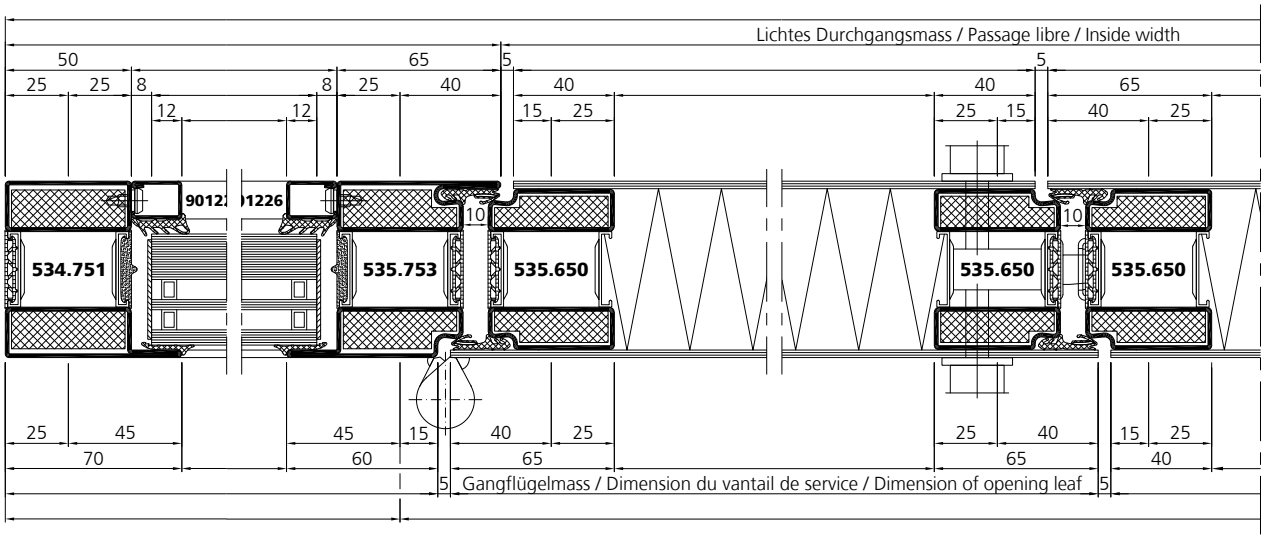
A - A



B - B

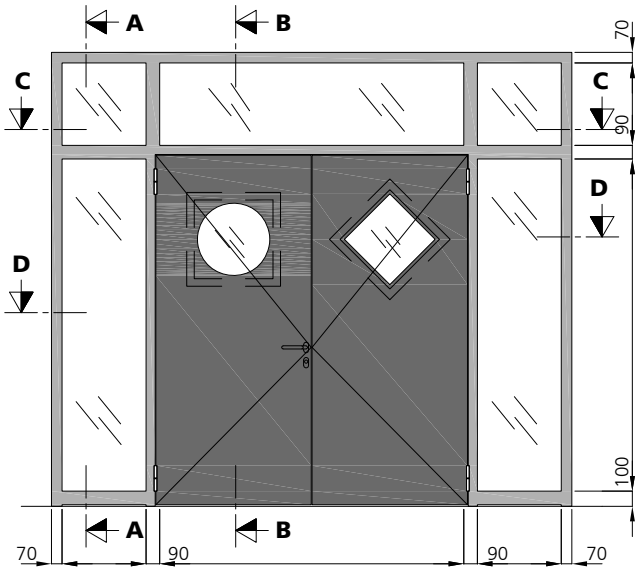


D - D

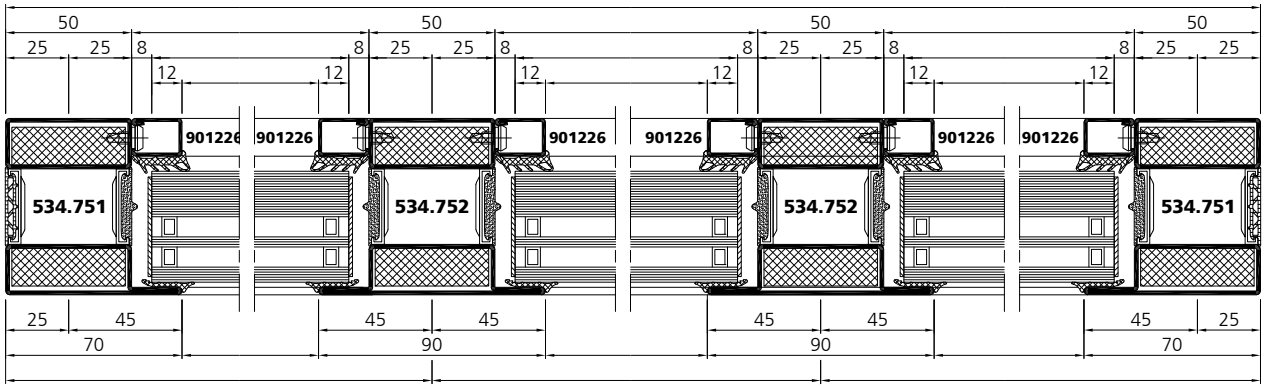


Systempläne | Plans du système | System plans

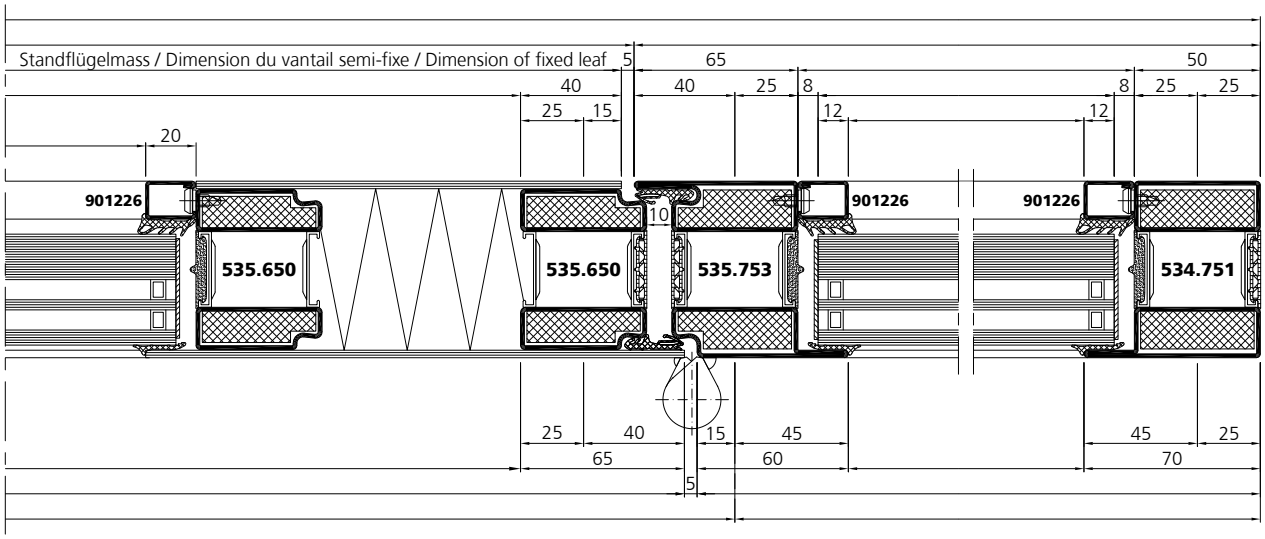
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C - C



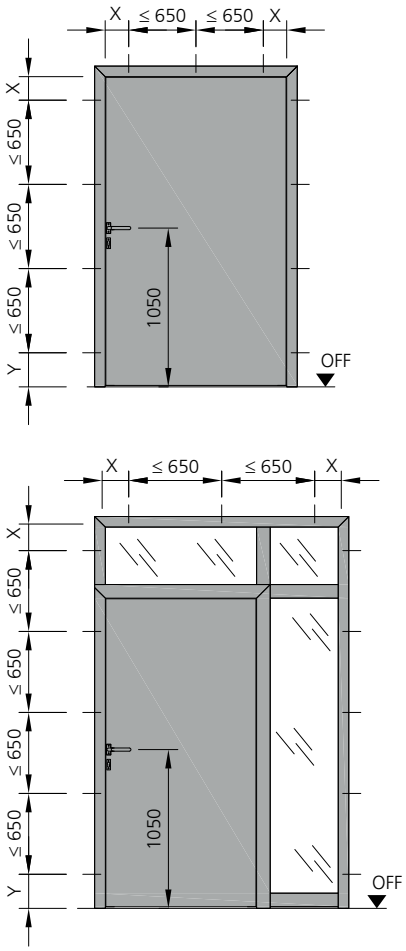
D - D

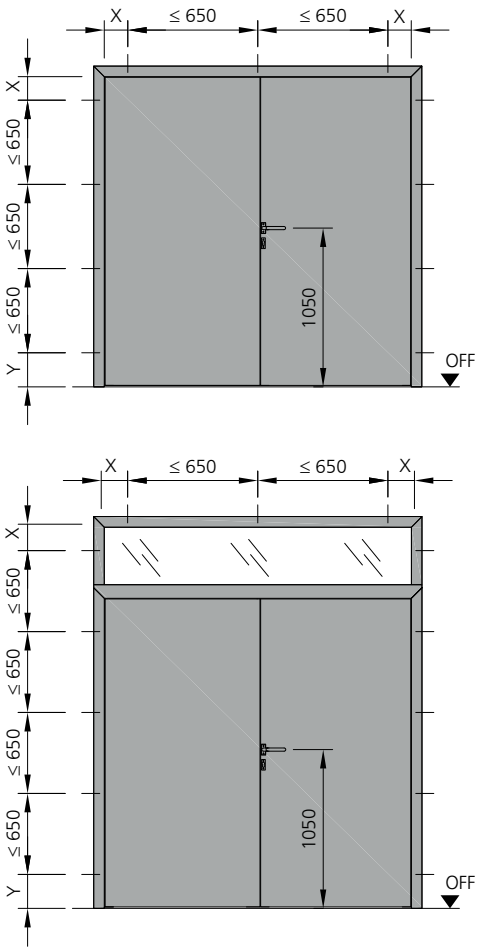


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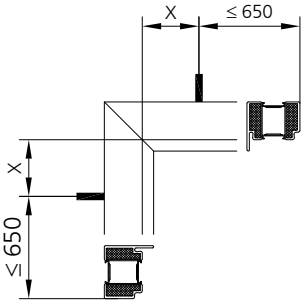
08/23

Befestigungspunkte | Points de fixation | Fixing points



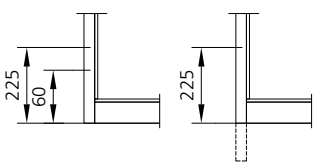


Mass X
Dimension X
Dimension X = 75 ±20



Wandanschlüsse siehe Kapitel 3.5.19
Raccords muraux voir chapitre 3.5.19
Wall abutments see chapter 3.5.19

Mass Y
Dimension Y
Dimension Y = 225 / 60 ±20



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Verarbeitung

Hinweis
Informationen zum Profilzuschnitt, Profilbearbeitung und Schweissempfehlung entnehmen Sie dem Kapitel 3.6.1.

Die nachfolgenden Seiten stellen nur die für die Einbruchhemmung relevanten Änderungen gegenüber dem Standard dar.

Mise en œuvre des profilés

Remarque
Vous trouverez des informations concernant la découpe des profilés, la mise en œuvre des profilés et le soudage dans le chapitre 3.6.1.

Les pages qui suivent contiennent exclusivement les modifications importantes en matière de résistance à l'effraction par rapport au standard

Processing profiles

Note
Information on profile cutting, assembly profiles and welding recommendations can be found in chapter 3.6.1.

The following pages only highlight the relevant changes required for burglary resistance compared to the standard specifications.

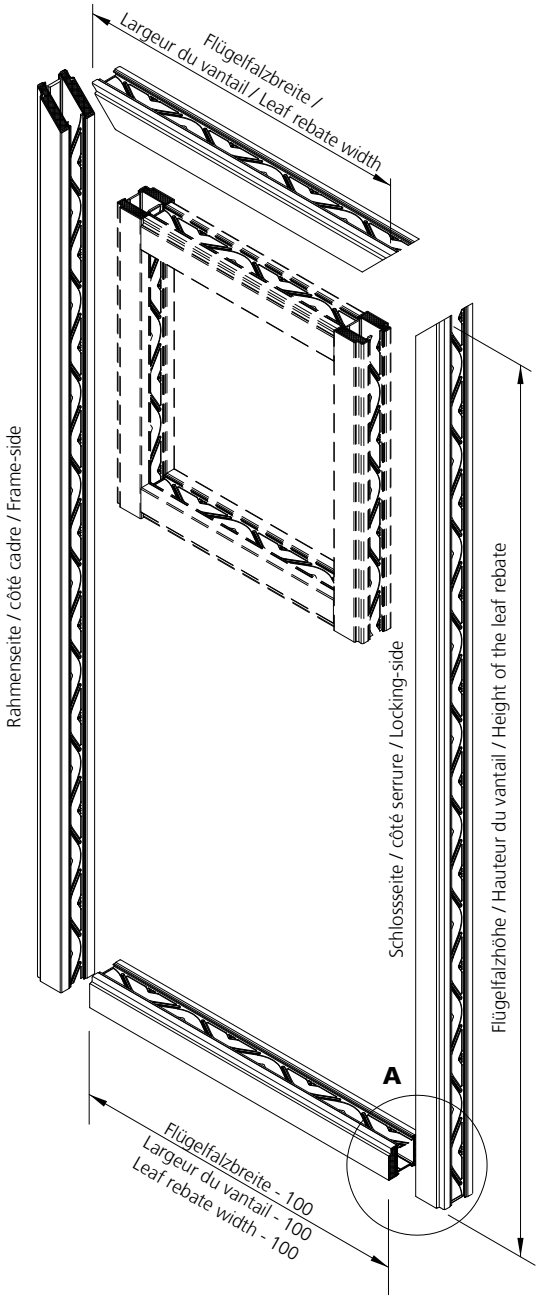
Zuschnitt und Klinkungen
Gangflügel

Débitage et usinages
du vantail de service

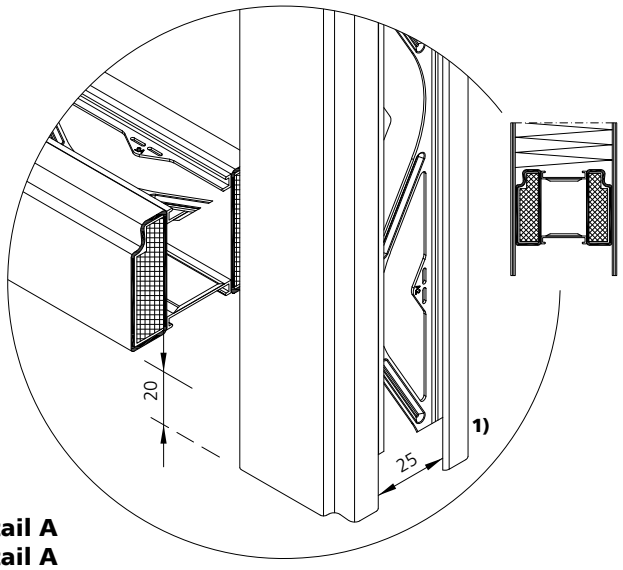
Cutting and notching
opening leaf

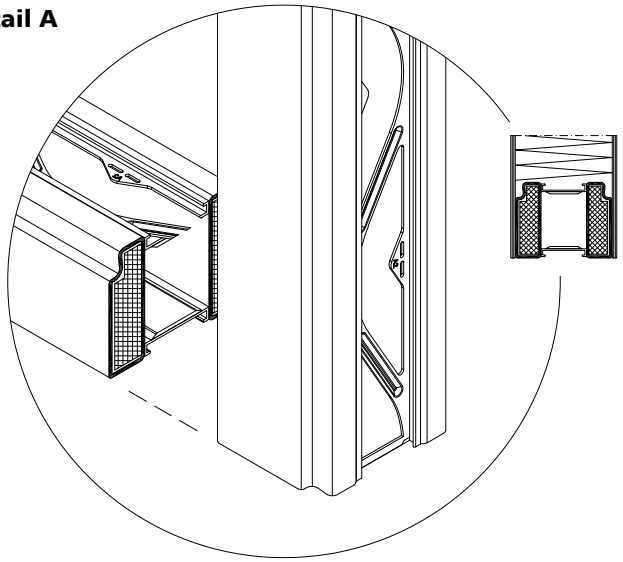
1) Klinkung für absenkbare Bodendichtungen.
Usinage pour joint de seuil automatique.
Notched out for automatic drop seal.

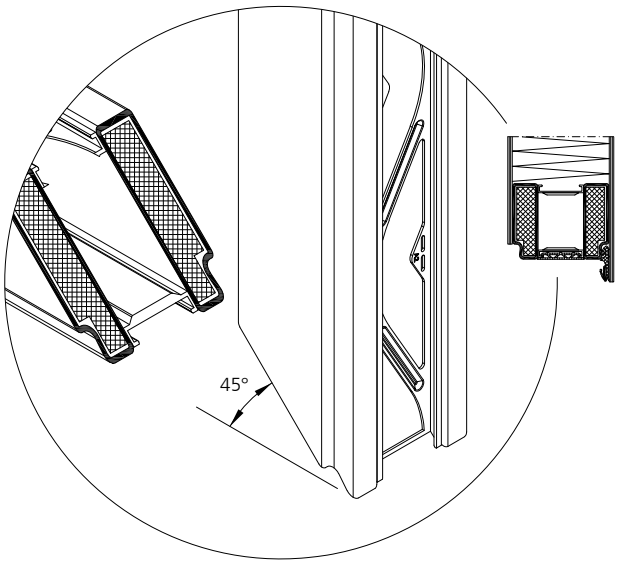
Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right



Detail A
Détail A
Detail A







09/23

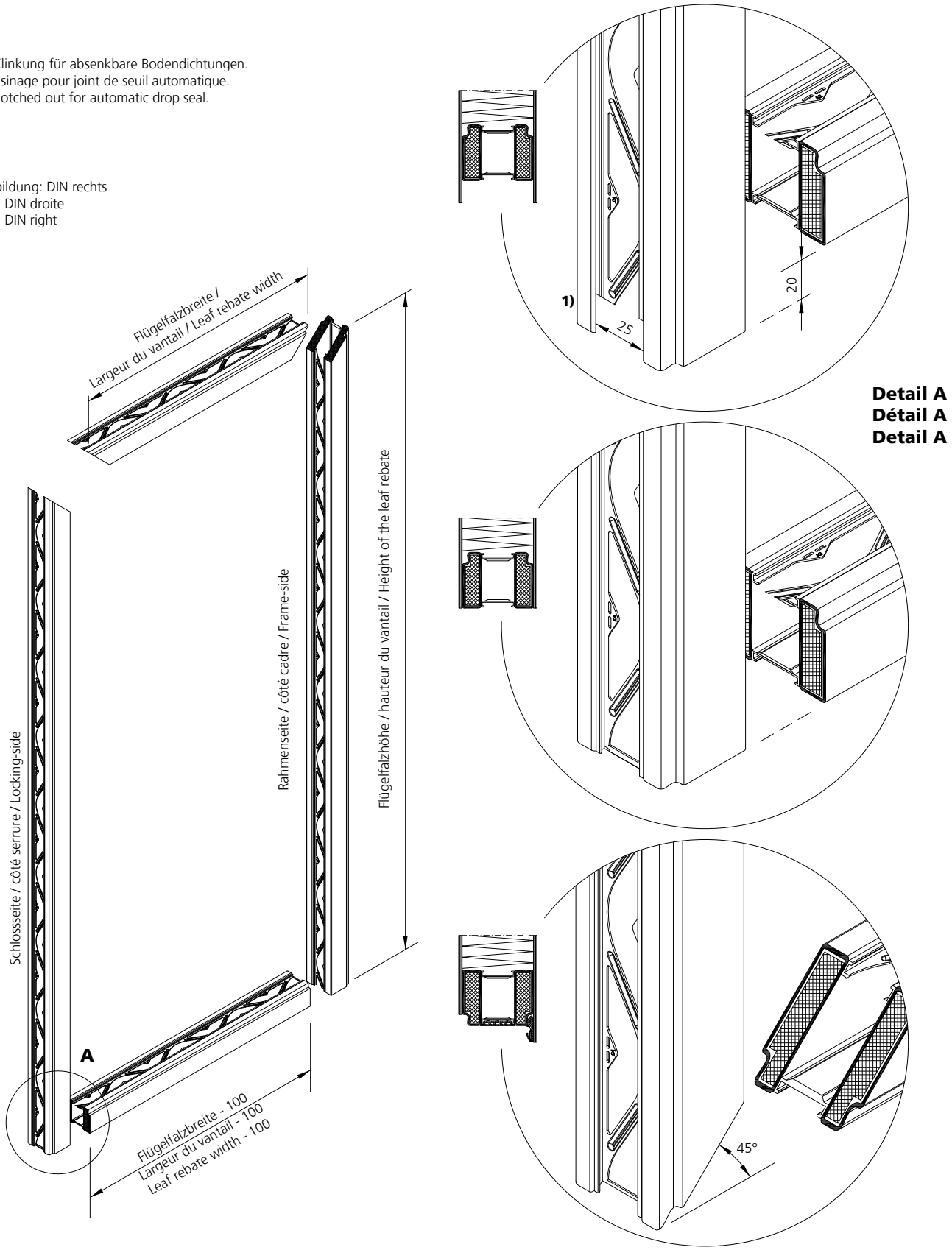
Zuschnitt und Klinkungen
Standflügel

Débitage et usinages
du vantail semi-fixe

Cutting and notching
fixed leaf

1) Klinkung für absenkbare Bodendichtungen.
Usinage pour joint de seuil automatique.
Notched out for automatic drop seal.

Abbildung: DIN rechts
fig.: DIN droite
fig.: DIN right



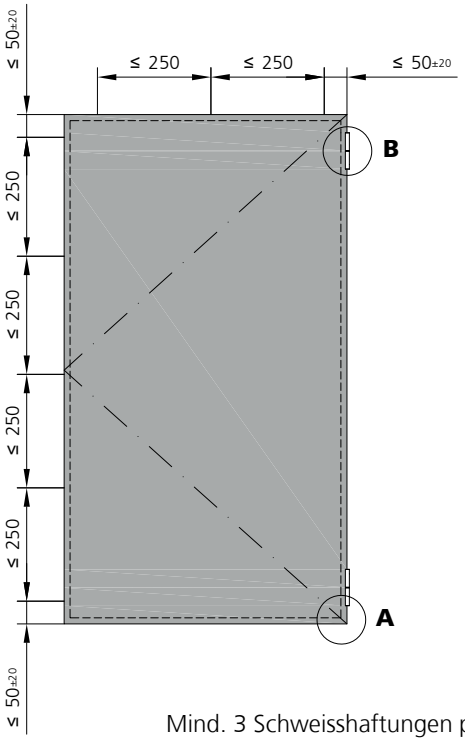
Detail A
Détail A
Detail A

6

Befestigung Bleche
Gang- und Standflügel

Fixation des Tôles
Vantail de service et vantail semi-fixe

Mounting sheets
Opening and fixed leaf



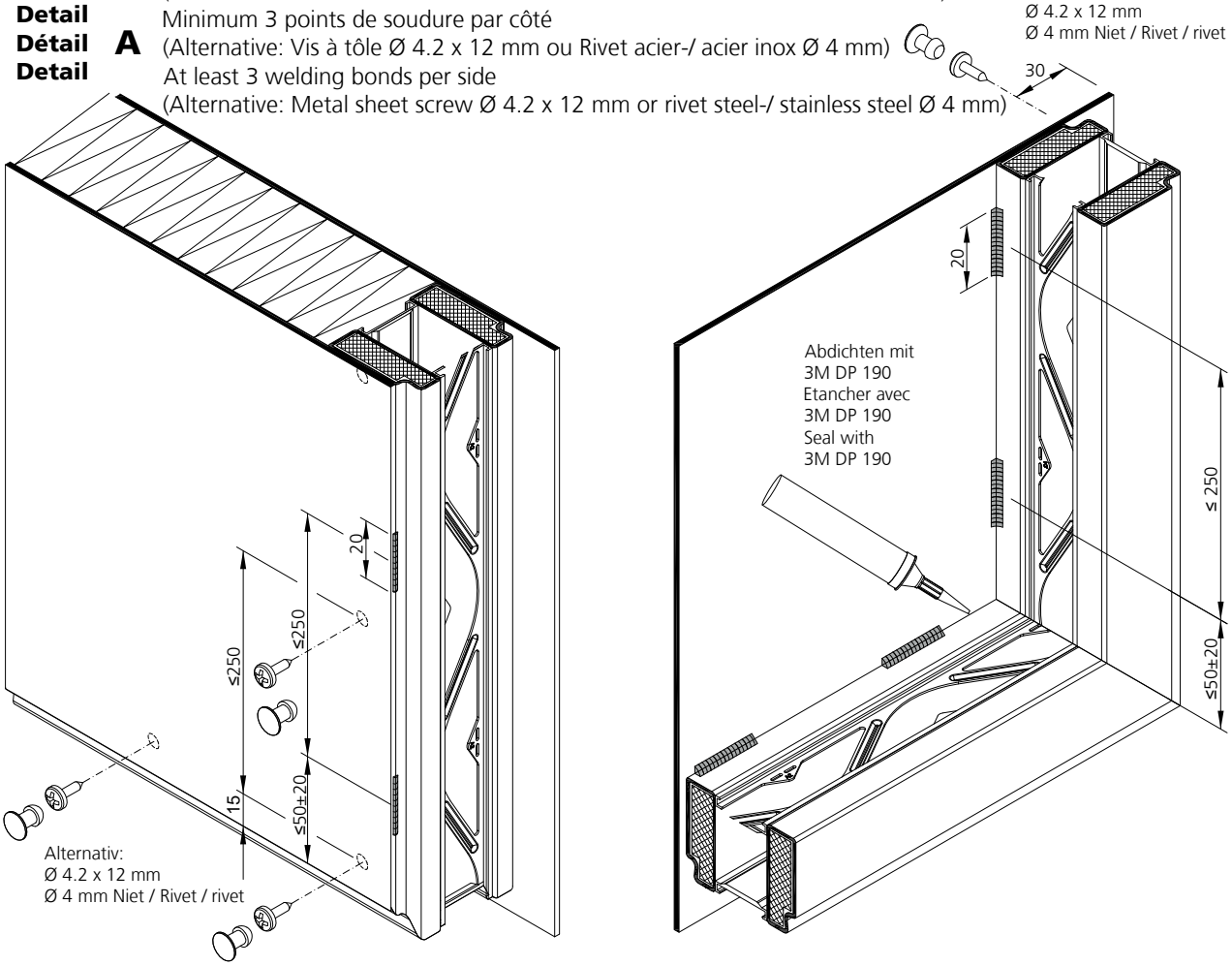
Montageanleitung Beplankung
1.) Aussenblech am Flügelrahmen fixieren, heften und schweissen. Zusätzlich Silikon, innen umlaufend, als Kehlnaht zwischen Profil und Aussenblech auftragen.
2.) Mineralwolle präzise mit 1 bis 2 mm Übermass zuschneiden und zwischen den Profile einklemmen. Sicherheits-Blatt des Herstellers beachten.
3.) Innenblech von aussen fixieren, heften und schweissen.

Instruction de montage des tôles
1.) Fixer et souder la tôle extérieure au cadre du vantail. Auxiliaire Silicone, circonférentiel intérieur, comme soudure d'angle entre le profilé et le panneau extérieur à la surface.
2.) Couper la laine minérale 1 à 2 mm plus grand et la coincer entre les profils. Tenir compte de la fiche de sécurité du fabricant.
3.) Fixer et souder la tôle intérieure.

Mounting instruction - sheet
1.) Fasten append and weld the outer sheet to the leaf frame. Ancillary Silicone, inside circumferential, as fillet weld between profile and outer panel on the surface.
2.) Cut the mineral wool precisely 1 to 2 mm oversize and squeeze between the profiles. Observe the provisions of the manufacturer's safety data sheet.
3.) Fasten append and weld the inner sheet to the leaf frame.

Detail A
Détail A
Detail A

Mind. 3 Schweisshaftungen pro Seite
(Alternativ: Blechschraube Ø 4.2 x 12 mm oder Stahl-/ Edelstahlniete Ø 4 mm)
Minimum 3 points de soudure par côté
(Alternative: Vis à tôle Ø 4.2 x 12 mm ou Rivet acier-/ acier inox Ø 4 mm)
At least 3 welding bonds per side
(Alternative: Metal sheet screw Ø 4.2 x 12 mm or rivet steel-/ stainless steel Ø 4 mm)



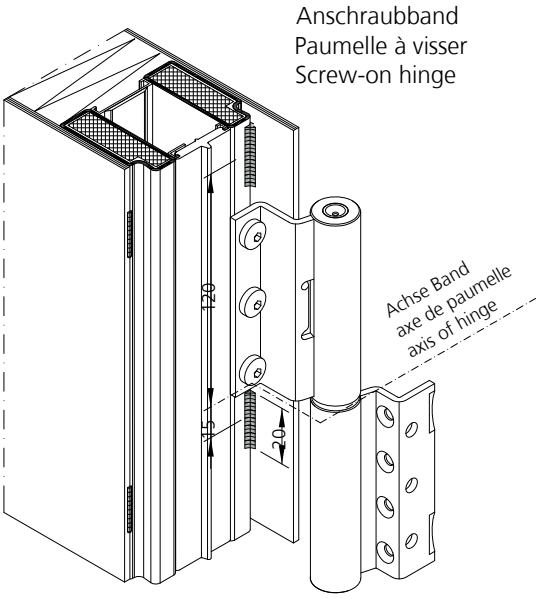
Befestigung Bleche
Gang- und Standflügel

Fixation des Tôles
Vantail de service et vantail semi-fixe

Mounting sheets
Opening and fixed leaf

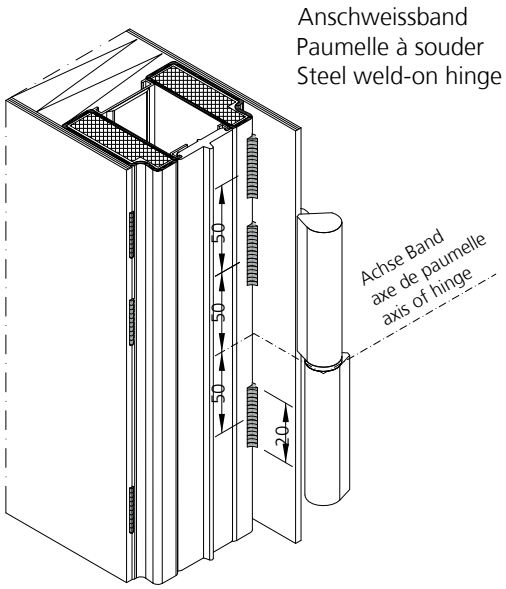
2.5 - 3 mm Stahl-Edelstahl Blech / tôles d'acier, acier inox / steel, stainless steel sheet

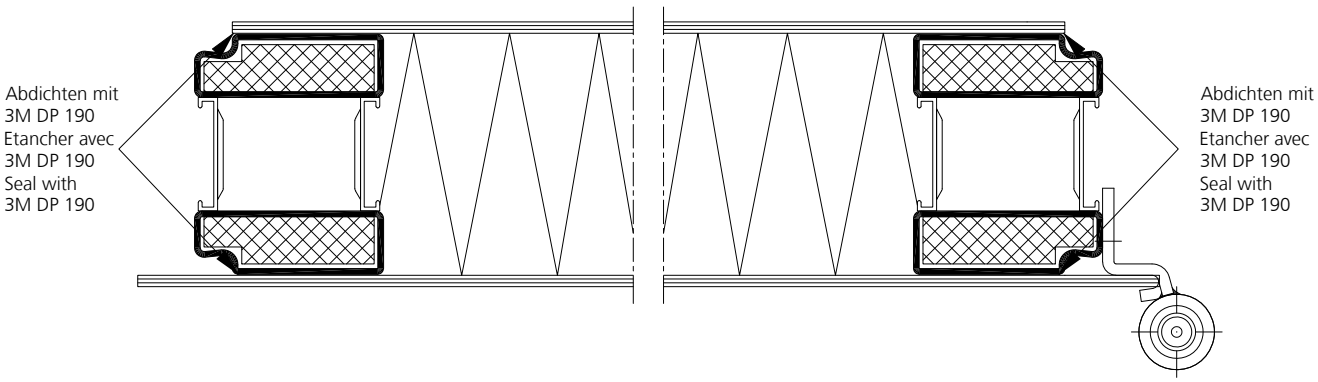
Detail
Détail B
Detail



2.5 - 3 mm Stahl, Edelstahl-Blech / tôles d'acier, acier inox / steel, stainless steel sheet

Detail
Détail B
Detail



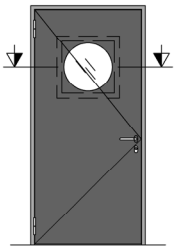


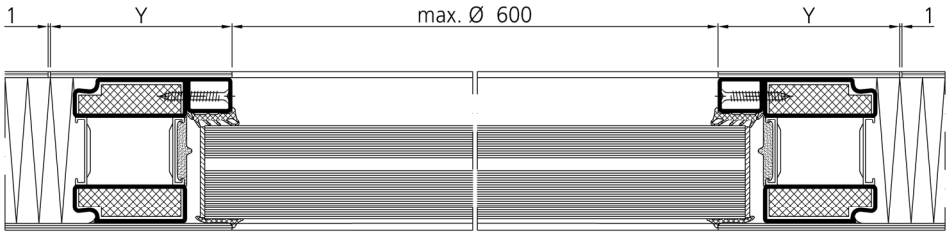
6

Montageanleitung
Bullauge rund

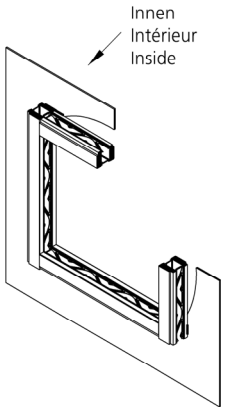
Instructions de montage
Oculus rond

Assembly instruction
Round porthole



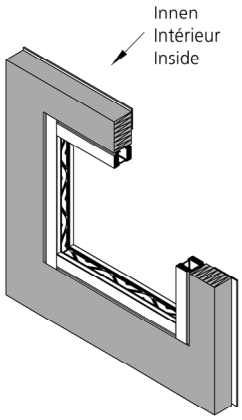


①



- Geschweisster Rahmen (Bullauge) auf dem Innenblech fixieren, heften und schweissen.
  Mind. 3 Schweisshaftungen pro Seite (L=20 mm).
- Souder le cadre, le fixer sur la tôle intérieure et le souder. Minimum 3 points de soudure par côté (L=20 mm).
- Fix the welded frame to the inner sheet, tack and weld. At least 3 welding bonds par side (L=20 mm).

②



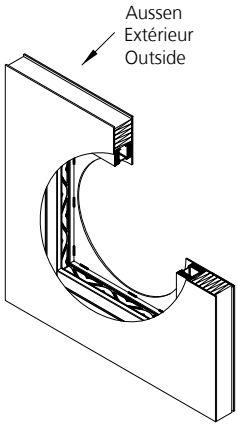
- Mineralwolle präzise mit 1 bis 2 mm Übermass zuschneiden und zwischen den Profilen einklemmen.
- Couper la laine minérale avec précision1 à 2 mm plus grand et la coincer entre les profils.
- Cut the mineral wool precisely 1 to 2 mm oversize and squeeze between the profiles.

Montageanleitung Bullauge rund

Instructions de montage Oculus rond

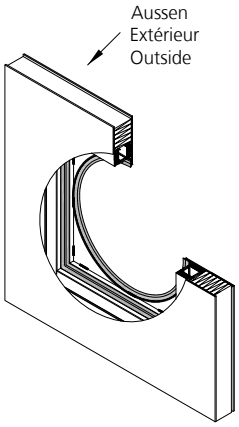
Assembly instruction Round porthole

③



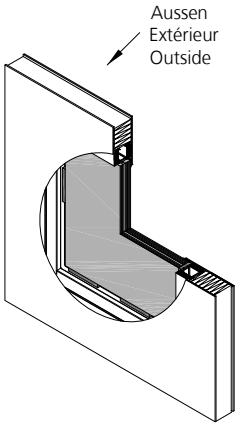
- Aussenblech fixieren, heften und schweissen.
  Mind. 3 Schweisshaftungen pro Seite (L=20 mm).
- Fixer et souder la tôle extérieure.
  Minimum 3 points de soudure par côté. (L=20 mm)
- Fasten append and weld the outer sheet to the leaf frame.
  At least 3 welding bonds par side (L=20 mm).

④



- Äussere Glasdichtung oder Verglasungsband um den Glasausschnitt auf dem Deckblech fixieren, sowie den Brandschutzstreifen 948000 auf dem Profil-Isolator (Verarbeitungsrichtlinien beachten).
- Fixez le joint de verre extérieur ou la bande de vitrage autour de la découpe du verre sur la plaque de recouvrement, et la bande intumescente 948000 sur l'isolateur du profilé.
  (Respecter les directives de mise en oeuvre).
- Fix the outer glass seal or glazing tape around the glass cut-out on the cover plate and the fire protection strip 948000 on the profile insulator.
  (observe processing guidelines)

⑤



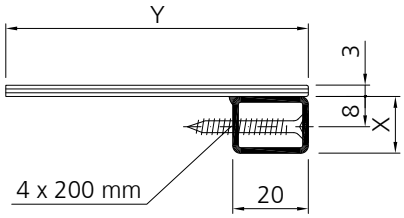
- Glas einsetzen und verklotzen
  (Verarbeitungsrichtlinien beachten).
- Insérer et caler le verre
  (Respecter les directives de mise en oeuvre).
- Use glass and blocks
  (observe processing guidelines).

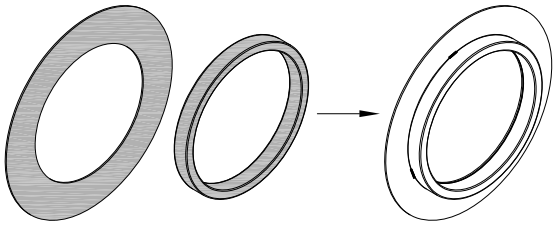
Montageanleitung Bullauge rund

Instructions de montage Oculus rond

Assembly instruction Round porthole

⑥

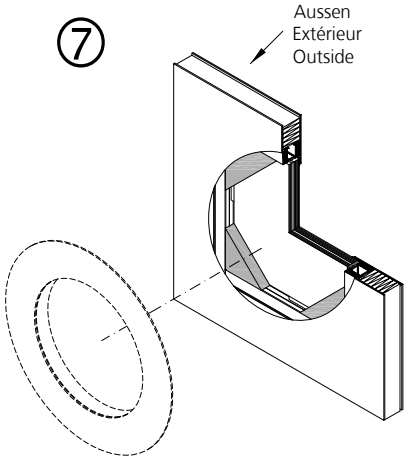




Hinweis: Mass Y ist konstruktiv zu ermitteln
Remarque: La dimension Y doit être déterminée constructivement
Notice: Dimension Y must be determined from a construction perspective

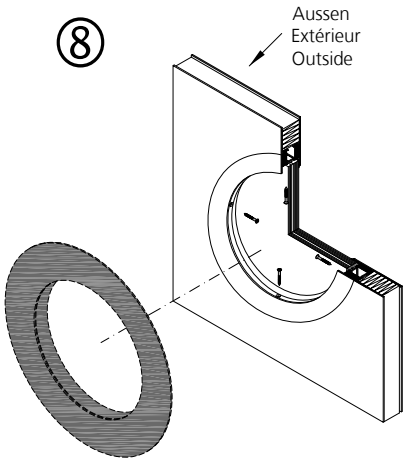
- Abdeckung Y x 3 mm mit gebogener Glashalteleiste (Stahl-, Edelstahlrohr 20 x X x 2 mm, Abstand 150 mm) verschweissen. Biegespeziallist auf Anfrage bei Fa. Forster
- Souder la tôle Y x 3 mm avec la parclose cintrée (tube acier ou acier inox 20 x X x 2 mm, distance 150 mm). Liste de spécialistes du cintrage sur demande chez Forster.
- Weld cover Y x 3 mm with curved glass holding strip (steel, stainless steel tube 20 x X x 2 mm, distance 150 mm). Bending specialist on request from Forster

⑦



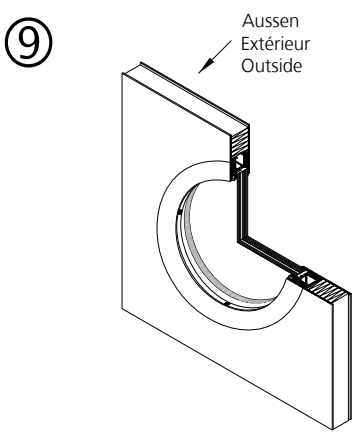
- Mineralwolle im Eckbereich zuschneiden, damit die Hohlräume zwischen Glas und Abdeckring gefüllt sind.
- Couper la laine minérale dans le coin pour que les cavités soient remplies.
- Cut the mineral wool in the corner area so that the cavities between glass and cover ring are filled.

⑧



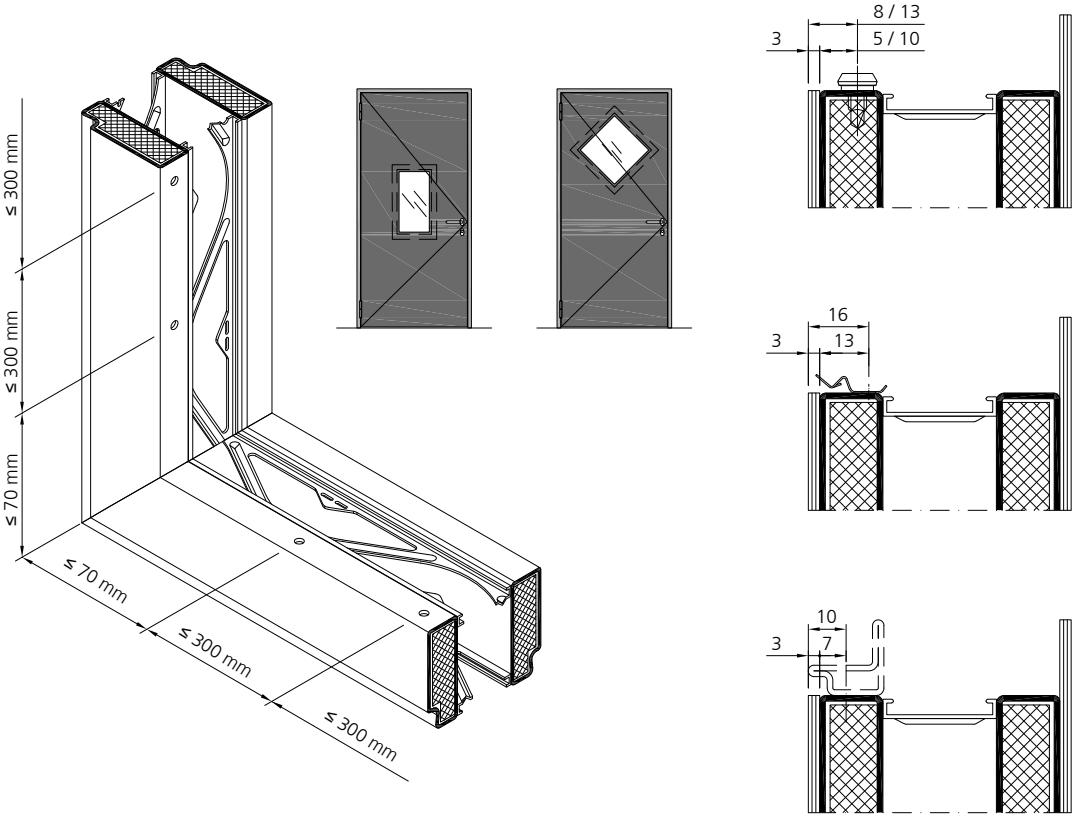
- Glashalteleiste (Ring) einsetzen und mit 4 Senkblechschrauben (Ø4.8 x 38 mm) verschrauben. Bei der Nassverglasung das Verglasungsband vorgängig aufkleben (Verarbeitungsrichtlinien beachten).
- Insérez la parclose (anneau) et vissez-la avec 4 vis à tête conique (Ø4.8 x 38 mm). Pour le vitrage au silicone, collez au préalable la bande de vitrage (Respecter les directives de mise en oeuvre).
- Insert glass retaining strip (ring) and screw-together with 4 countersunk screws (Ø4.8 x 38 mm). For wet glazing, glue on the glazing strip beforehand. (Observe processing guidelines).

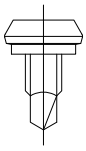
⑨



- Glasdichtung innen einsetzen. Bei der Nassverglasung innen und aussen mit Silikon versiegeln (Verarbeitungsrichtlinien beachten).
- Pose du joint du verre: Sceller au silicone l'intérieur et l'extérieur (Respecter les directives de mise eu oeuvre).
- Insert glass seal inside. For wet glazing, seal inside aud outside with silicone. (Observe processing guidelines).

Anordnung Klemmknöpfe | Pose des boutons | Setting studs





906577 (VE/100 Stk./pcs)
906578 (VE/1000 Stk./pcs)
906579 (VE/Mag. 200 Stk/pcs)

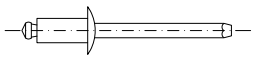
Klemmknöpfe
Bohrschraubensetzgerät Art.Nr. 909203 alternativ Bohrlehre Art.Nr. 909104, Bohrdurchmesser 3.5 mm

Boutons en acier
Appareil à poser les vis art. no. 909203 alternatif gabarit de perçage art.no. 909104, diamètre de perçage 3.5 mm

Steel studs
Power driver for screws art.no. 909203 alternative drilling template art.no. 909104, drilling diametre 3.5 mm



906421



Ø 3.2 x 1.5 - 3 mm

Feder
Bohrlehre Art.Nr. 909105, Bohrdurchmesser 3.3 mm
Befestigung mit handelsüblichem Blindniet aus Stahl verzinkt, Ø 3.2 mm, Klemmlänge 1.5 - 3 mm

Ressort
Gabarit de perçage art. no. 909105, diamètre perçage 3.3 mm
fixation avec rivet borgne du commerce en acier galvanisé, Ø 3.2 mm, longueur de serrage 1.5 - 3 mm

Spring
Drilling template art.no. 909105, drilling diametre 3.3 mm
assembly with commercial blind rivets galvanized steel Ø 3.2 mm, clamping length 1.5 - 3 mm

Platz für Notizen

Espace pour les notes

Space for memos

Verarbeitung Beschläge

Hinweis
Informationen zum Schloss, Band, Sicherungsbolzen und Türschliesse-reinbau entnehmen Sie dem Kapitel 3.7.1.

Mise en œuvre de la quincaillerie

Remarque
Vous trouverez des informations concernant serrure, paumelle, goujon de sécurité et montage du ferme-porte dans le chapitre 3.7.1.

Processing fittings

Note
For information on locks, hinges, locking pins and installing the door closer, see chapter 3.7.1.

Platz für Notizen

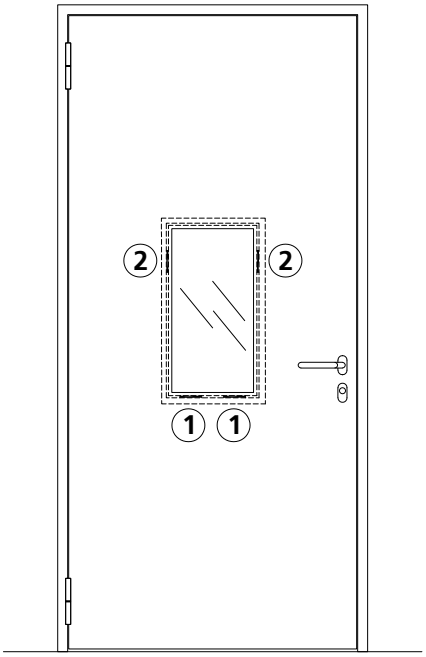
Espace pour les notes

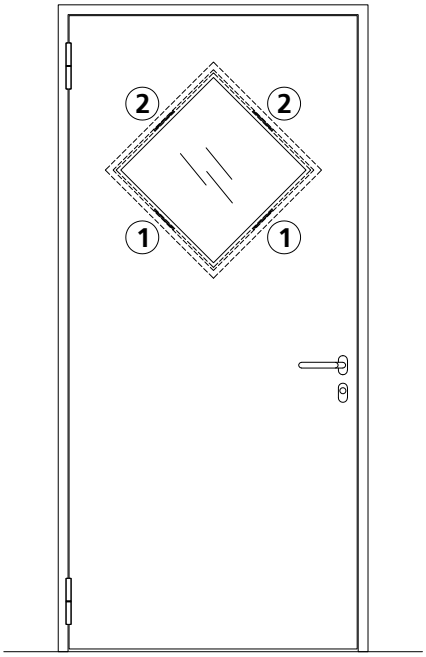
Space for memos

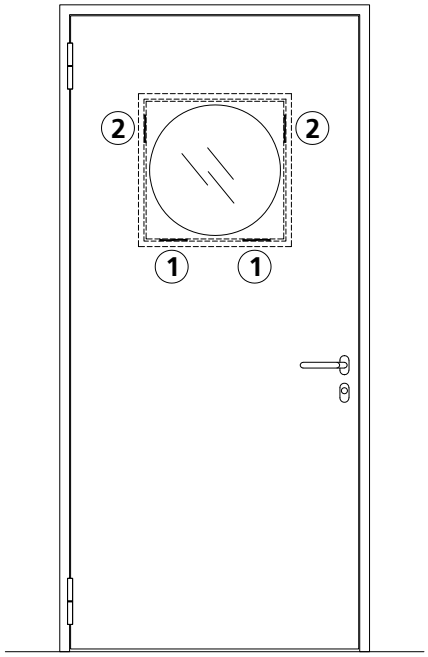
Verglasung
Glasauflager

Vitrage
Support de verre

Glazing
Glass support







X = ≥ 40mm

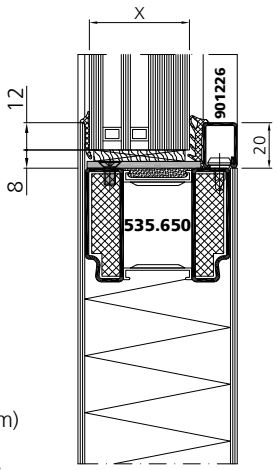
(1)
Artk.Nr. 986705
+
Distanzklotz 980401
Bloc Distance
Distance block

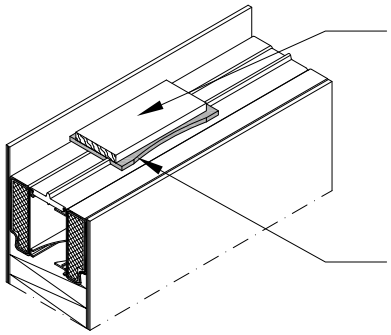
(2)
Distanzklotz 980401
Bloc Distance
Distance block

X = < 40mm

(1)
Art.Nr. 986706
+
Hartholzklotz
Cale de bois dur
Hard wood clog

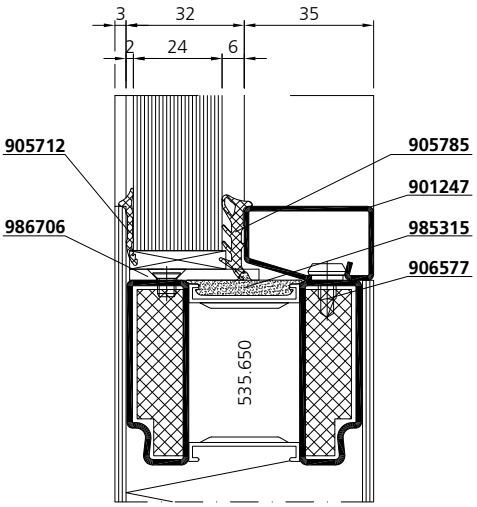
(2)
Hartholzklotz
Cale de bois dur
Hard wood clog





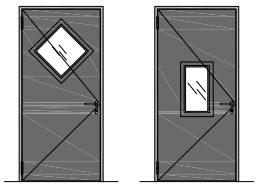
6

Verglasung
Glasauflager



Glasunterlage
Hartholzklotz L=80
Support de verre
Cale de bois dur L=80
Glass support
Hard wood block L=80

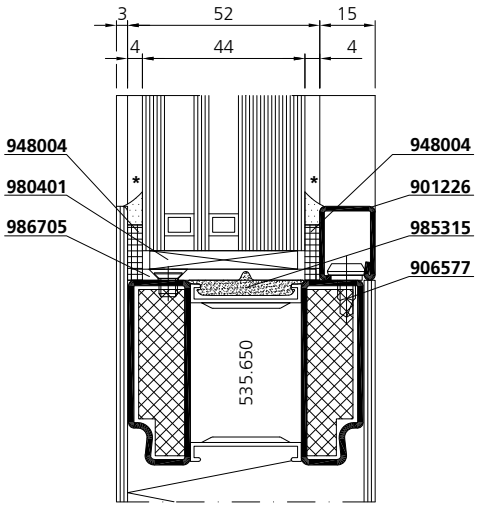
Vitrage
Support de verre



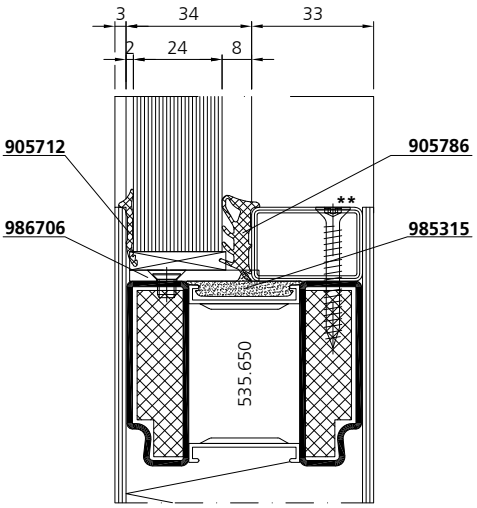
Einbau Eckig
Montage en angle
Installation square

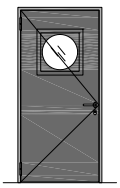
***** Wahlweise Versiegelung durch Silikon-, Acryl- oder PU-Dichtstoff.
Protection au choix avec joint silicone, acrylique ou PU.
Optionally sealed with silicone, acryl or PU sealant.

Glazing
Glass support



****** Verschraubungen mittels Schraube M4 mit Gewinde oder mittels St.-Einnietmutter, wahlweise Blechschraube Ø 4.8 x 38.
Fixation avec vis M4 avec filetage ou au moyen d'un rivet taraudé en acier, au choix vis à tôle Ø 4.8 x 38.
Mounted with M4 screw with thread or with standard rivet nut, optionally sheet-metal screw Ø 4.8 x 38.





Einbau Rund
Montage circulaire
Installation round

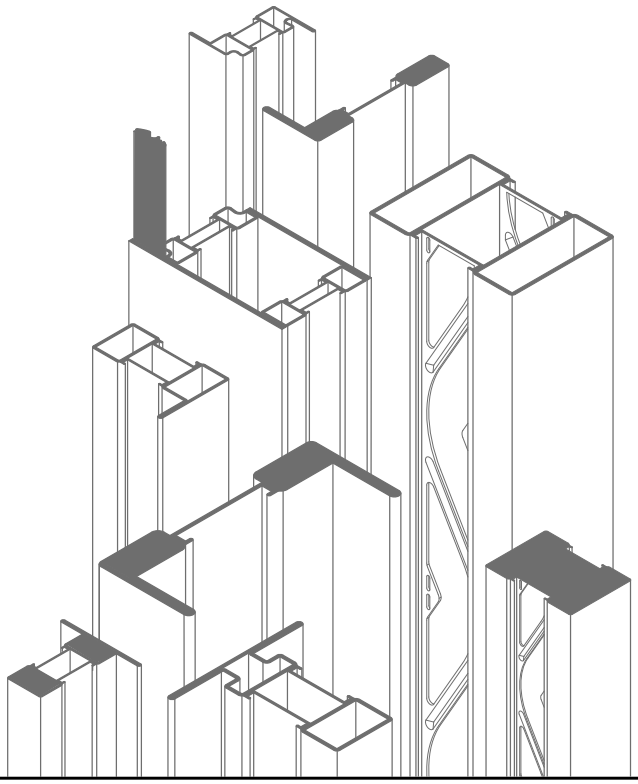
Stahlrohr s ≥ 1.5 mm
Tube en acier s ≥ 1.5 mm
Steel tube s ≥ 1.5 mm

forster

Profilsysteme in Stahl und Edelstahl

Systèmes de profilés en acier et en acier inox

Steel and stainless steel profile systems



Forster Profilsysteme AG | CH-9320 Arbon | info@forstersystems.ch | www.forstersystems.ch

988353/09-23