

rp tec 60

rp tec 60

Curtain walling in steel

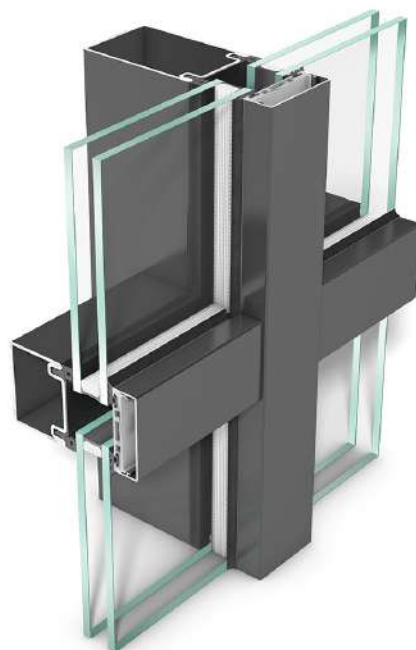
Façade montant/traverse en acier

Pfosten-Riegel-Fassade in Stahl

Product range

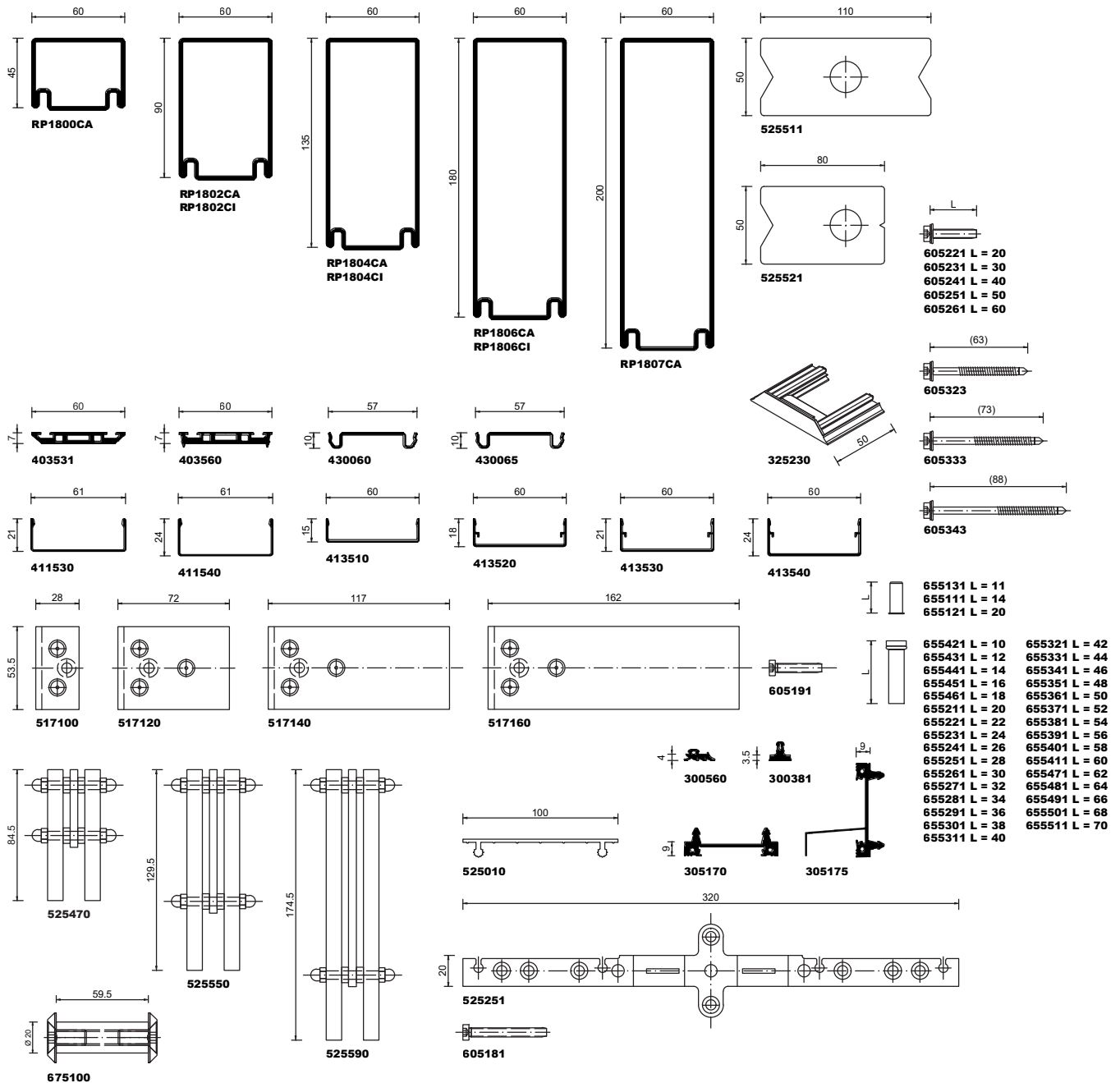
Gamme de produits

Lieferprogramm



M 1:4

tec_60_P02010



Explanation of the additional marking for part numbers:

CA = galvanized steel, delivery length 6000 mm
 CI = galvanized steel, delivery length 7500 mm

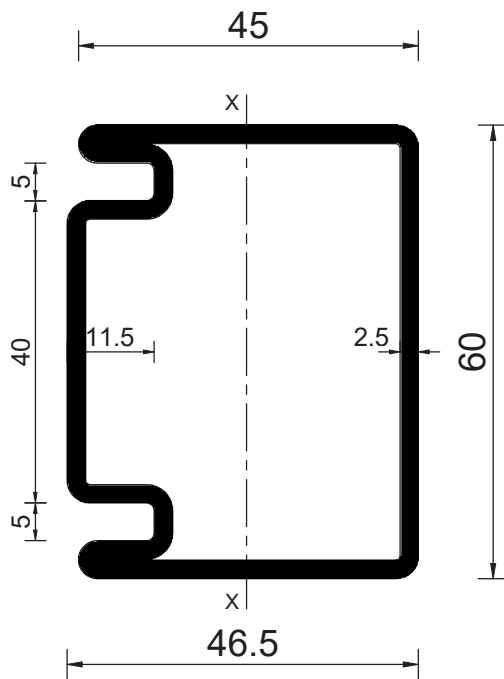
Explication du marquage supplémentaire pour les numéros d'articles :

CA = acier galvanisé, longueur de livraison 6000 mm
 CI = acier galvanisé, longueur de livraison 7500 mm

Erläuterung der Zusatzkennzeichnung bei Artikelnummern:

CA = Stahl verzinkt, Lieferlänge 6000 mm
 CI = Stahl verzinkt, Lieferlänge 7500 mm

RP1800

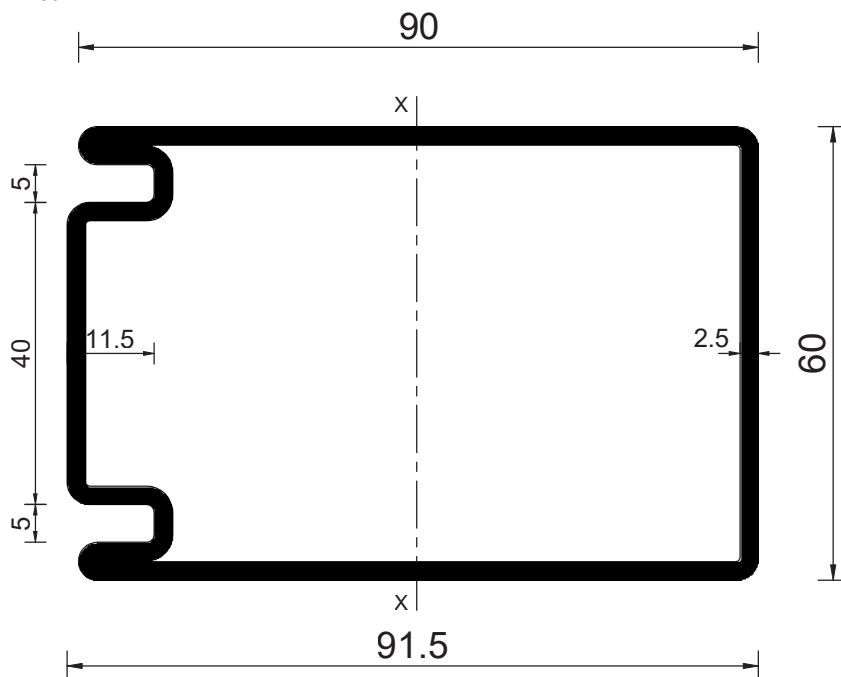


Nr. RP1800CA
L 6.0 m

G _{Fe}	4.59	kg/m
G _{CrNi}		kg/m
O	0.242	m ² /m
me	150	mm

I _X	17.68	cm ⁴
W _X	7.14	cm ³
I _Y	29.63	cm ⁴
W _Y	9.88	cm ³

RP1802

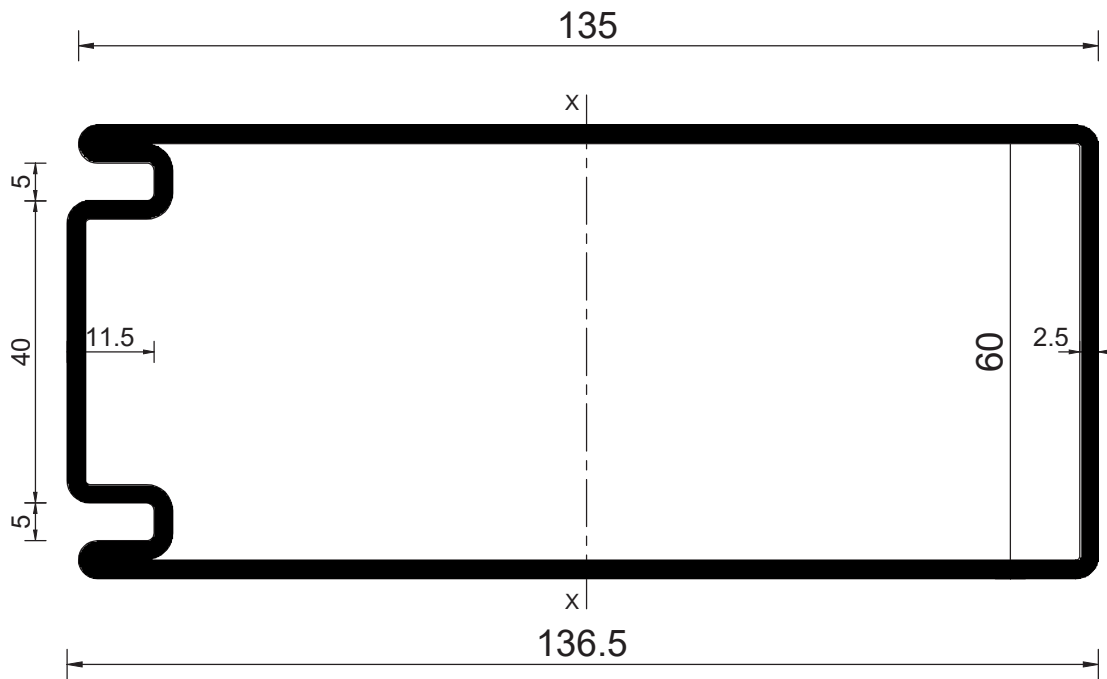


Nr. RP1802CA
L 6.0 m
Nr. RP1802CI
L 7.5 m

G _{Fe}	6.36	kg/m
G _{CrNi}		kg/m
O	0.332	m ² /m
me	240	mm

I _X	92.88	cm ⁴
W _X	18.87	cm ³
I _Y	48.24	cm ⁴
W _Y	16.08	cm ³

RP1804

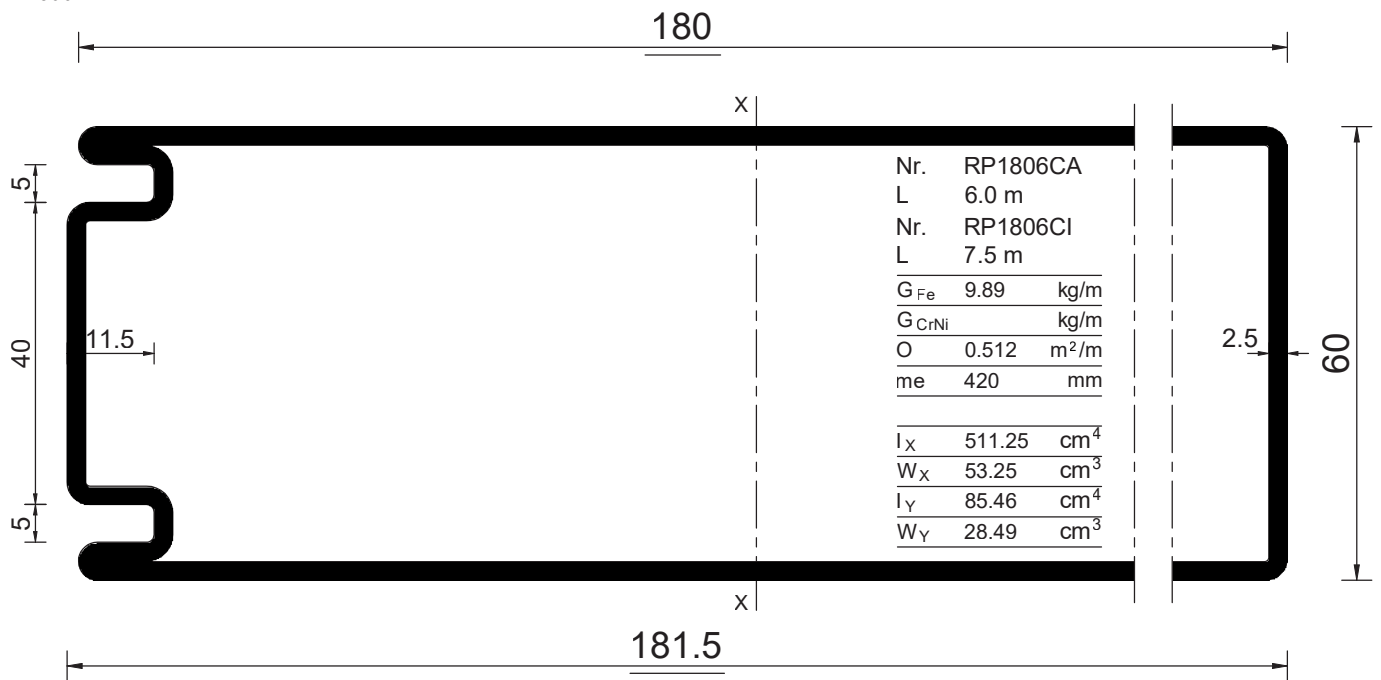


Nr.	RP1804CA
L	6.0 m
Nr.	RP1804CI
L	7.5 m

G_{Fe}	8.12	kg/m
G_{CrNi}		kg/m
O	0.422	m ² /m
me	330	mm

I_x	249.75	cm ⁴
W_x	34.30	cm ³
I_y	66.85	cm ⁴
W_y	22.28	cm ³

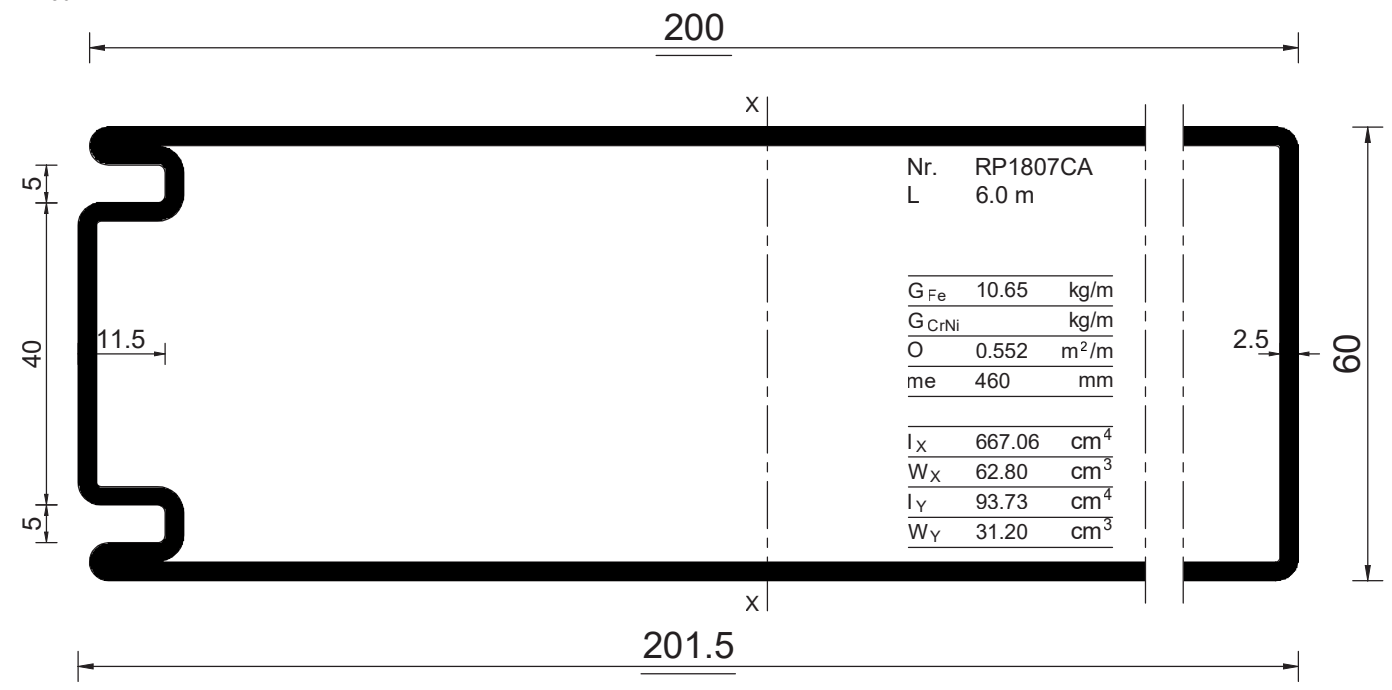
RP1806



Nr.	RP1806CA	
L	6.0 m	
Nr.	RP1806CI	
L	7.5 m	
G_{Fe}	9.89	kg/m
G_{CrNi}		kg/m
O	0.512	m ² /m
me	420	mm

I_x	511.25	cm ⁴
W_x	53.25	cm ³
I_y	85.46	cm ⁴
W_y	28.49	cm ³

RP1807

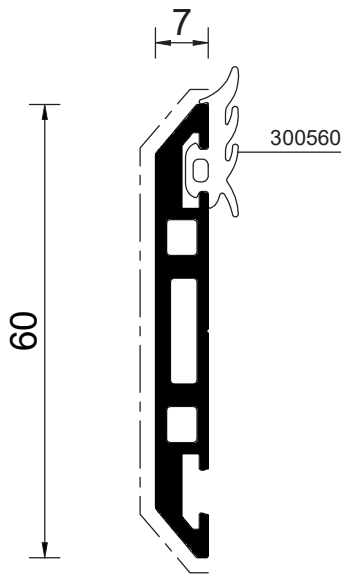


403531

Aluminium

Aluminium

Aluminium



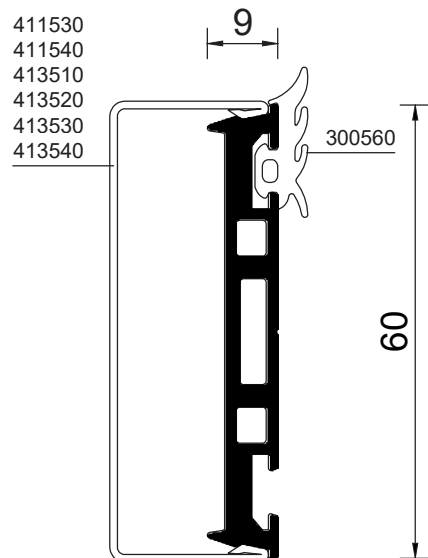
Nr.	403531	
L	6.0	m
G	0.67	kg/m
O	0.155	m ² /m
me	67	mm

403560

Aluminium

Aluminium

Aluminium



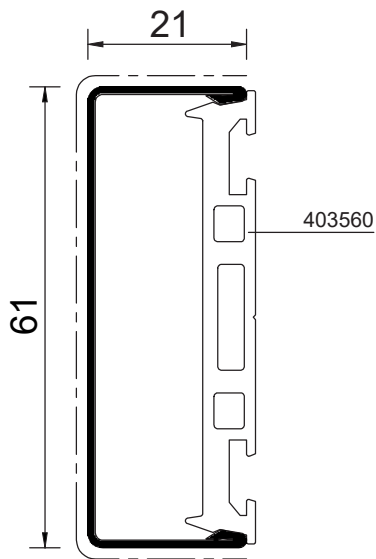
Nr.	403560	
L	6.0	m
G	0.69	kg/m
O	0.167	m ² /m
me	-	mm

411530

Stainless steel 1.4401 (316) visible surfaces ground, brushed and covered with protective foil

Acier inoxydable 1.4401 (316) surfaces visibles poncées, brossées et munies d'un film protecteur

Edelstahl 1.4401 (316) Sichtflächen geschliffen, gebürstet und mit Schutzfolie versehen



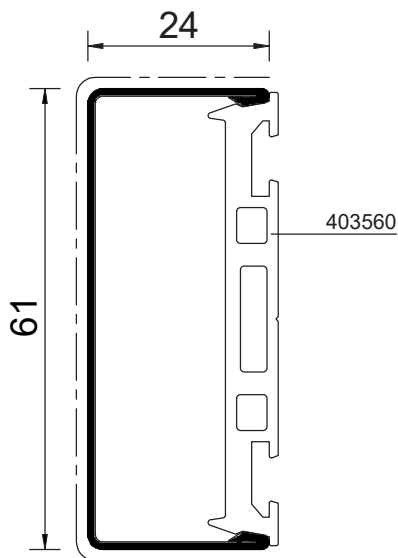
Nr.	411530	
L	6.0	m
G	0.69	kg/m
O	0.210	m ² /m
me	103	mm

411540

Stainless steel 1.4401 (316) visible surfaces ground, brushed and covered with protective foil

Acier inoxydable 1.4401 (316) surfaces visibles poncées, brossées et munies d'un film protecteur

Edelstahl 1.4401 (316) Sichtflächen geschliffen, gebürstet und mit Schutzfolie versehen



Nr.	411540	
L	6.0	m
G	0.73	kg/m
O	0.220	m ² /m
me	109	mm

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Curtain walling in steel

Façade montant/traverse en acier

Pfosten-Riegel-Fassade in Stahl



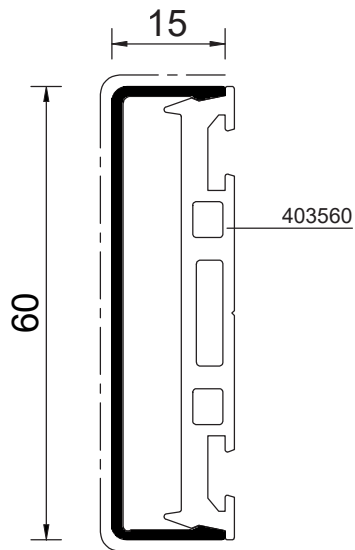
Product range
Profiles
Gamme de produits
Profils
Lieferprogramm
Profile

413510

Aluminium

Aluminium

Aluminium



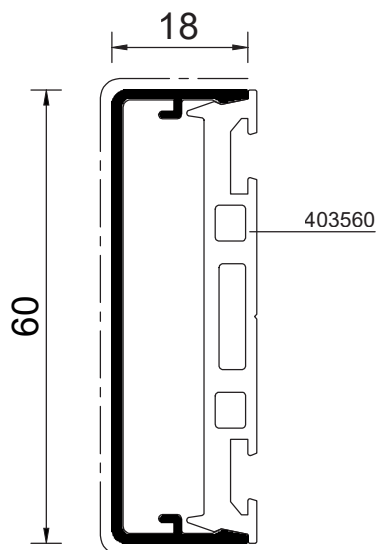
Nr.	413510
L	6.0 m
G	0.34 kg/m
O	0.175 m ² /m
me	90 mm

413520

Aluminium

Aluminium

Aluminium



Nr.	413520
L	6.0 m
G	0.39 kg/m
O	0.203 m ² /m
me	96 mm

rp tec 60

Curtain walling in steel

Façade montant/traverse en acier

Pfosten-Riegel-Fassade in Stahl



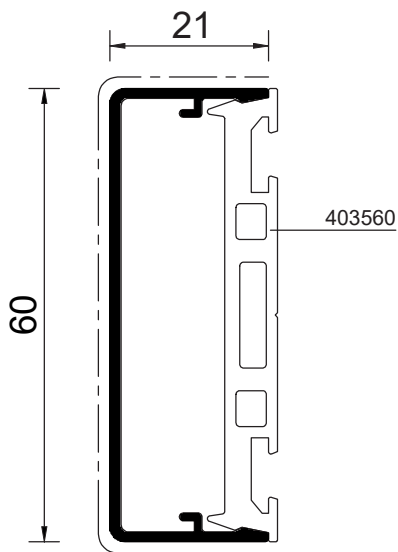
Product range
Profiles
Gamme de produits
Profils
Lieferprogramm
Profile

413530

Aluminium

Aluminium

Aluminium



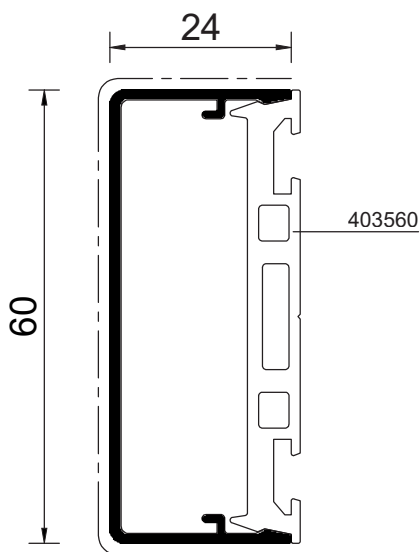
Nr.	413530
L	6.0 m
G	0.41 kg/m
O	0.215 m ² /m
me	102 mm

413540

Aluminium

Aluminium

Aluminium



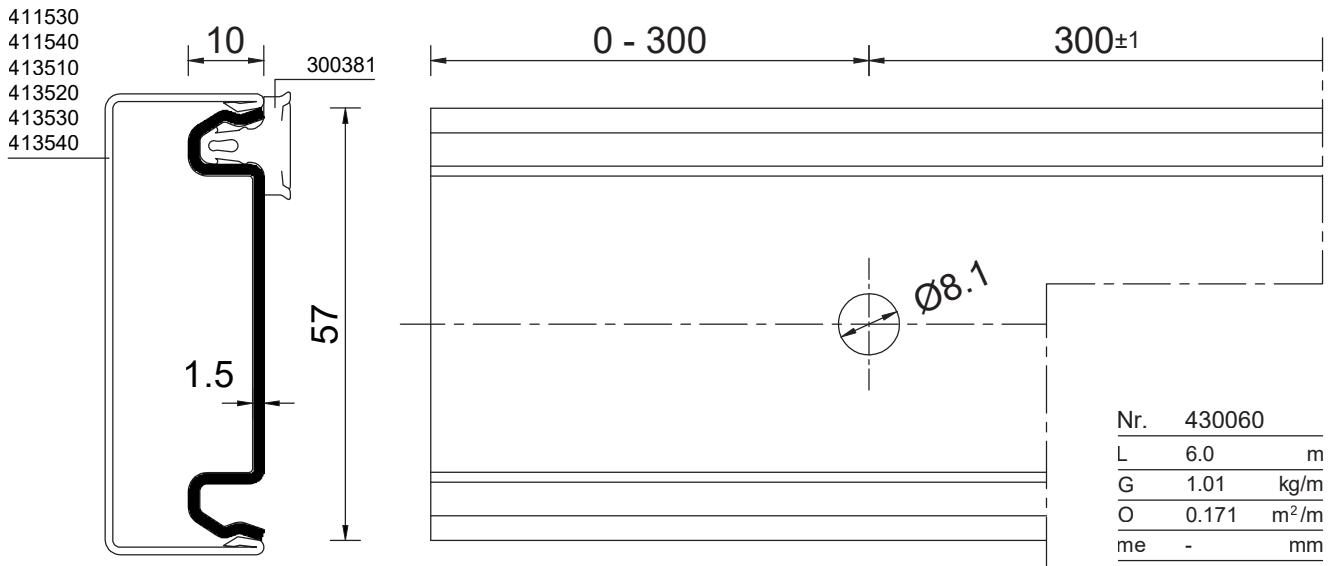
Nr.	413540
L	6.0 m
G	0.43 kg/m
O	0.227 m ² /m
me	108 mm

430060

Stainless steel 1.4401 (316)
surface 2B

Acier inoxydable 1.4401 (316)
surface 2B

Edelstahl 1.4401 (316) Oberfläche
2B



430065

Galvanized steel

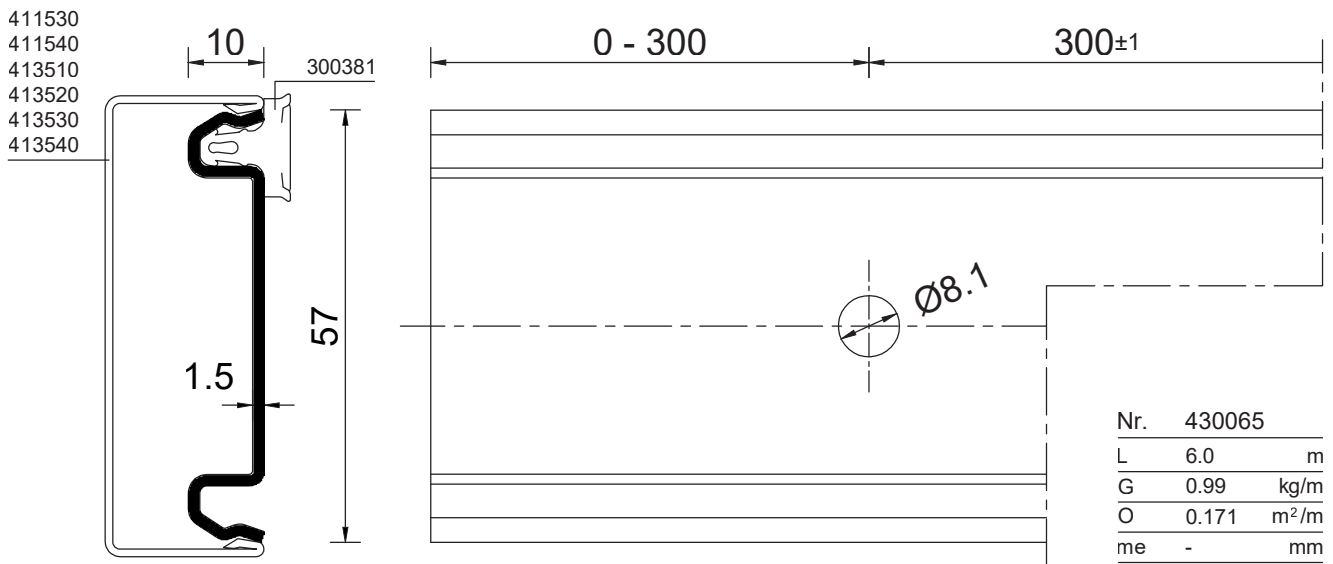
Acier galvanisé

Stahl verzinkt

When using the pressure profile in galvanized steel, corrosion protection / coating instructions must be observed; see chapter Hints on points surface treatment and VFF Information Sheet St. 01.

Pour utilisation du profilé de serrage en acier galvanisé, respecter les indications de protection anti-corrosion et de revêtement ; voir le chapitre Remarques relatives aux points de traitement de surface et fiche technique du VFF acier 01.

Bei Verwendung des Andruckprofils in Stahl verzinkt sind Korrosionsschutz- / Beschichtungs-hinweise zu berücksichtigen; siehe Kapitel Hinweise Punkte Oberflächenbehandlung und VFF Merkblatt St. 01.

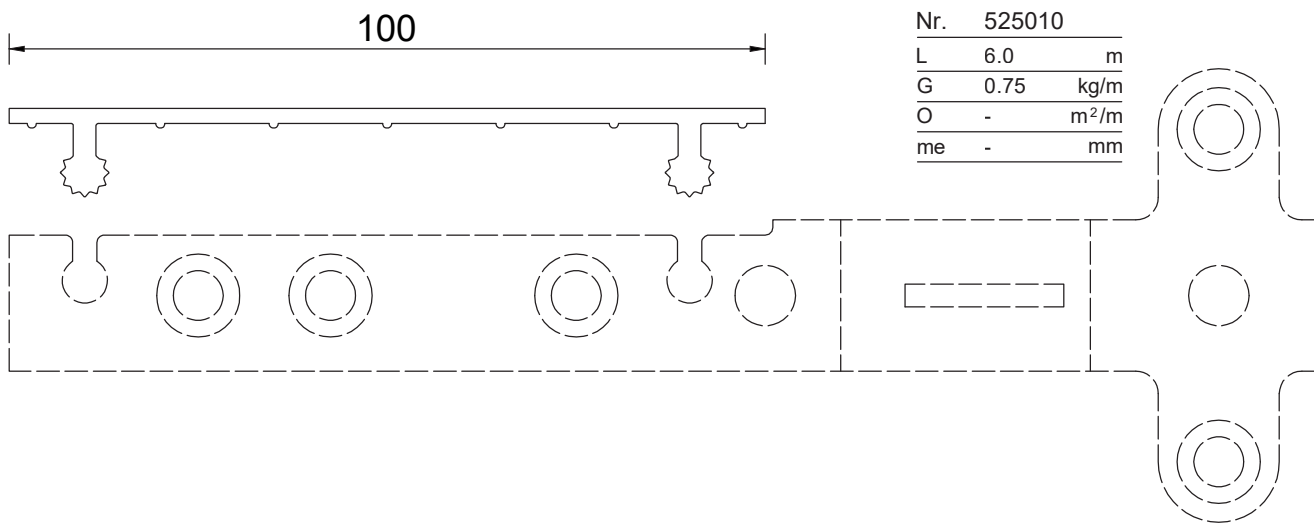


525010

Aluminium

Aluminium

Aluminium





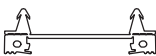
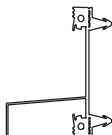
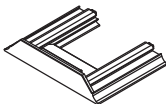
Nr. 525010

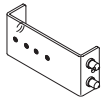
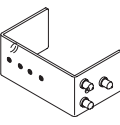
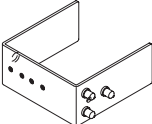
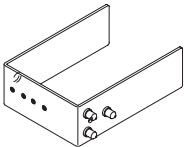
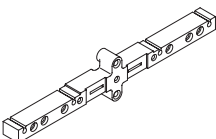
L 6.0 m

G 0.75 kg/m

O - m²/m

me - mm

<p>300381</p> 	<p>Outer gasket for pressure profile steel / stainless steel Gasket EPDM black</p> <p>PU = 100 meters Application area: Curtain walls Gap 3.5 mm ± 0.5 Suitable for pressure profile 430060 and 430065</p>	<p>Joint extérieur pour profilé de serrage acier/acier inoxydable Joint d'étanchéité EPDM noir</p> <p>UN = 100 mètres Domaine d'application : Façades Jeu de 3,5 mm ± 0,5 Adapté aux profilés de serrage 430060 et 430065</p>	<p>Aussendichtung für Andruckprofil Stahl / Edelstahl Dichtung EPDM schwarz</p> <p>VE = 100 Meter Einsatzbereich: Fassaden Spalt 3.5 mm ± 0.5 Passend zu Andruckprofil 430060 und 430065</p>
<p>300560</p> 	<p>Outer gasket for pressure profile aluminium Gasket EPDM black</p> <p>PU = 100 meters Application area: Curtain walls Gap 4 mm ± 0.5 Suitable for pressure profile 403531 and 403560</p>	<p>Joint extérieur de profilé de serrage aluminium Joint d'étanchéité EPDM noir</p> <p>UN = 100 mètres Domaine d'application : Façades Jeu de 4 mm ± 0.5 Adapté aux profilés de serrage 403531 et 403560</p>	<p>Aussendichtung für Andruckprofil Aluminium Dichtung EPDM schwarz</p> <p>VE = 100 Meter Einsatzbereich: Fassaden Spalt 4 mm ± 0.5 Passend zu Andruckprofil 403531 und 403560</p>
<p>305170</p> 	<p>Façade gasket EPDM black</p> <p>PU = 50 meters Application area: Curtain walls</p>	<p>Joint de façade EPDM noir</p> <p>UN = 50 mètres Domaine d'application : Façades</p>	<p>Fassadendichtung EPDM schwarz</p> <p>VE = 50 Meter Einsatzbereich: Fassaden</p>
<p>305175</p> 	<p>Façade gasket with flap EPDM black</p> <p>PU = 40 meters Application area: Transom gasket for curtain walls Flap length 80 mm</p>	<p>Joint de façade avec bavette EPDM noir</p> <p>UN = 40 mètres Domaine d'application : Joint de traverse pour façades Longueur du bavette 80 mm</p>	<p>Fassadendichtung mit Lappen EPDM schwarz</p> <p>VE = 40 Meter Einsatzbereich: Riegeldichtung für Fassaden Lappenlänge 80 mm</p>
<p>325230</p> 	<p>End seal for pressure profile aluminium EPDM black</p> <p>PU = 10 pcs Application area: Curtain walls Suitable for pressure profile 403531 and 403560</p>	<p>Joint extérieur de profilé de serrage aluminium EPDM noir</p> <p>UN = 10 pièces Domaine d'application : Façades Adapté aux profilés de serrage 403531 et 403560</p>	<p>Endabdichtung für Andruckprofil Aluminium EPDM schwarz</p> <p>VE = 10 Stück Einsatzbereich: Fassaden Passend zu Andruckprofil 403531 und 403560</p>

<p>517100</p> 	<p>Transom connector Steel galvanized</p> <p>PU = 10 pcs for profile RP1800</p> <ul style="list-style-type: none"> - Assembly screw for transom connector 605191 (1x) - Fixing screw for ladder-type assembling 605191 (1x) 	<p>L'assemblage traverse Acier galvanisé</p> <p>UN = 10 pièces pour le profil RP1800</p> <ul style="list-style-type: none"> - Vis d'assemblage pour l'assemblage traverse 605181 (1x) - Vis de fixation pour montage en échelle 605181 (1x) 	<p>Riegelverbinder Stahl verzinkt</p> <p>VE = 10 Stück für Profil RP1800</p> <ul style="list-style-type: none"> - Montageschraube für Riegelverbinder 605191 (1x) - Befestigungsschraube für Leiterbauweise 605191 (1x)
<p>517120</p> 	<p>Transom connector Steel galvanized</p> <p>PU = 10 pcs for profile RP1802</p> <ul style="list-style-type: none"> - Assembly screw for transom connector 605191 (1x) - Fixing screw for ladder-type assembling 605191 (1x) 	<p>L'assemblage traverse Acier galvanisé</p> <p>UN = 10 pièces pour le profil RP1802</p> <ul style="list-style-type: none"> - Vis d'assemblage pour l'assemblage traverse 605181 (1x) - Vis de fixation pour montage en échelle 605181 (1x) 	<p>Riegelverbinder Stahl verzinkt</p> <p>VE = 10 Stück für Profil RP1802</p> <ul style="list-style-type: none"> - Montageschraube für Riegelverbinder 605191 (1x) - Befestigungsschraube für Leiterbauweise 605191 (1x)
<p>517140</p> 	<p>Transom connector Steel galvanized</p> <p>PU = 10 pcs for profile RP1804</p> <ul style="list-style-type: none"> - Assembly screw for transom connector 605191 (1x) - Fixing screw for ladder-type assembling 605191 (1x) 	<p>L'assemblage traverse Acier galvanisé</p> <p>UN = 10 pièces pour le profil RP1804</p> <ul style="list-style-type: none"> - Vis d'assemblage pour l'assemblage traverse 605181 (1x) - Vis de fixation pour montage en échelle 605181 (1x) 	<p>Riegelverbinder Stahl verzinkt</p> <p>VE = 10 Stück für Profil RP1804</p> <ul style="list-style-type: none"> - Montageschraube für Riegelverbinder 605191 (1x) - Befestigungsschraube für Leiterbauweise 605191 (1x)
<p>517160</p> 	<p>Transom connector Steel galvanized</p> <p>PU = 10 pcs for profile RP1806</p> <ul style="list-style-type: none"> - Assembly screw for transom connector 605191 (1x) - Fixing screw for ladder-type assembling 605191 (1x) 	<p>L'assemblage traverse Acier galvanisé</p> <p>UN = 10 pièces pour le profil RP1806</p> <ul style="list-style-type: none"> - Vis d'assemblage pour l'assemblage traverse 605181 (1x) - Vis de fixation pour montage en échelle 605181 (1x) 	<p>Riegelverbinder Stahl verzinkt</p> <p>VE = 10 Stück für Profil RP1806</p> <ul style="list-style-type: none"> - Montageschraube für Riegelverbinder 605191 (1x) - Befestigungsschraube für Leiterbauweise 605191 (1x)
<p>525251</p> 	<p>Glass support Cast aluminum</p> <p>PU = 10 pcs</p> <p>Fixing with screw 605181</p> <p>Widening of the glass support with profile 525010</p>	<p>Support de verre Aluminium moulé</p> <p>UN = 10 pièces</p> <p>Fixation par vis 605500 (2x)</p> <p>Élargissement du support de verre avec le profil 525010</p>	<p>Glasauflager Aluminiumguss</p> <p>VE = 10 Stück</p> <p>Befestigung mit Schraube 605181</p> <p>Verbreiterung des Glasauflagers mit Profil 525010</p>

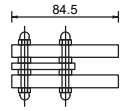
525470

Profile connector

Steel galvanized

PU = 1 pc

for profile RP1802
Delivery length 500 mm



Connecteur de profil

Acier galvanisé

UN = 1 pièce

pour le profil RP1802
Longueur de livraison 500 mm

Profilverbinder

Stahl verzinkt

VE = 1 Stück

für Profil RP1802
Lieferlänge 500 mm

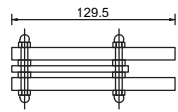
525550

Profile connector

Steel galvanized

PU = 1 pc

for profile RP1804
Delivery length 500 mm



Connecteur de profil

Acier galvanisé

UN = 1 pièce

pour le profil RP1804
Longueur de livraison 500 mm

Profilverbinder

Stahl verzinkt

VE = 1 Stück

für Profil RP1804
Lieferlänge 500 mm

525590

Profile connector

Steel galvanized

PU = 1 pc

for profile RP1806
Delivery length 500 mm



Connecteur de profil

Acier galvanisé

UN = 1 pièce

pour le profil RP1806
Longueur de livraison 500 mm

Profilverbinder

Stahl verzinkt

VE = 1 Stück

für Profil RP1806
Lieferlänge 500 mm

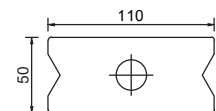
525511

Cross-joint coverage

CrNi black

PU = 20 pcs

Application area: Curtain walls
self-adhesive on one side



Recouvrement d'assemblage en croix

CrNi noir

UN = 20 pièces

Domaine d'application : Façades
auto-adhésif sur un côté

Kreuzstossüberdeckung

CrNi schwarz

VE = 20 Stück

Einsatzbereich: Fassaden
einseitig selbstklebend

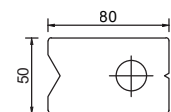
525521

T-joint coverage

CrNi black

PU = 20 pcs

Application area: Curtain walls
self-adhesive on one side



Recouvrement d'assemblage en T

CrNi noir

UN = 20 pièces




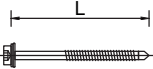

Domaine d'application : Façades
auto-adhésif sur un côté

T-Stossüberdeckung

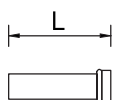
CrNi schwarz

VE = 20 Stück

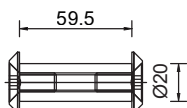
Einsatzbereich: Fassaden
einseitig selbstklebend

605181		Cylinder head screw M6x50, T27 thread-forming, CrNi	Vis à tête cylindrique M6x50, T27 formation de fil, CrNi	Zylinderschraube M6x50, T27 gewindefurchend, CrNi
		PU = 100 pcs for fixing the glass support 525251	UN = 100 pièces pour fixer le support de verre 525251	VE = 100 Stück zur Befestigung des Glasaufleger 525251
				
605191		Cylinder head screw M6x30, T27 thread-forming, CrNi	Vis à tête cylindrique M6x30, T27 formation de fil, CrNi	Zylinderschraube M6x30, T27 gewindefurchend, CrNi
		PU = 100 pcs - Assembly screw for transom connector - Fixing screw for ladder-type assembling	UN = 100 pièces - Vis d'assemblage pour l'assemblage traverse - Vis de fixation pour montage en échelle	VE = 100 Stück - Montageschraube für Riegelverbinder - Befestigungsschraube für Leiterbauweise
				
605221	L = 20 mm	Façade screw M6 T27 CrNi, thread-forming with sealing washer Ø 12	Vis de façade M6 T27 CrNi, formation de fil avec rondelle d'étanchéité Ø 12	Fassadenschraube M6 T27 CrNi, gewindefurchend mit Dichtscheibe Ø 12
605231	L = 30 mm			
605241	L = 40 mm			
605251	L = 50 mm	Application area: Curtain walls	Domaine d'application : Façades	Einsatzbereich: Fassaden
605261	L = 60 mm	PU = 100 pcs for screwing into the glass support 525251 L = screw length	UN = 100 pièces pour visser dans le support de verre 525251 L = longueur de vis	VE = 100 Stück zur Verschraubung im Glasaufleger 525251 L = Schraubenlänge
				
605323	L = 63 mm	Façade screw Ø 5,5 T27 CrNi, self-drilling with sealing washer Ø 12	Vis de façade Ø 5,5 T27 CrNi, autoperceuse avec rondelle d'étanchéité Ø 12	Fassadenschraube Ø 5,5 T27 CrNi, selbstbohrend mit Dichtscheibe Ø 12
605333	L = 73 mm			
605343	L = 88 mm	Application area: Curtain walls PU = 100 pcs L = screw length	Domaine d'application : Façades UN = 100 pièces L = longueur de vis	Einsatzbereich: Fassaden VE = 100 Stück L = Schraubenlänge
				
655131	L = 11 mm	Guiding bush Plastic	Douille de guidage Plastique	Führungshülse Kunststoff
655111	L = 14 mm			
655121	L = 20 mm	Application area: Curtain walls PU = 100 pcs L = length	Domaine d'application : Façades UN = 100 pièces L = longueur	Einsatzbereich: Fassaden VE = 100 Stück L = Länge
				

Code	Length (mm)	Clamp separator bush	Distanceur	Andruckdistanzhülse
655421	L = 10 mm	Clamp separator bush	Distanceur	Andruckdistanzhülse
655431	L = 12 mm	Plastic with EPDM sealing ring	Plastique avec joint d'étanchéité en EPDM	Kunststoff mit Dichtring EPDM
655441	L = 14 mm			
655451	L = 16 mm	Application area: Curtain walls	Domaine d'application : Façades	Einsatzbereich: Fassaden
655461	L = 18 mm	PU = 100 pcs	UN = 100 pièces	VE = 100 Stück
655211	L = 20 mm	L = length	L = longueur	L = Länge
655221	L = 22 mm			
655231	L = 24 mm			
655241	L = 26 mm			
655251	L = 28 mm			
655261	L = 30 mm			
655271	L = 32 mm			
655281	L = 34 mm			
655291	L = 36 mm			
655301	L = 38 mm			
655311	L = 40 mm			
655321	L = 42 mm			
655331	L = 44 mm			
655341	L = 46 mm			
655351	L = 48 mm			
655361	L = 50 mm			
655371	L = 52 mm			
655381	L = 54 mm			
655391	L = 56 mm			
655401	L = 58 mm			
655411	L = 60 mm			
655471	L = 14 mm			
655481	L = 64 mm			
655491	L = 66 mm			
655501	L = 68 mm			
655511	L = 70 mm			



Code	Connection unit	Unité de connexion	Verbindungseinheit
675100	<p>PU = 2 pcs</p> <p>for fastening of the profile connectors</p>	<p>UN = 2 pièces</p> <p>pour la fixation des connecteurs de profilés</p>	<p>VE = 2 Stück</p> <p>zur Befestigung der Profilverbinder</p>



800760



Gasket scissor
with straight stop

PU = 1 pc

Découpe-joint
avec butée droite

UN = 1 pièce

Dichtungsschere
mit geradem Anschlag

VE = 1 Stück

805210

L = 25 mm

Torx bit T27
for 1/4" socket

PU = 1 pc

Embout Torx T27
pour montage 1/4"

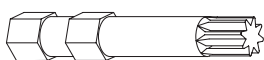
UN = 1 pièce

Torx Bit T27
für 1/4"-Aufnahme

VE = 1 Stück

805220

L = 70 mm



805260



Cut-out tool
for transom gaskets

suitable for clamping in pillar
drilling machines

PU = 1 pc

Outil de découpe
pour joints de traverse

convient pour le serrage dans les
perceuses de piliers

UN = 1 pièce

Auslinkwerkzeug
für Riegeldichtungen

geeignet zum Einspannen in
Standbohrmaschinen

VE = 1 Stück

805280



Cutting jig
for mullion gaskets

PU = 1 pc

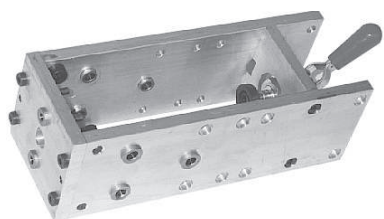
Gabarit de découpe
pour joints de montant

UN = 1 pièce

Schneidschablone
für Pfostendichtungen

VE = 1 Stück

815590



Drilling jig
for mullion machining

PU = 1 pc

Gabarit de perçage
pour l'usinage de le montant

UN = 1 pièce

Bohrschablone
zur Pfostenbearbeitung

VE = 1 Stück

815600**Drilling jig**for glass support drillings for
welded transom joints

PU = 1 pc

Gabarit de perçagepour les trous de support de verre
dans les joints de traverse soudés

UN = 1 pièce

Bohrschablonefür Glasauflegerbohrungen bei
geschweißten Riegelverbindungen

VE = 1 Stück

815640**Drilling jig**

for transom machining

PU = 1 pc

Gabarit de perçage

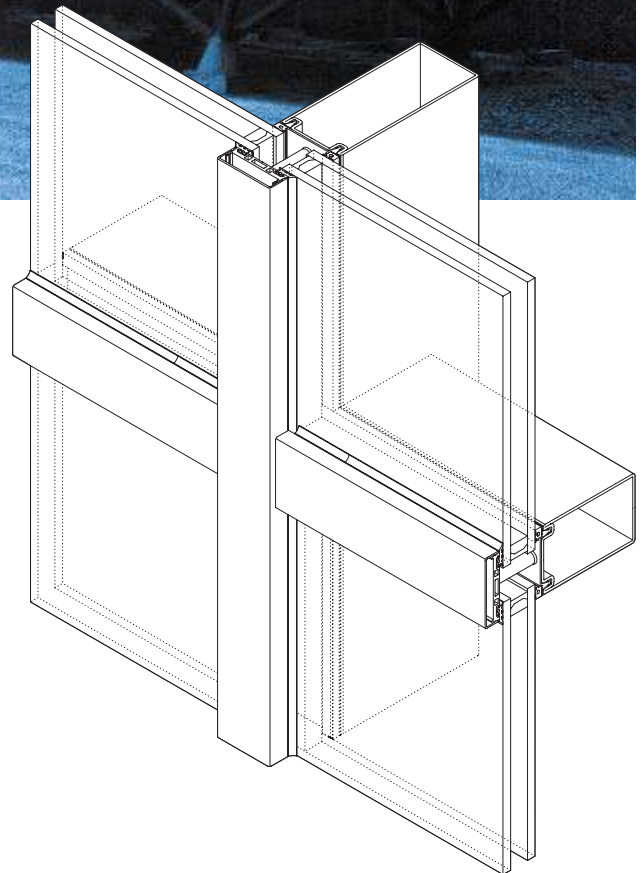
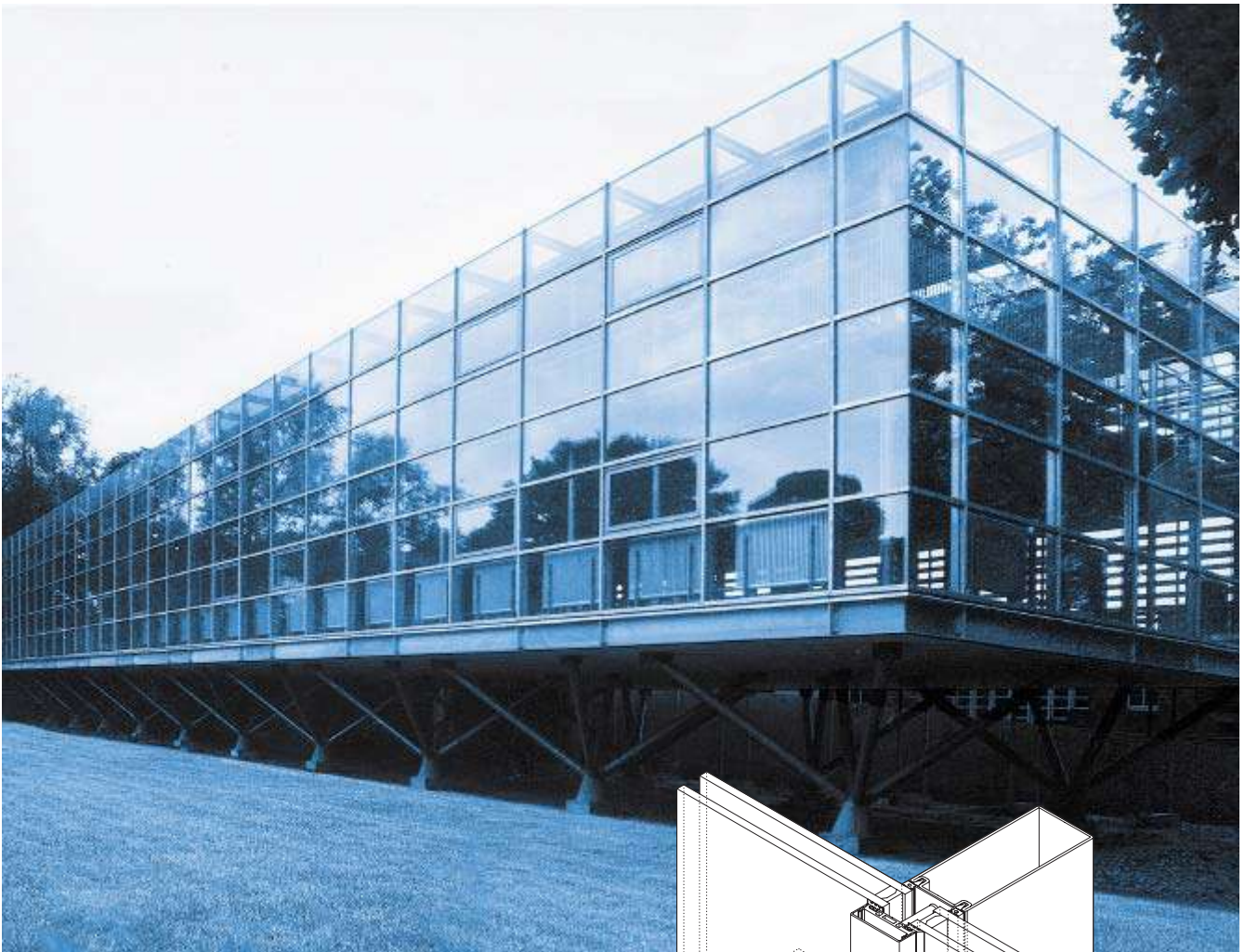
pour l'usinage de la traverse

UN = 1 pièce

Bohrschablone

zur Riegelbearbeitung

VE = 1 Stück



RP-ISO-hermetic 60N
facade system
planning and processing manual

- E.E. and we reserve the right to effect modifications -

General information

RP Technik GmbH Profilsysteme supplies systems for the metal construction industry.

RP Systems are designed to be handled by specialist firms familiar with the generally accepted guidelines and rules of metal construction technology and and glazing and who can be expected to be familiar with the applicable standards, specifications, and industry best practice.

For coatings, including pre-treatment, the procedures recommended by the coating industry must be observed. Details regarding possible applications and conditions should be discussed with the coating plant in question before awarding the coating contract.

All technical data, advice and recommendations are voluntary services and intended to provide without obligation proposals to planners and fabricators. The user must, however, examine and decide for theirselves whether the proposed products fully meet all requirements for his intended application in each individual case.

RP products are sold under registered trademark. They also form component parts of tested and approved assemblies. In the case of loss or damage resulting from the use of other products not only does the company deny all liability, but also all testing certificates applicable to the construction lose their validity.

With systems from stainless steel please observe that not all accessory parts are made from stainless steel. For the use in highly corrosive environment these components must be protected by applying grease.

Special solutions must be carried out with great care since these are not covered by system tests. Equally, workshop made components must be controlled for completeness and function before installation.

Every care has been taken to ensure that the data, explanations and illustrations in the document is accurate and whilst the publishers would be grateful to learn of any error, they regret they can accept no responsibility. Nevertheless mistakes cannot be entirely excluded. For the use of the suggestions, drawings and data we cannot take any responsibility or liability. Please note also our sales and delivery terms.

Because of the constraints printing technology and/or graphics illustrations may not always correspond to the stated scales and norm sizes.

RP Technik GmbH Profilsysteme reserves the right to undertake technical modifications without prior notice.

The publication of new documentation renders invalid all previous versions.

Edition 04-2005

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Steel - slim line - high strength

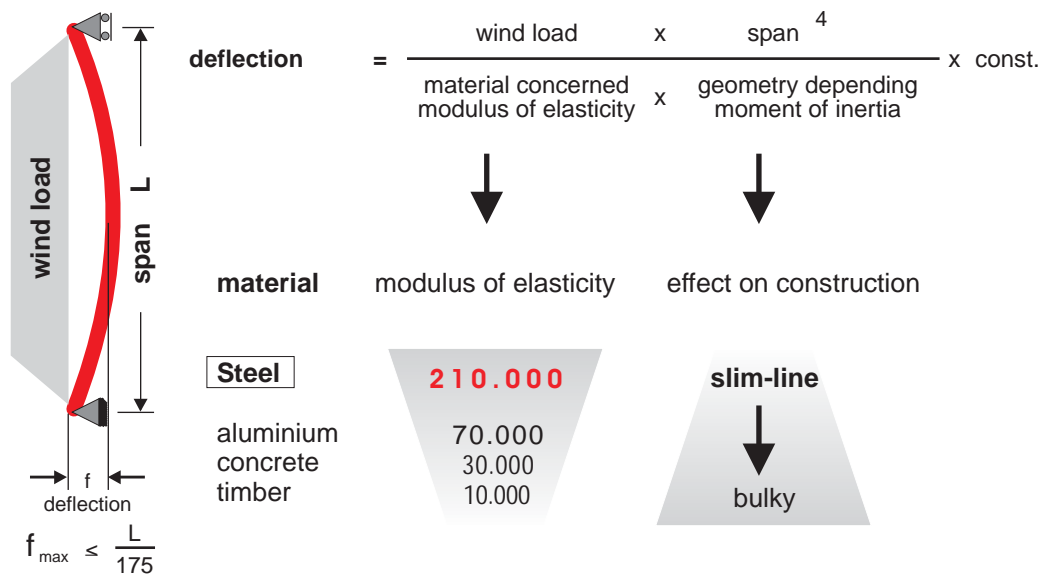
Its special properties make steel an ideal and at the same time environmentally friendly material.

Its high load capacity, durability, fire resistance properties and the maximum protection it offers against intrusion and vandalism are positive advantages for every-day use.

Slim-line constructions in steel and glass, the basis of modern architecture, never fail to impress.

This is why steel is preferred more and more to other materials by planning authorities and tender panels.

Steel makes it possible - Steel : the material of the future.



1. Advantages at a glance

Slim-line construction

Like no other material steel enables the creation of slim line facades that combined with glass offer the maximum passage of natural light

Four profiles: a complete mullion-transom-system compatible to façade system RP-ISO-hermetic 45

High load capacity

Mullions are available to a depth of 180 mm thereby allowing for wide spans without requiring additional reinforcing supports or sections.

Corrosion resistant surface

Corrosion resistant, easy-to-coat finish due to sections that have been produced from pre-galvanized steel.

Header by coating (anticorrosive paint) the ready machined sections before screw assembly.

Hermetically-sealed steel section

Continuous inner seal with drainage channels as a second aquifer, water resistance drilling by sealing washer

Cascade form combination seal

Same seal for mullion and transom for all drainage directions

Thermal insulation

Separation of warm and cold zones including screws

Technical treatment

Use of self-drilling screws does away with the need for precision depiction of holes in workshop drawings for mullions and transoms.

Workshop

Clamping the glazing beads with self-drilling screws does away with the need for the labour intensive precision locating of screw-holes and fixtures in mullion and transom.

Assembly

Separate mounting of all mullions prior to transom installation

Time and labour saving plug and screw assembly of all transoms with patented transom fixtures.

Simplified and fast attachment of glazing beads by using self-tapping screws which are inserted in combined guide and separator bushes which act as plumbing screw leads.

Insulated penetration of mullion/transom seal via put-on washer.

In case of glass exchange, the second seal level will be penetrated with the screw at the same point as before, due to the guide bushes functions.

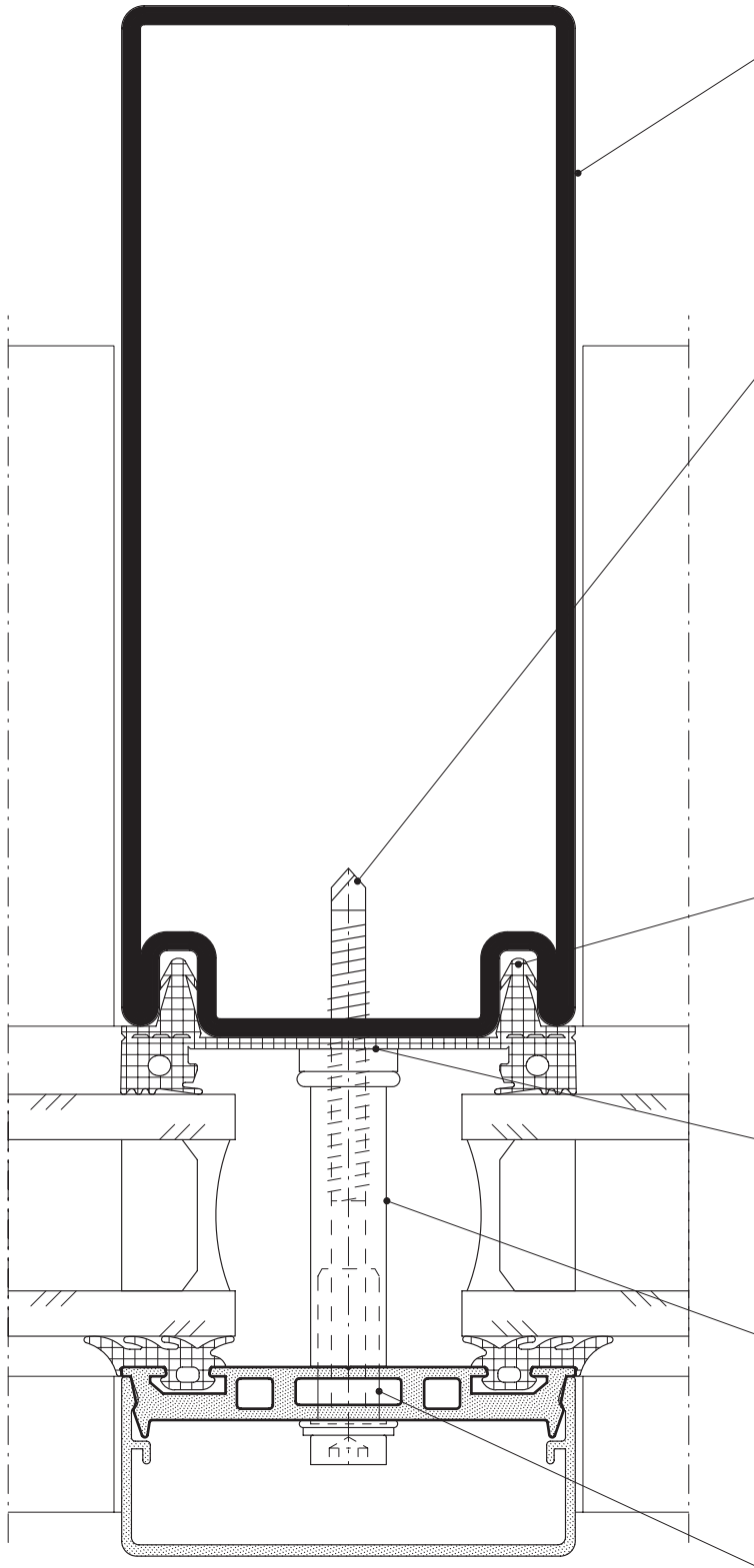
Only one screw driving tool required, pre-set to required depth, which takes all stainless steel screw types used.

Only three screws needed (depending on loads) for a torsionally rigid and shear-resistant mullion and transom assembly.

Stable fixture of the interior seals in grooves in the steel sections enables pre-assembly in the workshop.

Sections come delivered to the building site colour coated ready for assembly using the screw-on mountings.

Advantages at a glance
sectional drawing



mullion profile
steel, pre-galvanized

**self drilling
facade screws**

- for fixing in steel profile
- saving time for planning- and workshop

seal
secured guiding in
profile grooves

**waterresistant
penetration**
through sealing washer

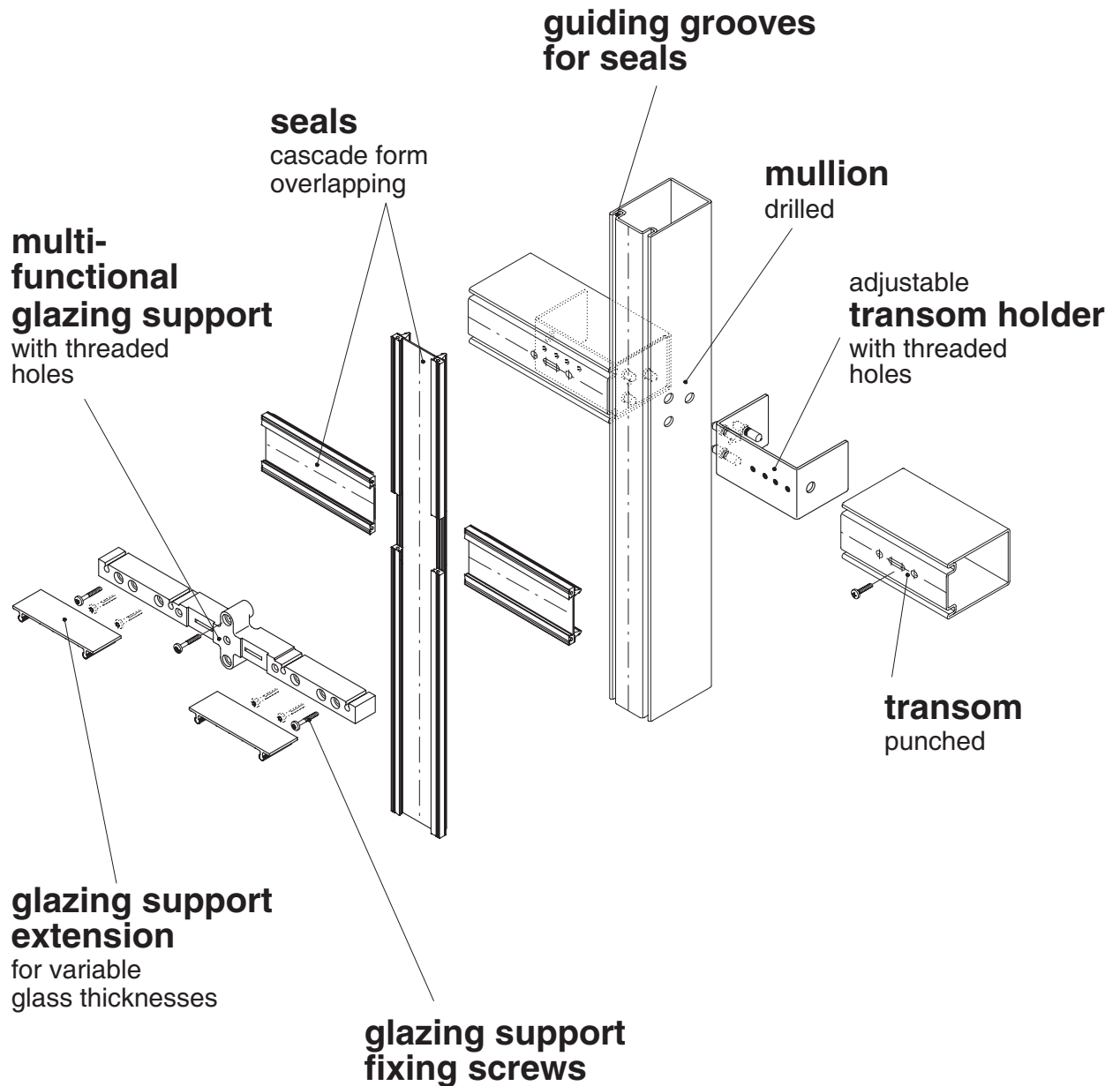
**clamp separator
bush**

- guided drilling
- defined clamping pressure

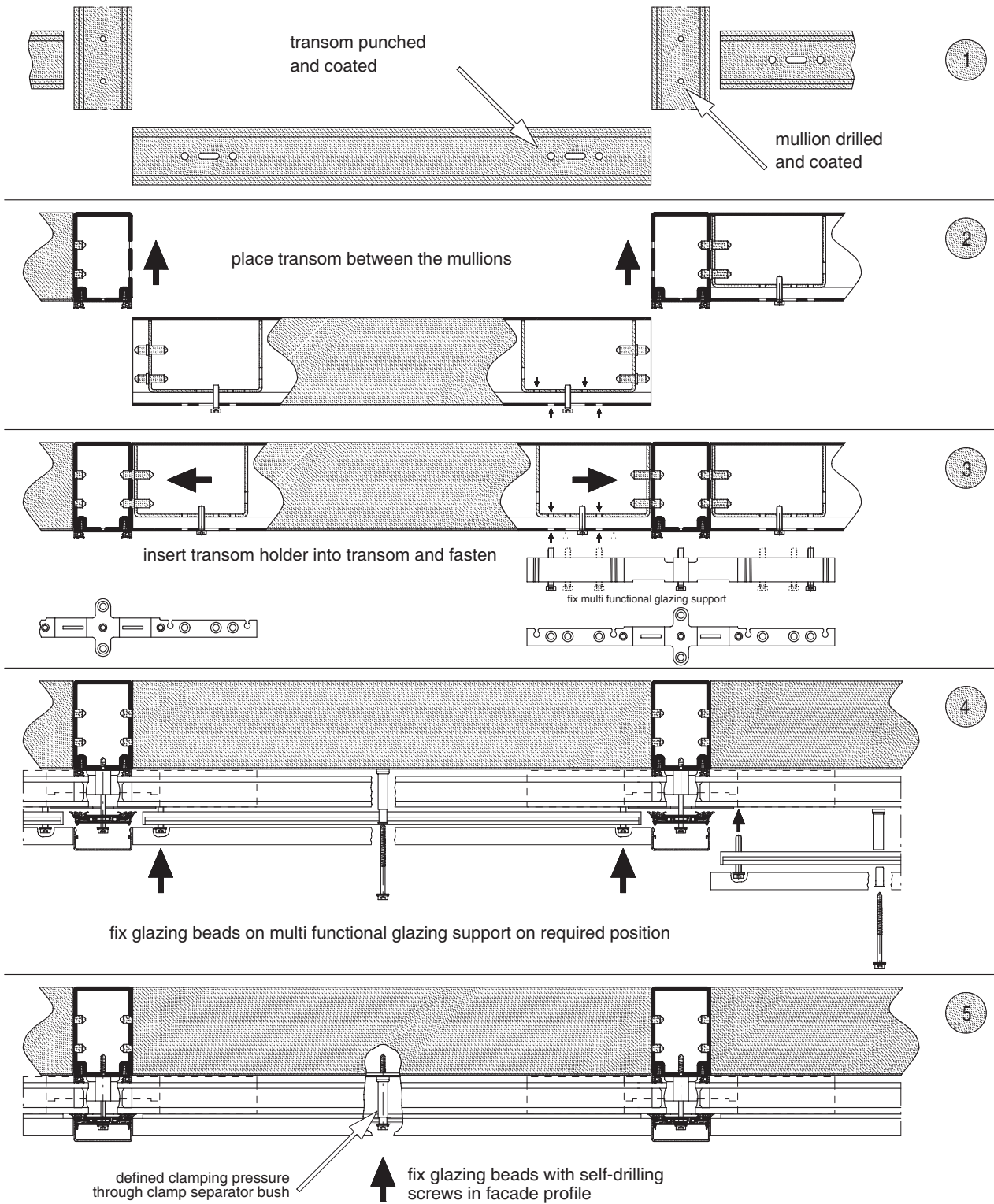
guiding bush

- E.E. and we reserve the right to effect modifications -

1.2 Advantageous screw - plug- connection mullion- transom joint



1.3 Advantageous screw - plug- connection



- E.E. and we reserve the right to effect modifications -

2. System specifications

2.1 system description

RP-ISO-hermetic 60 N is an easy-to-assemble system for dry/pressure glazing of large area thermally insulated facades.

Steel's outstanding properties make it the ideal basis for mullion-transom support structures as a system.

The system allows mounting of all mullions before assembling transoms.

The transoms can either be connected to mullions by an easy-to-use, patented plug and screw system. Welding can be applied if desired.

The steel sections are hermetically closed by a continuous EPDM seal which form a second water conduit surface.

Water resistant penetration of screws are achieved through sealing washer.

The seals / gaskets are fixed in grooves and therefor stable.

Panes made of glass or other materials are held in stable multi-purpose supports which can be economically secured by a small number of screws at the intersection points of the mullions and transoms.

Use of self-drilling screws for attaching the glazing beads does away the need for preparations of support normally required. The screws are inserted in combined guide and separator bushes which act as plumbing screw leads.

Special stainless steel screws allow the use of only one screw driving tool. The screws are preset to required depths.

The cover strips and glazing beads are available in various shapes and materials.

Tests

Thermal transmittance: $U_f \geq 1,4 \text{ W/m}^2\text{K}$

Air permeability of joints and water tightness: 600 Pa

Wind resistance: 1250 Pa

2.2 Position list

pos.	description
1	mullion (height 45...90...135...180 mm)
2	transom (height 45...90...135...180 mm)
3	transom holder
4	transom holder fixing screws
5	mullion seal (= transom seal)
6	transom seal (= mullion seal)
7	multi functional glazing support
8	glazing support extension
9	glazing support fixing screw *)
9 a / b	load-controlled special screw *)
10	glazing support fixing screw *)
11	block filling
12	seal glazing bead
13	glazing bead
14	end seal for glazing bead
15	screw with sealing washer for glazing bead *)
16	self-drilling screw with sealing washer for glazing bead *)
17	guiding bush for self-drilling screw
18	clamp separator bush and sealing washer for self-drilling screw
19	cover strip
20	cover strip
21	intersection- / t-joint cover plate *)

*) STAINLESS STEEL A2

2.3 Item description

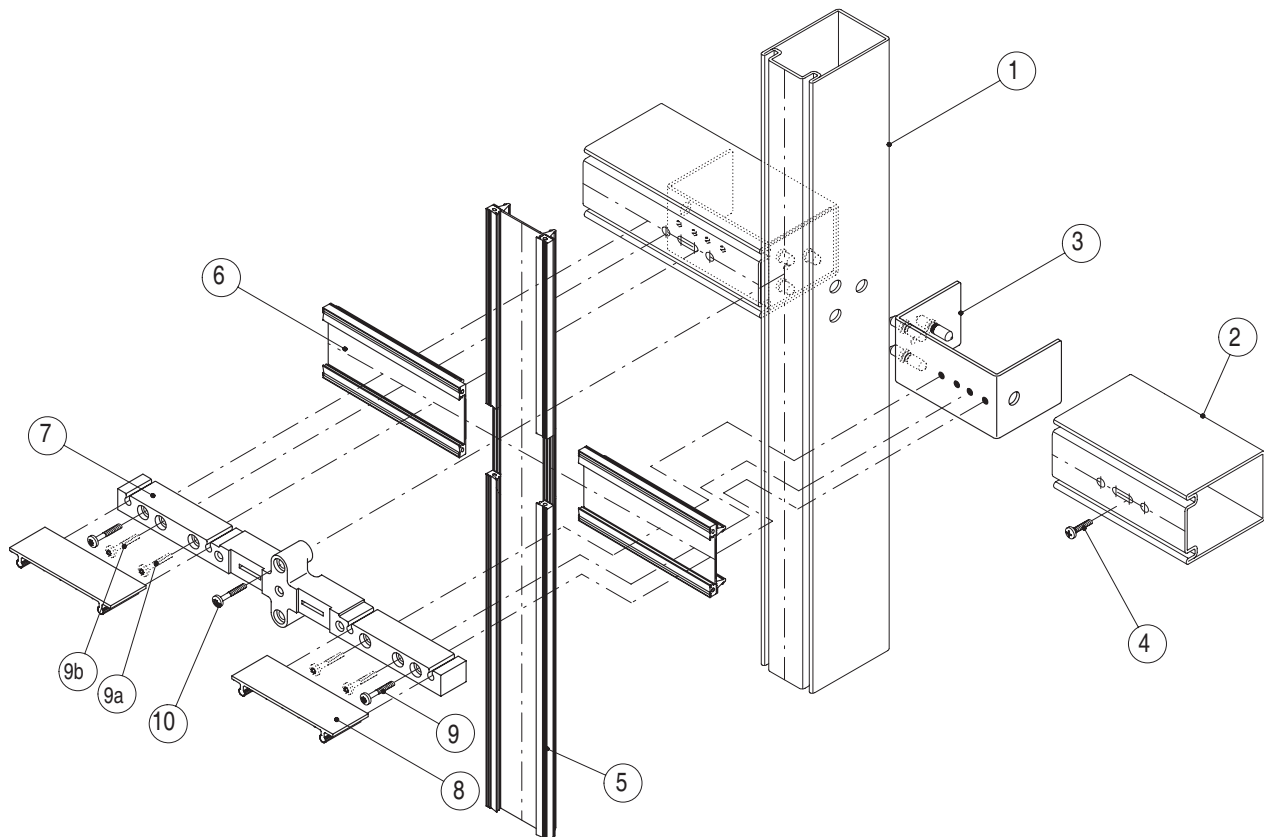
- Item 1 / 2 Mullions and transoms**
are made from slender corrosion-resistant steel sections (produced from pre-galvanized steel) and feature an exposed width of 60 mm. Despite their relatively low depth of 45 - 180 mm they are superior to other materials in terms of their static load-bearing capacity. Depending on loads single-pane spans of up to 7 meters are possible.
- Item 3 Transom holders (patented)**
enable economical plug and screw assembly of mullion and transom. As transom holders are adjustable within the transoms, all mullions can be mounted separately in advance. Transom fixing bolts are screwed into mullions to take up the vertical load. This method allows also pre-(colour)coated sections to be assembled.
- Item 4 Transom holder mounting screws**
Are guided in the transom slot and serve to locate, bolt on and fix in place the transom holders. The internal tapping is factory-executed.
- Item 5 / 6 Mullion/transom seals**
are made from EPDM. The continuous seals with drainage channels provide a water-tight seal at the junction of the glazing edge and the steel sections. They serve as thermal insulators and as a second water conducting level at the same time. The lower flange is inserted into the mullion/transom grooves thus ensuring that the seals are firmly in place and can be pre-assembled in the workshop.
- Item 7 Multi functional glazing support**
made of pressure die cast aluminium with a bearing surface of 25 mm is ready to assemble and all screw holes and inner thread are in place. To fix the glazing support at least two mounting screws (item 9) must be screwed through the transom into the pre-threaded screw holes of the transom holder. A further glazing support mounting screw (item 10) must be screwed into the mullion. This method of bolting on ensures a torsionally rigid and shear-resistant mullion-transom assembly.
- Item 8 Glazing support extension**
is an extruded aluminium section which enables the use of varying glazing thicknesses. For this purpose the required length is sawn off the section according to the thickness of the glass and pressed into the grooves in the glazing support.
- Item 9 Glazing support mounting screw**
serves to anchor glazing support to transom assembly.
- Item 9a/b Load-controlled additional screw**
is used for heavier glass loads.
- Item 10 Glazing support mounting screw**
is used to anchor the glazing support to mullion assembly.

2.3 Item description

- Item 11 Glazing block**
made of hardwood or a suitable synthetic material of the user's choice; it is inserted between glazing support and glass in order to avoid contact between glass and metal.
- Item 12 Glazing bead seals**
from EPDM and form the first sealing level. Easy-to-assemble pressed from below into the glazing bead grooves..
- Item 13 Glazing beads**
are extruded aluminium or stainless steel profiles with grooves for seals assembly.
- Item 14 End seal for glazing beads**
from EPDM for the bottom mounted seals (sealed with adhesive)
It provides a good sealing for joints as shown in the illustration.
- Item 15 Screw with sealing washer for glazing beads**
made of stainless steel to fix and screw press-on glazing beads at intersections.
Screws are screwed into factory-drilled holes in the glazing support.
- Item 16 Self-drilling screw with sealing washer for glazing beads**
- Item 17 Guiding bush for self-drilling screws**
- Item 18 Clamp separator bush and sealing washer for self-drilling screws**
The self-drilling stainless steel screw with sealing washer provides the necessary press fastening of the glazing beads at intersections and is guided through the guiding-(item 17) and clamp separator bush (item 18).
The guiding- and clamp separator bushes serve the following purposes:
1. guide the self-drilling stainless steel screws in plumb-line;
 2. to ensure correct spacing between mullion/transom and glazing bead with controlled clamping pressure;
 3. to reseal the hole resulting from the penetration of the mullion and/or transom seal;
 4. to catch and isolate the metal shavings caused by this;
 5. to insulate the screws thermally.
- Item 19 Vertical cover strip**
- Item 20 Horizontal cover strip** (used for depths smaller than item 19)
- Item 21 Intersection/t-joint cover plates**
out of stainless steel with self-adhesive film, used for U-formed end seals (form, item 14)
For the sealing of the glazing beads at intersections and t-joints.

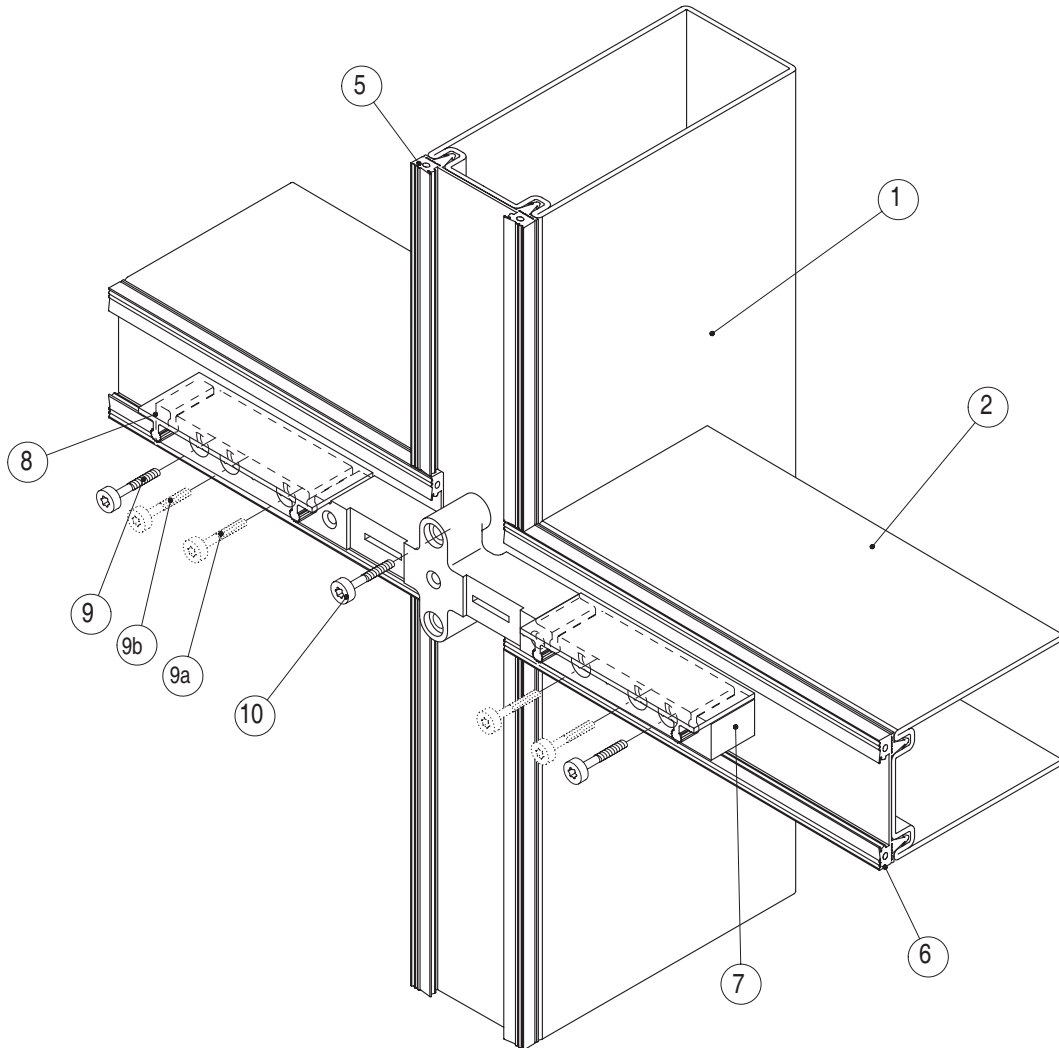
3. System design drawings

3.1 First mounting level



pos.	description
1	mullion (depth 45...90...135...180mm)
2	transom (depth 45...90...135...180mm)
3	transom holder
4	transom holder fixing screw
5	mullion seal
6	transom seal
7	multi functional glazing support
8	glazing support extension
9	glazing support fixing screw (transom)
9a/b	load controlled special screw
10	glazing support fixing screw (mullion)

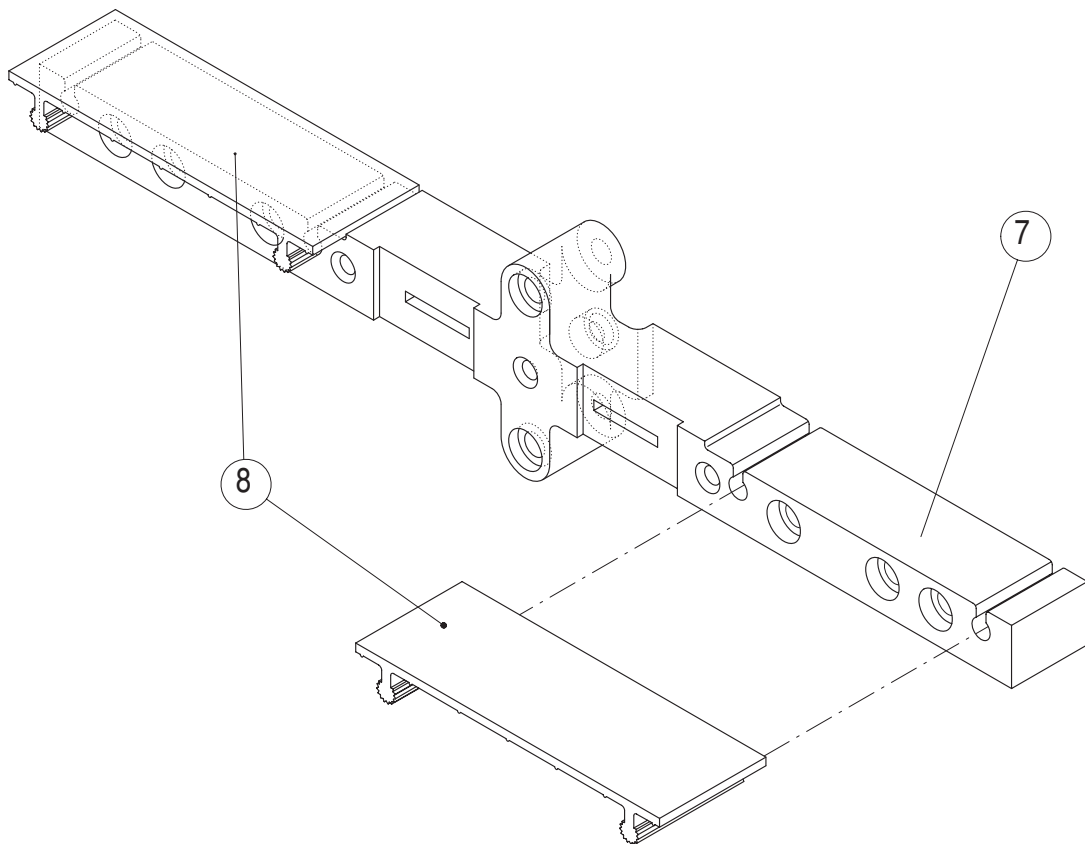
3.2 Detail intersection



pos.	description
1	mullion (depth 45...90...135...180mm)
2	transom (depth 45...90...135...180mm)
5	mullion seal
6	transom seal
7	multi functional glazing support
8	glazing support extension
9	glazing support fixing screw (transom)
9a/b	load controlled special screw
10	glazing support fixing screw (mullion)

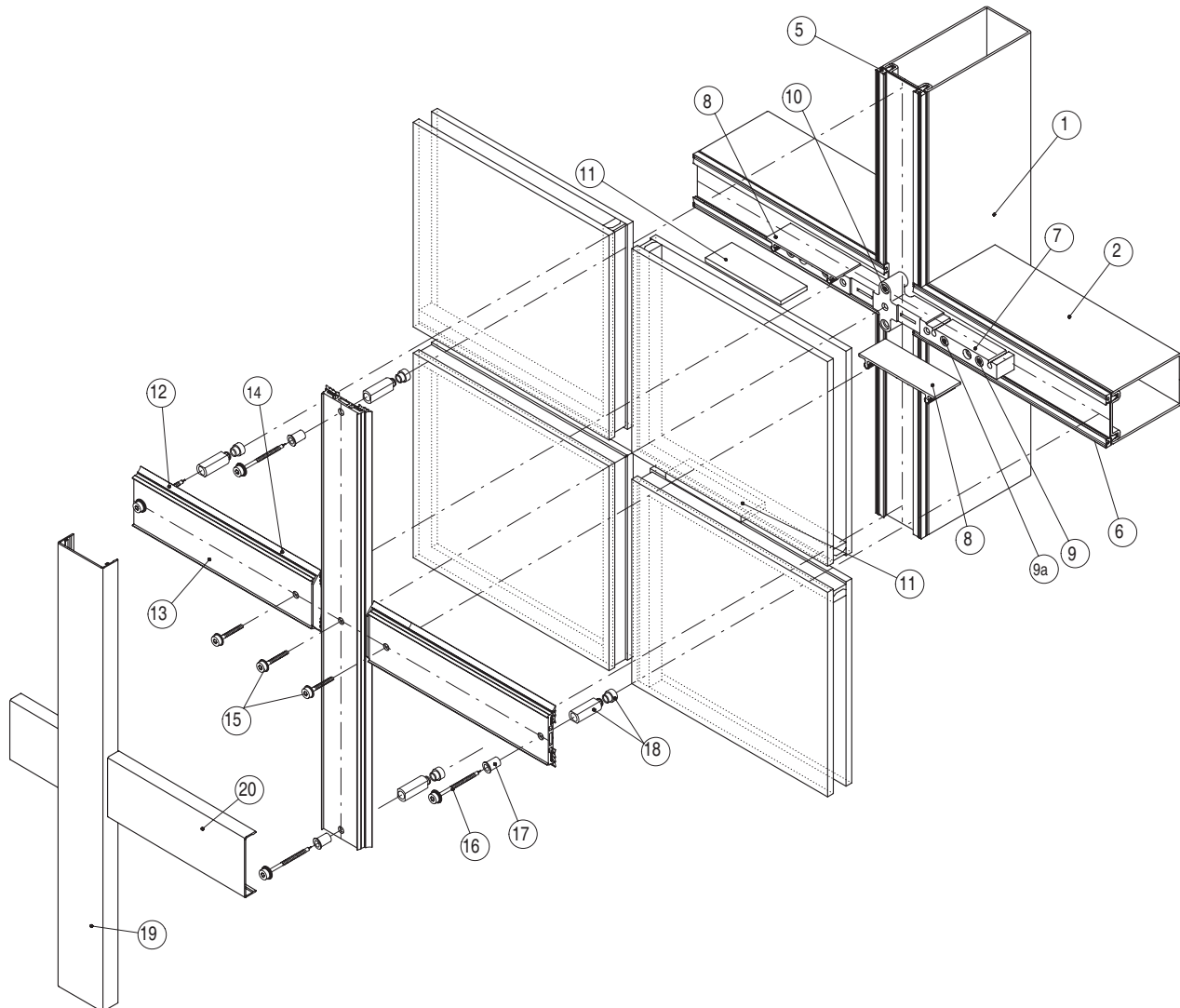
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3.3 Detail multi functional glazing support



pos.	description
7	multi functional glazing support
8	glazing support extension

3.4 Second mounting level

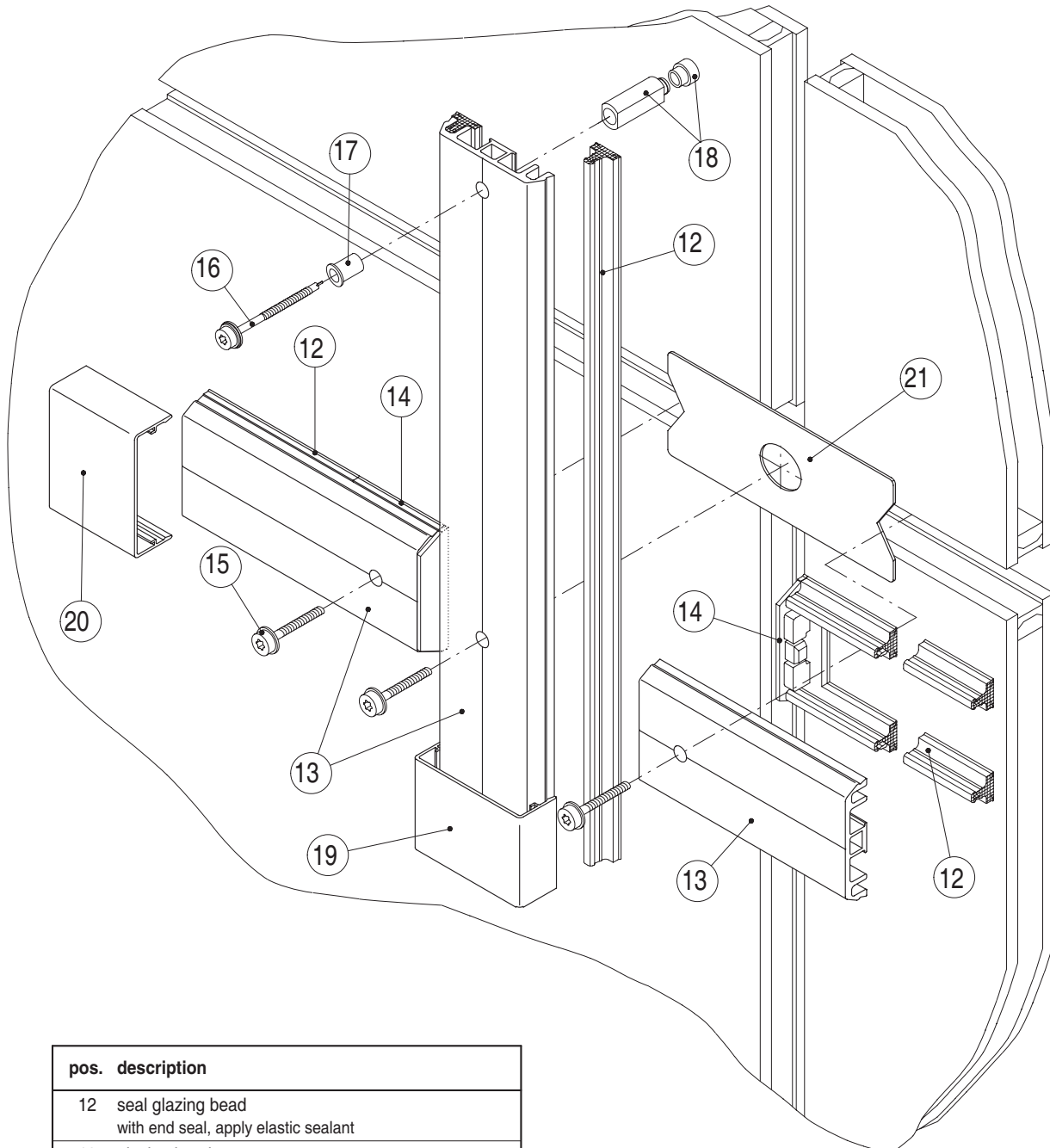


pos.	description
1	mullion (depth 45...90...135...180mm)
2	transom (depth 45...90...135...180mm)
5	mullion seal
6	transom seal
7	multi functional glazing support
8	glazing support extension
9	glazing support fixing screw (transom)
9a/b	load controlled special screw
10	glazing support fixing screw (mullion)
11	block filling

pos.	description
12	seal glazing bead
13	glazing bead
14	end seal for glazing bead
15	screw with sealing washer for glazing bead
16	self drilling screw with sealing washer
17	guiding bush for self drilling screw
18	clamp separator bush with sealing washer for self drilling screw
19	cover strip
20	cover strip

- E.E. and we reserve the right to effect modifications -

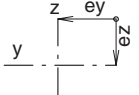
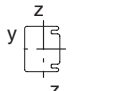
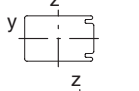
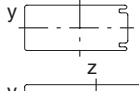
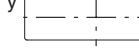
3.5 Detail intersection with glazing beads and intersection cover plate



pos.	description
12	seal glazing bead with end seal, apply elastic sealant
13	glazing bead
14	end seal for glazing bead
15	screw with sealing washer for glazing bead
16	self drilling screw with sealing washer
17	guiding bush for self drilling screw
18	clamp separator bush with sealing washer for self drilling screw
19	cover strip
20	cover strip
21	intersection- / t-joint cover plate




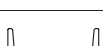
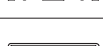

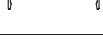



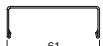

- E.E. and we reserve the right to effect modifications -

4. Profile data

	profile	T mm	s mm	A cm ²	U m ² /m	G kg/m	ey cm	ez cm	Iy cm ⁴	Wy cm ³	iy cm	Iz cm ⁴	Wz cm ³	iz cm
	RP1800	45	2.5	5.85	0.242	4.59	2.17	3.00	29.63	9.88	2.25	17.68	7.14	1.74
	RP1802	90	2.5	8.10	0.332	6.36	4.71	3.00	48.24	16.08	2.44	92.88	18.87	3.39
	RP1804	135	2.5	10.35	0.422	8.12	6.37	3.00	66.85	22.28	2.54	249.75	34.30	4.91
	RP1806	180	2.5	12.60	0.512	9.89	8.55	3.00	85.46	28.49	2.60	511.25	53.25	6.37

face width: 60 mm

material: S 235 JRG 2

beads/strips		part.no.	T mm	h mm	A cm ²	U m ² /m	G kg/m	O m ² /m
aluminium AlMgSi0.5 F22		403 560	9.3	7	2.57	0.166	0.69	0.081
		403 531	7	7	2.47	0.155	0.67	0.067
		403 811	12	12	2.85	0.203	0.77	0.075
		403 910	26	12	4.57	0.265	1.23	0.136
		413 510	15	1.5	1.28	0.174	0.35	0.090
		413 520	18	1.5	1.44	0.202	0.39	0.096
		413 530	21	1.5	1.52	0.214	0.41	0.102
		413 540	24	1.5	1.60	0.226	0.43	0.108
		413 590	54	1.5	3.0	0.263	0.81	0.144
stainless steel 1.4401		430 060	10	1.5	1.26	0.171	0.99	0.089
		411 530	21	0.8	0.88	0.205	0.69	0.105
		411 540	24	0.8	0.93	0.217	0.73	0.111

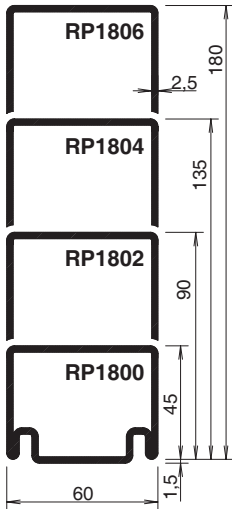
face width: 60 mm

T = depth
s = wall thickness
A = cross sectional area
U = peripheral area
G = weight
O = front sight
h = height in the middle
e = gravity center axis
I = moment of inertia
W = section modulus
i = radius of gyration

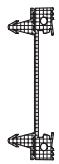
Facade System RP-ISO-hermetic 60 N

6. Parts list

mullion- and transom profile

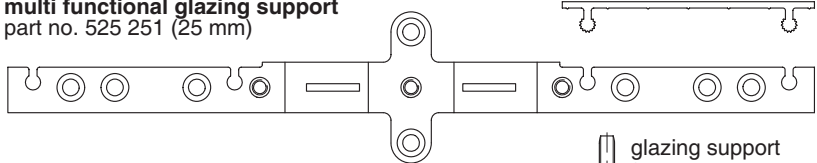


mullion- and transom seal



305 170

multi functional glazing support part no. 525 251 (25 mm)

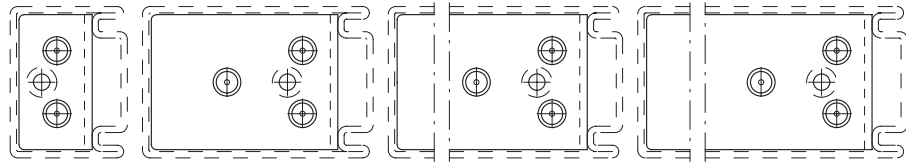


glazing support extension part no. 525 010



glazing support fastening screws
self-locking, torx T27
part no. 605 181

transom holder



517 100 for RP1800 (45 mm)
517 120 for RP1802 (90 mm)
517 140 for RP1804 (135 mm)
517 160 for RP1806 (180 mm)

transom-holder mounting screw (torx T27)
part no. 605 191

glazing beads / seals aluminium

seal part no. 300381

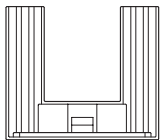


403 811

seal part no. 300381



403 910



end seal part no. 325 381 for part no. 403 811 and 403 910

seal part no. 300560

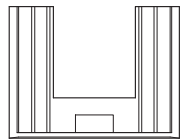


403 531

seal part no. 300560



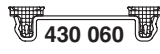
403 560



end seal part no. 325 230 for part no. 403 531 and 403 560

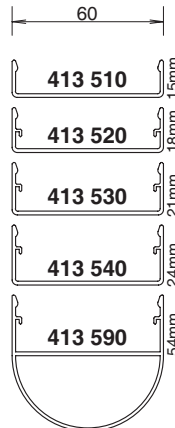
stainless steel

seal part no. 300381

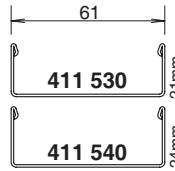


430 060

cover strips aluminium



cover strips stainless steel



facade screws and accessories

clamp separator bush with sealing washer



- 655 451 | = 16 mm
- 655 461 | = 18 mm
- 655 211 | = 20 mm
- 655 221 | = 22 mm
- 655 231 | = 24 mm
- 655 241 | = 26 mm
- 655 251 | = 28 mm
- 655 261 | = 30 mm
- 655 271 | = 32 mm
- 655 281 | = 34 mm
- 655 291 | = 36 mm
- 655 301 | = 38 mm
- 655 311 | = 40 mm
- 655 321 | = 42 mm
- 655 331 | = 44 mm
- 655 341 | = 46 mm
- 655 351 | = 48 mm
- 655 361 | = 50 mm
- 655 371 | = 52 mm
- 655 381 | = 54 mm
- 655 391 | = 56 mm

guiding bush



- 655 111 | = 14 mm
- 655 121 | = 20 mm

facade screws and accessories

facade screw self-locking, torx T27 for glazing support



- part no.
- 605 221 M6x20
 - 605 231 M6x30
 - 605 241 M6x40
 - 605 251 M6x50

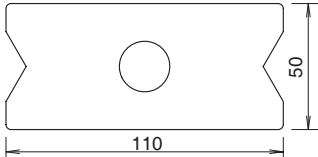
facade screw



- self-drilling, torx T27 with sealing washer dia. 12 mm
- 605 322 | = 65 mm
 - 605 333 | = 75 mm
 - 605 343 | = 90 mm

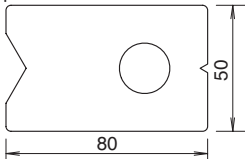
intersection cover plate

part no. 525 511



t-joint cover plate

part no. 525 521



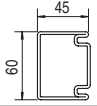
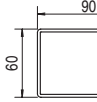
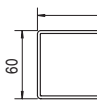
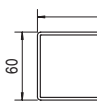
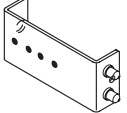
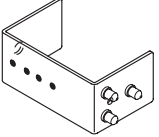
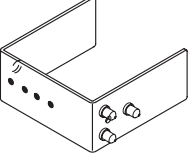
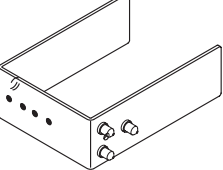


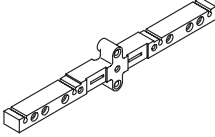
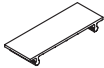

surface finish

RP-profiles: pre-galvanized
aluminium beads: anodisable

M 1:3










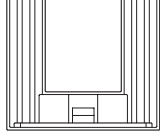

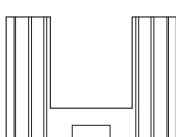
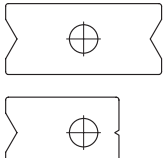
- E.E. and we reserve the right to effect modifications -

7. Accessories

	part no.	unit unit/bundle	item additional information
	RP 1800	6 m 24 bars/bundle	transom profile 45 mm depth, t = 2,5 mm pre-galvanized Iz 17,68 cm ⁴ Iy 29,63 cm ⁴ G 4,59 kg/m U 0,242 m ² /m
	RP 1802	6 m 24 bars/bundle	mullion- / transom profile 90 mm depth, t = 2,5 mm pre-galvanized Iz 92,88 cm ⁴ Iy 48,24 cm ⁴ G 6,36 kg/m U 0,332 m ² /m
	RP 1804	6 m 24 bars/bundle	mullion- / transom profile 180 mm depth, t = 2,5 mm pre-galvanized Iz 249,75 cm ⁴ Iy 66,85 cm ⁴ G 8,12 kg/m U 0,422m ² /m
	RP 1806	6 m 24 bars/bundle	mullion profile 112,5 mm depth, t = 2,5 mm pre-galvanized Iz 511,25 cm ⁴ Iy 85,46 cm ⁴ G 9,89 kg/m U 0,512m ² /m
	517 100	1 pcs	transom holder, pre-galvanized 2 bolts 45 mm / RP 1800
	517 120	1 pcs	transom holder, pre-galvanized 3 bolts 90 mm / RP 1802
	517 140	1 pcs	transom holder, pre-galvanized 3 bolts 135 mm / RP 1804
	517 160	1 pcs	transom holder, pre-galvanized 3 bolts 180 mm / RP 1806
	605 191	250 pcs	transom holder- mounting screw torx T27 , M 6 x 30 , stainless steel A2
	305 170	50 m	mullion- / transom seal EPDM
	525 251	10 pcs	multi functional glazing support aluminium die cast metal 25 mm depth
	525 010	6 m	glazing support extension widens profile aluminium
	605 181	250 pcs	glazing support fastening screw torx T27 , M 6 x 50 , stainless steel A2


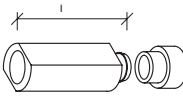
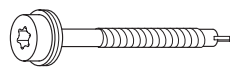
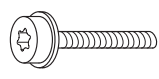
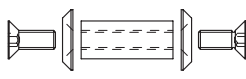
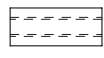
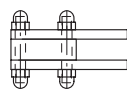
*) Attention: 100 pieces / PU valid from 01.07.2007

7. Accessories 2nd page

	part no.	unit unit/bundle	item additional information
	403 560	12 m (2x6m)	Glazing bead, aluminium AIMgSi0.5F22 (60 mm exposed width) for covering strip G 0,69 kg/m U 0,166 m ² /m A 2,57 cm ²
	403 531	12 m (2x6m)	Glazing bead, aluminium AIMgSi0.5F22 (60 mm exposed width) G 0,67 kg/m U 0,155 m ² /m A 2,47 cm ²
	403 811	12 m (2x6m)	Glazing bead, aluminium AIMgSi0.5F22 (60 mm exposed width) for covering strip G 0,77 kg/m U 0,203 m ² /m A 2,85 cm ²
	403 910	6 m	Glazing bead, aluminium AIMgSi0.5F22 (60 mm exposed width) G 1,23 kg/m U 0,265 m ² /m A 4,57 cm ²
	430 060	6 m	Glazing bead, stainless steel 1.4401 (for covering strip 60 mm exposed width) G 0,99 kg/m U 0,171 m ² /m A 1,26 cm ²
	413 510	12 m (2x6m)	Covering strip, aluminium AIMgSi0.5F22 h = 15 mm
	413 520	12 m (2x6m)	h = 18 mm
	413 530	12 m (2x6m)	h = 21 mm
	413 540	12 m (2x6m)	h = 24 mm
	413 590	12 m (2x6m)	Covering strip, aluminium AIMgSi0.5F22 h = 54 mm
	411 530	12 m (2x6m)	Covering strip, stainless steel 1.4401 h = 21 mm sanded with 240
	411 540	12 m (2x6m)	h = 24 mm sanded with 240
	300 381	100 m	Seal, EPDM, black for glazing bead part.no. 403 811 / 403 910 / 430 060
	325 381	10 St	Glazing bead end seal, EPDM for glazing bead: part.no. 403 811 / 403 910
	300 560	100 m	Seal, EPDM, black for glazing bead part.no. 403 531 / 403 560
	325 230	10 St	Glazing bead end seal, EPDM for glazing bead: part.no. 403 531 / 403 560
	525 511	20 St	Covering for crossing point, stainless steel with self adhesive film for seals 325 230 and 325 381 Intersection cover plate
	525 521	20 St	T-joint cover plate

- E.E. and we reserve the right to effect modifications -



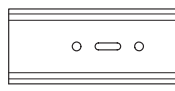

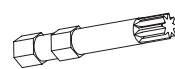
7. Accessories 3rd page

	part no.	unit unit/bundle	item additional information
	655 111 655 121	250 pcs 250 pcs	guiding bush l = 14 mm l = 20 mm
	655 451 655 461 655 211 655 221 655 231 655 241 655 251 655 261 655 271 655 281 655 291 655 301 655 311 655 321 655 331 655 341 655 351 655 361 655 371 655 381 655 391	250 pcs 250 pcs	clamp separator bush (polyamide) with sealing washer (EPDM) l = 16 mm l = 18 mm l = 20 mm l = 22 mm l = 24 mm l = 26 mm l = 28 mm l = 30 mm l = 32 mm l = 34 mm l = 36 mm l = 38 mm l = 40 mm l = 42 mm l = 44 mm l = 46 mm l = 48 mm l = 50 mm l = 52 mm l = 54 mm l = 56 mm
	605 322 605 333 605 343	250 pcs 250 pcs 250 pcs	facade screw self-drilling 12 mm sealing washer, special screw torx T27, stainless steel A2 65 mm 75 mm 90 mm
	605 221 605 231 605 241 605 251	250 pcs 250 pcs 250 pcs 250 pcs	facade screw with sealing washer special screw self-locking, torx T27, stainless steel A2 M 6 * 20 M 6 * 30 M 6 * 40 M 6 * 50
	675 100	2 pcs	connection part to fix mullion: 1 bolt, L = 59.5 mm, 2 supporting disks, 2 countersunk screws M10 x 25, A4
	675 100	1 pcs	bolt, stainless steel L = 59.5 mm
	525 470 525 550 525 590	1 pc 1 pc 1 pc	RP-inserts, L = 500 mm, galv., without drilling holes for connection parts for RP 1802 for RP 1804 for RP 1806







*) Attention: 100 pieces / PU valid from 01.07.2007

- E.E. and we reserve the right to effect modifications -

7. Accessories tools and templates

	part no.	unit unit/bundle	item additional information
	815 590	1 pc	drilling template for mullion machining for transom holder drilling holes in mullion profile
	805 290	1 pc	punching tool for transoms for normal and multi-faceted facade (press force of at least 5 tons required) hole lay-out 
	815 600	1 pc	drilling template mullion- / transom machining for glazing support fixing holes for welded mullion-transom connections
	805 210 805 220	1 pc 1 pc	torx bit T27 for 1/4" - bush 25 mm 70 mm

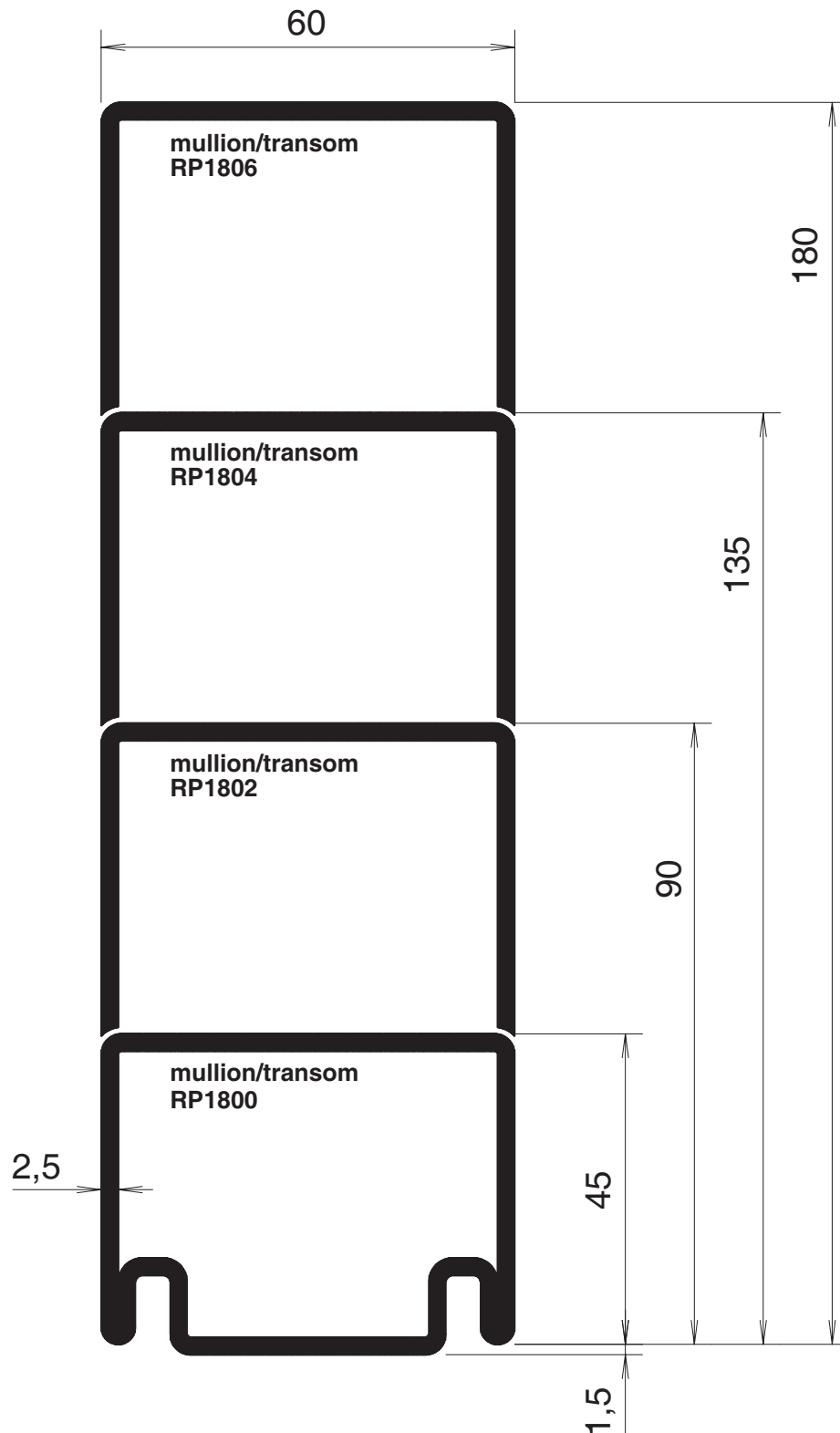
7. Accessories talaus and templates for seals

	part no.	unit unit/bundle	item additional information
	805 152	1 pc	punching tool for transom seals, adjustable $\pm 45^\circ$ together with hand cutter part no. 805 240
	805 240	1 pc	hand cutter for cutting transom seal to required length after using transom seals cutter for cut-outs, part no. 805 152
	805 260	1 pc	punching and cutting tool for transom seal 90° cut fastened to drill holder
	805 270	1 pc	mullion seal cutter grips into the transom holder drilling holes with screwed fixing into transom holder
	805 280	1 pc	cutting template mullion seal to cut-out mullion seal at intersections for welded connections and for screwed fixing into transom holder
	800 760	1 pc	hand cutter to cut seals to length 90°

- E.E. and we reserve the right to effect modifications -

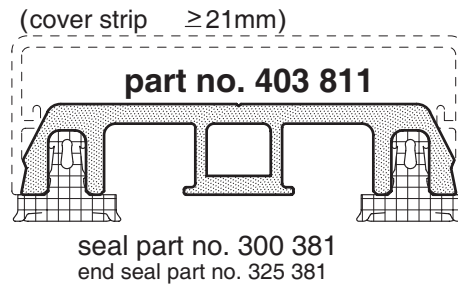
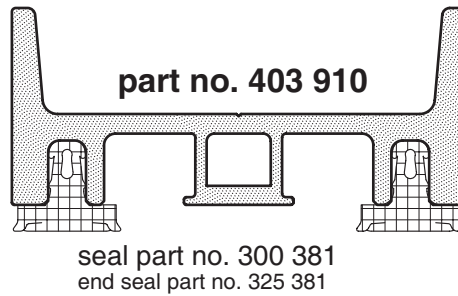
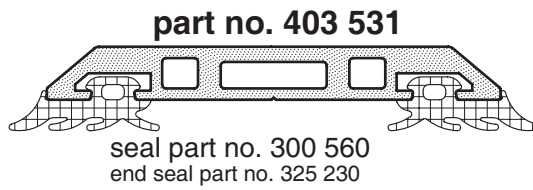
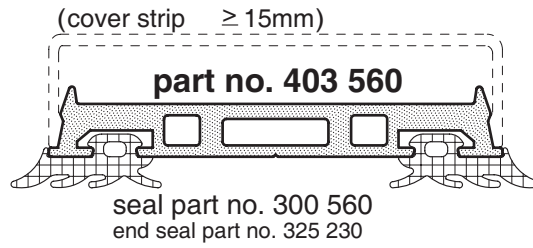
8. Profiles

8.1 Mullion and transom profiles

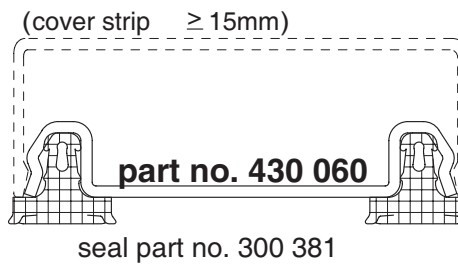


8.2 Glazing beads

aluminium



stainless steel

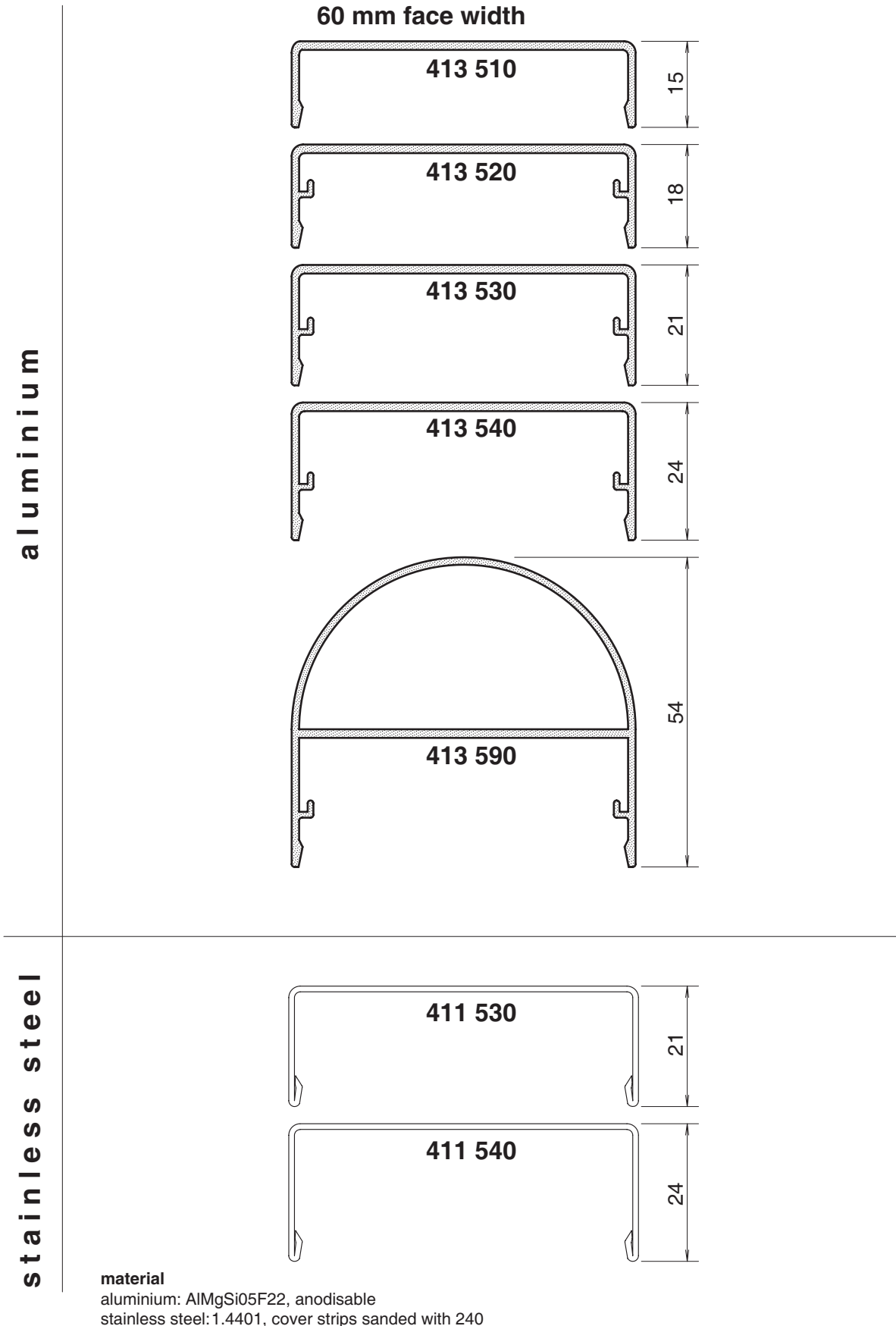


material

aluminium: AlMgSi05F22, anodisable
stainless steel: 1.4401, cover strips sanded with 240

- E.E. and we reserve the right to effect modifications -

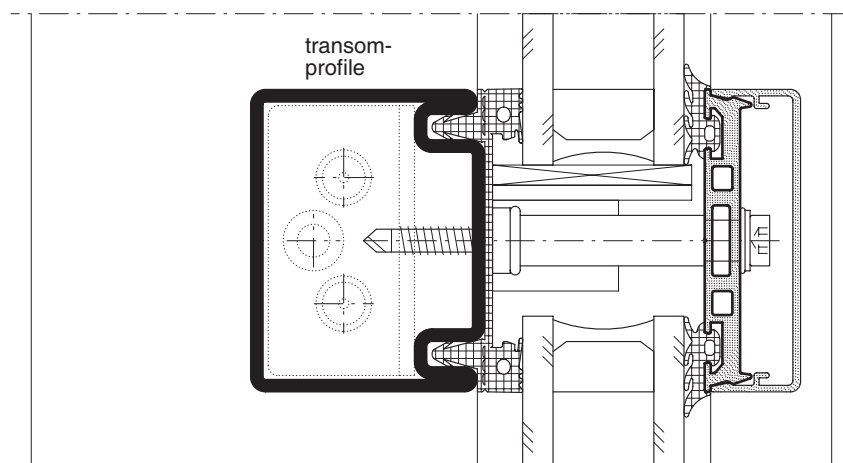
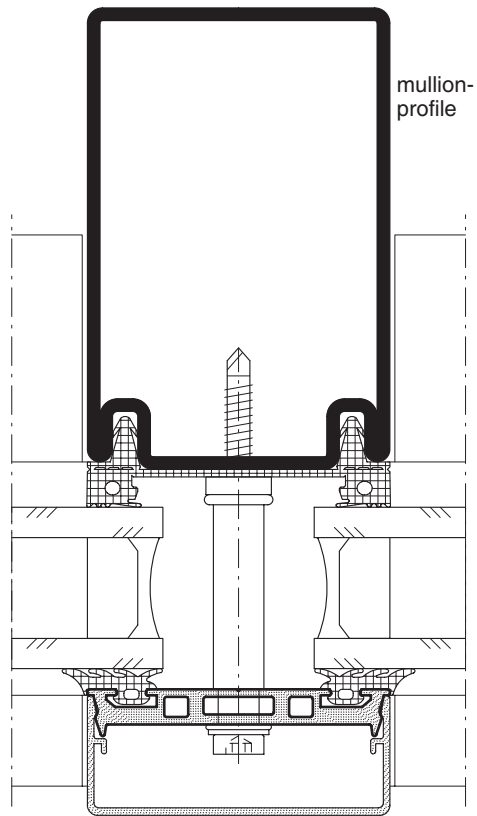
8.3 Cover strips



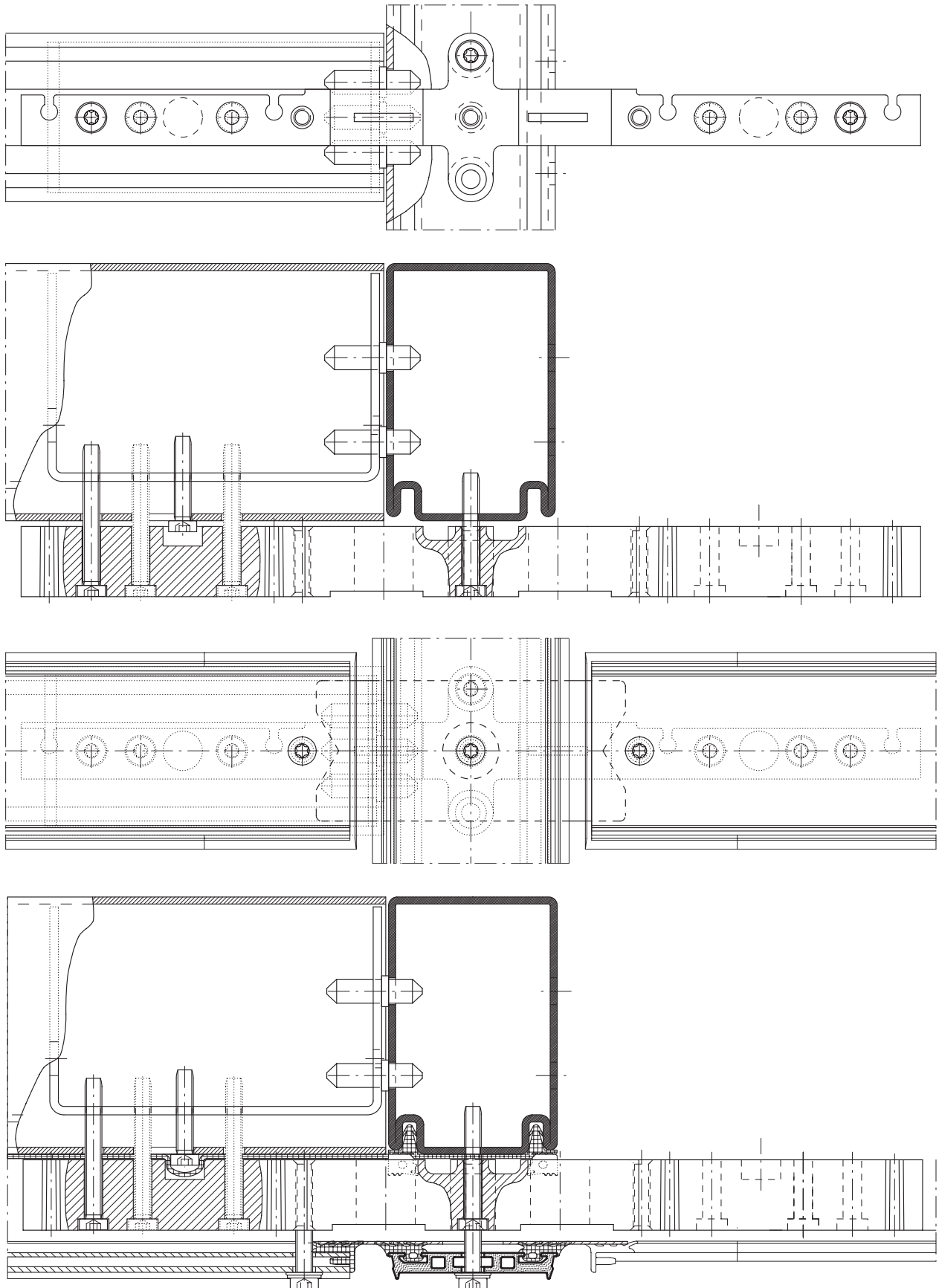
- E.E. and we reserve the right to effect modifications -

9. System sectional drawings

9.1 System sectional drawing mullion und transom



9.2 Sectional drawing intersection - diagramm



- E.E. and we reserve the right to effect modifications -

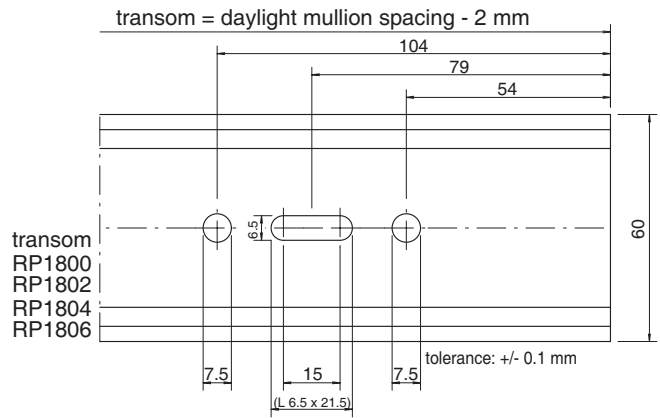
10. Machining and mounting instructions

10.1 Summary machining

transom

machining the transom with adjustable punching tool part no. 805 290

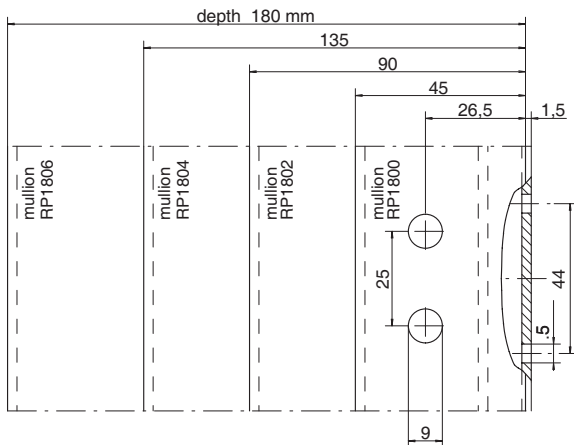
punching lay-out R1



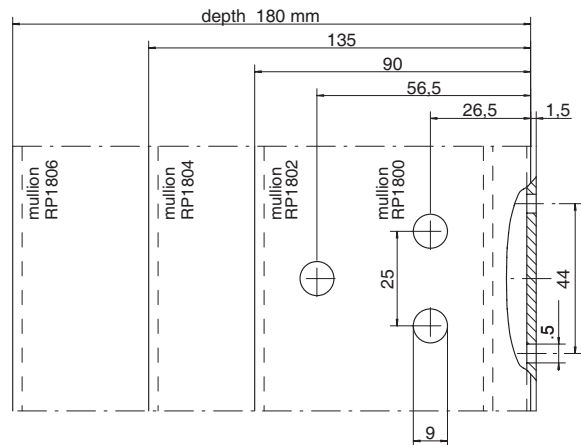
mullion

mullion-hole lay-out		transom profile (depth) part no. transom holder			
		RP1800 (45 mm) 517100	RP1802 (90 mm) 517120	RP1804 (135 mm) 517140	RP1806 (180 mm) 517160
mullion profile (depth)	RP1800 (45 mm)	P 1	—	—	—
	RP1802 (90 mm)	P 1	P 2	—	—
	RP1804 (135 mm)	P 1	P 2	P 2	—
	RP1806 (180 mm)	P 1	P 2	P 2	P 2

hole lay-out P1 (transom holder with 2 bolts)

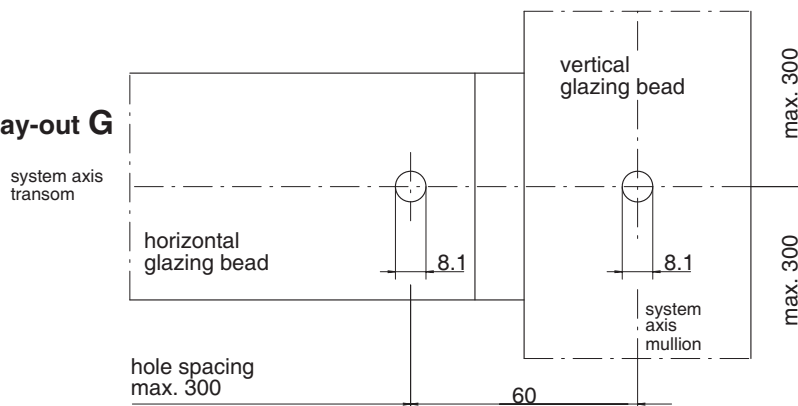


hole lay-out P2 (transom holder with 3 bolts)



glazing bead

hole lay-out G



lengths for glazing beads and cover strips see: 11.1

- E.E. and we reserve the right to effect modifications -

10.2 Transom machining (punching lay-out R1)

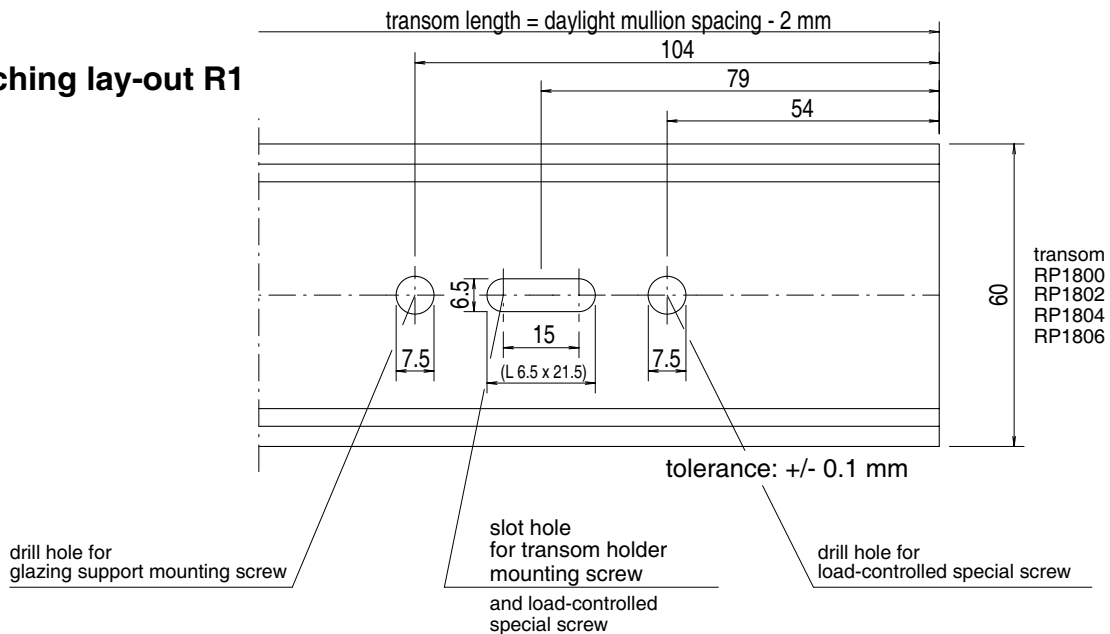
-for air gap mullion - transom 1mm

**transom machining
with adjustable
punching tool
part no. 805 290**

also suitable for multi-
faceted facades

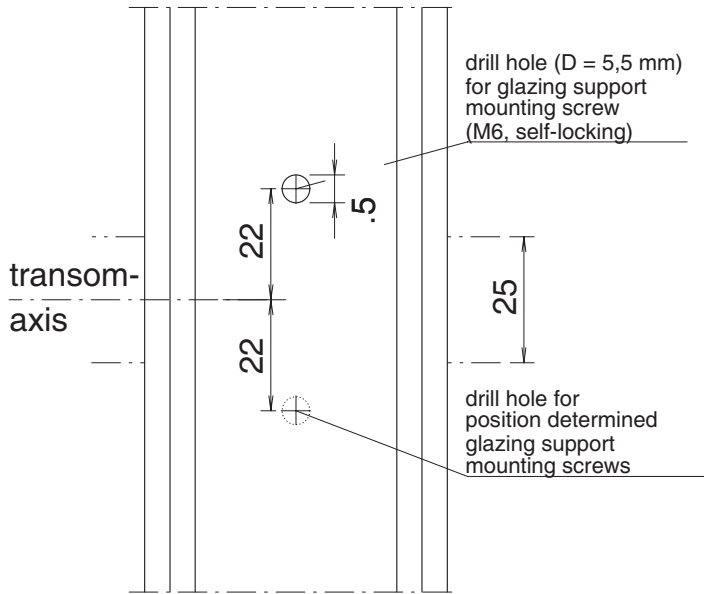


punching lay-out R1

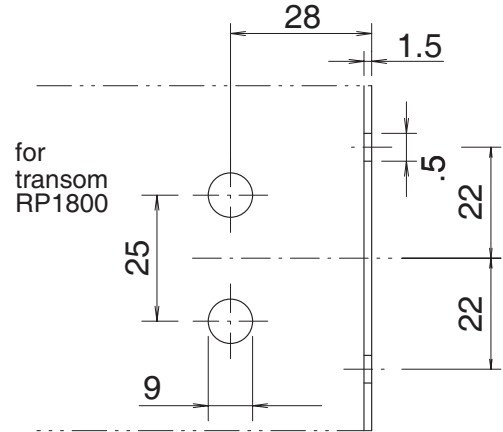


10.3 Mullion machining

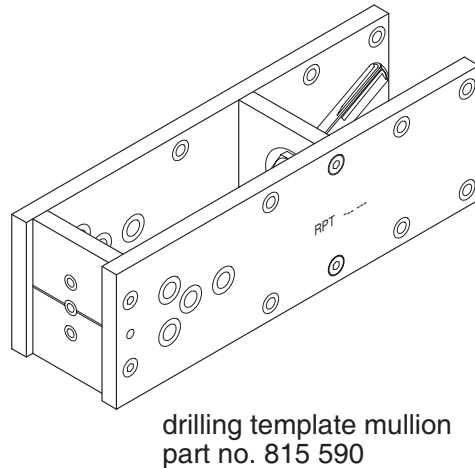
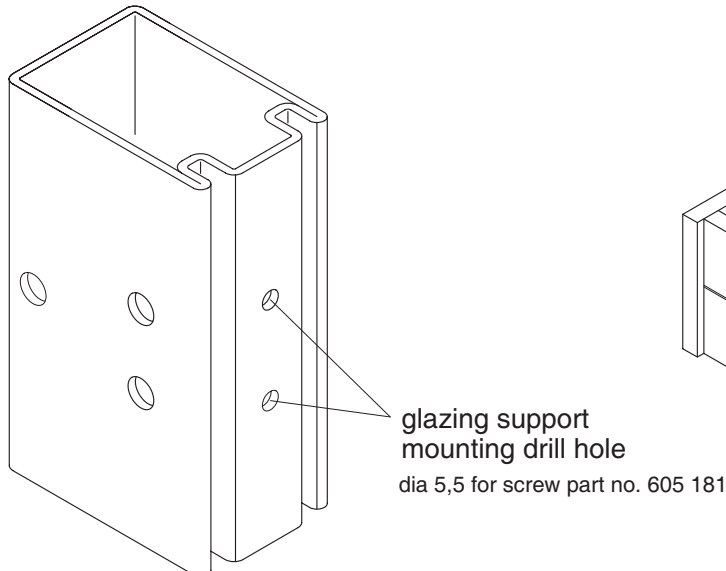
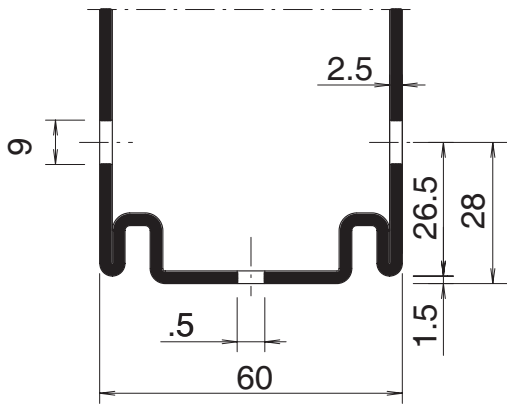
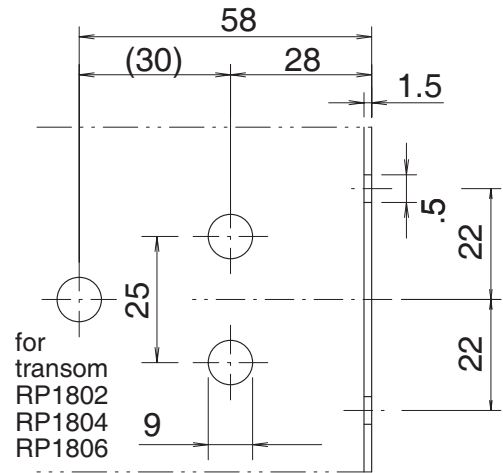
- transom holder drill holes
- glazing support mounting drill holes



hole lay-out P1



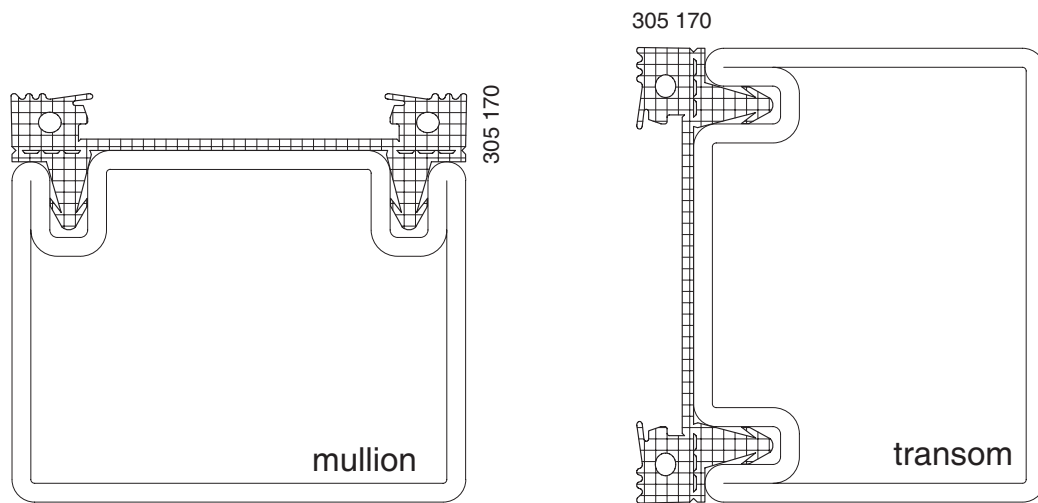
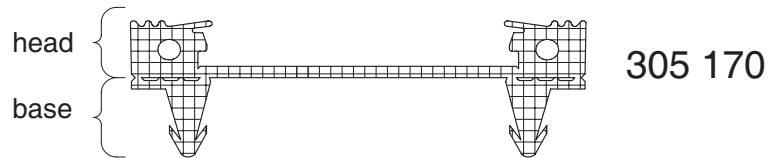
hole lay-out P2



- E.E. and we reserve the right to effect modifications -

10.4 Mullion- / transom seal

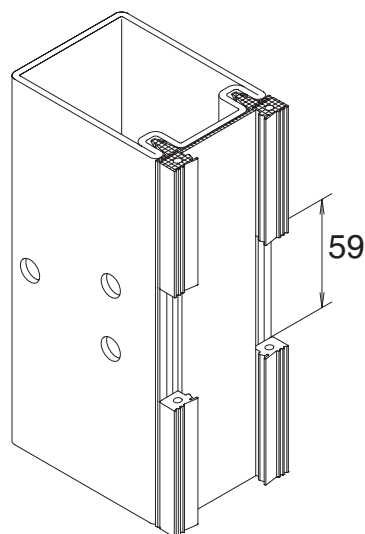
combination seal - one seal for mullion and transom



as mullion seal

as transom seal

machining for seal overlapping in cascade form



mullion
cut-out the head

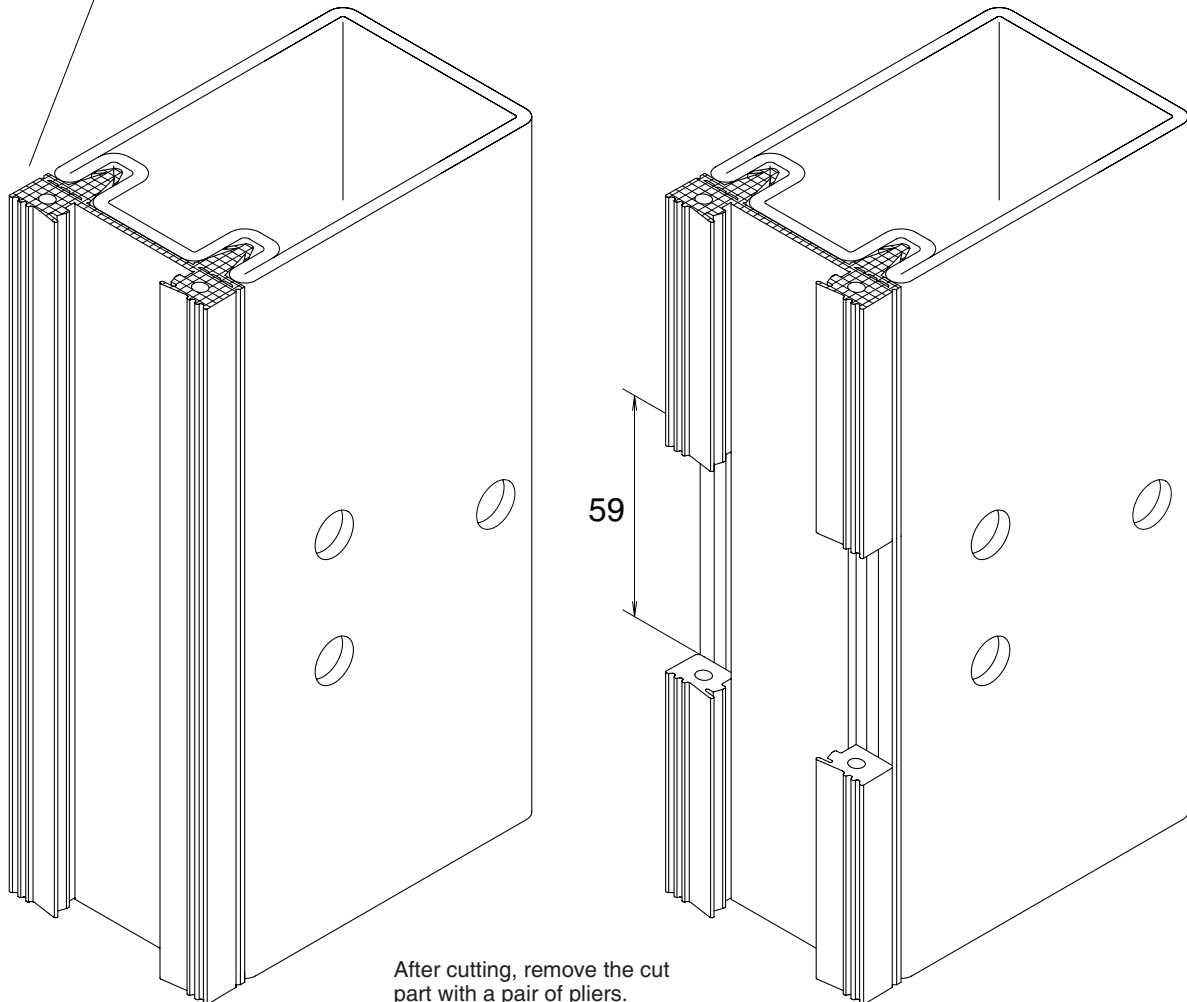


transom
cut-out the base

10.5 Mullion seal cutting, mounting, cut-outs

part no. 305 170

seal length = mullion length + 1%



After cutting, remove the cut part with a pair of pliers. Hold down the seal to avoid damaging.

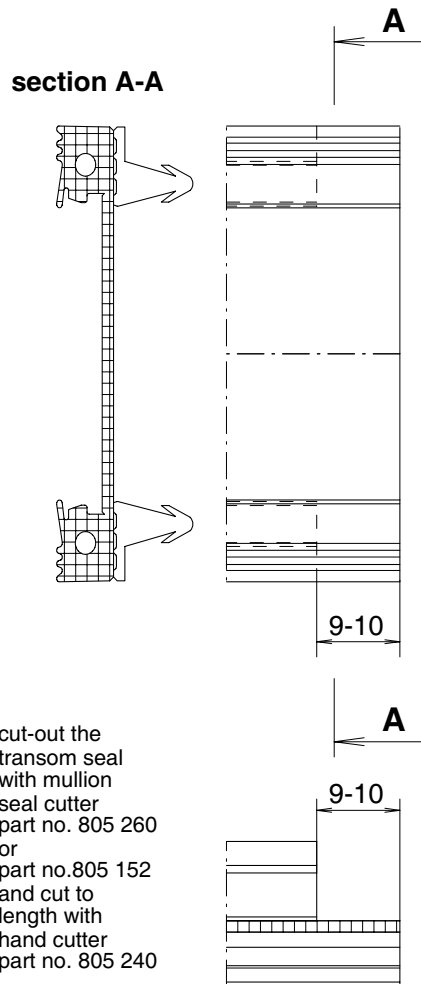


mullion seal cutter
part no. 805 270

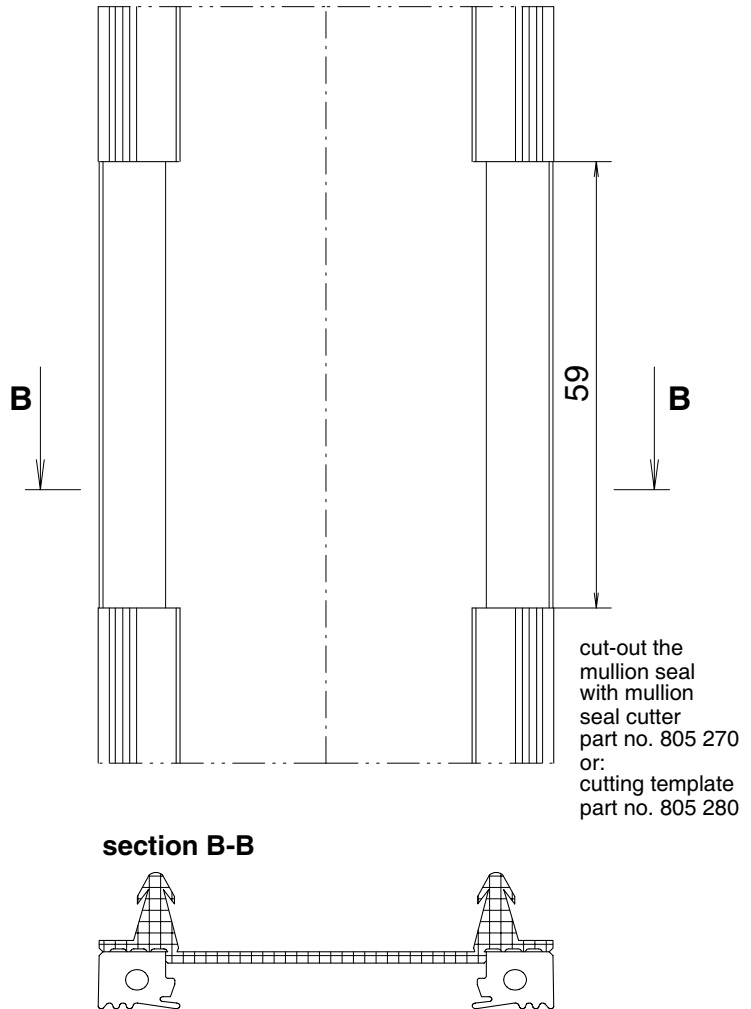
place cutter in the mullion holes for mounting
the transom and cut-out the transom seal

10.6 Cutting mullion- and transom seal

transom seal part no. 305 170



mullion seal part no. 305 170



punching template transom seal 90° edge part no. 805 260



punching template transom seal adjustable $\pm 45^\circ$ part no. 805 152



length hand cutter transom seal part no. 805 240



seal cutter mullion seal part no. 805 270

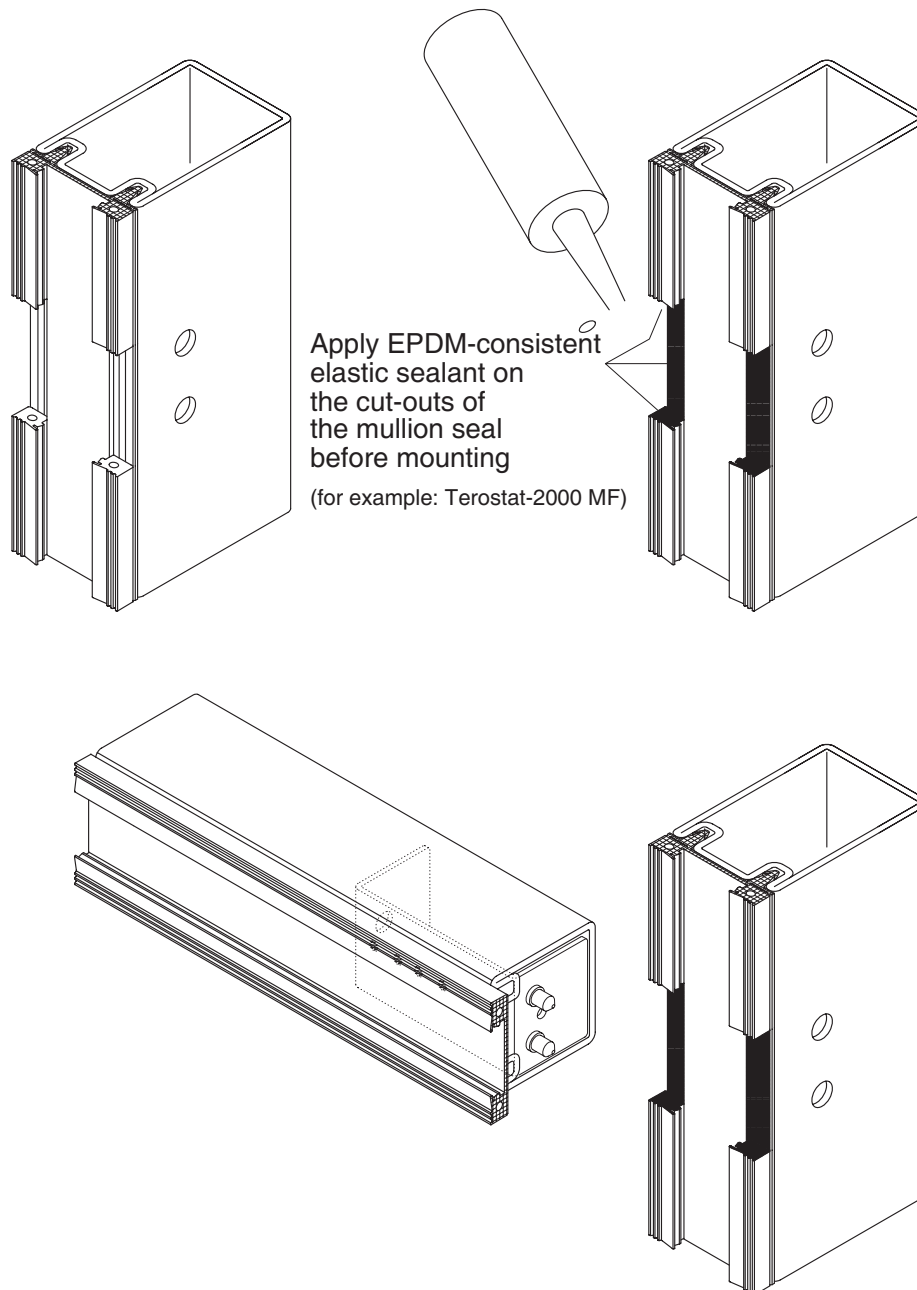


cutting template mullion seal part no. 805 280

The seals have to be cut approx. 1% longer acc. to regular building regulations.

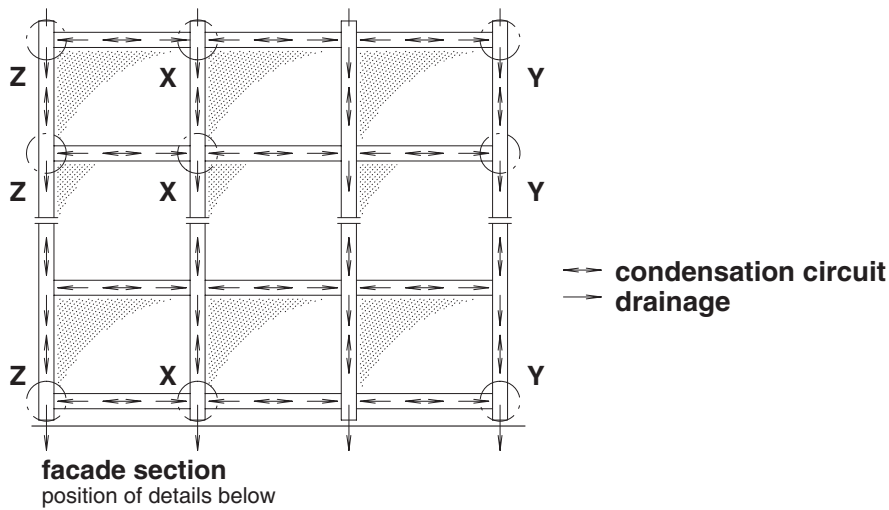
- E.E. and we reserve the right to effect modifications -

10.6.1 Transom assembly sealing mullion-/transom seal

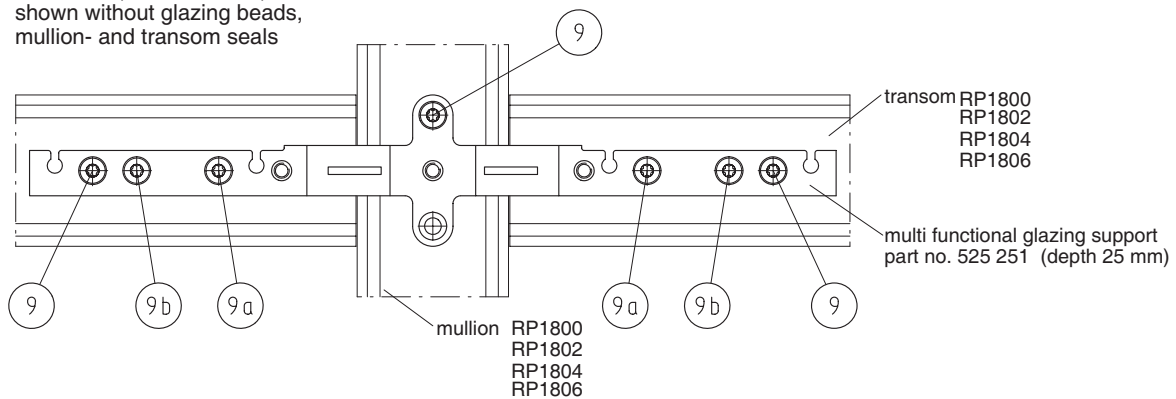


Place transom from the front between the mullions;
overlap the transom seal with the cut-outs in the mullion seal

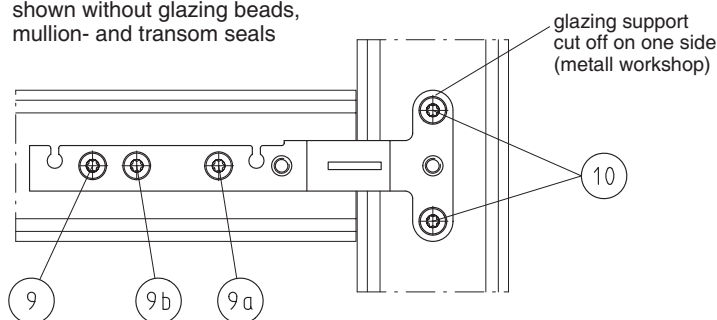
10.7 Fixing glazing support aeration and drainage







detail X (centre mullion)
shown without glazing beads,
mullion- and transom seals



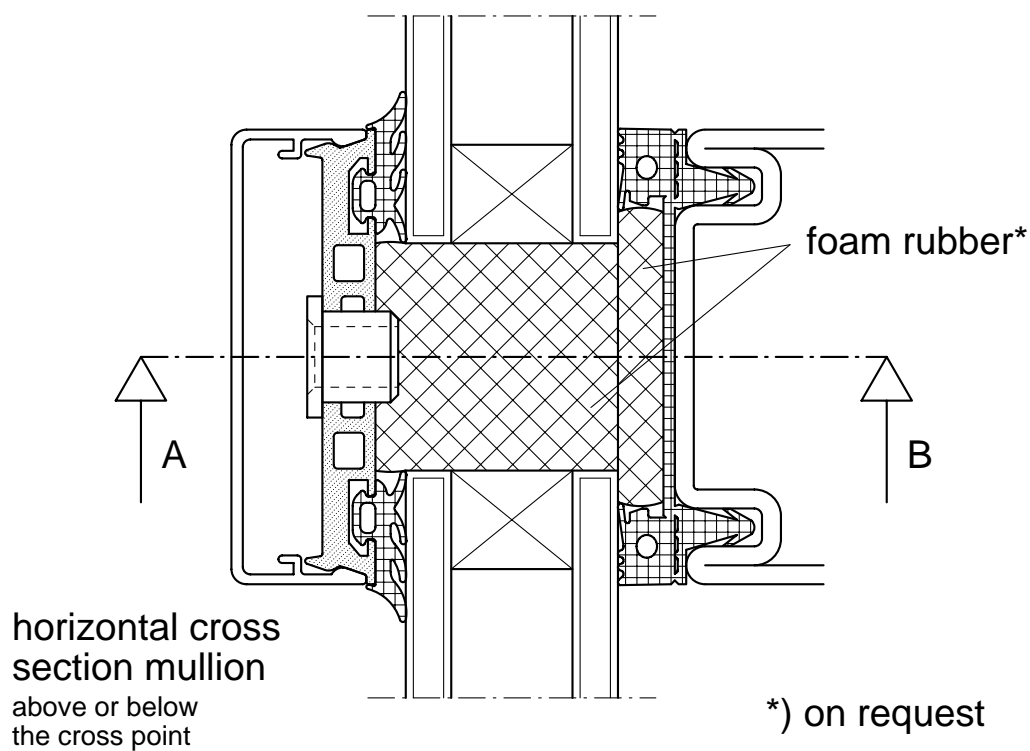
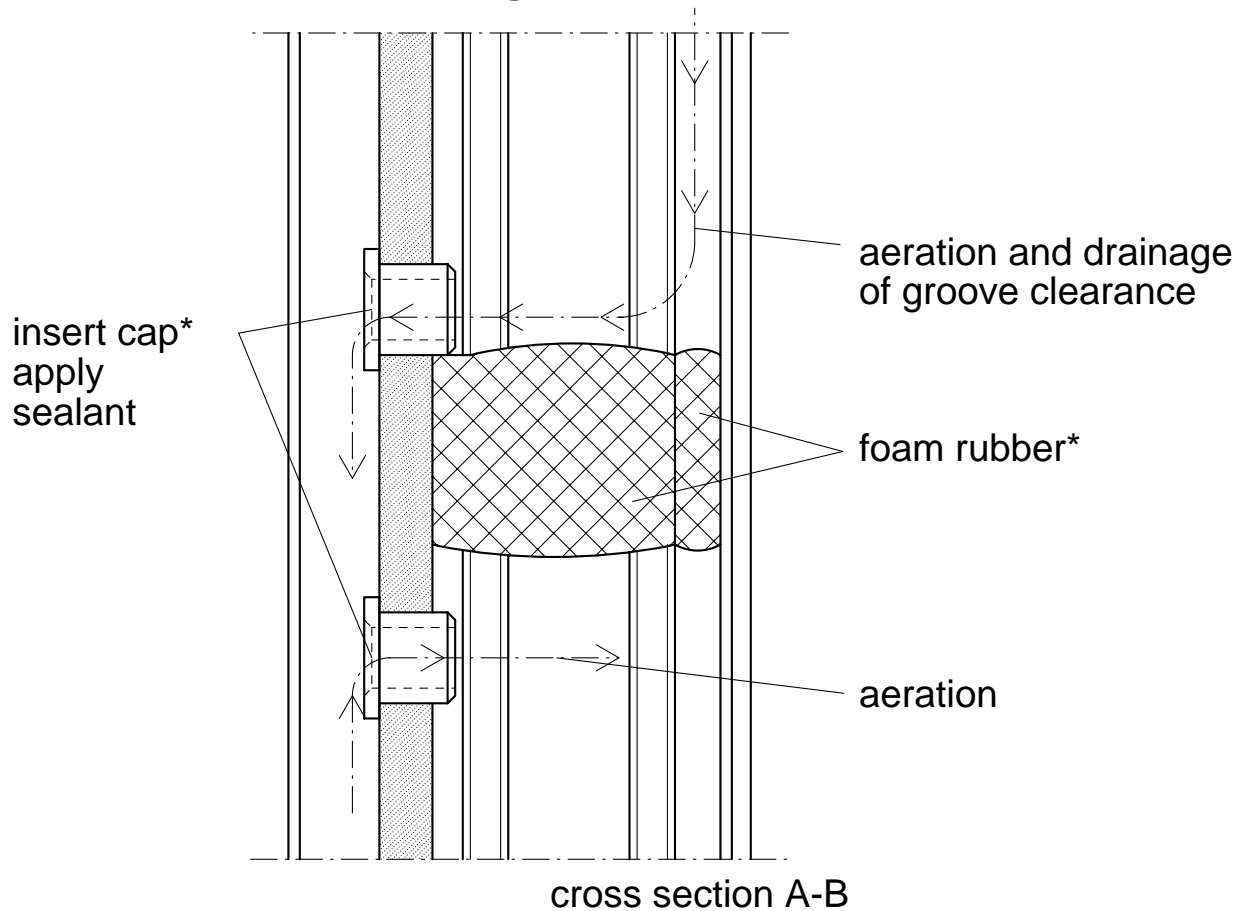
detail Y (right outer mullion)
shown without glazing beads,
mullion- and transom seals



detail Z (left outer mullion)
mirror-inverted of detail Y

-  **glazing support mounting screw** part no. 605 181
-  **load-controlled special screw** part no. 605 181
-  **load-controlled special screw** part no. 605 181
-  **glazing support mounting screw** part no. 605 181

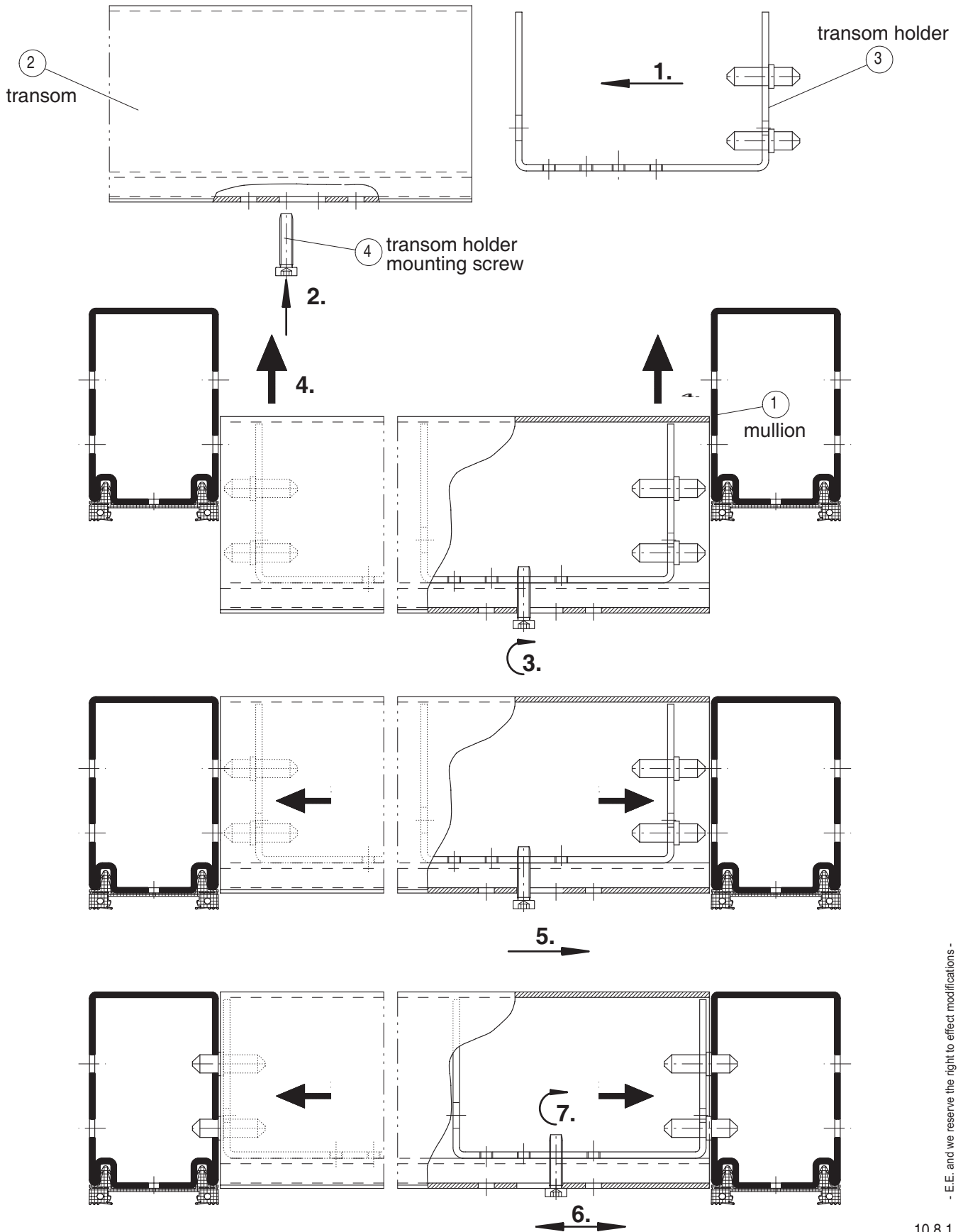
10.7.1 Aeration and drainage with tall buildings



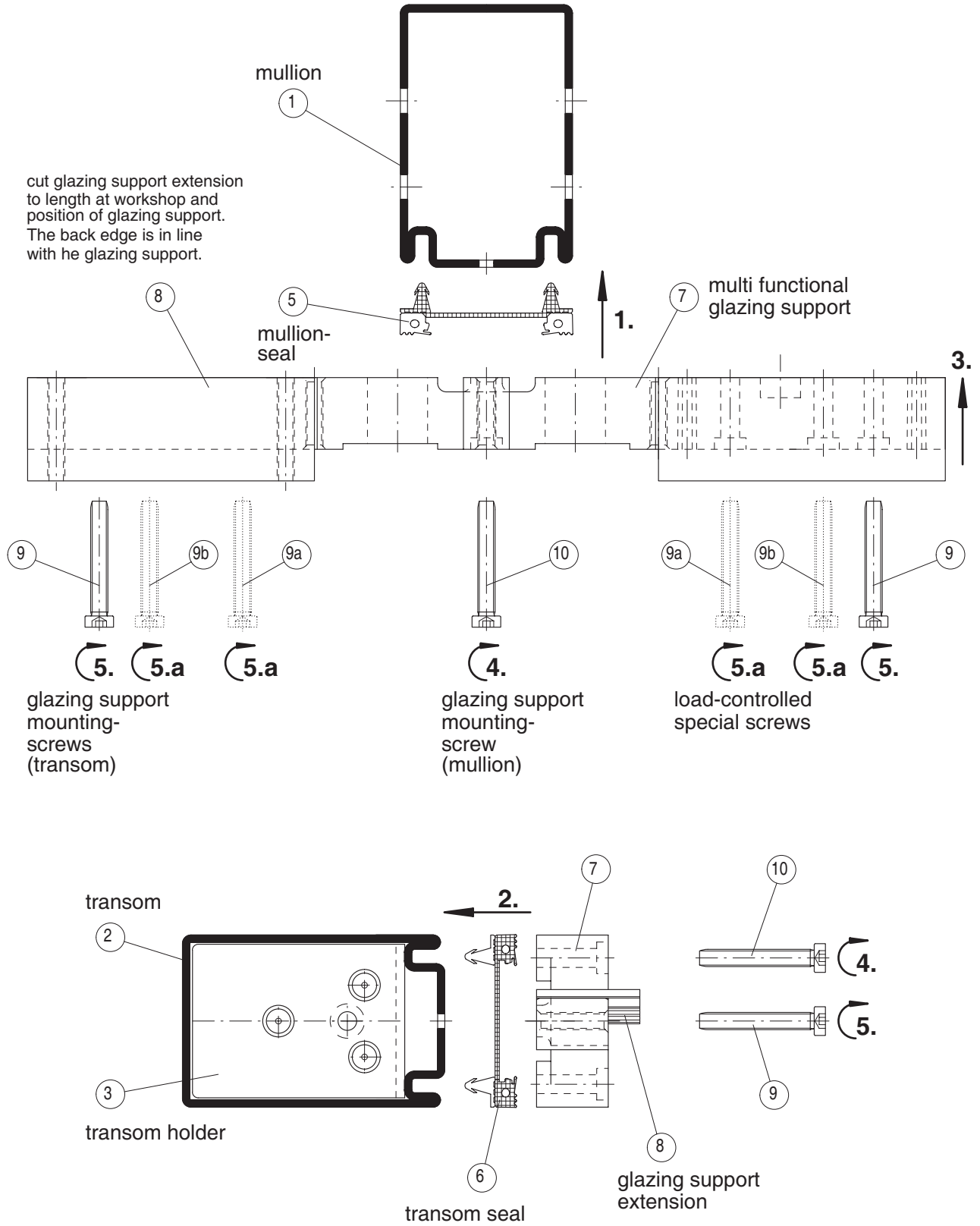
- E.E. and we reserve the right to effect modifications -

10.8 Mounting

10.8.1 Mounting mullion- and transom profiles

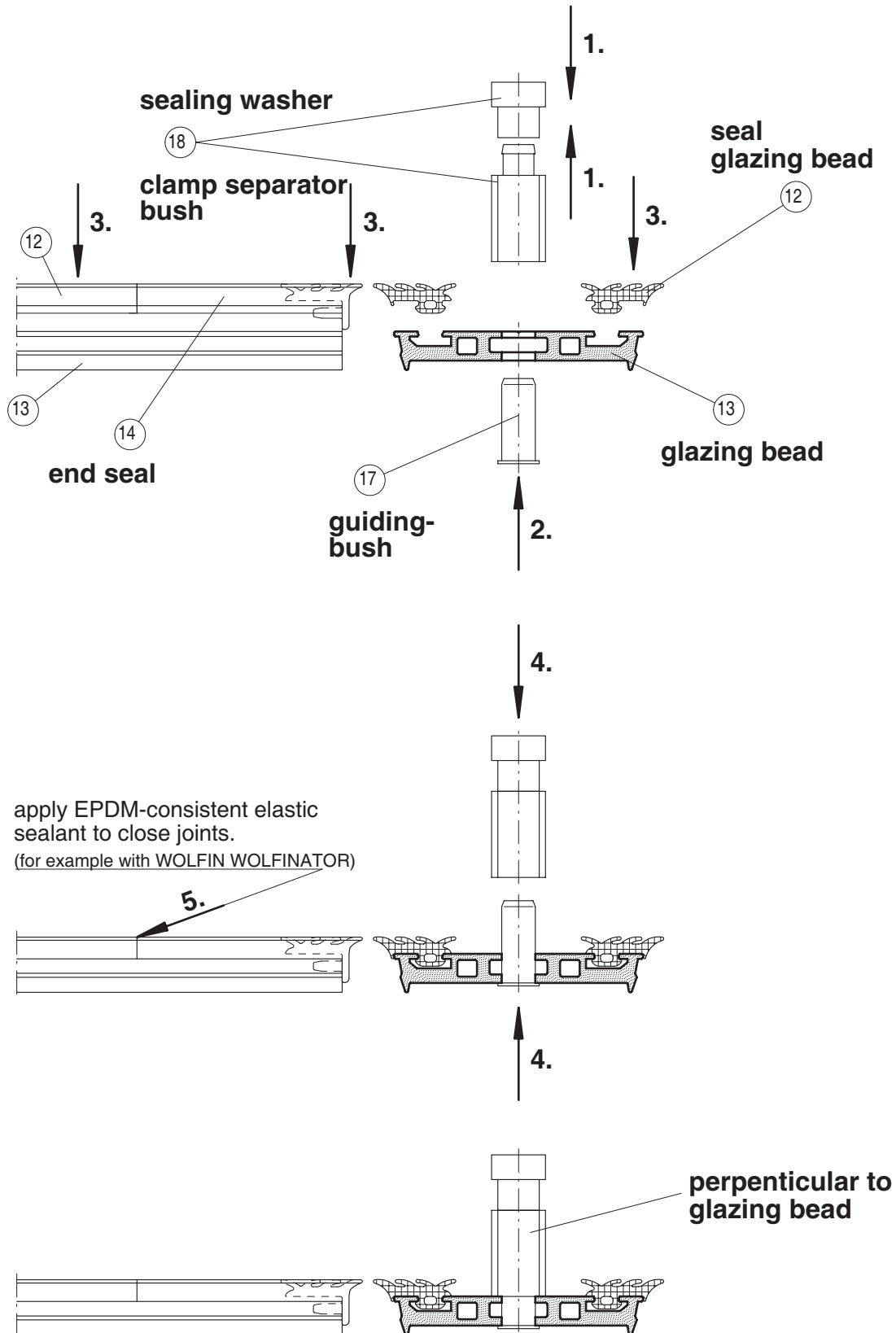


10.8.2 Mounting seals and glazing support



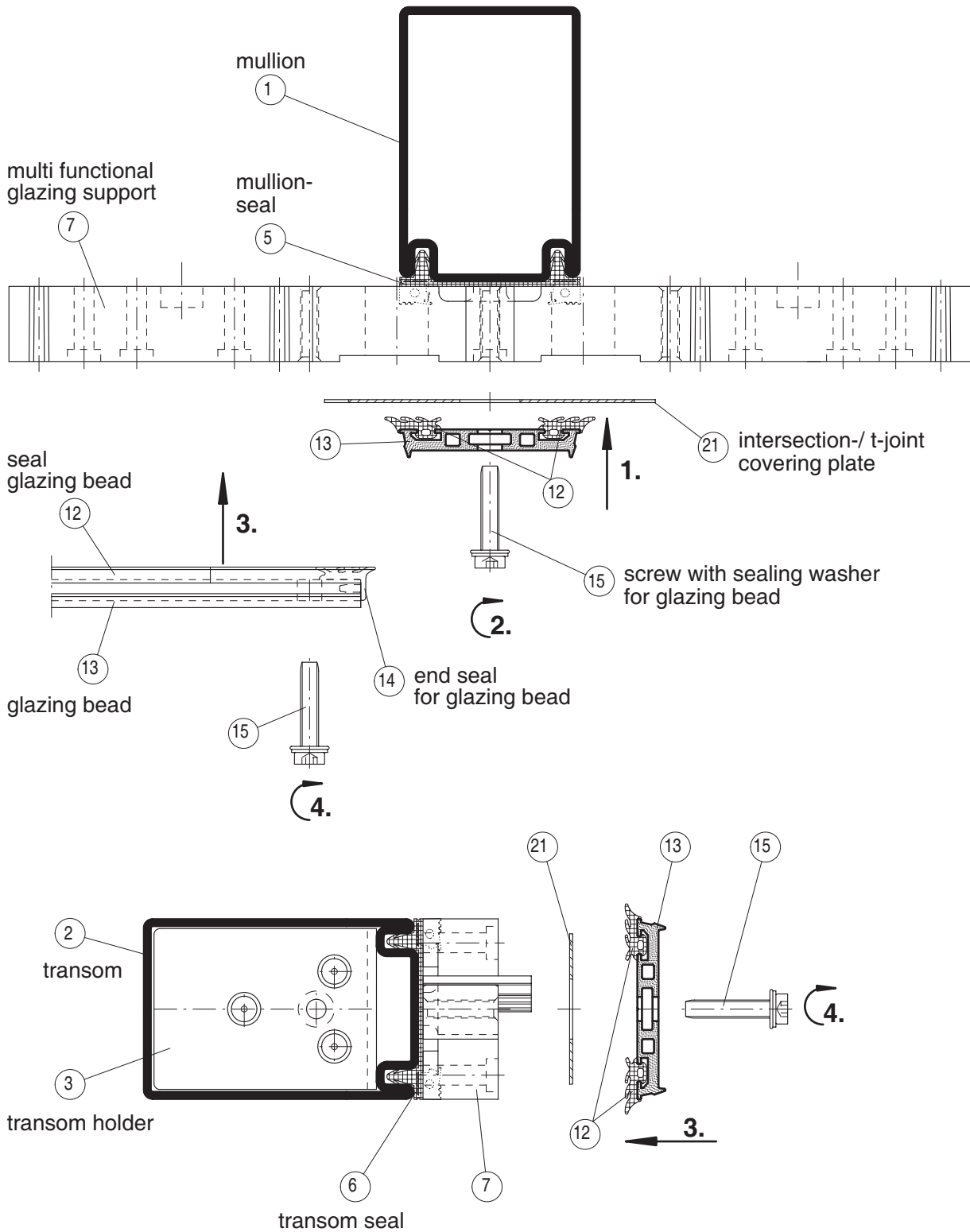
- E.E. and we reserve the right to effect modifications -

10.8.3 Preparation glazing beads - with self drilling screws

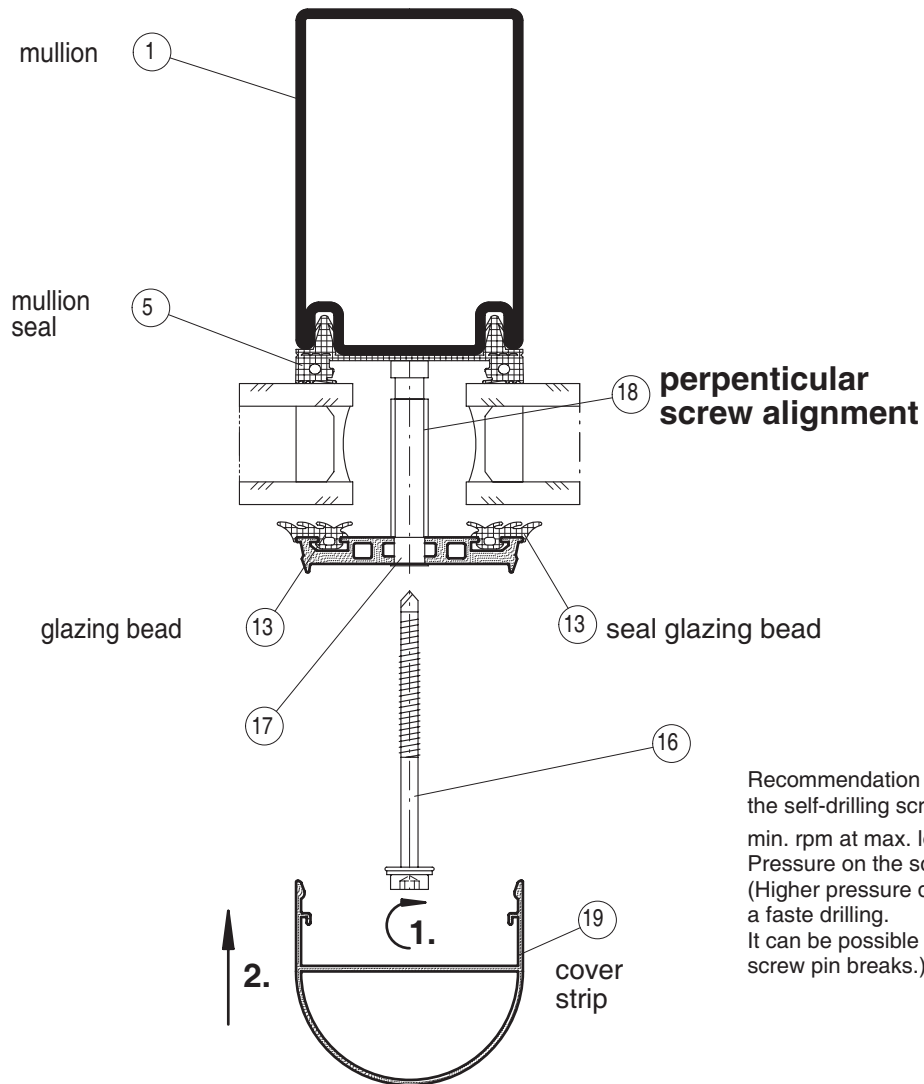


10.8.4 Mounting glazing beads

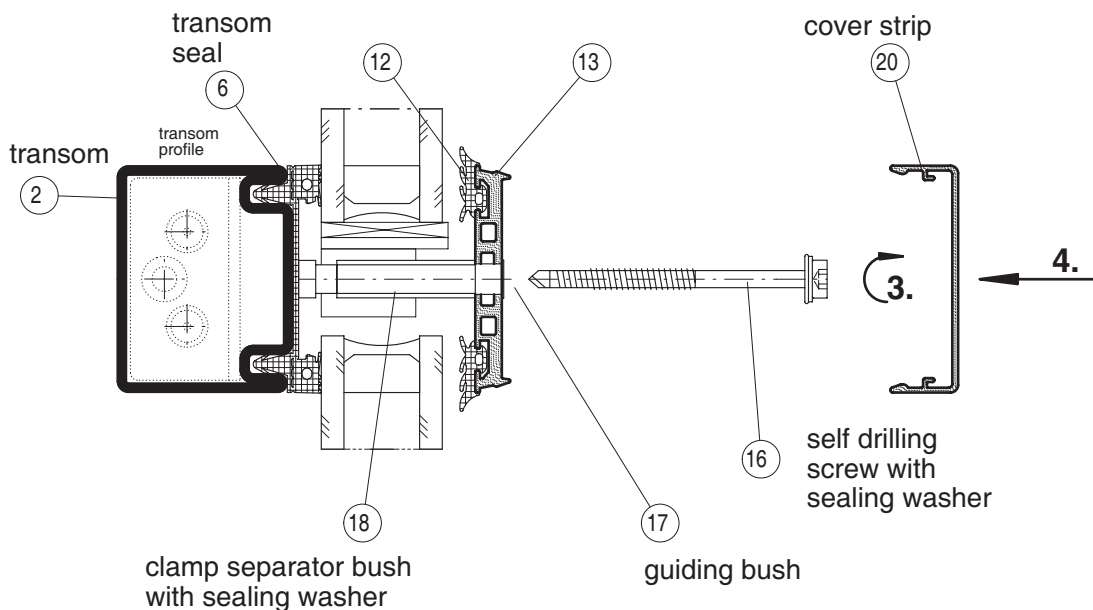
- fastened by screws in glazing support



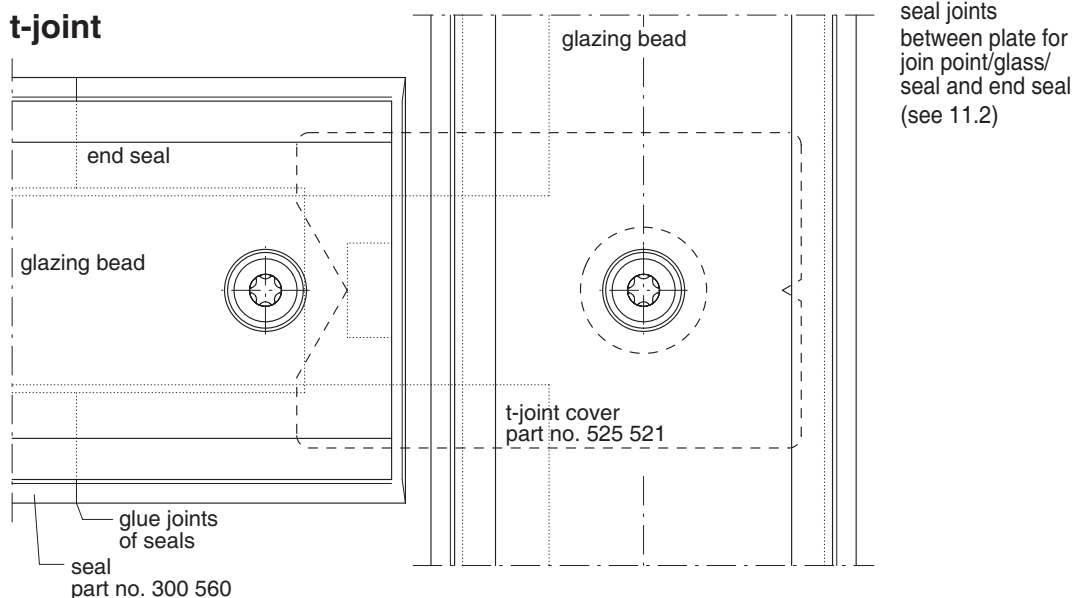
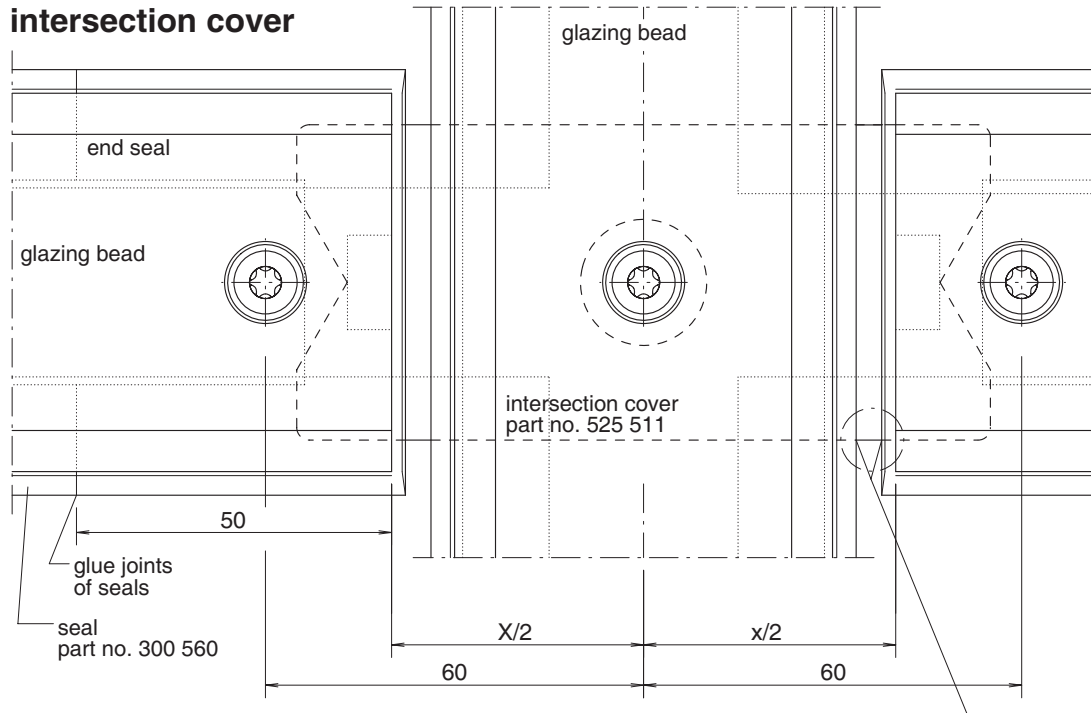
10.8.5 Final installation glazing beads



Recommendation to handle the self-drilling screws:
min. rpm at max. load: > rpm 1500.
Pressure on the screws less than 30 kg.
(Higher pressure doesn't mean a fast drilling.
It can be possible that under higher pressure screw pin breaks.)



10.8.6 Mounting glazing beads with intersection-/ t-joint cover plate



Apply the self adhesive intersection cover centered on the glass panes.

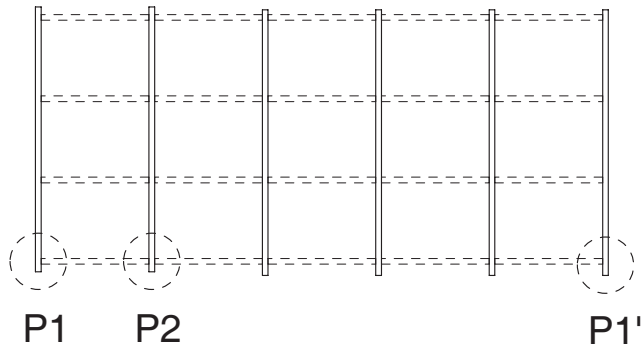
With multi-faceted facades, the cover has to be bent into the right form.

Use an elastic sealant to seal the end seal (part no. 325 230) and the glazing seal (part no. 300 560) (for example with WOLFIN WOLFINATOR).

Size $x/2$ and fitting end seals to glazing beads see: 11.1

10.9 Mounting variations

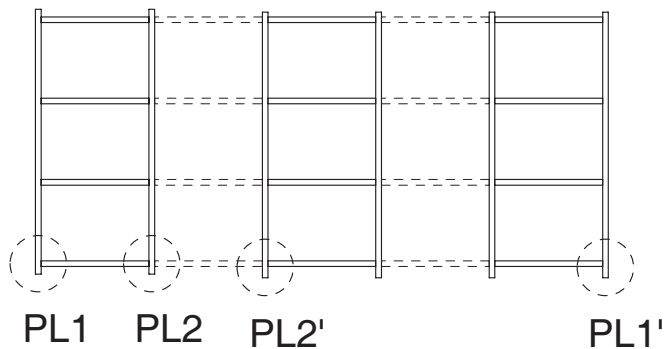
mullion-transom assembly



Set mullions at required distance.
Fix mullions.
Place transom between the mullions.

=> Seite 10-9-1

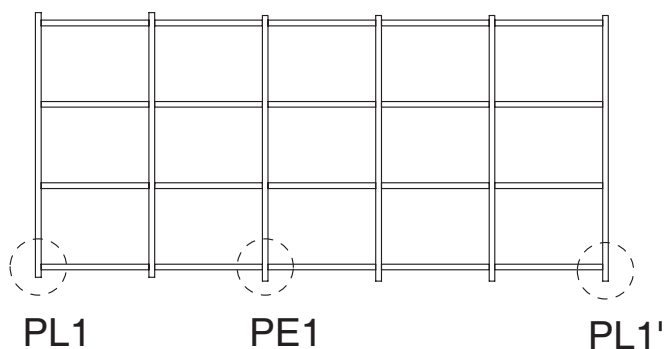
"ladder-type" assembly



Pre-fabricate the components in the workshop.
Place components at required distance.
Fix components. Place the transoms between the pre-fabricated components. (mullion-transom assembly).

=> Seite 10-9-2

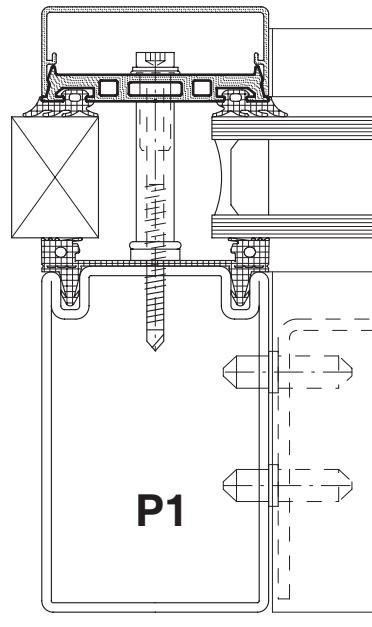
component assembly



Pre-fabricate complete components in the workshop.
Install component.

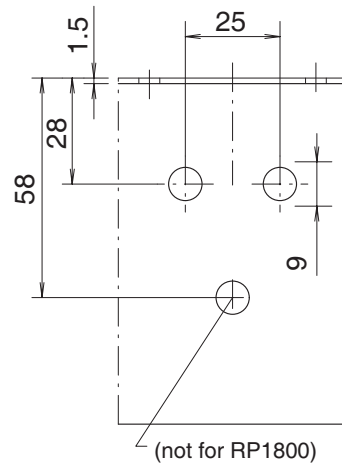
=> Seite 10-9-2

10.9.1 Mounting variations mullion-transom construction

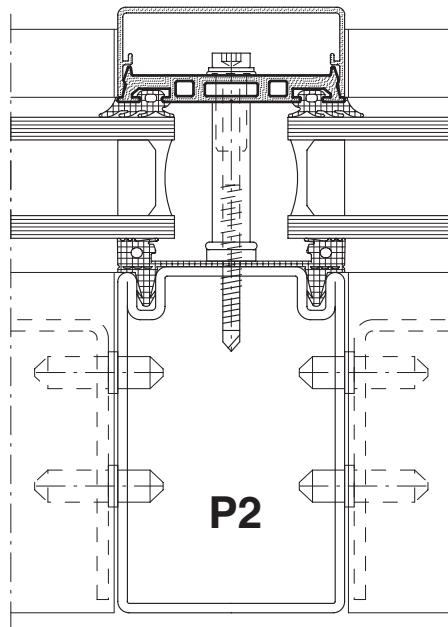
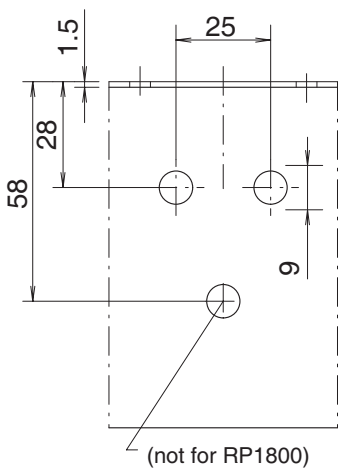


P1' mirror-inverted

hole lay-out mullion right

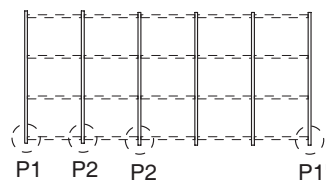
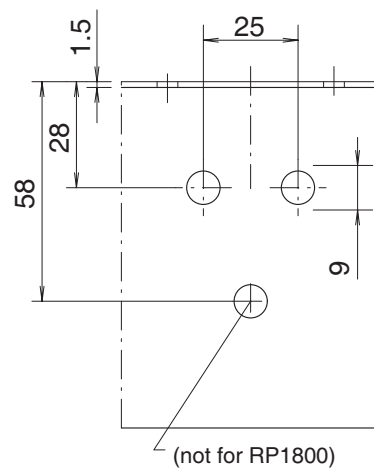


hole lay-out mullion left



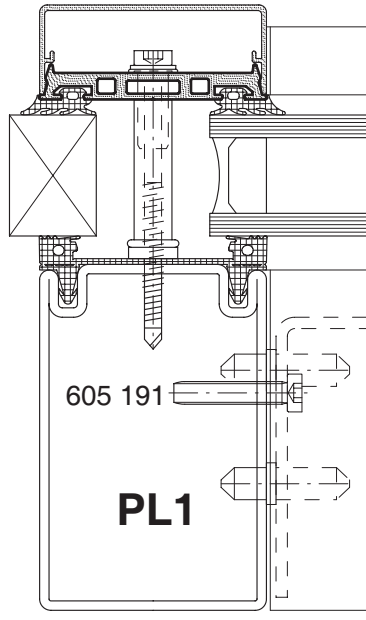
P2

hole lay-out mullion right



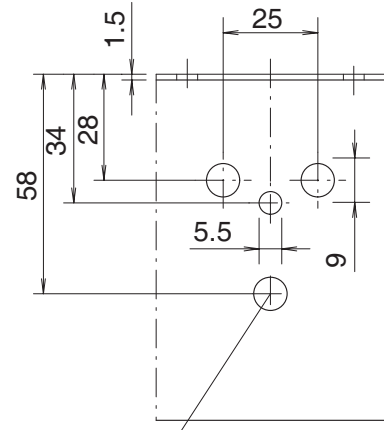
- E.E. and we reserve the right to effect modifications -

10.9.2 Mounting variations
"ladder-type" construction

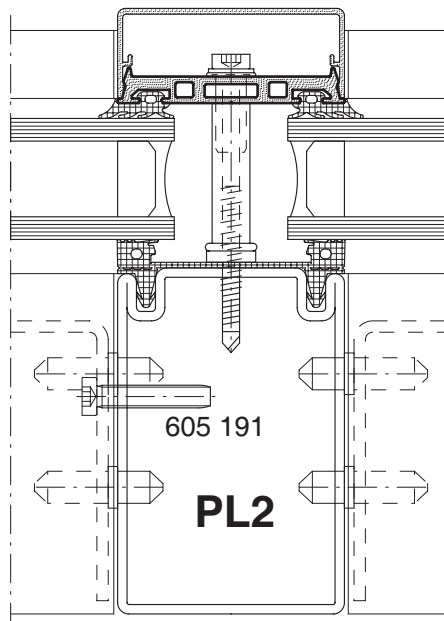
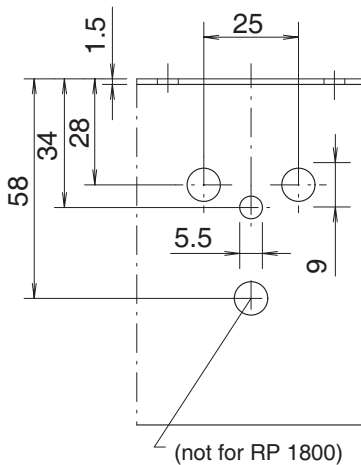


PL1' mirror-inverted

hole lay-out mullion
right

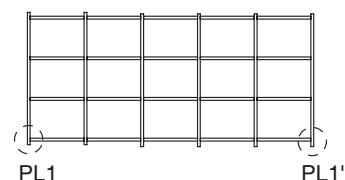
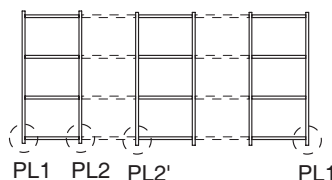
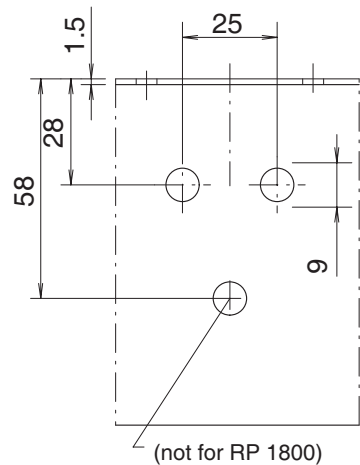


hole lay-out mullion
left



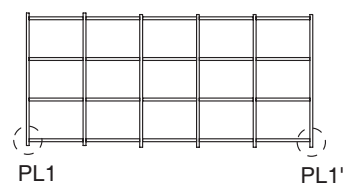
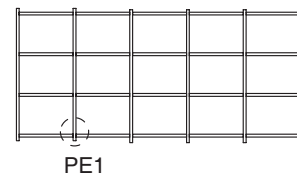
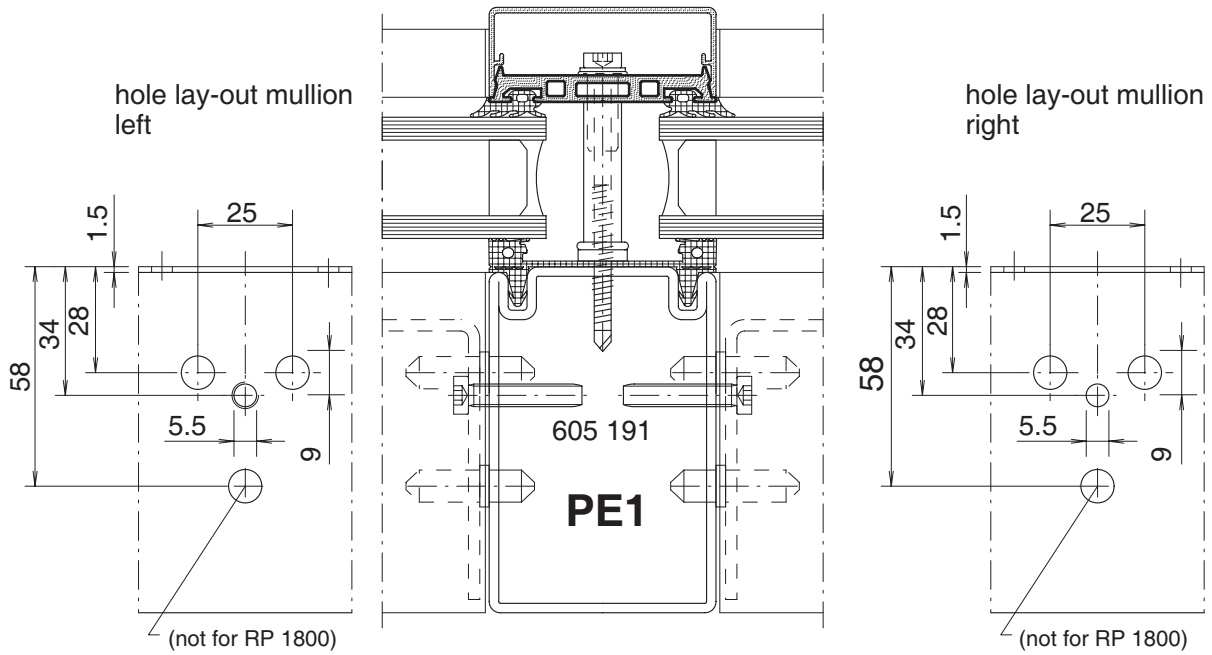
PL2' mirror-inverted

hole lay-out mullion
right



- E.E. and we reserve the right to effect modifications -

10.9.3 Mounting variations component construction

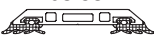
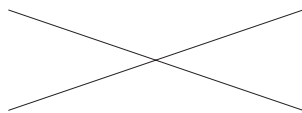

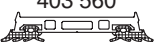


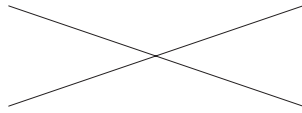
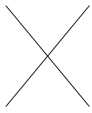
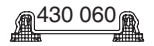


see "ladder-type" construction

- E.E. and we reserve the right to effect modifications -

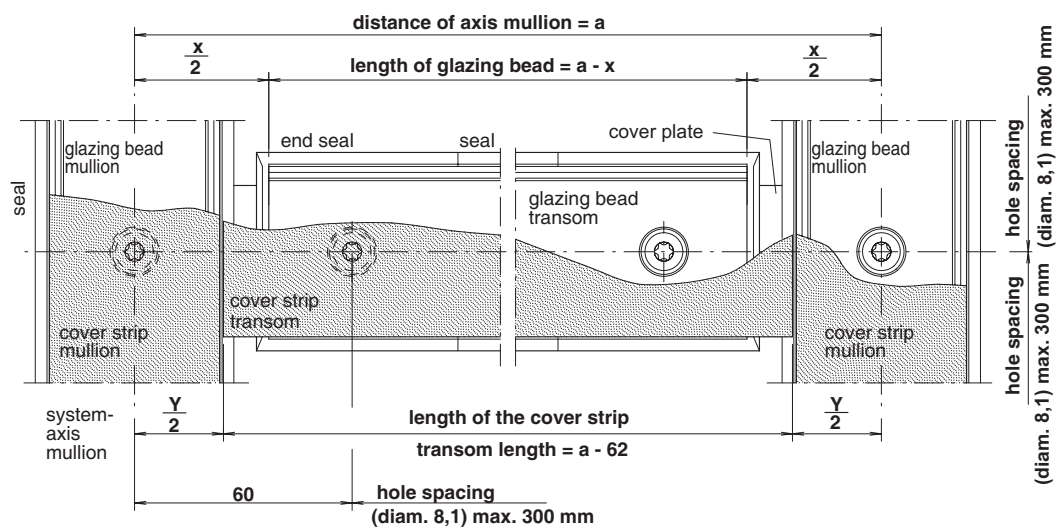
11. Glazing variations

11.1 accessories and lengths of beads

glazing bead / cover strip part no.	glazing seal part no.	end seal *) part no.	intersect./ t-joint cover plates part no.	size x [mm]	cover strips		size y [mm]
					aluminium part no. height	stainl.st. part no. height	
 403 531	300 560	325 230	525 511 525 521	86 mm			
 403 560	300 560	325 230	525 511 525 521	86 mm	413 510 15mm 413 520 18mm 413 530 21mm 413 540 24mm 413 590 54mm	411 530 21mm 411 540 24mm	aluminium 62 mm stainl.st. 63mm
 403 811	300 381	325 381	525 511 525 521	86 mm	413 530 21mm 413 540 24mm 413 590 54mm	411 530 21mm 411 540 24mm	aluminium 62 mm stainl.st. 63mm
 403 910	300 381	325 381	525 511 525 521	62 mm mit Aus- klinkung			
 430 060	300 381	seal **	525 511 525 521	86 mm	413 510 15mm 413 520 18mm 413 530 21mm 413 540 24mm 413 590 54mm	411 530 21mm 411 540 24mm	aluminium 62 mm stainl.st. 63mm

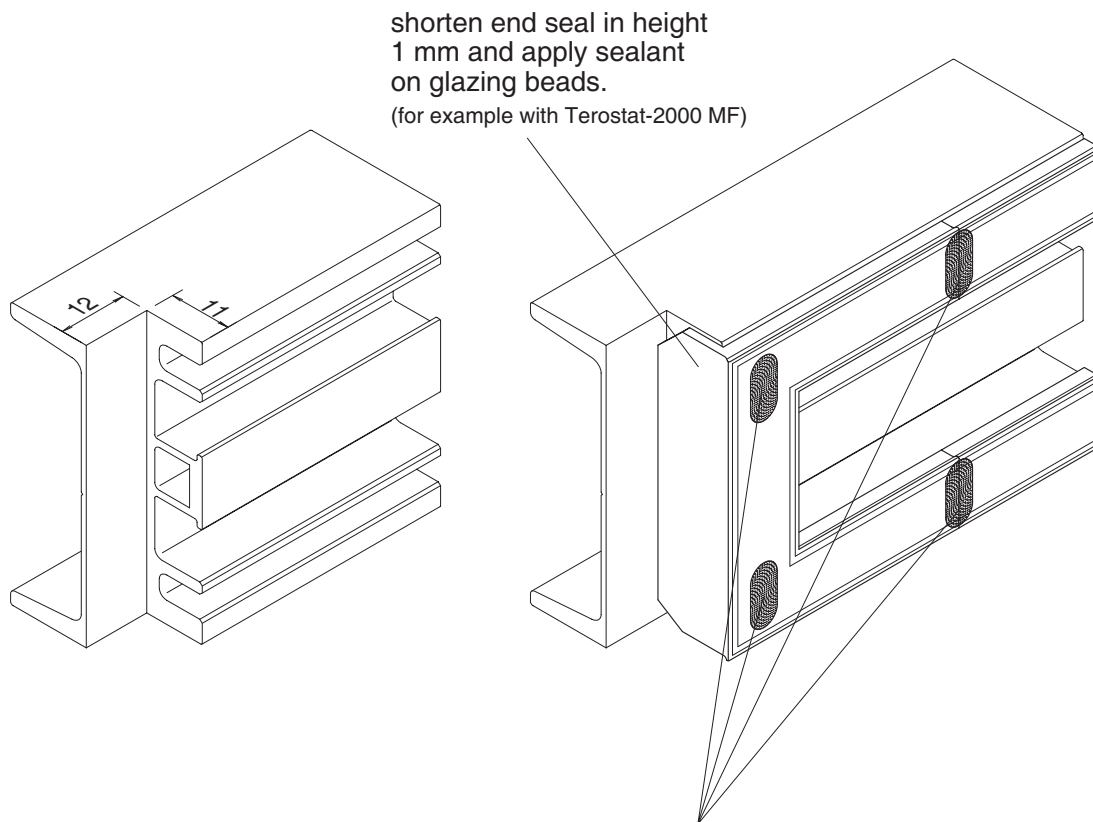
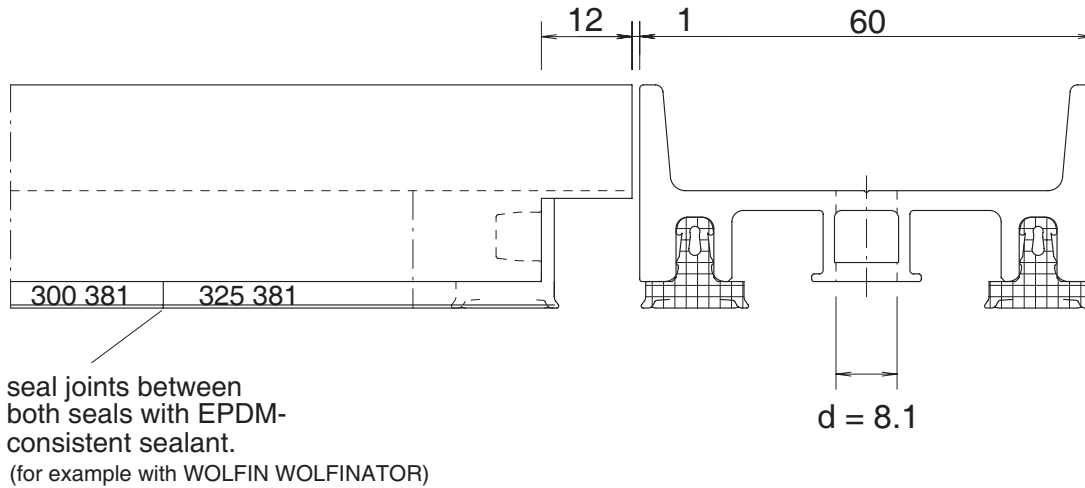
)* seal end seal for example with: WOLFIN WOLFINATOR

)** for example with Terostat Terostat-2000 MF, Firma Teroson



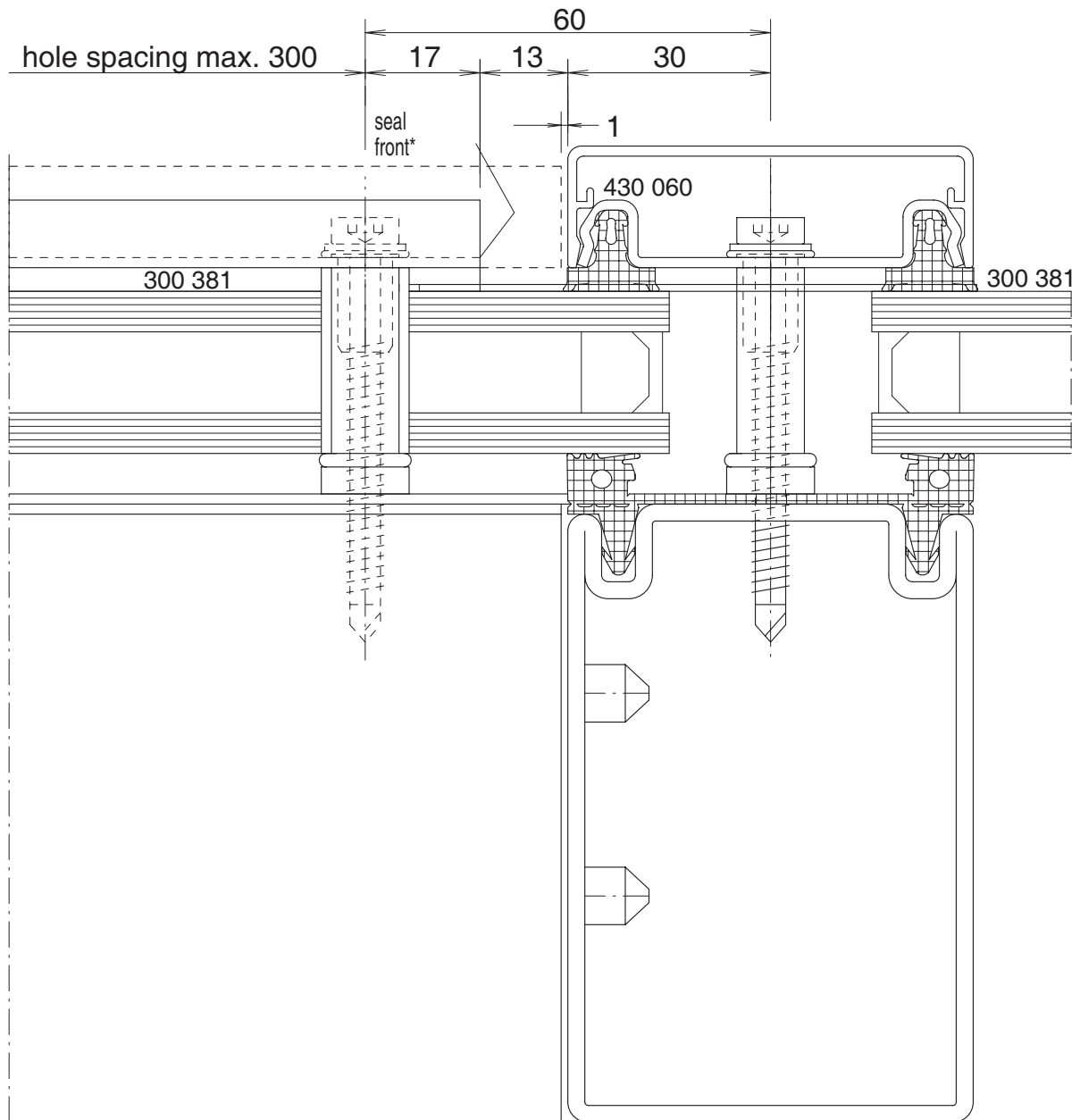
- E.E. and we reserve the right to effect modifications -

11.2 Application glazing bead part no. 403 910



Apply EPDM-consistent elastic sealant on the holes in the cover plate, and on joints of glass/seal or end seal.
(for example with Terostat-2000 MF)

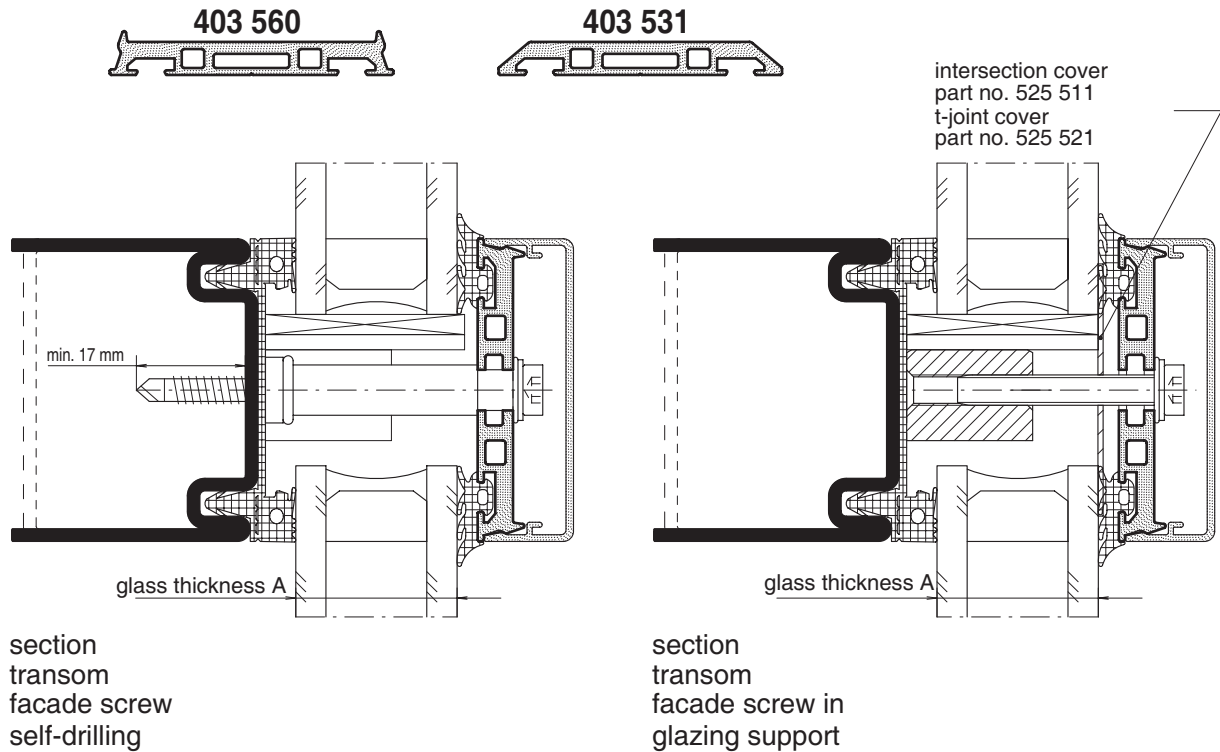
11.2.1 System dimensions glazing bead part no. 430 060



*) for example with Terostat-2000 MF

- E.E. and we reserve the right to effect modifications -

11.3 Glazing charts



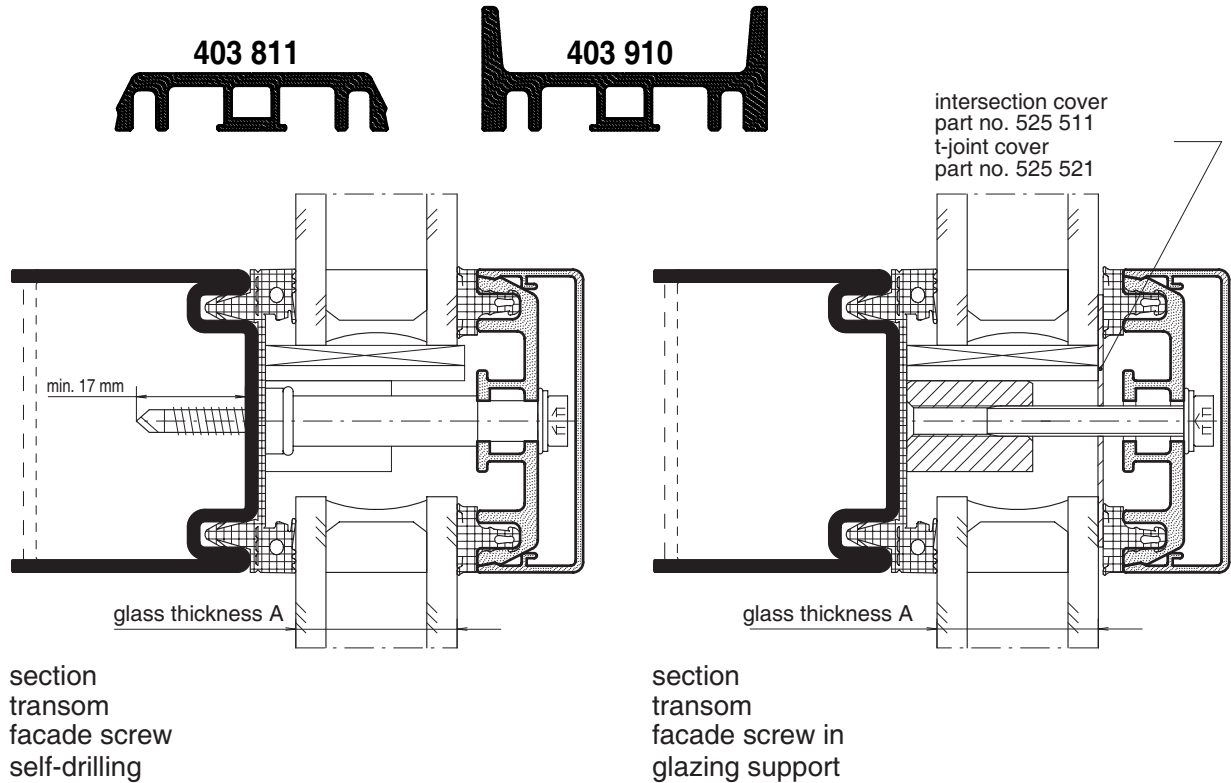
glass-thickness A (mm)	clamp separator bush	guiding bush	facade-screw self-drilling torx T27	multi-functional glazing support	glazing support widener profile (section) part no.: 525 010 (mm)	facade-screw spec. screw self locking torx T27
20	655 261 (30 mm)	655121 (20 mm)	605 322 (65 mm)	525 251 (25 mm)	25 mm	605 231 (M6*30)
22	655 271 (32 mm)	-----	-----	-----	27 mm	-----
24	655 281 (34 mm)	-----	-----	-----	29 mm	-----
26	655 291 (36 mm)	-----	605 333 (75 mm)	-----	31 mm	605 241 (M6*40)
28	655 301 (38 mm)	-----	-----	-----	33 mm	-----
30	655 311 (40 mm)	-----	-----	-----	35 mm	-----
32	655 321 (42 mm)	-----	-----	-----	37 mm	-----
34	655 331 (44 mm)	-----	-----	-----	39 mm	-----
36	655 341 (46 mm)	-----	605 343 (90 mm)	-----	41 mm	-----
38	655 351 (48 mm)	-----	-----	-----	43 mm	605 251 (M6*50)
40	655 361 (50 mm)	-----	-----	-----	45 mm	-----
42	655 371 (52 mm)	-----	-----	-----	47 mm	-----
44	655 381 (54 mm)	-----	-----	-----	49 mm	-----
46	655 391 (56 mm)	-----	-----	-----	51 mm	-----

The rebate depth is 15mm
Dimension size of glass pane:
width = center distance between mullion - 30 mm,
height = center distance between transom - 30 mm.

For glazing, together with general regulations the following have to be considered:

DIN 18545, part 1, glazing rebate
DIN 18361 VOB part C - glazing
DIN 52460 grooves and glass sealing
Glazing regulations of the glass supplier

11.4 Glazing charts



glass-thickness A (mm)	clamp separator bush	guiding bush	facade-screw self-drilling torx T27	multi-functional glazing support	glazing support widener profile (section) part no.: 525 010 (mm)	facade-screw spec. screw self locking torx T27
20	655 261 (30 mm)	655121 (20 mm)	605 322 (65 mm)	525 251 (25 mm)	25 mm	605 231 (M6*30)
22	655 271 (32 mm)	-----	605 333 (75 mm)	-----	27 mm	605 241 (M6*40)
24	655 281 (34 mm)	-----			29 mm	
26	655 291 (36 mm)	-----	605 343 (90 mm)	-----	31 mm	-----
28	655 301 (38 mm)	-----			33 mm	-----
30	655 311 (40 mm)	-----			35 mm	-----
32	655 321 (42 mm)	-----	-----	-----	37 mm	-----
34	655 331 (44 mm)	-----	-----	-----	39 mm	605 251 (M6*50)
36	655 341 (46 mm)	-----	-----	-----	41 mm	-----
38	655 351 (48 mm)	-----	-----	-----	43 mm	-----
40	655 361 (50 mm)	-----	-----	-----	45 mm	-----
42	655 371 (52 mm)	-----	-----	-----	47 mm	-----
44	655 381 (54 mm)	-----	-----	-----	49 mm	-----
46	655 391 (56 mm)	-----	-----	-----	51 mm	-----

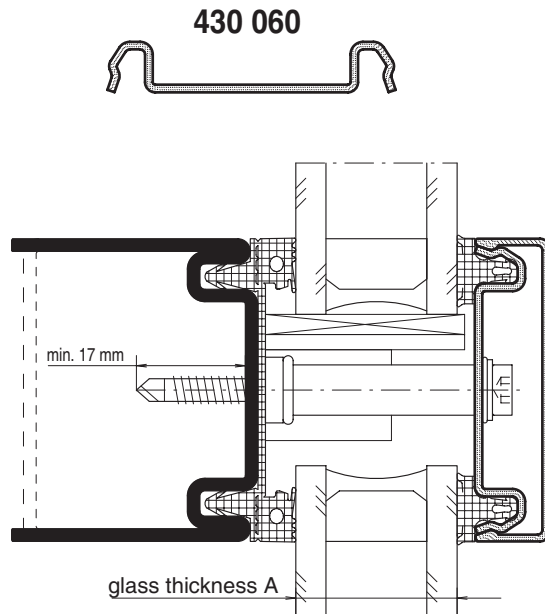
The rebate depth is 15mm
Dimension size of glass pane:
width = center distance between mullion - 30 mm,
height = center distance between transom - 30 mm.

For glazing, together with general regulations the following have to be considered:

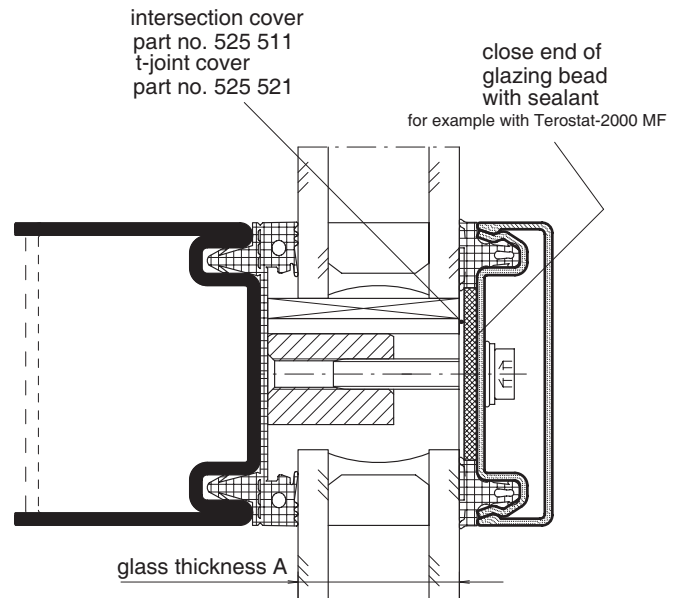
DIN 18545, part 1, glazing rebate
DIN 18361 VOB part C - glazing
DIN 52460 grooves and glass sealing
Glazing regulations of the glass supplier

- E.E. and we reserve the right to effect modifications -

11.5 Glazing charts



section
transom
facade screw
self-drilling



section
transom
facade screw in
glazing support

glass-thickness A (mm)	clamp separator bush	guiding bush	facade-screw self-drilling torx T27	multi-functional glazing support	glazing support widener profile (section) part no.: 525 010 (mm)	facade-screw spec. screw self locking torx T27
20	655 261 (30 mm)	655121 (20 mm)	605 322 (65 mm)	525 251 (25 mm)	25 mm	605 231 (M6*30)
22	655 271 (32 mm)	-----	-----	-----	27 mm	-----
24	655 281 (34 mm)	-----	-----	-----	29 mm	-----
26	655 291 (36 mm)	-----	-----	-----	31 mm	-----
28	655 301 (38 mm)	-----	-----	-----	33 mm	-----
30	655 311 (40 mm)	-----	605 333 (75 mm)	-----	35 mm	-----
32	655 321 (42 mm)	-----	-----	-----	37 mm	-----
34	655 331 (44 mm)	-----	-----	-----	39 mm	-----
36	655 341 (46 mm)	-----	-----	-----	41 mm	-----
38	655 351 (48 mm)	-----	-----	-----	43 mm	605 241 (M6*40)
40	655 361 (50 mm)	-----	-----	-----	45 mm	-----
42	655 371 (52 mm)	-----	605 343 (90 mm)	-----	47 mm	-----
44	655 381 (54 mm)	-----	-----	-----	49 mm	-----
46	655 391 (56 mm)	-----	-----	-----	51 mm	-----

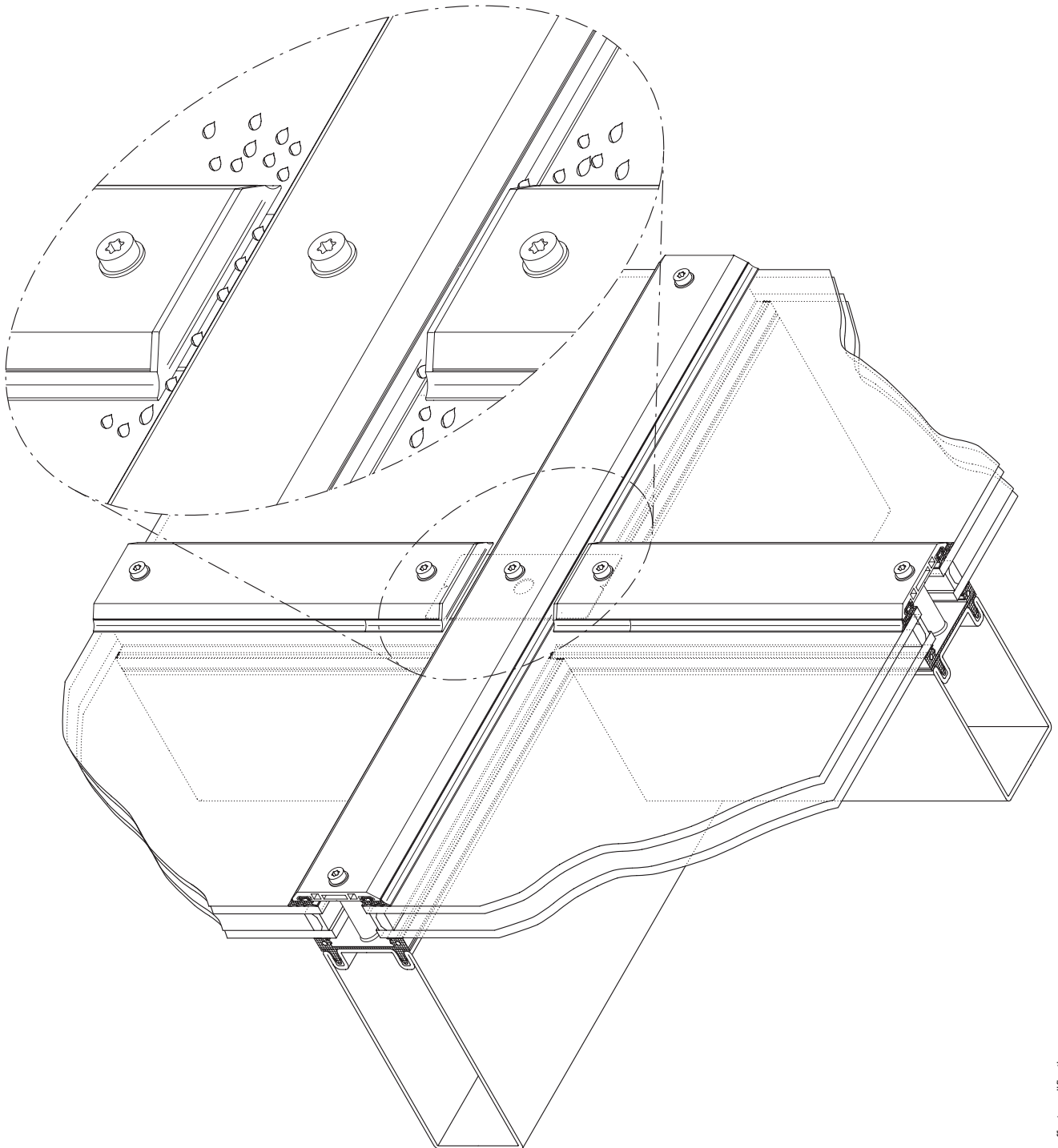
The rebate depth is 15mm
Dimension size of glass pane:
width = center distance between mullion - 30 mm,
height = center distance between transom - 30 mm.

For glazing, together with general regulations the following have to be considered:

DIN 18545, part 1, glazing rebate
DIN 18361 VOB part C - glazing
DIN 52460 grooves and glass sealing
Glazing regulations of the glass supplier

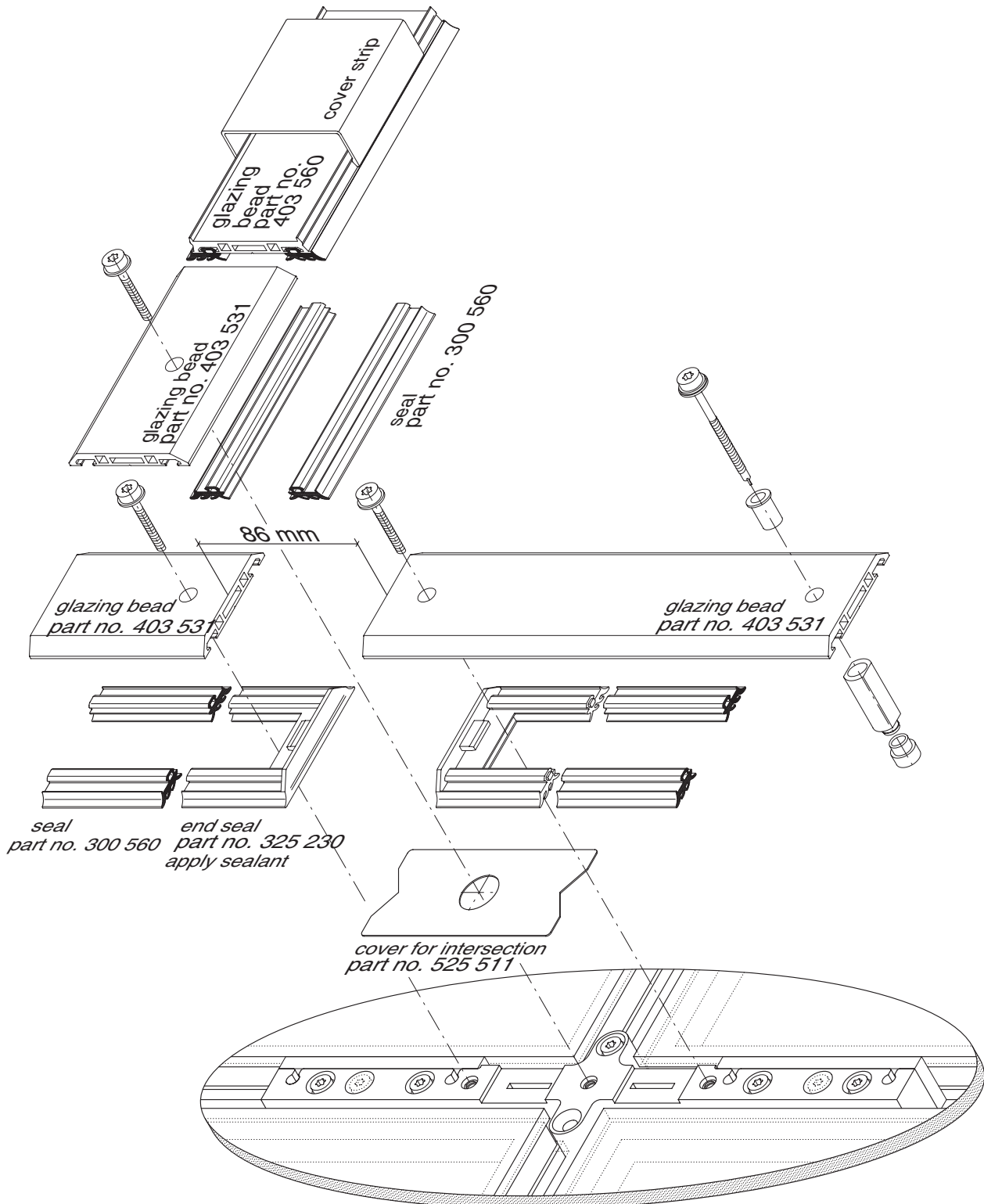
- E.E. and we reserve the right to effect modifications -

12. Pitched roof glazing



- E.E. and we reserve the right to effect modifications -

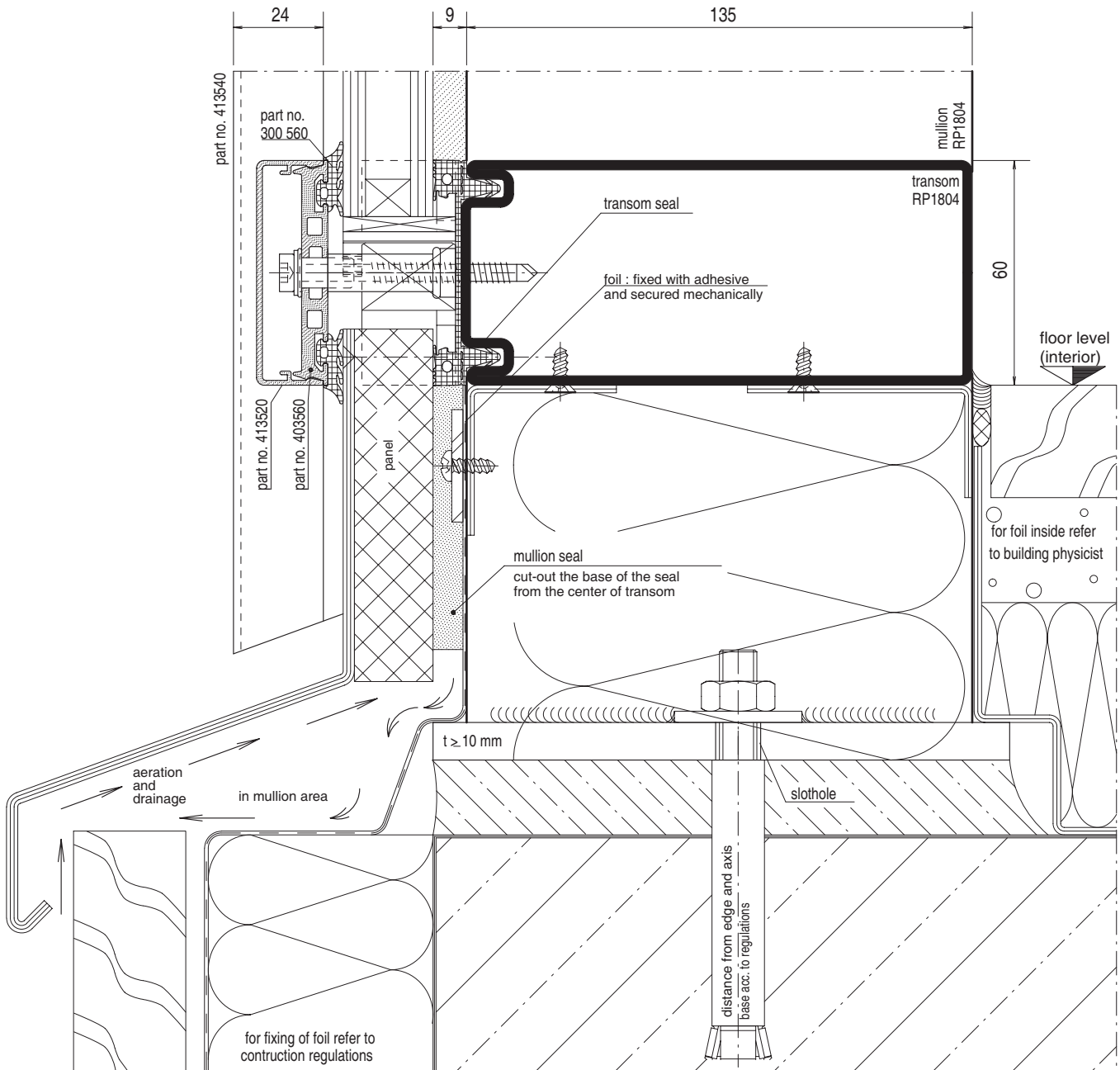
12.1 Detail intersection glazing beads



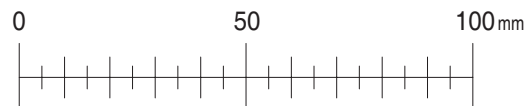
13. Multi faceted facade

... in preparation

14.1 Base with base plate

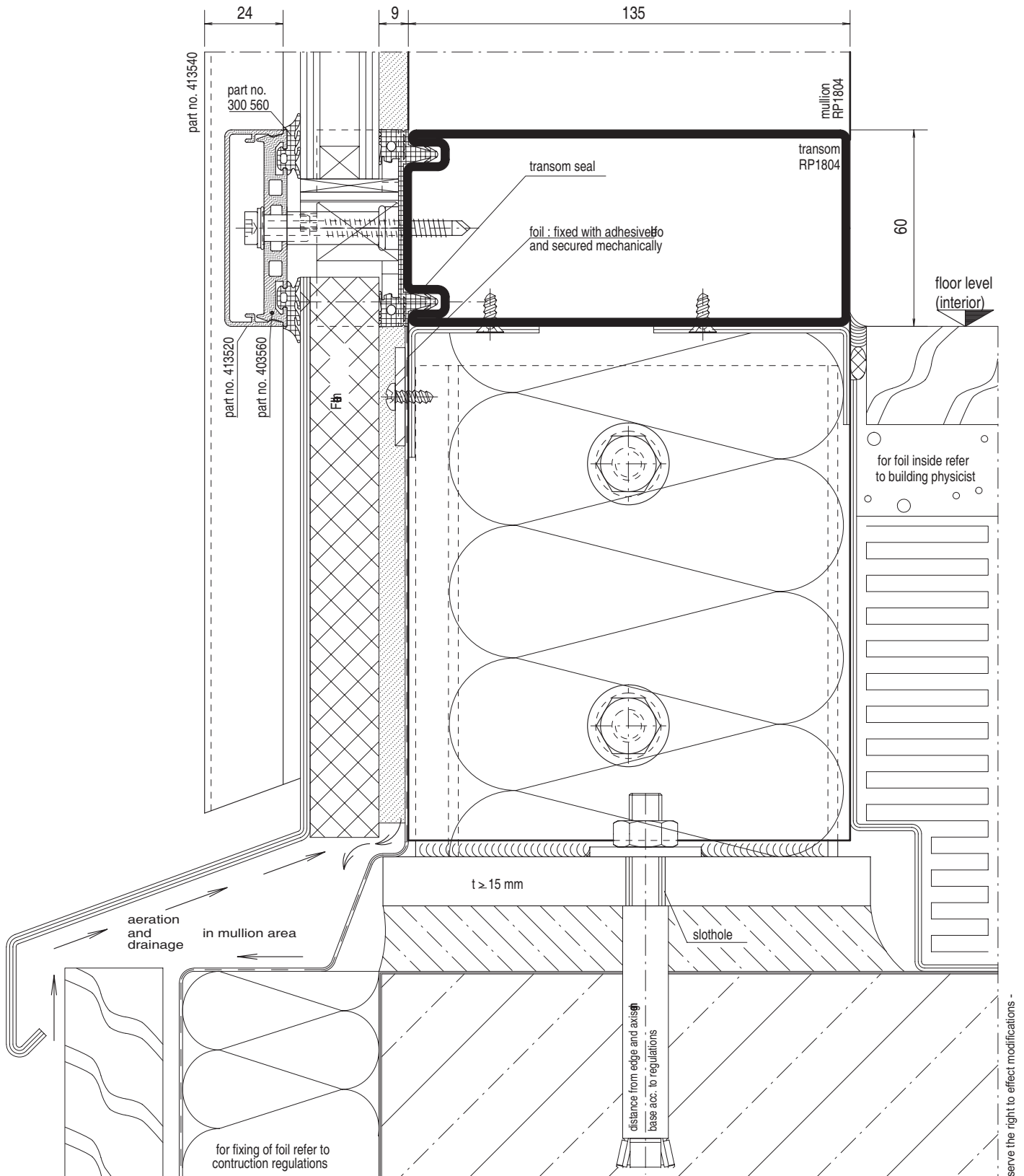


All RP-profiles and fixing parts have to be determined by a stress analysis.

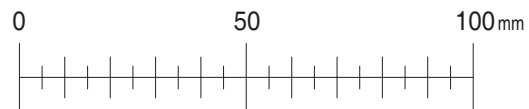


- E.E. and we reserve the right to effect modifications -

14.2 Base with insert

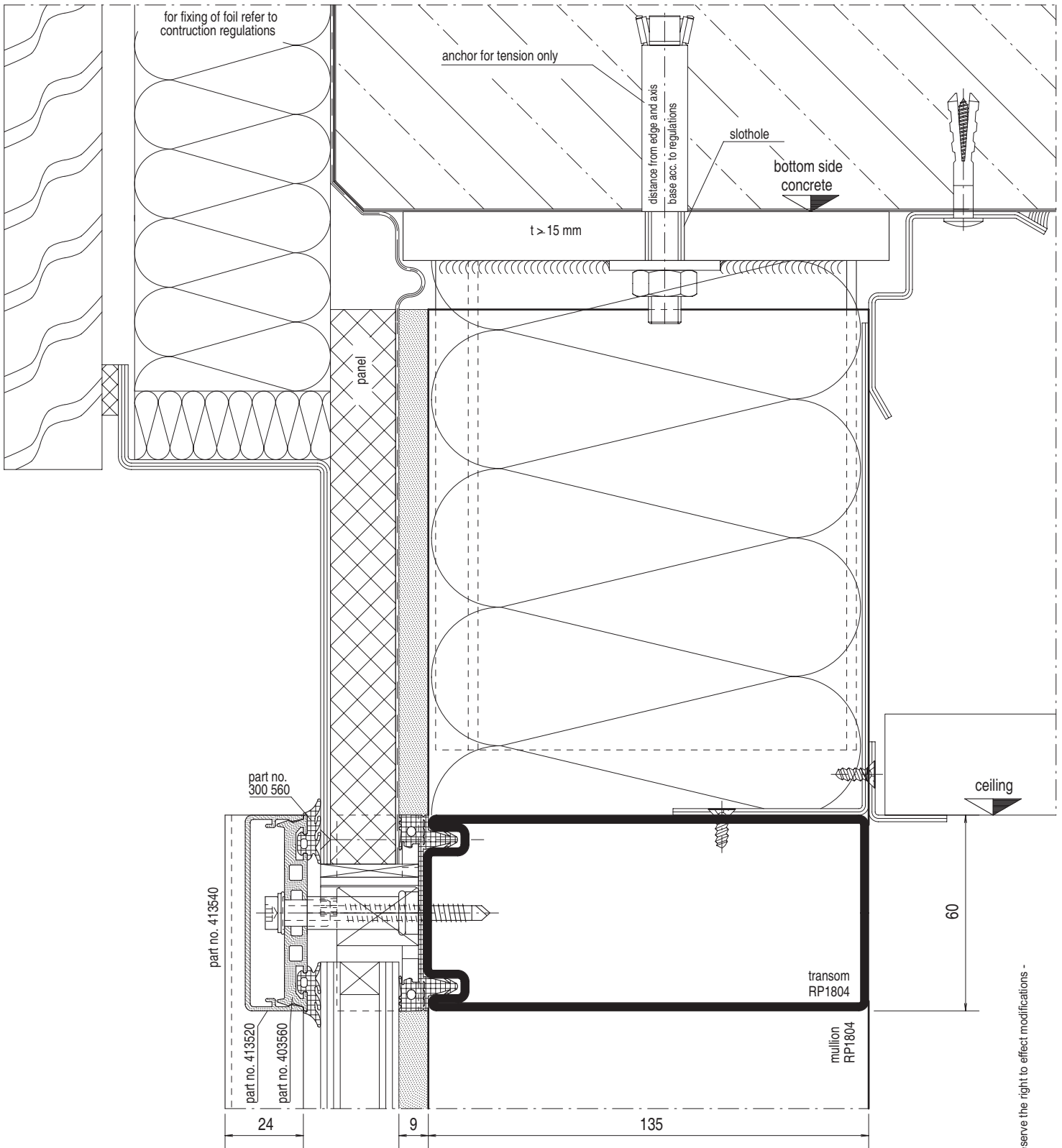


All RP-profiles and fixing parts have to be determined by a stress analysis.

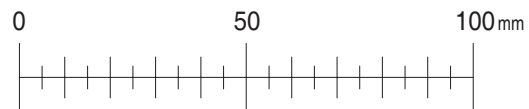


- E.E. and we reserve the right to effect modifications -

14.3 Top with insert

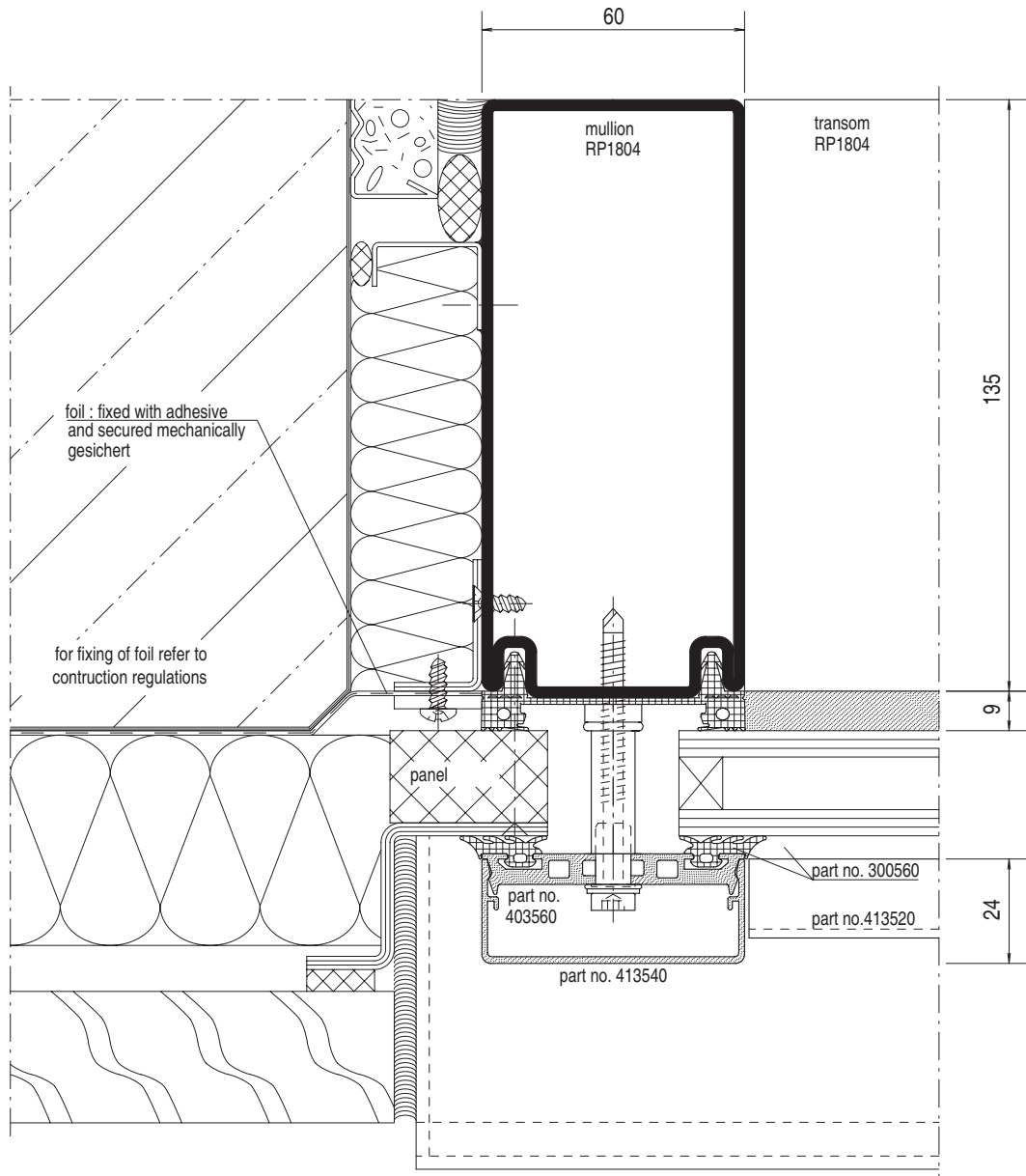


All RP-profiles and fixing parts have to be determined by a stress analysis.



- E.E. and we reserve the right to effect modifications -

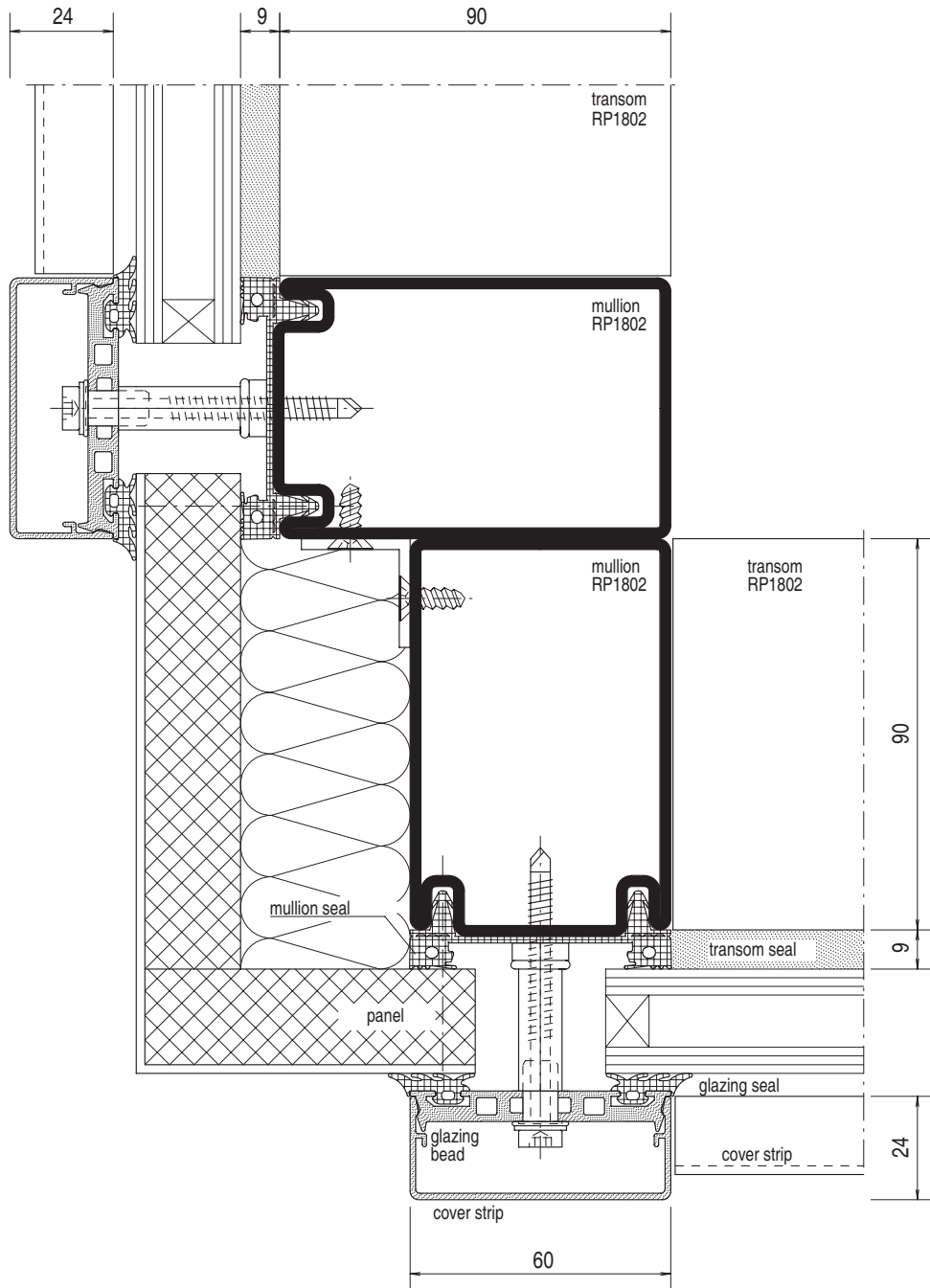
14.4 Join to wall



All RP-profiles and fixing parts have to be determined by a stress analysis.



14.5 90° Angle

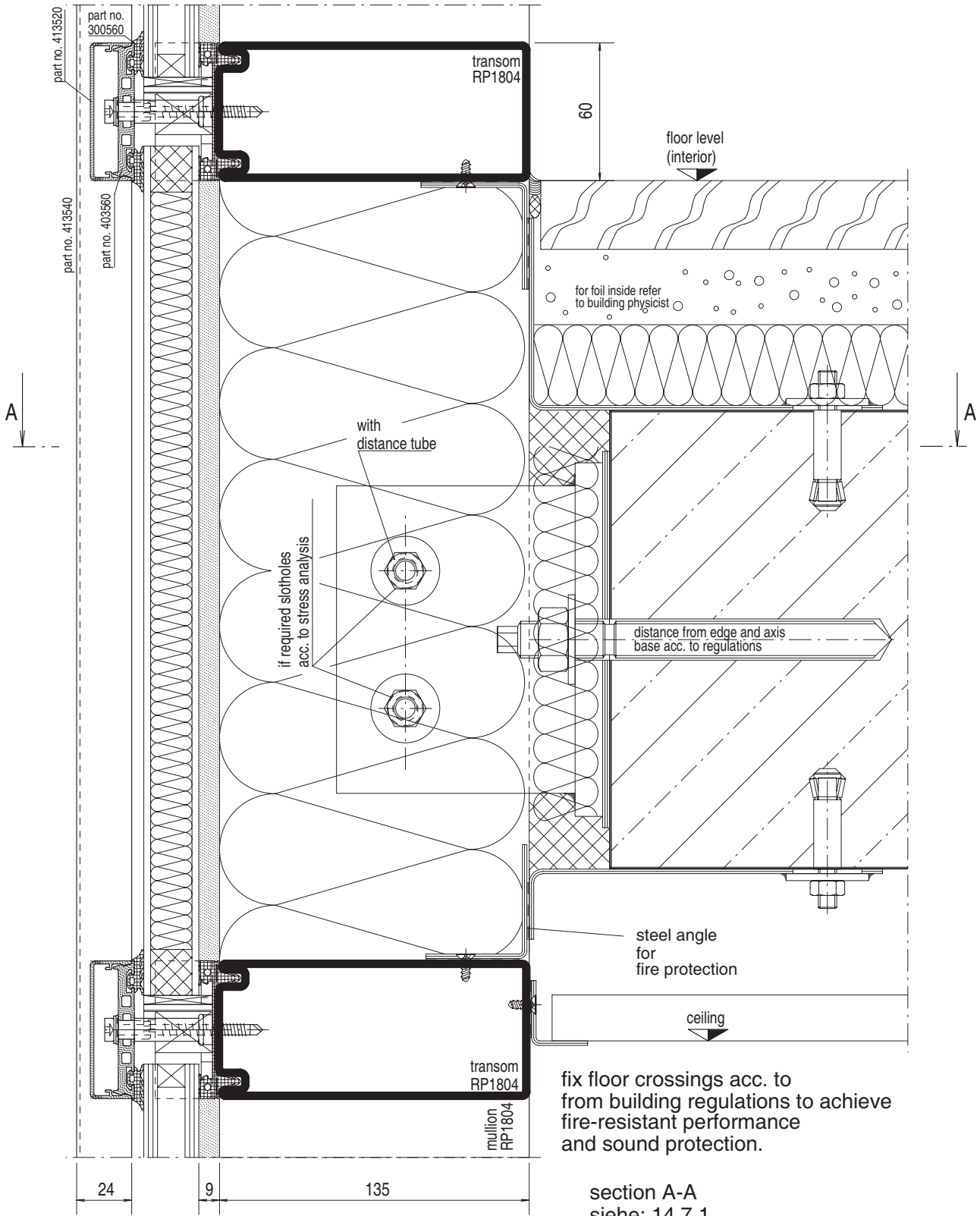


All RP-profiles and fixing parts have to be determined by a stress analysis.



- E.E. and we reserve the right to effect modifications -

14.6 Joint to ceiling



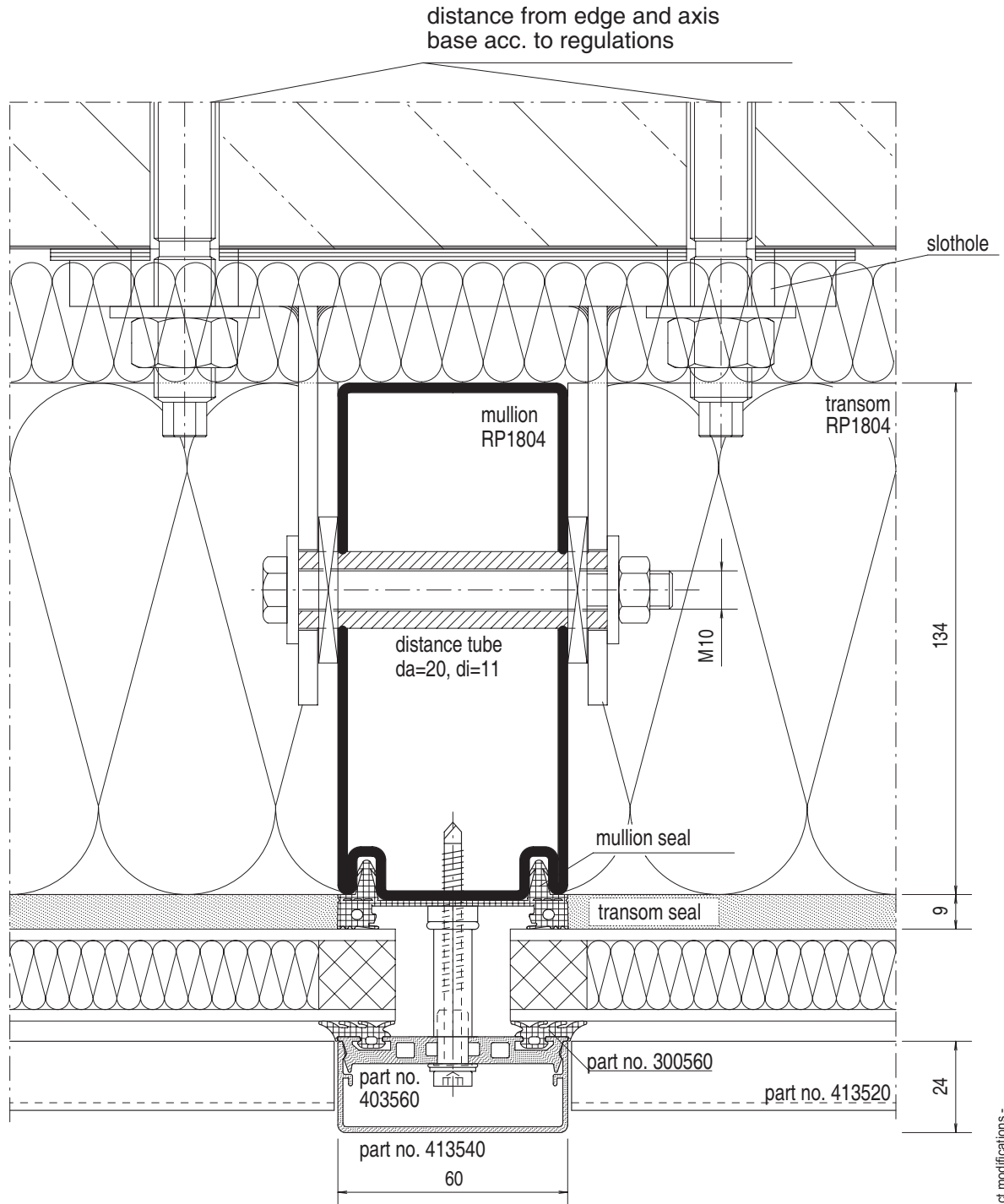
All RP-profiles and fixing parts have to be determined by a stress analysis.

fix floor crossings acc. to from building regulations to achieve fire-resistant performance and sound protection.

section A-A
siehe: 14.7.1.



**14.6.1 Join to ceiling
section A-A**



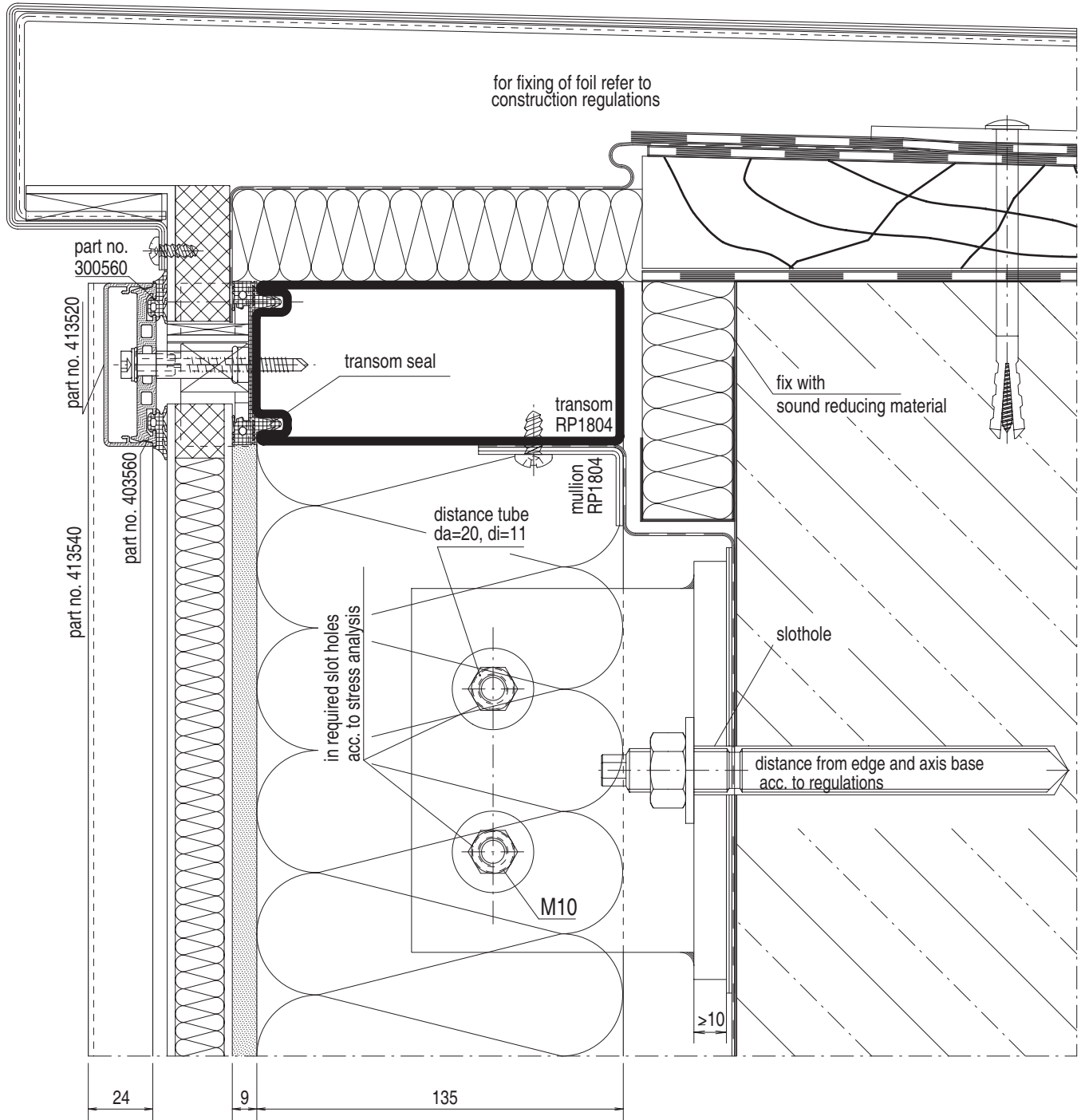
fix floor crossings acc. to building regulations to achieve fire-resistant performance and sound protection.

All RP-profiles and fixing parts have to be determined by a stress analysis.



I.E. and we reserve the right to effect modifications -

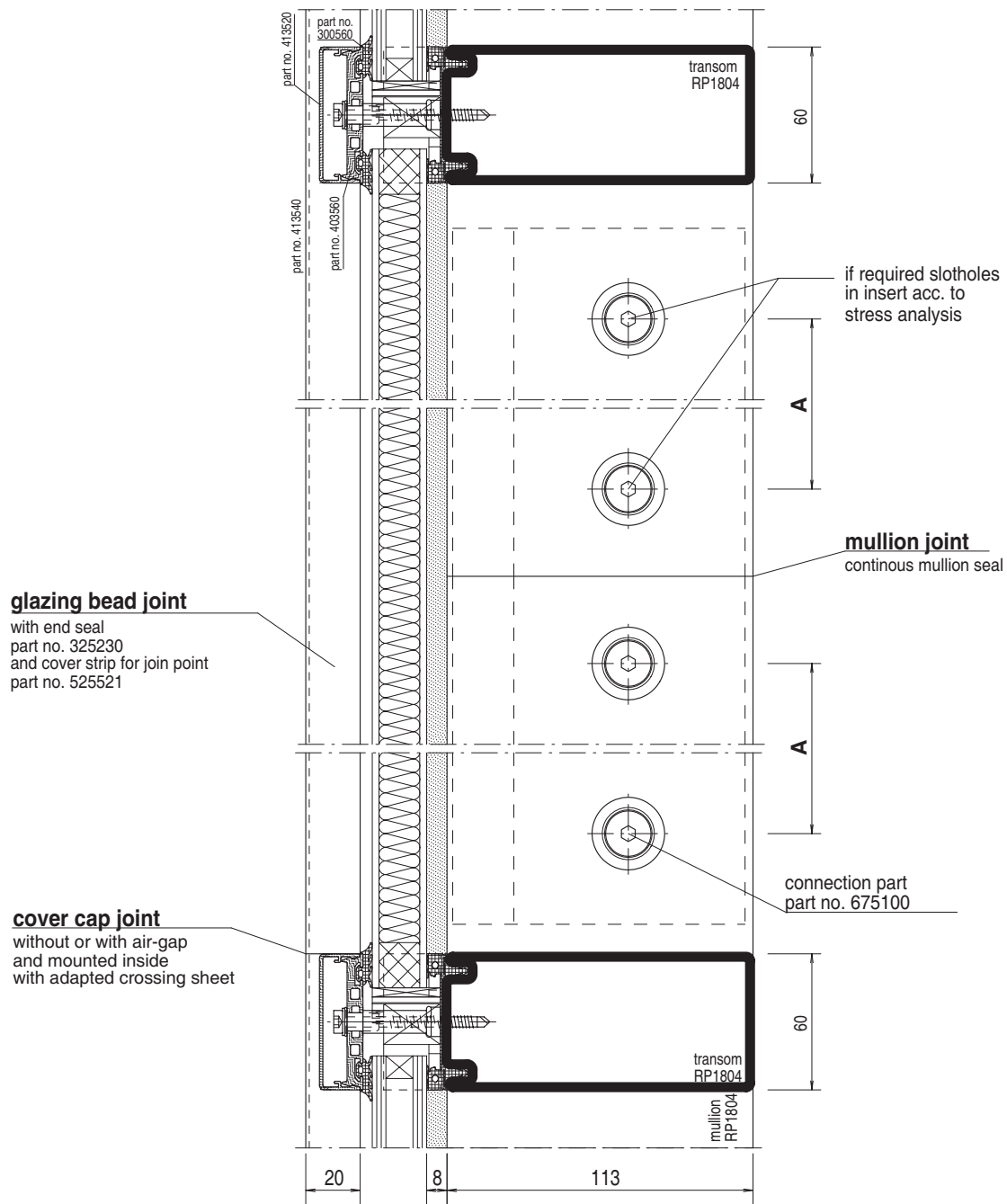
14.7 Join to roof/attica



All RP-profiles and fixing parts have to be determined by a stress analysis.

- E.E. and we reserve the right to effect modifications -

14.8 Mullion- facade joint with insert

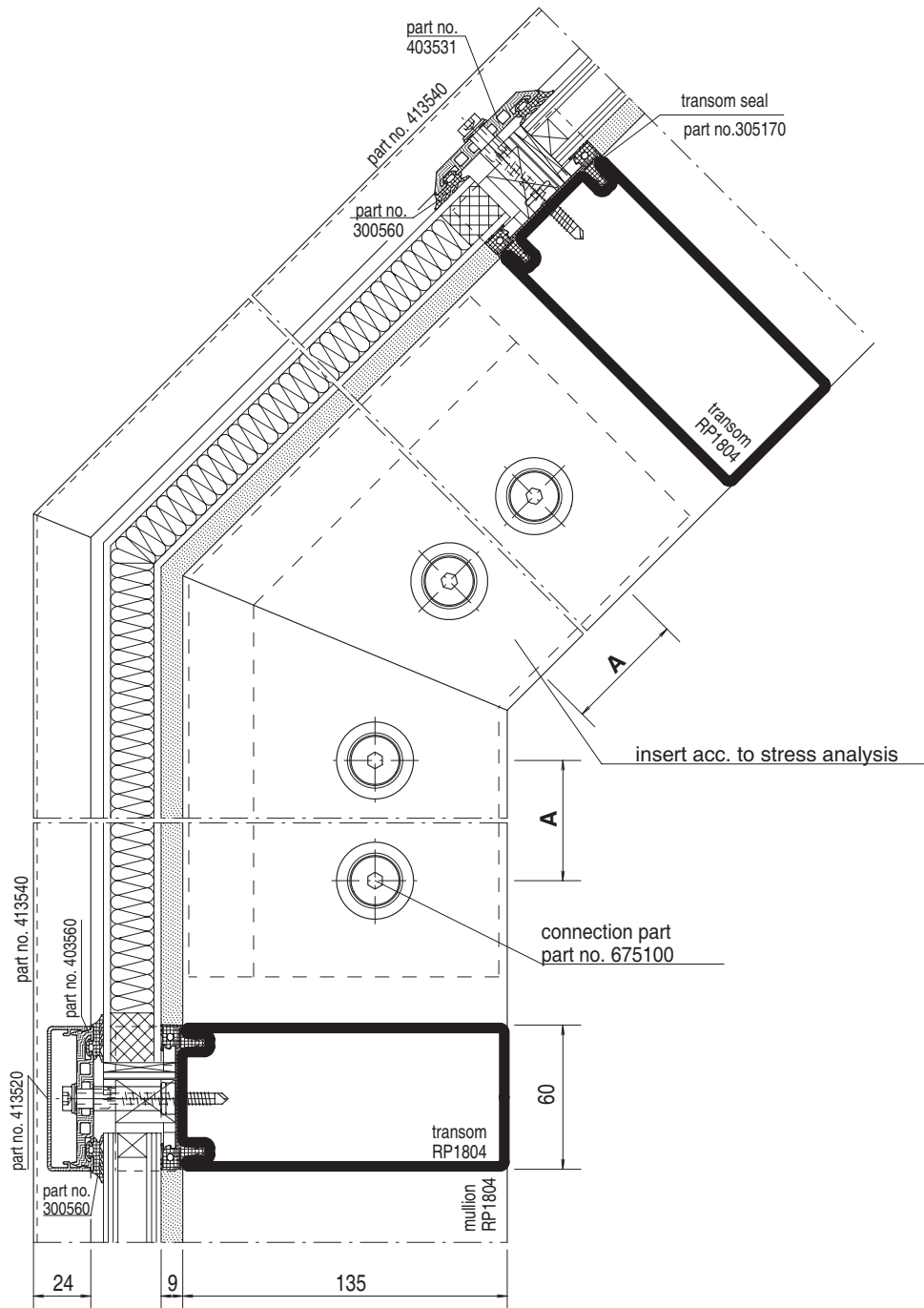


Dimensions acc. to stress analysis.

All RP-profiles and fixing parts have to be determined by a stress analysis.



14.9 Mullion facade/roof with insert -bending resistance joint



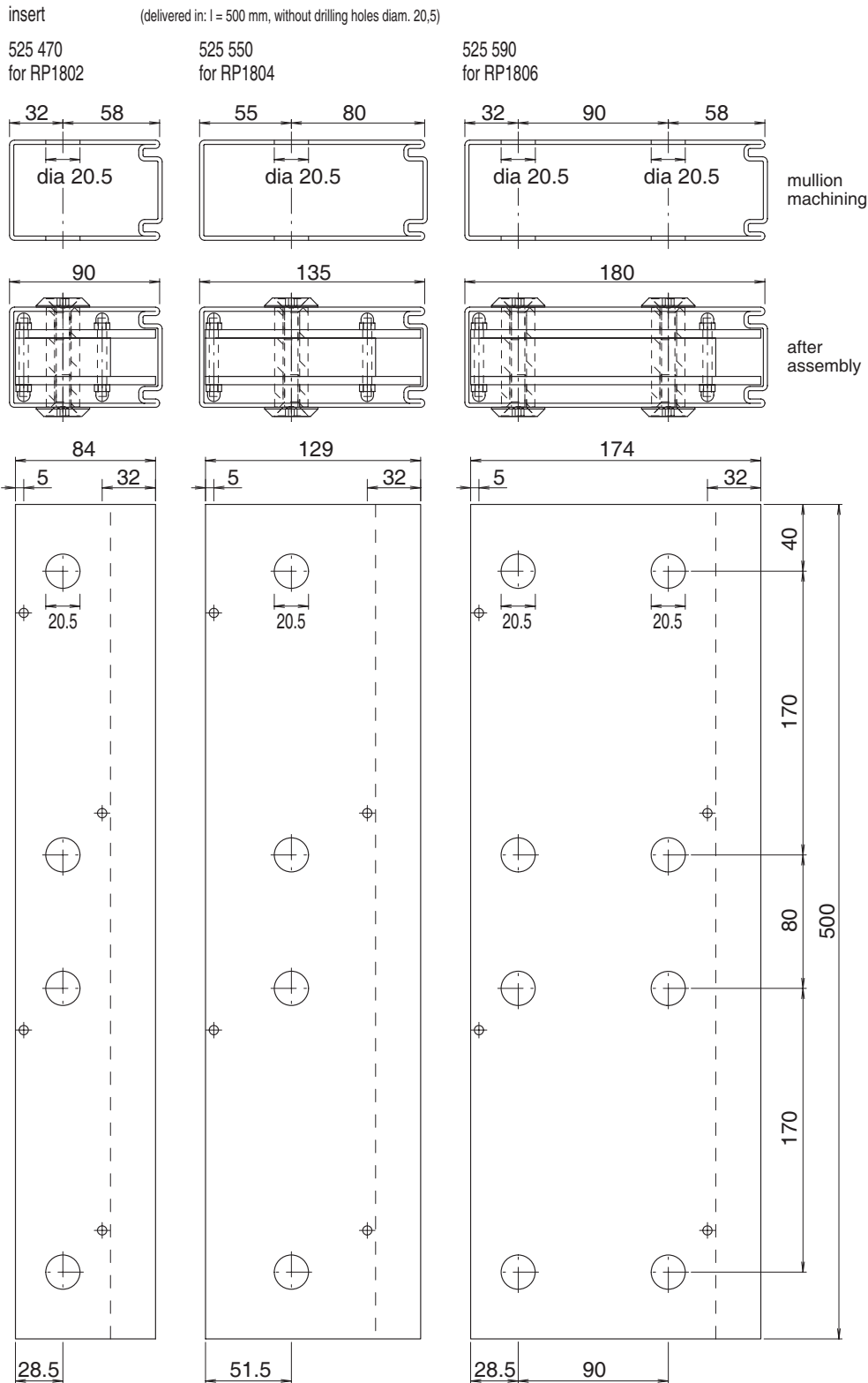
Dimensions acc. to stress analysis

All RP-profiles and fixing parts have to be determined by a stress analysis.



15 Inserts

15.1 Example for mullion joint



The inserts and the connection with the connection part (number and distances) must be proven through a stress analysis. The given measures are for an example only.



The inserts can be used without further machining for transom connections, because they do not collide with the bolts of the transom holder.