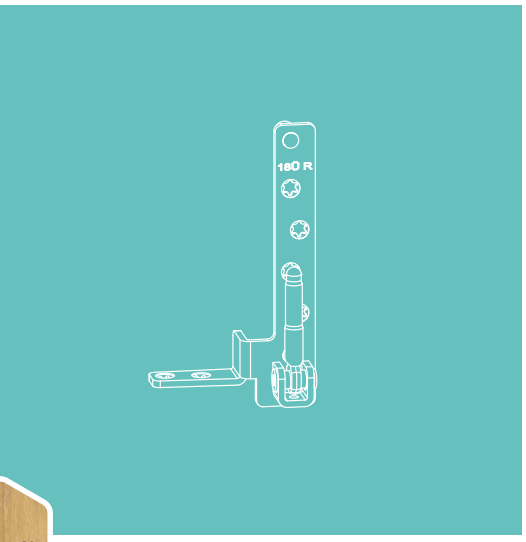
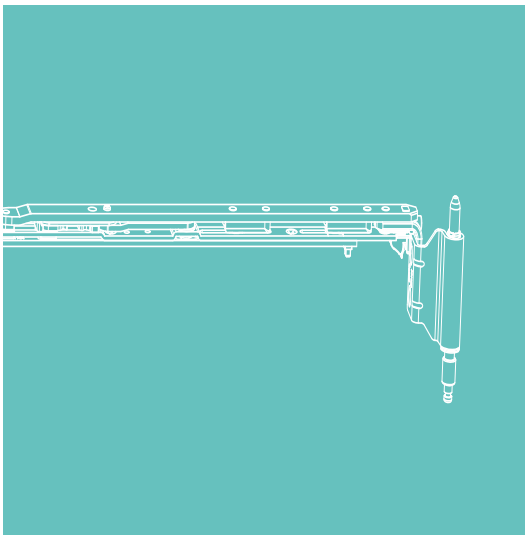
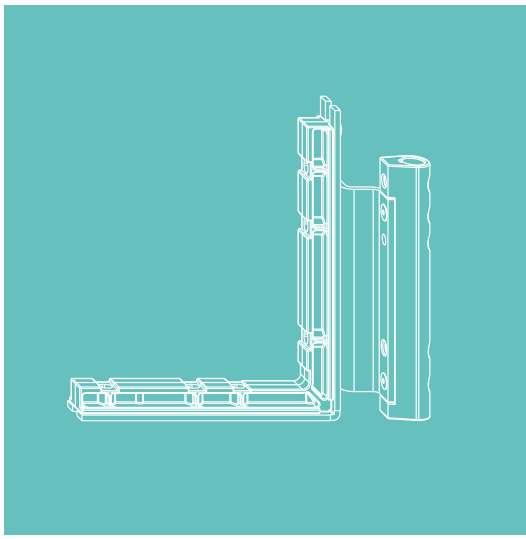
TECHNOLOGY IN MOTION

MACO
MULTI MAMMUT
TILT AND TURNHARDWARE



ASSEMBLY INSTRUCTIONS
Heavy-duty hardware

Use only by certified specialists!!

TIMBER
PVC
ALUMINIUM

Key/abbreviations

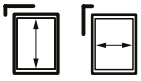

Sash rebate height (SRH)


Sash rebate width (SRW)


Sash rebate width and height


Maximum sash weight


Corner element, standard


Corner element, short


Drive gear, fixed


Drive gear, variable


Backset (BS)


Air gap (FL)


Rebate leg (Ü)


Offset (V)


Rebate depth (FT)


MULTI-MATIC (MM)


MULTI-MATIC
with tilt lock bolt (MM-KS)

AWD = Application Diagram
ZV = Central locking system

Table of contents

Additional assembly instructions for central locking system (Order No. 759173) are binding and must be observed.

Important Information

Target audience

This documentation is intended exclusively for specialist companies and certified specialists.
The work-steps described herein may only be carried out by certified specialists.

Instructions for use

› Unless otherwise indicated, all measurements are made in millimetres.

› Mount all hardware parts professionally as described in this manual and observe all safety instructions!

› All diagrams are only symbolic.

› Further technical documents can be found in our online catalogue (TOM) at extranet.maco.eu

› This print document is constantly being revised and is available for download in the current version at www.maco.eu erhältlich.

› Printing errors, mistakes and changes are reserved.

› Please send feedback or suggestions and ideas for improvements on our instructions by email to: feedback@maco.eu

Material notes

› The hardware parts described in these instructions are made of galvanised steel, passivated and sealed according to DIN EN 12329. They must not be used in environments with aggressive, corrosion-promoting air contents.

› Do not use acid-curing sealants, as these can lead to corrosion of the hardware parts.

› The window elements may only be surface-treated (painted, varnished, varnished, oiled, ...) before the hardware parts are installed. Subsequent surface treatment may restrict the function of the hardware parts. In this case, any warranty claims against the hardware manufacturer become invalid.

General processing information

Intended purpose

These assembly instructions are binding for the hinge-side MULTI MAMMUT. Use and assembly of the components is only permitted in the manner described below. They are not intended for any other use and therefore any other such use does not correspond to the intended purpose. The following points must also be observed:

› The application ranges, sash weights and processing guidelines of the system supplier are binding and must be observed.

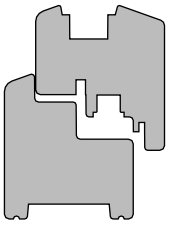
› The centre of gravity and the position of the glass pane can affect the application range and max. weights and must be requested where required!

Non-observance will render claims for damages void!

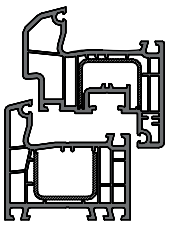
❶ Application materials

⚠ **IMPORTANT!**

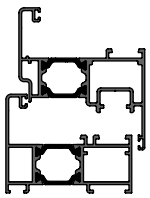
Timber*



PVC

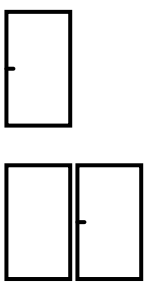


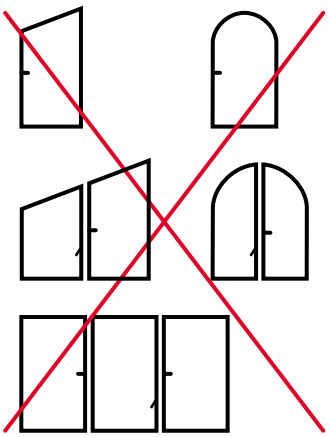
Aluminium**



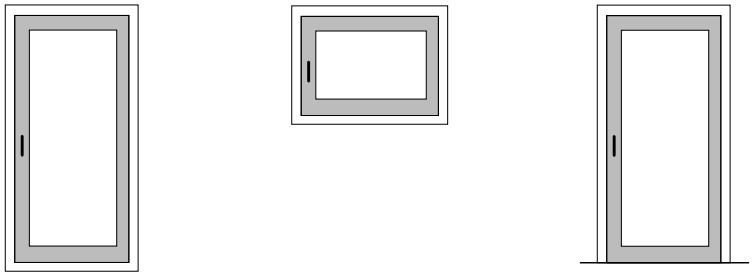
* The rebate width must be sufficiently strong so that it does not break in the event of changes to the gasket compression.
** Rebate width ≥16 mm

❷ Sash format and number of sashes

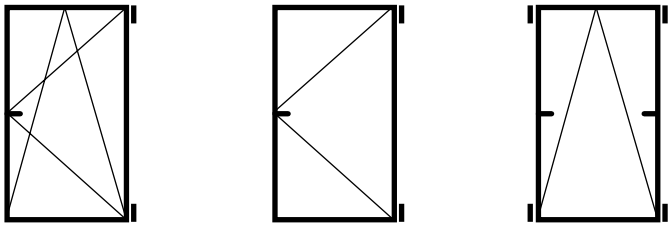




❸ Window design

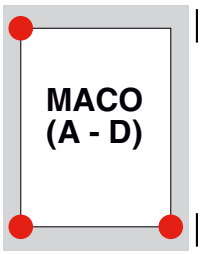


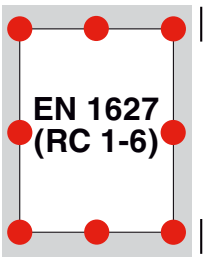
❹ Opening modes



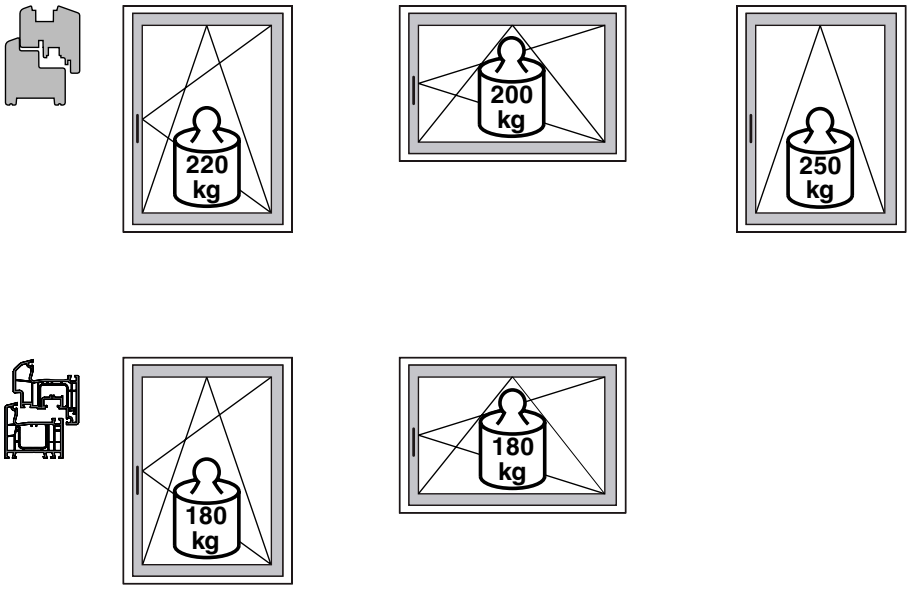
❺ Hardware range

❻ Hardware version (security)





❼ Maximum sash weight



❽ Application range – turn&tilt and turn-only units

≤ 1800 x 2800 mm

≥ 400 mm

≤ 315 mm

≥ 360 mm (15)
≥ 455 mm (6,5)

≥ 470 mm (15)
≥ 530 mm (6,5)

≥ 275 mm (15)
≥ 370 mm (6,5)

≥ 385 mm (15)
≥ 445 mm (6,5)

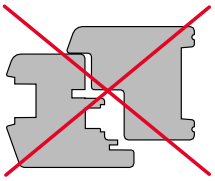
❾ Application range – tilt units

1200 - 2000 mm

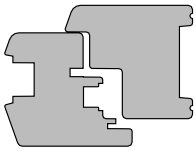
800 - 2800 mm

❿ Sash profile – air gap, rebate leg and offset

4 / 15 - 9



4 / 18 - 13*



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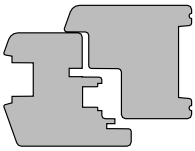
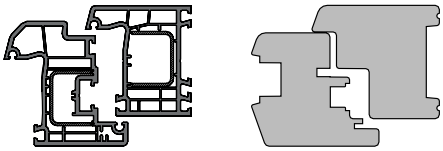
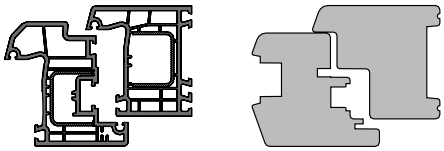


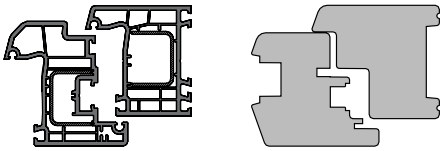
12 / 18 - 13



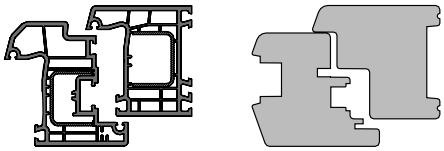
12 / 18 - 9



12 / 20 - 13



12 / 20 - 9



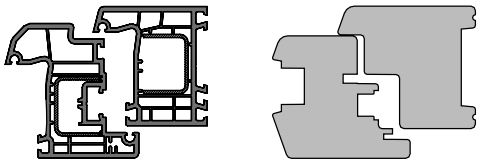
* additional routing work required

⓫ Fitting groove

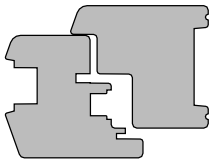
The fitting groove must be created according to the specifications in our print and online catalogues.

⓬ Frame rebate

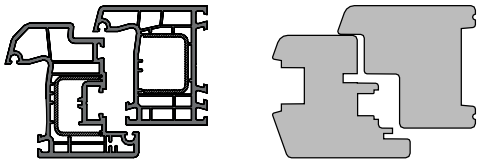
FT 24



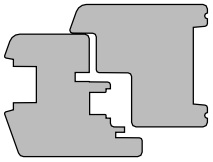
FT 18 *



FT 30

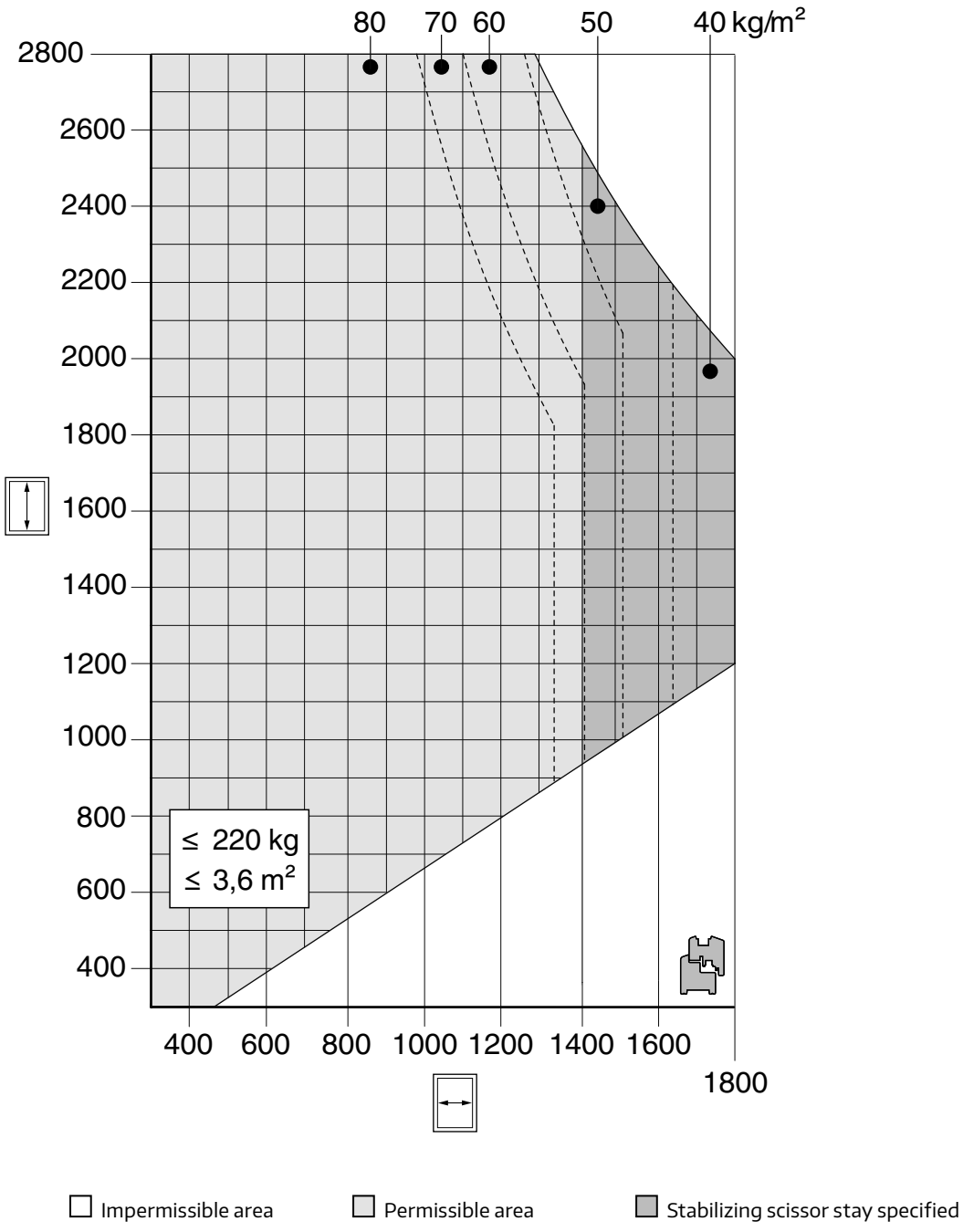


FT 20



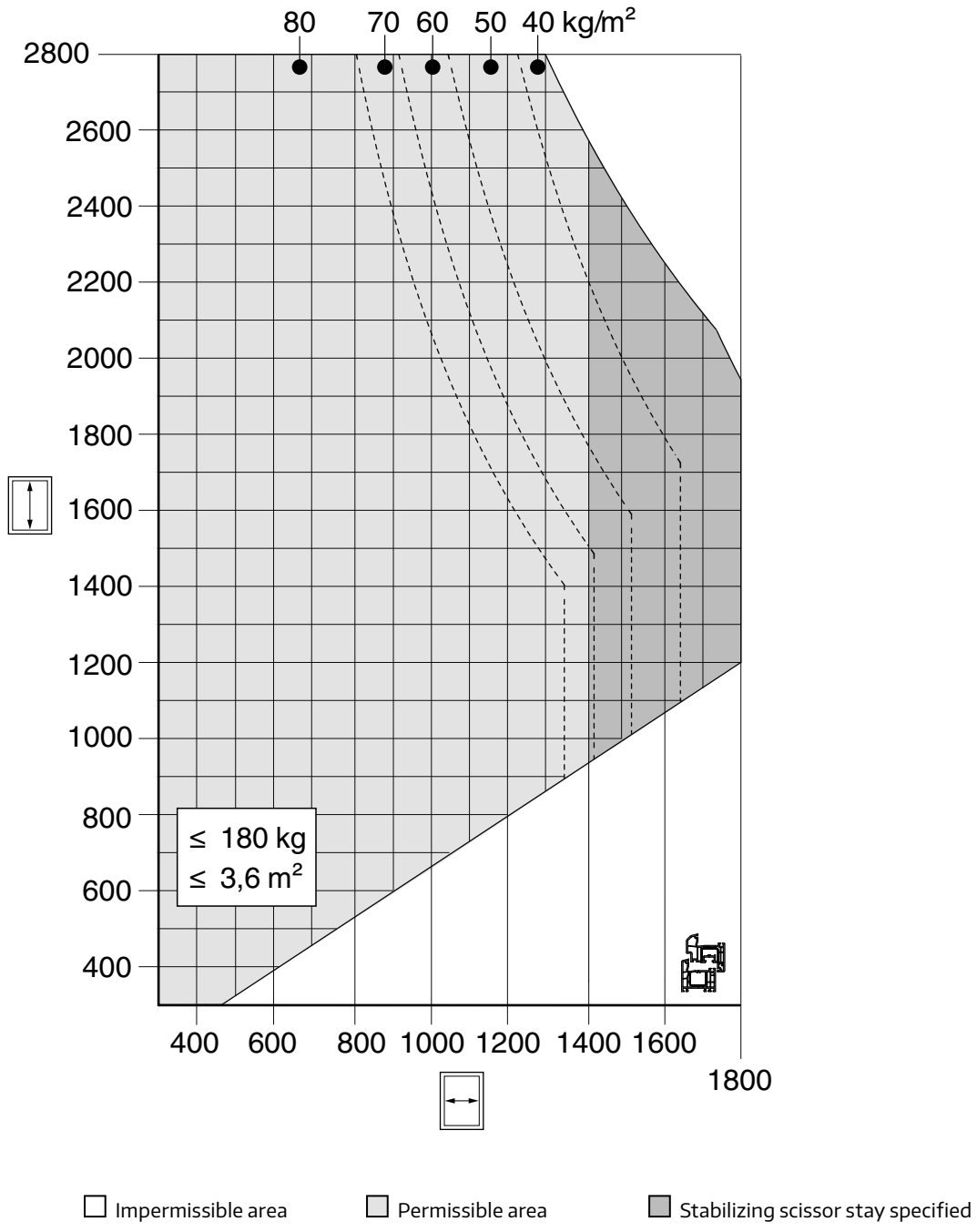
* additional routing work required

⓭ Application diagram for timber turn-only and turn&tilt units



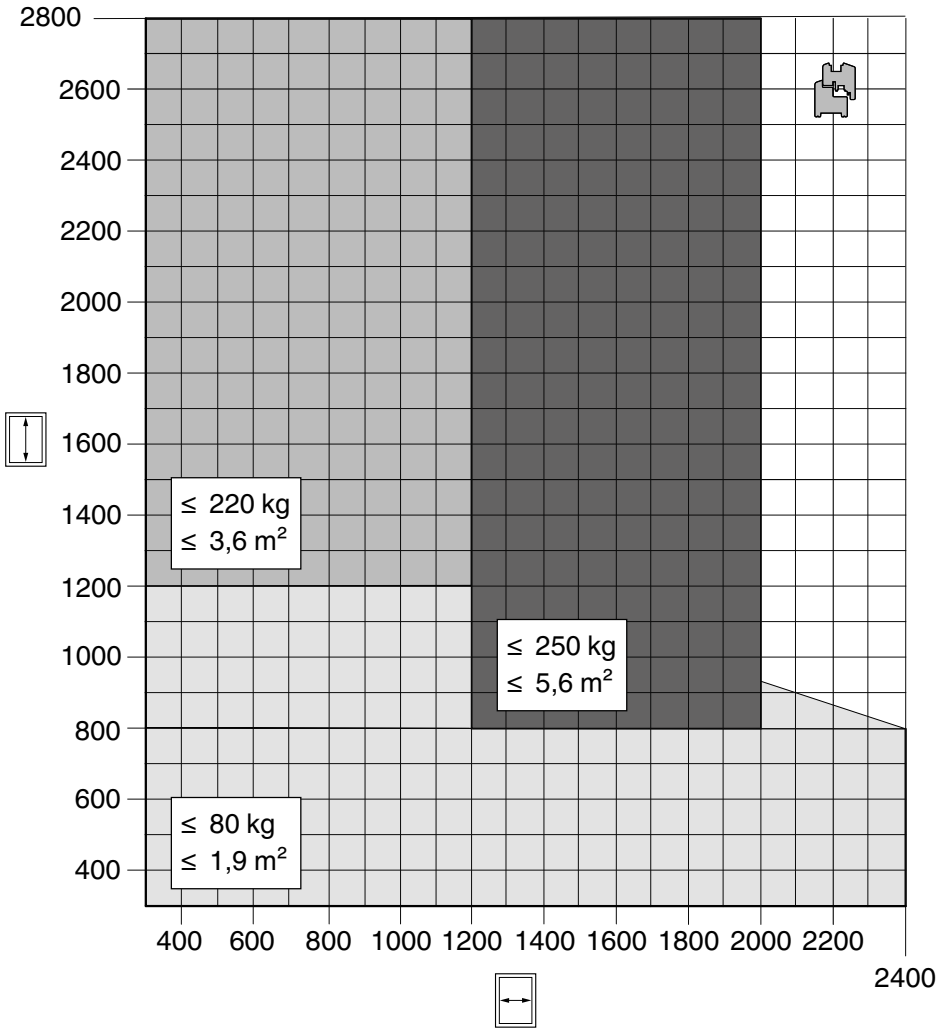
All notes regarding the use of application diagrams in our print and online catalogues must be taken into account.

⓮ Application diagram for PVC turn-only and turn&tilt units



All notes regarding the use of application diagrams in our print and online catalogues must be taken into account.

⓯ Application diagram for timber tilt units



Impermissible area

Permissible area Mammut-tilt-only sash (both sides hinge-sides)

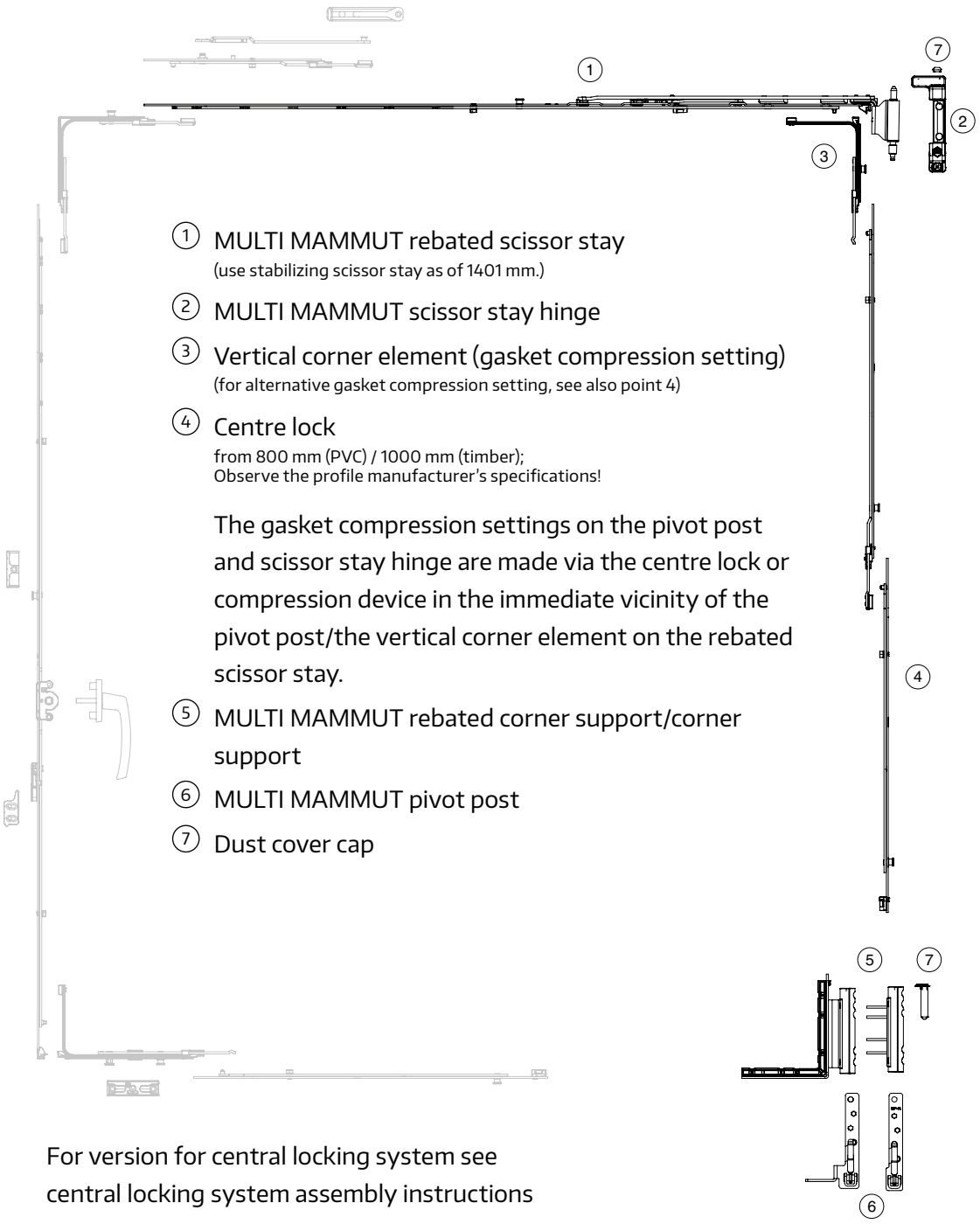
Turn&tilt application range Multi Mammut

Application range standard tilt-only sash

All notes regarding the use of application diagrams in our print and online catalogues must be taken into account.

Hardware combinations

Overview, turn&tilt hardware single-sash.



① MULTI MAMMUT rebated scissor stay
(use stabilizing scissor stay as of 1401 mm.)

② MULTI MAMMUT scissor stay hinge

③ Vertical corner element (gasket compression setting)
(for alternative gasket compression setting, see also point 4)

④ Centre lock
from 800 mm (PVC) / 1000 mm (timber);
Observe the profile manufacturer's specifications!

The gasket compression settings on the pivot post and scissor stay hinge are made via the centre lock or compression device in the immediate vicinity of the pivot post/the vertical corner element on the rebated scissor stay.

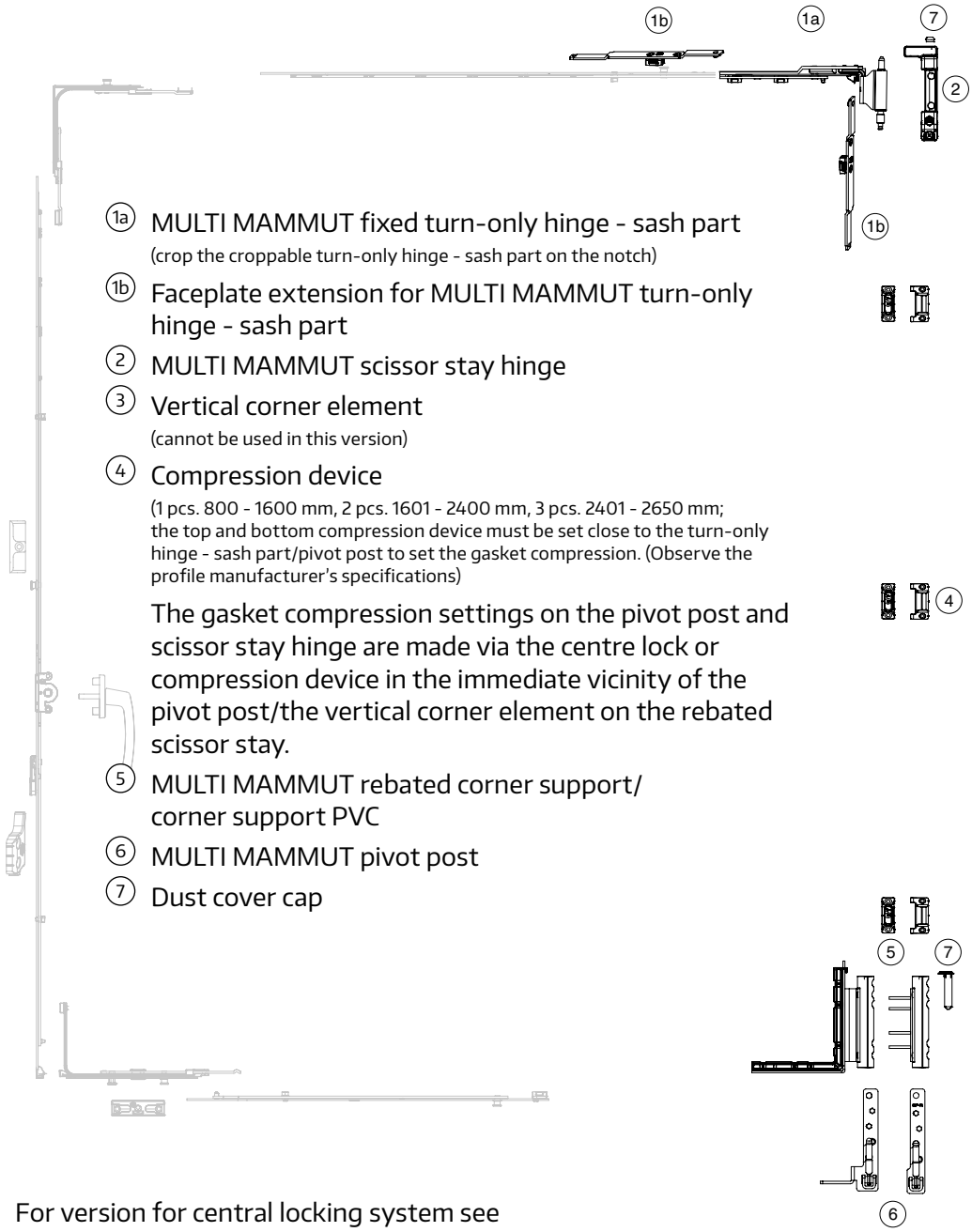
⑤ MULTI MAMMUT rebated corner support/corner support

⑥ MULTI MAMMUT pivot post

⑦ Dust cover cap

For version for central locking system see central locking system assembly instructions

Overview, turn-only hardware with fixed turn-only hinge - sash part (SRW 385 - 1800 mm)



(1a) MULTI MAMMUT fixed turn-only hinge - sash part
(crop the croppable turn-only hinge - sash part on the notch)

(1b) Faceplate extension for MULTI MAMMUT turn-only hinge - sash part

(2) MULTI MAMMUT scissor stay hinge

(3) Vertical corner element
(cannot be used in this version)

(4) Compression device
(1 pcs. 800 - 1600 mm, 2 pcs. 1601 - 2400 mm, 3 pcs. 2401 - 2650 mm; the top and bottom compression device must be set close to the turn-only hinge - sash part/pivot post to set the gasket compression. (Observe the profile manufacturer's specifications)

The gasket compression settings on the pivot post and scissor stay hinge are made via the centre lock or compression device in the immediate vicinity of the pivot post/the vertical corner element on the rebated scissor stay.

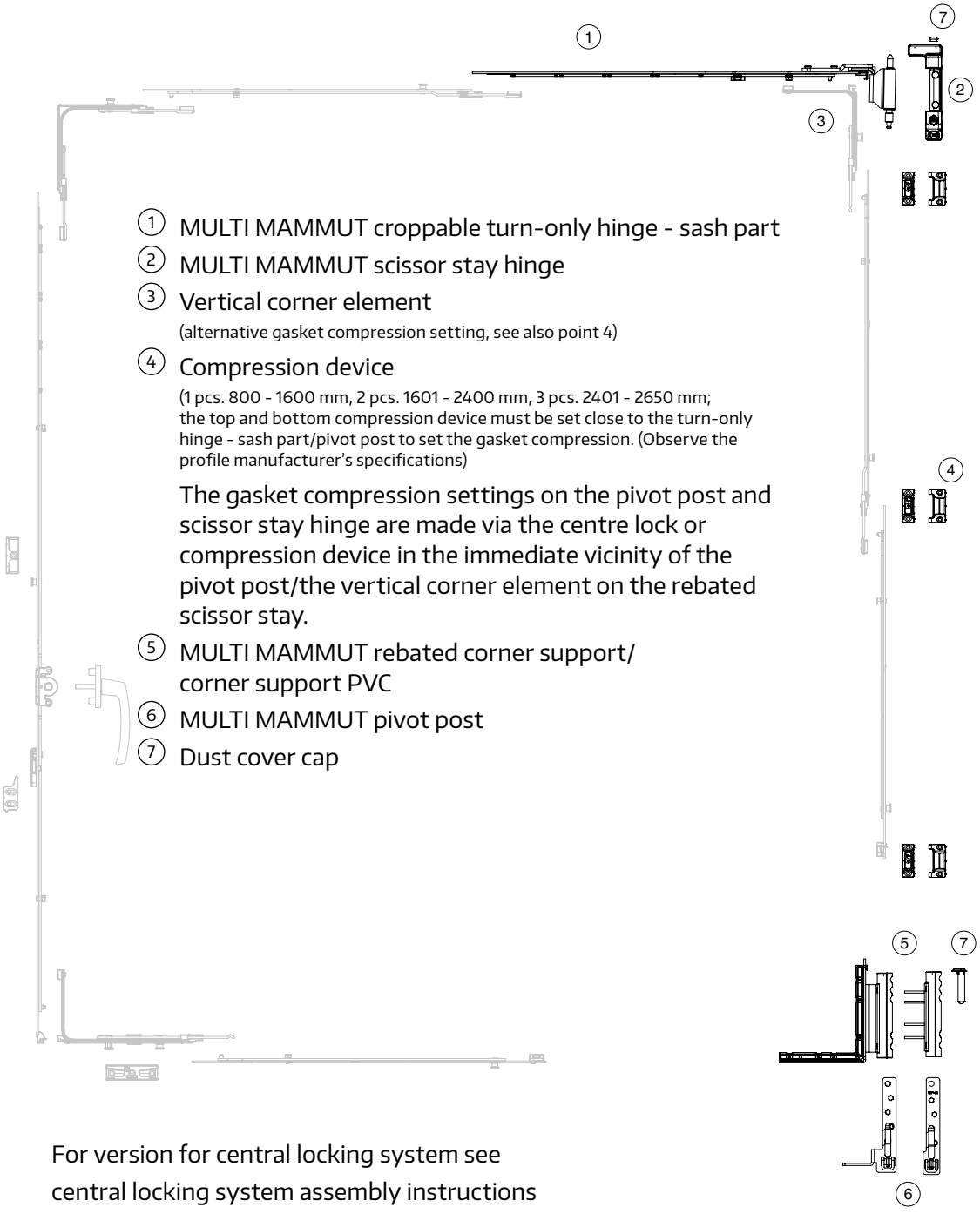
(5) MULTI MAMMUT rebated corner support/ corner support PVC

(6) MULTI MAMMUT pivot post

(7) Dust cover cap

For version for central locking system see central locking system assembly instructions

Overview, turn-only hardware with croppable turn-only hinge - sash part (SRW 400 - 635 mm)

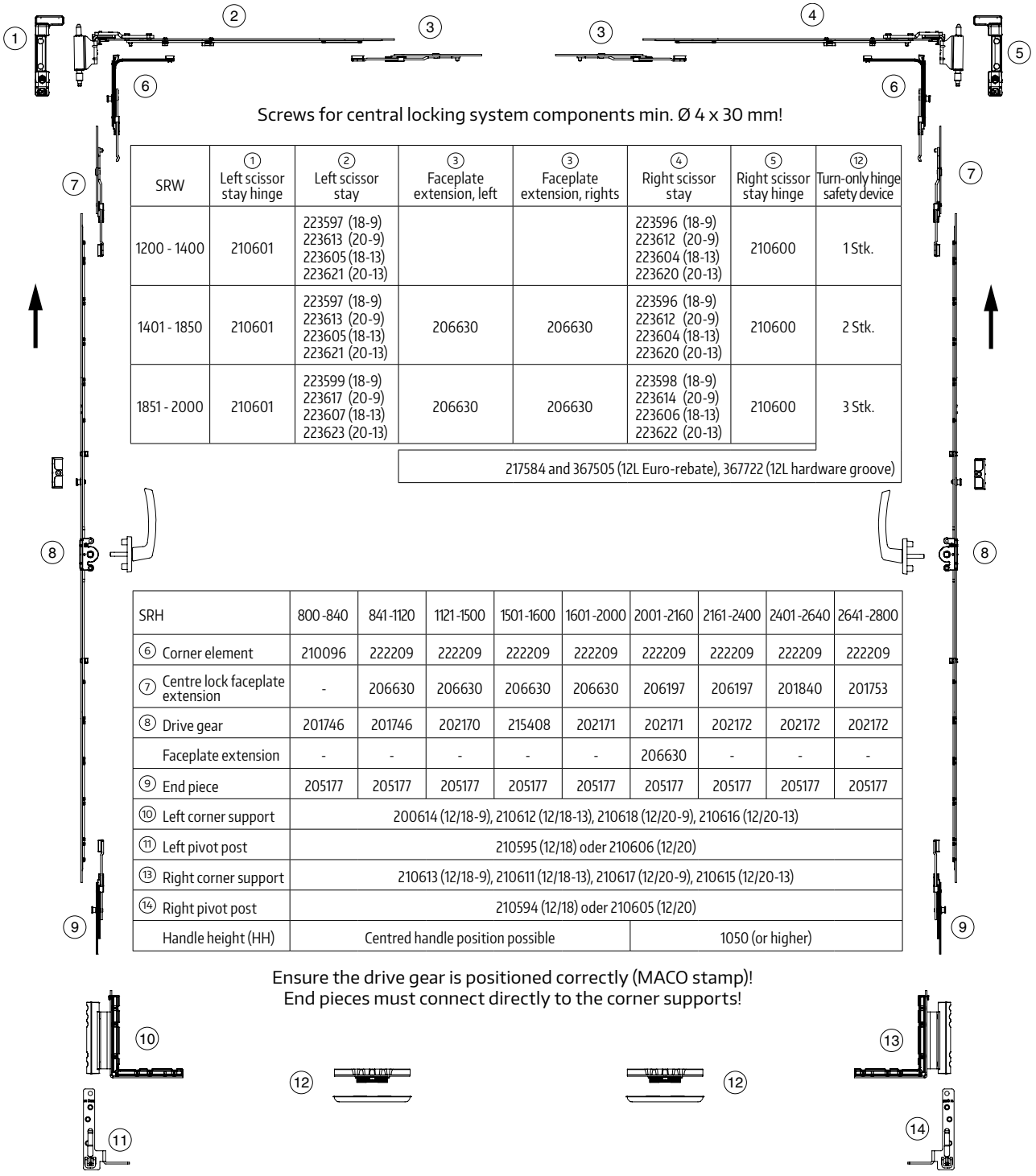


1. MULTI MAMMUT croppable turn-only hinge - sash part
2. MULTI MAMMUT scissor stay hinge
3. Vertical corner element
   (alternative gasket compression setting, see also point 4)
4. Compression device
   (1 pcs. 800 - 1600 mm, 2 pcs. 1601 - 2400 mm, 3 pcs. 2401 - 2650 mm;
   the top and bottom compression device must be set close to the turn-only hinge - sash part/pivot post to set the gasket compression. (Observe the profile manufacturer's specifications)

   The gasket compression settings on the pivot post and scissor stay hinge are made via the centre lock or compression device in the immediate vicinity of the pivot post/the vertical corner element on the rebated scissor stay.
5. MULTI MAMMUT rebated corner support/
   corner support PVC
6. MULTI MAMMUT pivot post
7. Dust cover cap

For version for central locking system see
central locking system assembly instructions

Overview of tilt-only hardware with two central locking systems



Screws for central locking system components min. Ø 4 x 30 mm!

SRW	① Left scissor stay hinge	② Left scissor stay	③ Faceplate extension, left	③ Faceplate extension, rights	④ Right scissor stay	⑤ Right scissor stay hinge	⑫ Turn-only hinge safety device
1200 - 1400	210601	223597 (18-9) 223613 (20-9) 223605 (18-13) 223621 (20-13)			223596 (18-9) 223612 (20-9) 223604 (18-13) 223620 (20-13)	210600	1 Stk.
1401 - 1850	210601	223597 (18-9) 223613 (20-9) 223605 (18-13) 223621 (20-13)	206630	206630	223596 (18-9) 223612 (20-9) 223604 (18-13) 223620 (20-13)	210600	2 Stk.
1851 - 2000	210601	223599 (18-9) 223617 (20-9) 223607 (18-13) 223623 (20-13)	206630	206630	223598 (18-9) 223614 (20-9) 223606 (18-13) 223622 (20-13)	210600	3 Stk.

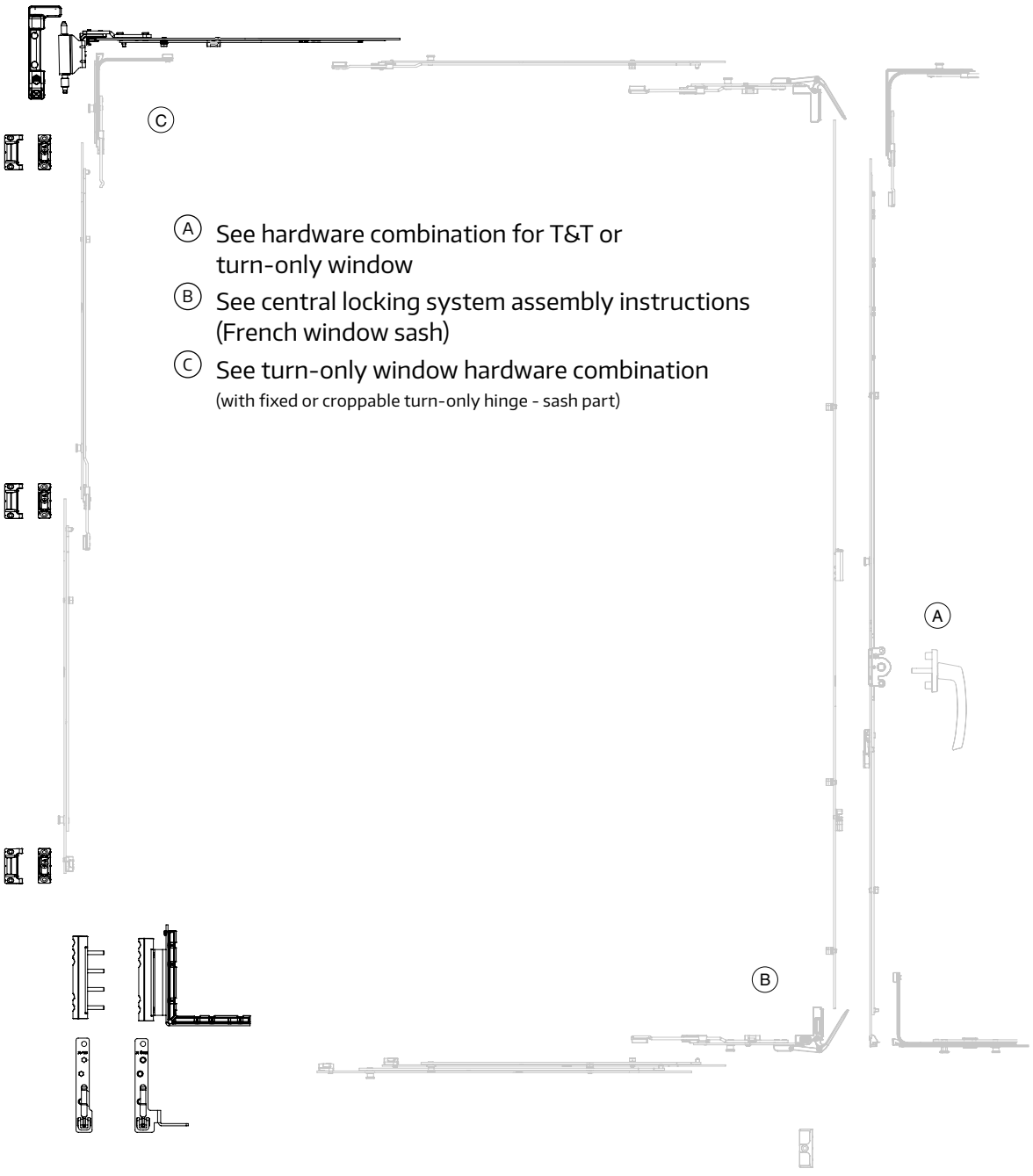
217584 and 367505 (12L Euro-rebate), 367722 (12L hardware groove)

SRH	800 -840	841 -1120	1121 -1500	1501 -1600	1601 -2000	2001 -2160	2161 -2400	2401 -2640	2641 -2800
⑥ Corner element	210096	222209	222209	222209	222209	222209	222209	222209	222209
⑦ Centre lock faceplate extension	-	206630	206630	206630	206630	206197	206197	201840	201753
⑧ Drive gear	201746	201746	202170	215408	202171	202171	202172	202172	202172
Faceplate extension	-	-	-	-	-	206630	-	-	-
⑨ End piece	205177	205177	205177	205177	205177	205177	205177	205177	205177
⑩ Left corner support	200614 (12/18-9), 210612 (12/18-13), 210618 (12/20-9), 210616 (12/20-13)								
⑪ Left pivot post	210595 (12/18) oder 210606 (12/20)								
⑬ Right corner support	210613 (12/18-9), 210611 (12/18-13), 210617 (12/20-9), 210615 (12/20-13)								
⑭ Right pivot post	210594 (12/18) oder 210605 (12/20)								
Handle height (HH)	Centred handle position possible					1050 (or higher)			

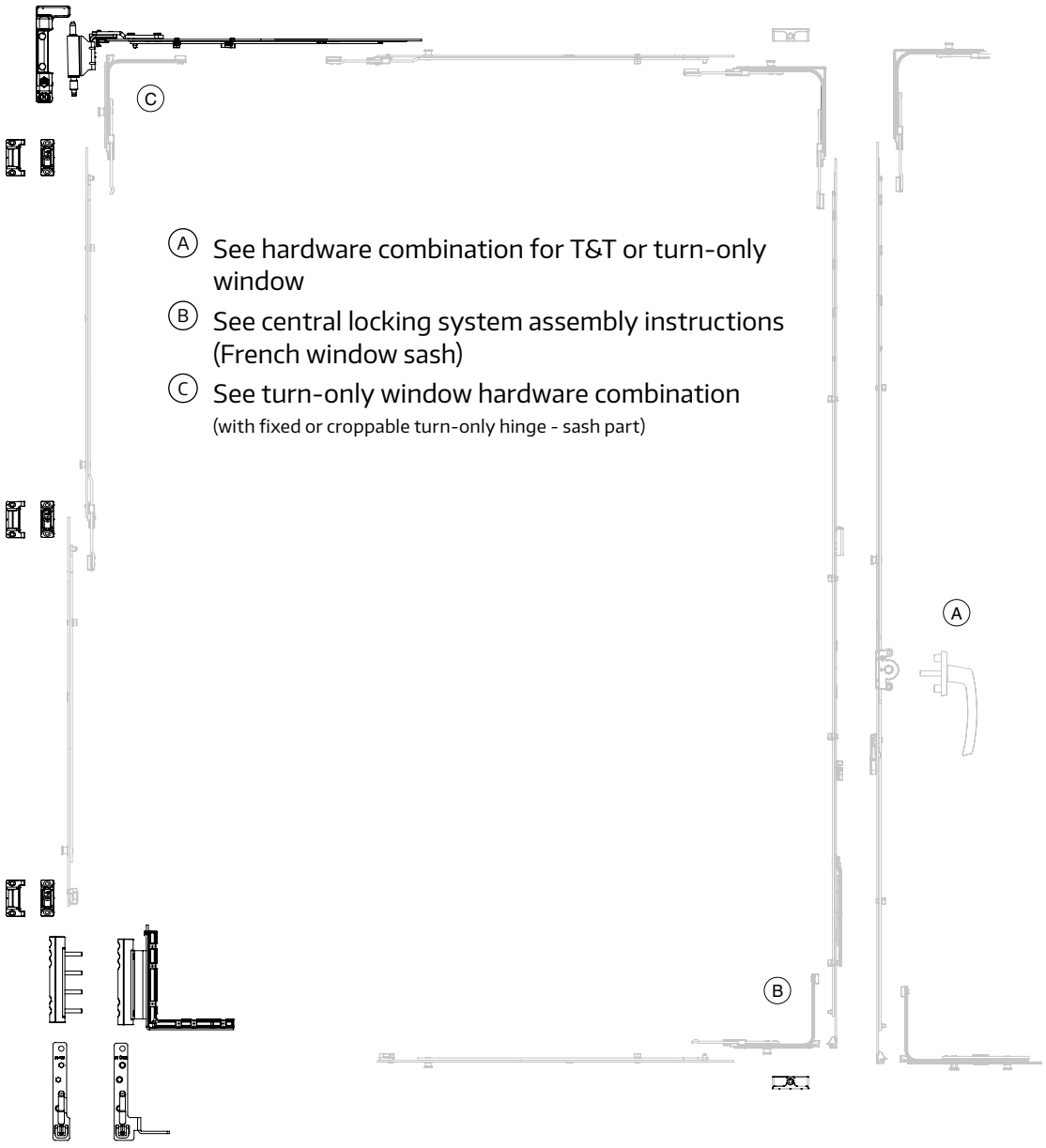
Ensure the drive gear is positioned correctly (MACO stamp)!
End pieces must connect directly to the corner supports!

Fit the handle (handle position vertically upwards = locked position) and tear through both central locking systems in direction horizontal handle position (= tilted position).

Overview, 2-sashed window – with horizontal French casement locks



Overview, 2-sashed window – with fixed French casement drive gear

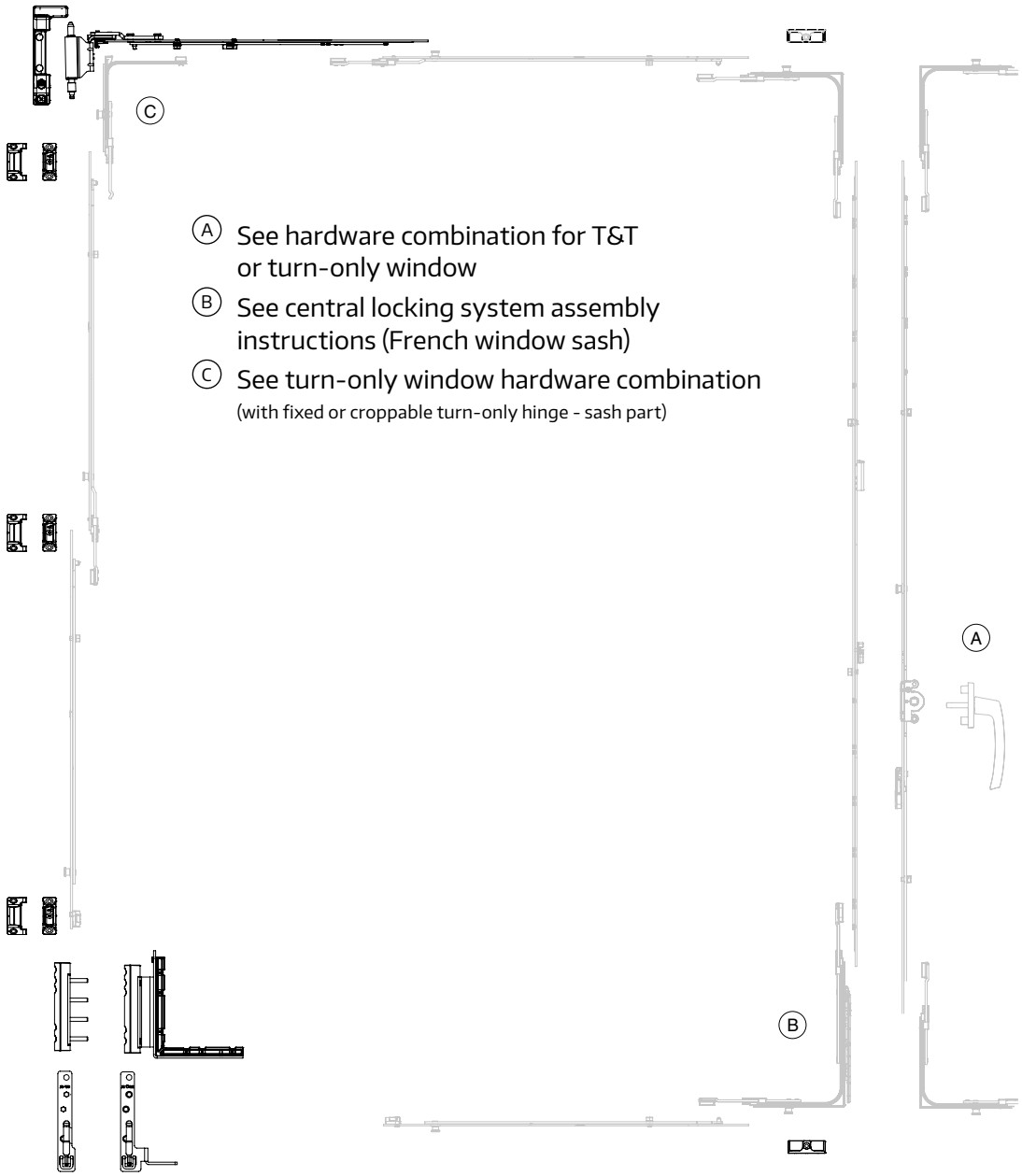


Ⓐ See hardware combination for T&T or turn-only window

Ⓑ See central locking system assembly instructions (French window sash)

Ⓒ See turn-only window hardware combination
(with fixed or croppable turn-only hinge - sash part)

Overview, 2-sashed window – with variable French casement drive gear



Ⓐ See hardware combination for T&T or turn-only window

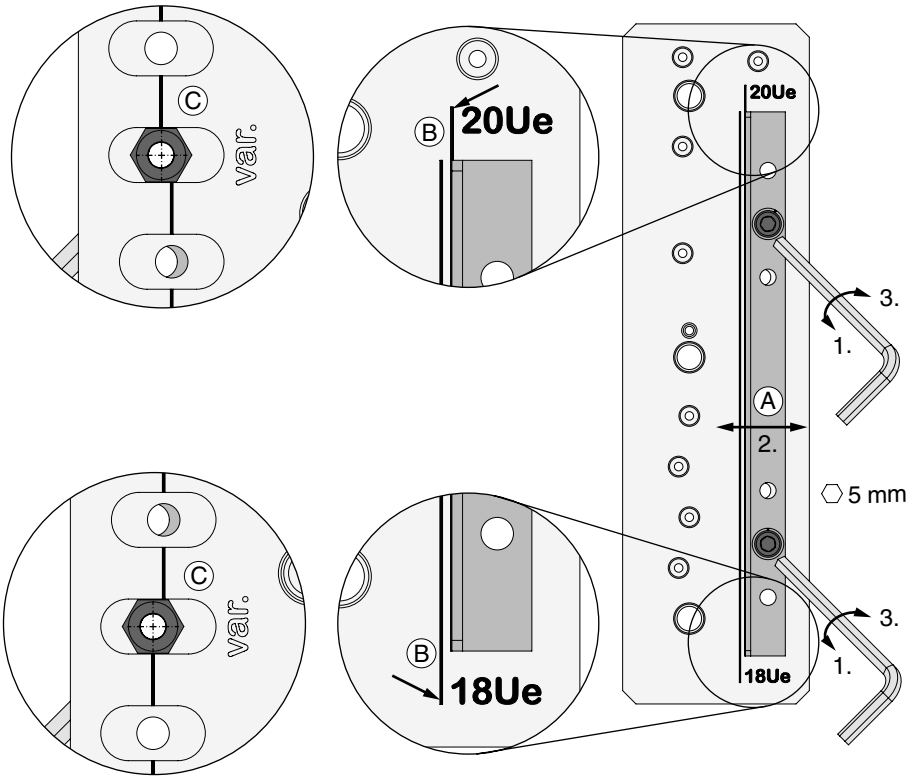
Ⓑ See central locking system assembly instructions (French window sash)

Ⓒ See turn-only window hardware combination
(with fixed or croppable turn-only hinge - sash part)

Installing the fittings on the frame

Adjusting the drilling jig

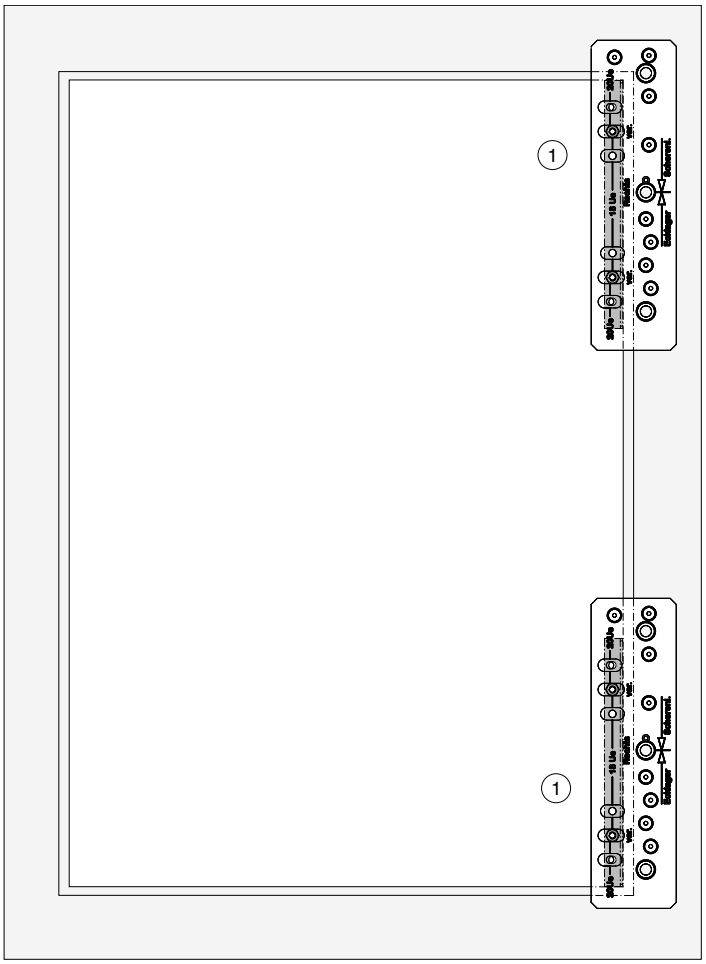
Drilling jig for pivot post and scissor stay hinge, right (Item No. 213096) or left (Item No. 213097)



1. Unscrew the screws of the angled stop Ⓐ.
2. Set the rebate leg used (18 Ü or 20 Ü).
   (Marking line Ⓑ on the rear / Ⓒ on the screw holes)
3. Tighten the screws again.

The default setting of the jig is 20 mm rebate leg and 12 mm air gap.

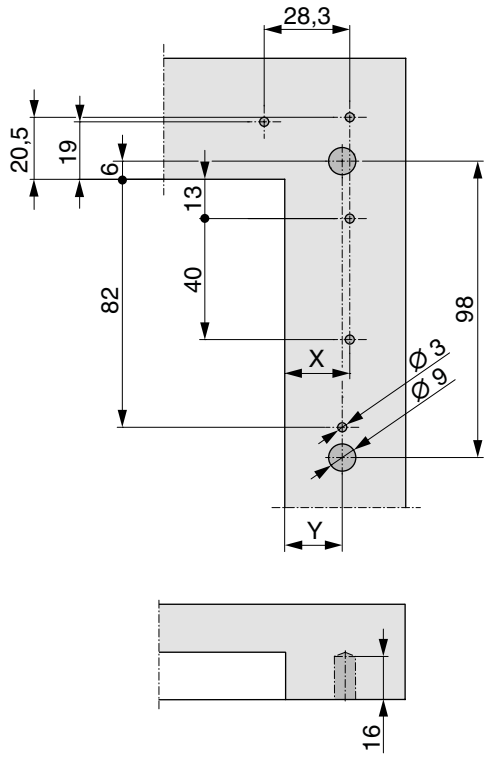
Drill holes with jig - pivot post and scissor stay hinge



① Insert drilling jig for right sash Item No. 213096 or for left sash Item No. 213097 in frame rebate corners at the top and bottom (with air gap 12 mm) and pre-drill with Ø 3 or Ø 9 mm drill.

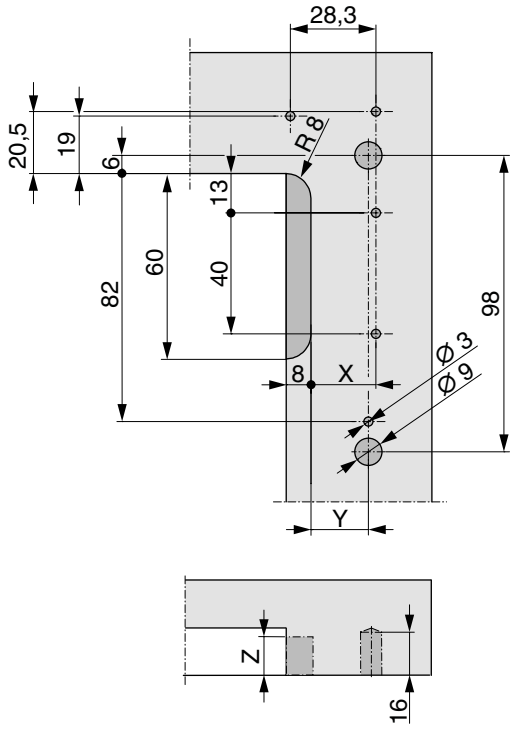
Drilling-holes, routing pattern

Drilling-hole pattern MULTI MAMMUT scissor stay hinge 12 mm air gap



	X	Y
18 Ü	21,5	19
20 Ü	23,5	21

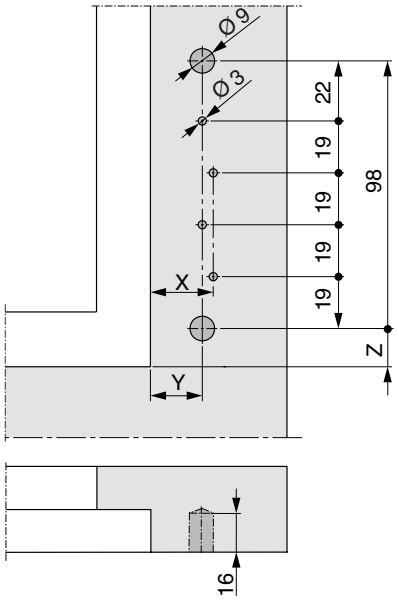
Drilling and routing pattern MULTI MAMMUT scissor stay hinge 4 mm air gap (12 mm air gap at top)



	X	Y
18 Ü	21,5	19
20 Ü	23,5	21

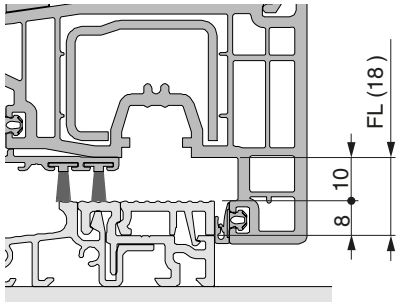
	Z
9 V	20
13 V	24

Drilling-hole pattern MULTI MAMMUT PVC pivot post 12 mm

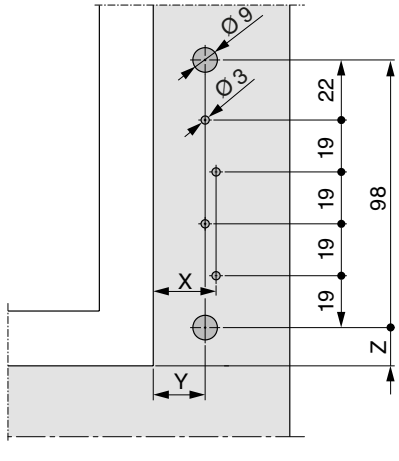


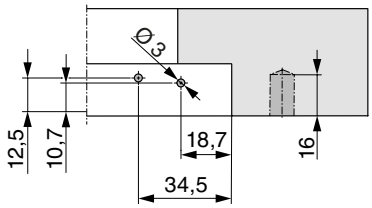
	X	Y	Z
18Ü	23	19	14
20Ü	25	21	14

Threshold	Z
12L	33
14L	35 (33 + 2 mm)
18L	39 (33 + 6 mm)



Drilling-hole pattern MULTI MAMMUT timber pivot post 12 mm air gap

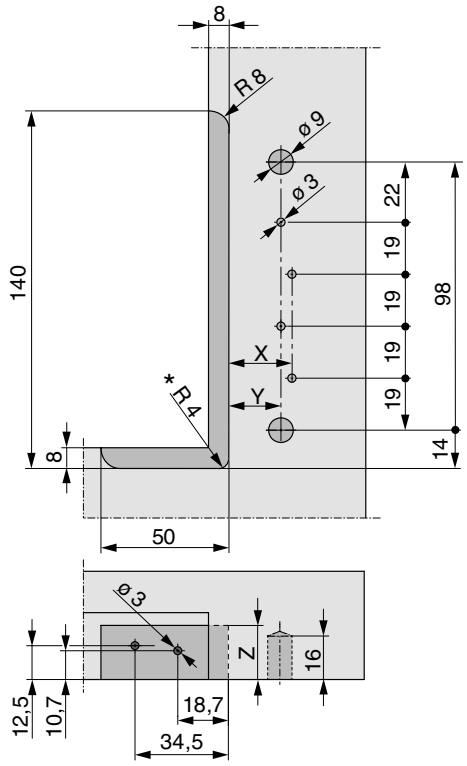




	X	Y
18Ü	23	19
20Ü	25	21

Threshold	Z
12L	14
14L	–
18L	–

Drilling and routing pattern MULTI MAMMUT pivot post 4 mm air gap



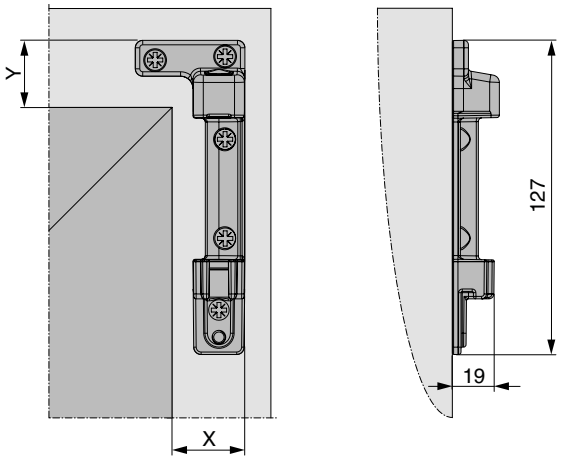
	X	Y
18 Ü	23	19
20 Ü	25	21

Caution:
Required in corner area R4!

	Z
9 V	20
13 V	24

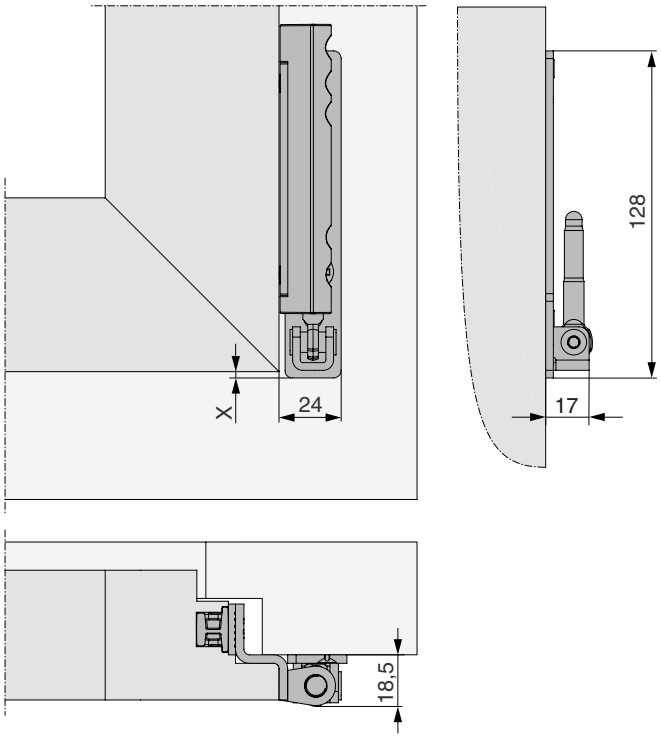
Clearances

MULTI MAMMUT scissor stay hinge



	X	Y
18 Ü	25	21
20 Ü	23	19

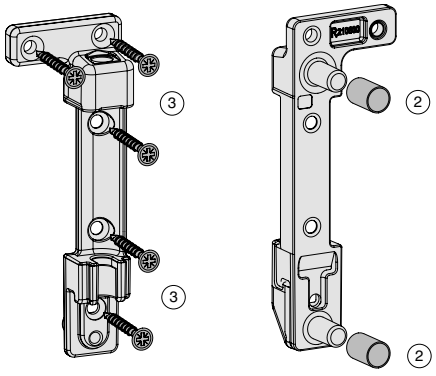
MULTI MAMMUT pivot post



	X
18 Ü	3
20 Ü	1

MULTI MAMMUT scissor stay hinge assembly

DANGER!
The bearing parts must be screwed in place in accordance with the requirements of the TBDK guideline (Gütegemeinschaft Schlösser und Beschläge [quality assurance association for locks and hardware] www.schlossindustrie.de) / EN 13126-8.

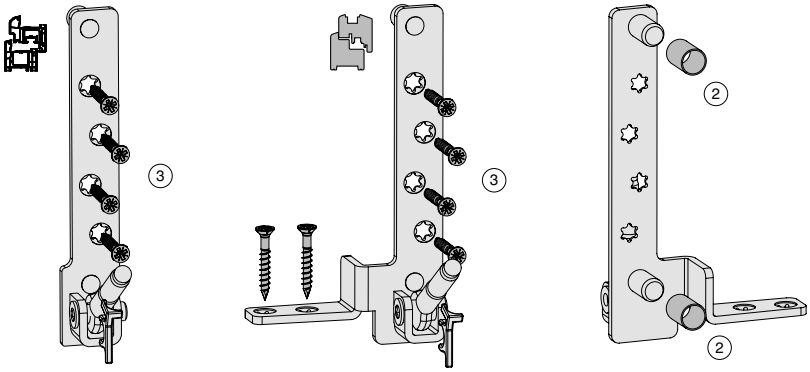


① Do not screw the scissor stay hinge in place until the striker plates have been installed, otherwise the jigs cannot be applied!

② When using a 10 mm drill, attach the clip-on bushes (Item No. 362336).
Caution: The clip-on bush must be used for each support pin! Two pieces per bearing part!

③ Insert the scissor stay hinge and screw tightly with five screws. Vertical screw fixings must go through the reinforcement on PVC profiles (exept screw in corner)!

MULTI MAMMUT pivot post assembly



① Do not screw the pivot post in place until the striker plates have been installed, otherwise the jigs cannot be applied!

② When using a 10 mm drill, attach the clip-on bush (Item No. 362338).
Caution: The clip-on bush must be used for each support pin! Two pieces per bearing part!

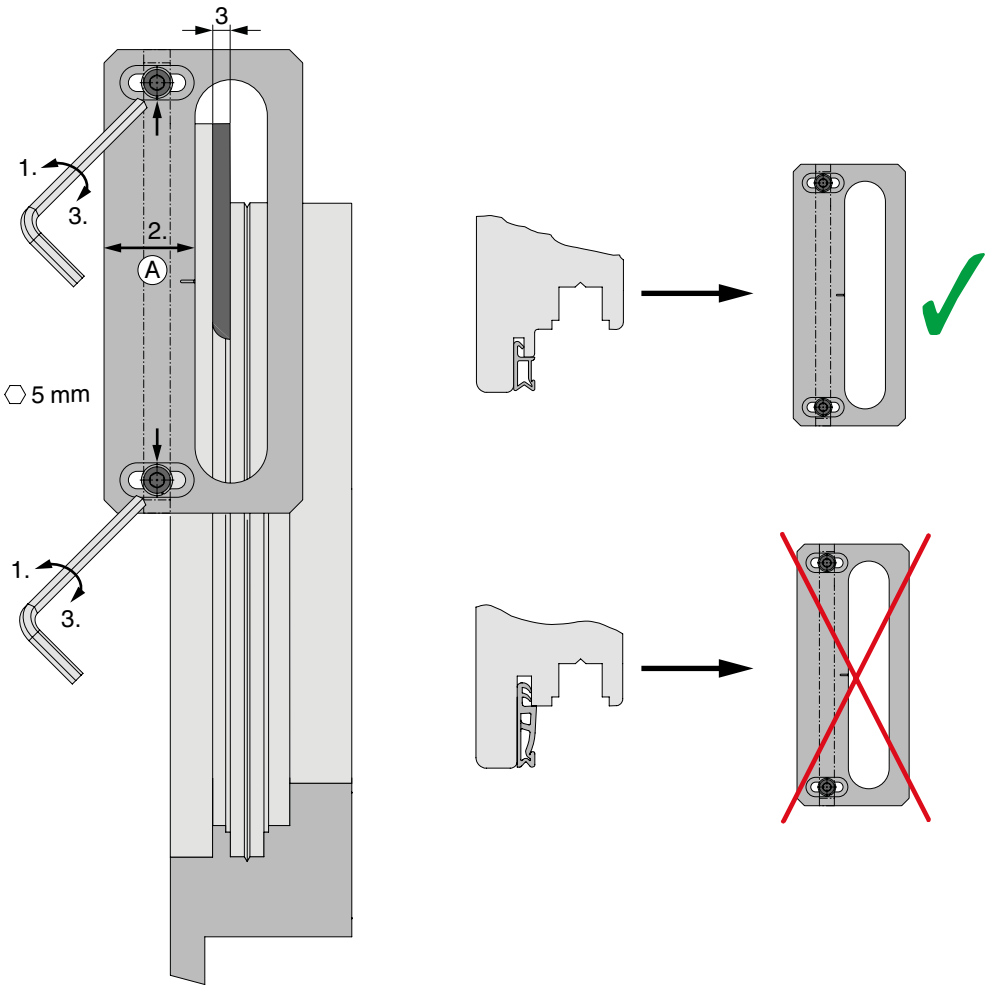
③ Insert the pivot post and screw tightly with four/six screws. Vertical screw fixings must go through the reinforcement on PVC profiles.

Installing the hardware components on the sash

Adjusting the milling jig

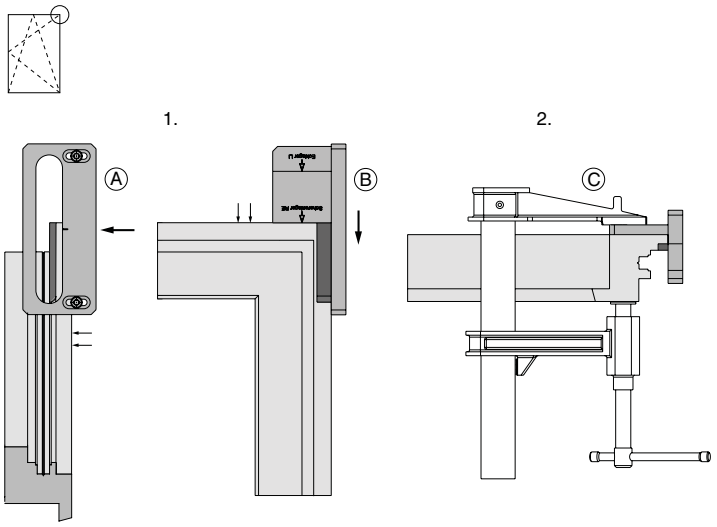
Milling jig for corner support and rebated scissor stay support arm (Item No. 213099)

IS NOT REQUIRED ON PROFILES WITH LARGER REBATE LEG GASKET!



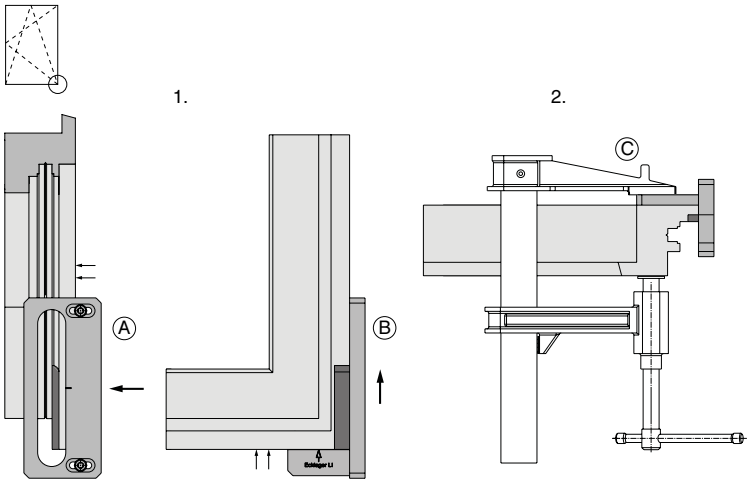
1. Unscrew the screws of the arm fixing bracket Ⓐ.
2. Set the arm fixing bracket so that 3 mm is milled off the sealing side of the rebate leg with a Ø 27 mm copy ring and Ø 16 mm cutter.
3. Tighten the screws again.

Milling with jig – rebated scissor stay support arm scissor stay/turn-only hinge - frame part



1. Place milling jig (Item No. 213099) with milling opening on rebate leg face side Ⓐ and slide until the "scissor stay hinge" marking is touching the rebate leg edge Ⓑ.
2. Fix the milling jig with a C-clamp Ⓒ.
3. Perform routing with router and Ø 27 mm copy ring. For milling depth/width on the rebate leg, see the "Rebated scissor stay support arm scissor stay/turn-only hinge - sash part" routing pattern on the following page.

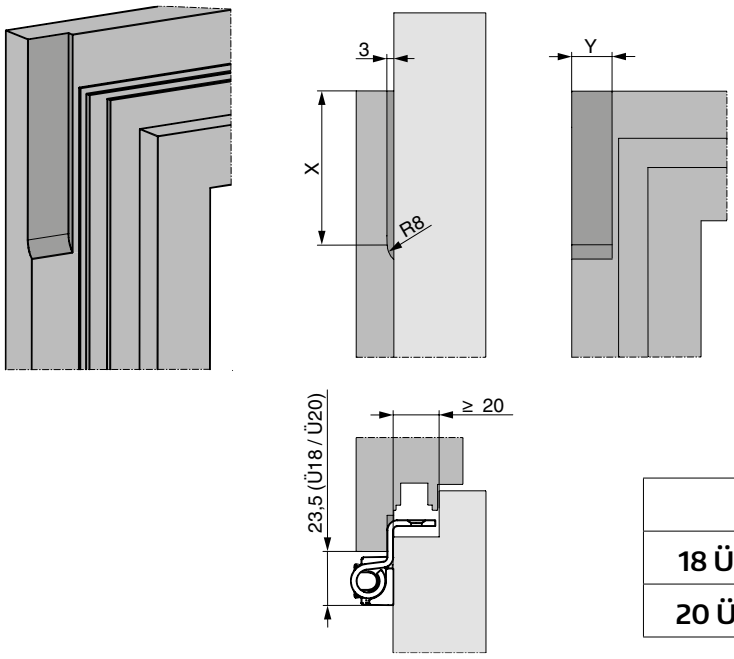
Milling with jig – pivot post corner hinge



1. Place milling jig (Item No. 213099) with milling opening on rebate leg face side Ⓐ and slide until the "pivot post" marking is touching the rebate leg edge Ⓑ.
2. Fix the milling jig with a C-clamp Ⓒ.
3. Perform routing with router and Ø 27 mm copy ring. For milling depth/width on the rebate leg, see the "Rebated scissor stay support arm corner support" routing pattern on the following page.

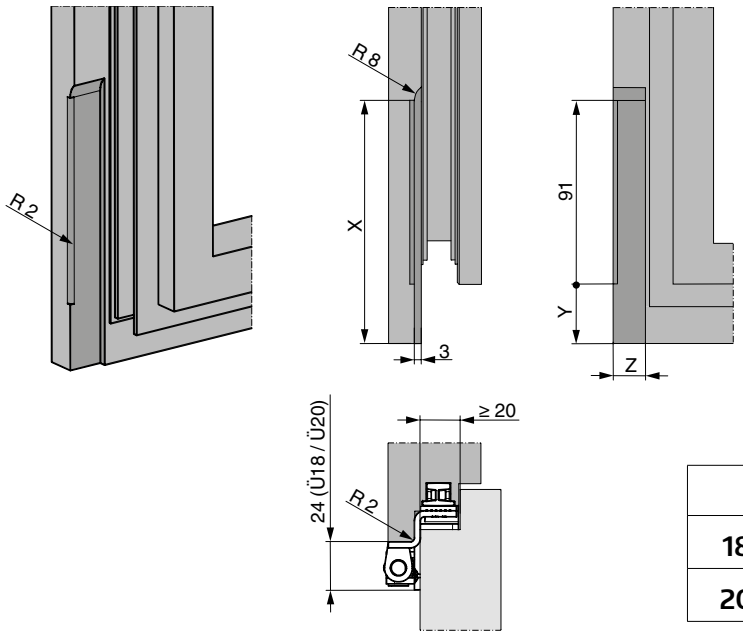
Routing pattern

MULTI MAMMUT rebated scissor stay support arm scissor stay/turn-only hinge - frame part



	X	Y
18 Ü	67	15,5
20 Ü	69	17,5

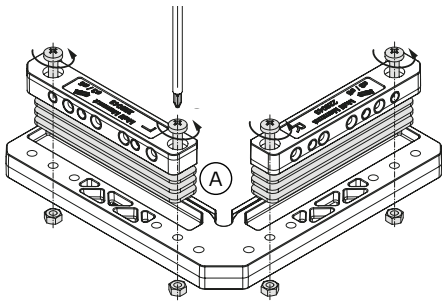
MULTI MAMMUT rebated scissor stay support arm pivot post



	X	Y	Z
18 Ü	120	29	15,5
20 Ü	122	31	17,5

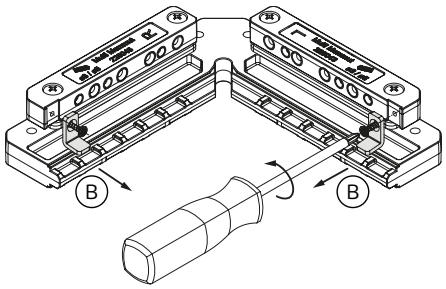
Adjusting the drilling jig

Milling jig for MULTI MAMMUT PVC corner support (Item No. 228043)

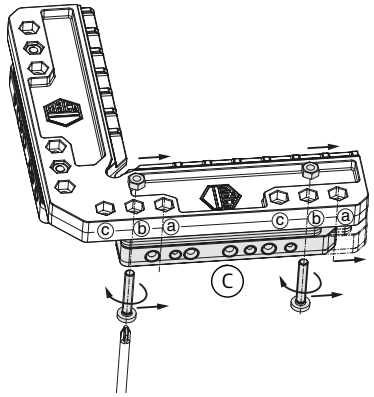


1. **Gasket compression:**
   Adjustment through different packer heights Ⓐ
   (7 mm = standard).

   (Set with packers available under Item No. 104941)

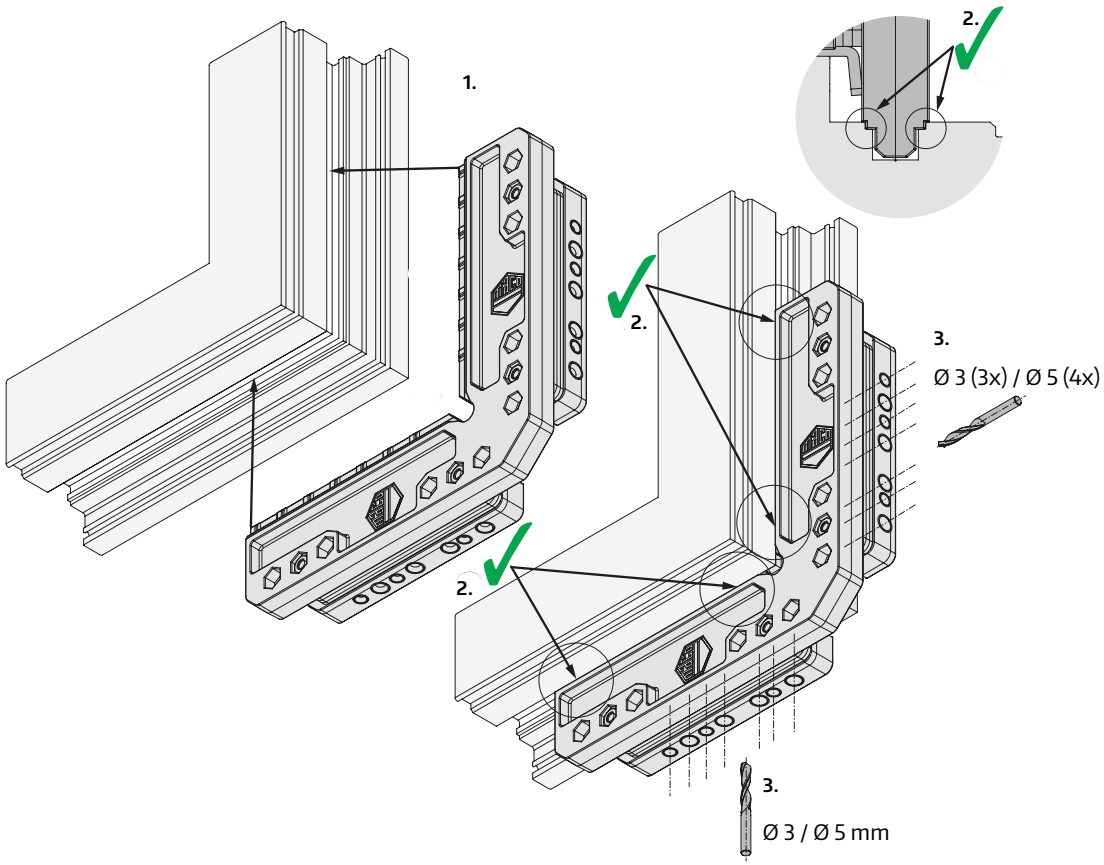


2. **Rebate leg:**
   Ü20 = standard setting.
   Remove corner bracket Ⓑ for larger rebate legs.
   Maximum rebate leg = 22 mm.



3. **Drill template position:**
   (Frame profile/thresholds)
   MULTI MAMMUT drill template Ⓒ in position:
   ⓐ = threshold
   ⓑ = frame profile (standard)
   ⓒ = spare

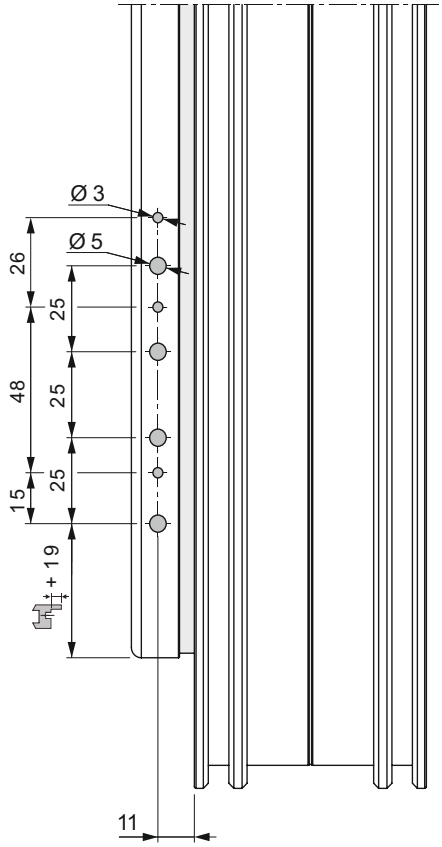
Using the drilling jig



1. Place the drilling jig (Item No. 228043) in the Eurogroove.
2. Check the position of the jig in the Eurogroove (apply across the entire length).
3. Pre-drill with Ø 3 or 5 mm (see drilling-hole pattern).

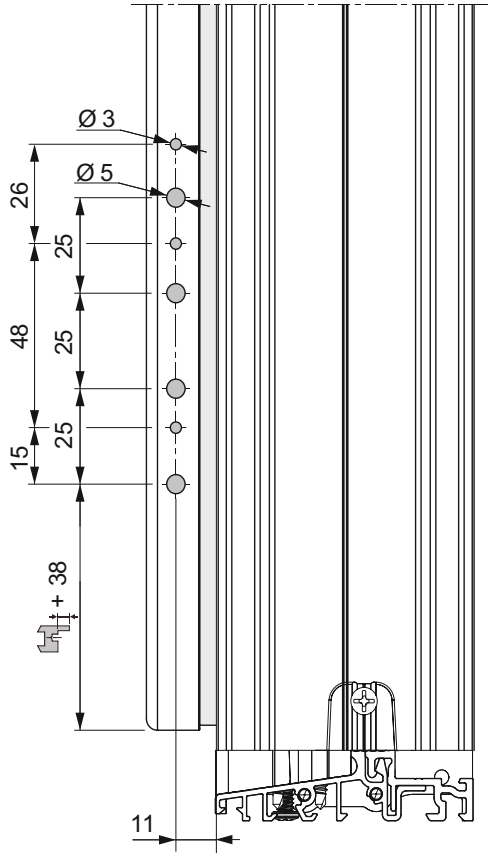
Drilling-hole pattern

Corner support MULTI MAMMUT with circumferential frame profil



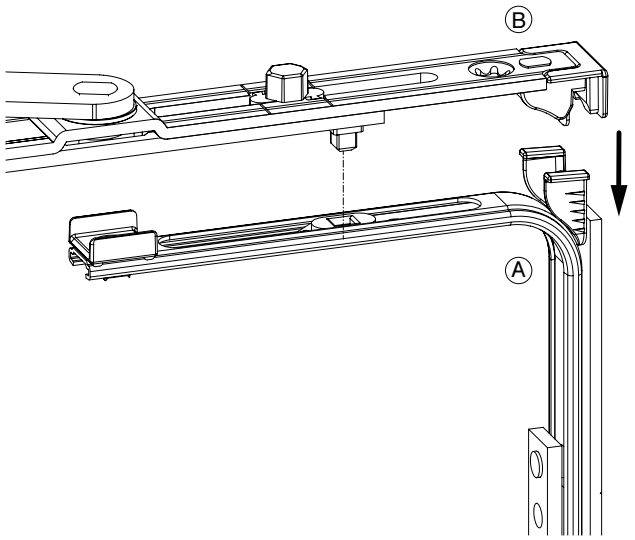
Drilling-hole pattern

Corner support MULTI MAMMUT with treshold



Assembly of the fitting parts

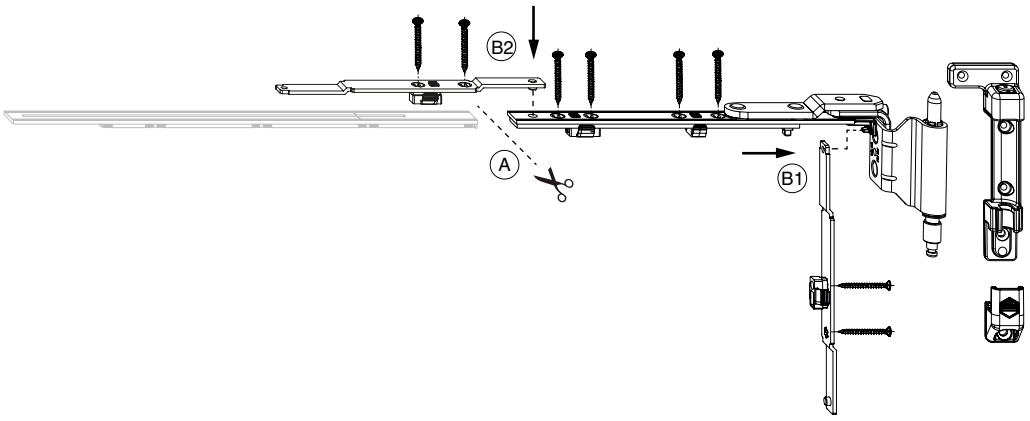
Assembly MULTI MAMMUT rebated scissor stay/croppable turn-only hinge - sash part



1. Gently lift the scissor stay arm upward and swing out.
2. Clip the vertical corner element Ⓐ in the rebated scissor stay* Ⓑ and place together in the Eurogroove and screw tightly into place.

* In the case of scissor stay size 670, first insert and screw the corner element into the groove base!

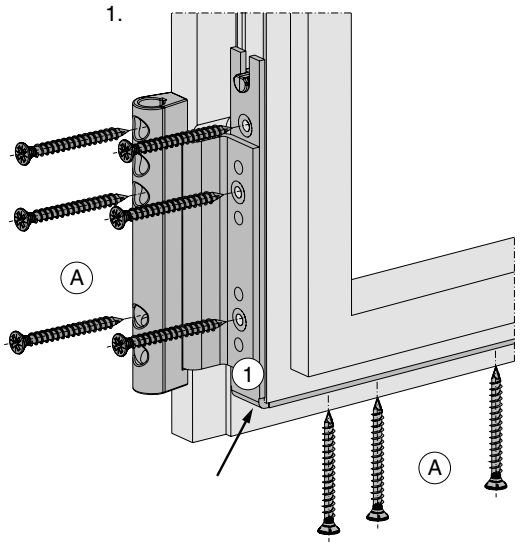
Assembly MULTI MAMMUT fixed turn-only hinge - sash part with faceplate extension



1. Crop the turn-only hinge - sash part Ⓐ to the notch marking (216 mm).
2. Vertically insert the faceplate extension Ⓑ1 (Item No. 202867) and place in the Eurogroove together with the turn-only hinge - sash part and screw tightly into place.
3. Horizontally insert the faceplate extension Ⓑ2 (Item No. 202867) and screw tightly into place.

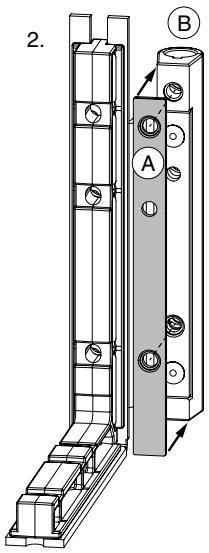
Assembly MULTI MAMMUT rebated corner support

DANGER!
The bearing parts must be screwed in place in accordance with the requirements of the TBDK guideline (Gütegemeinschaft Schlösser und Beschläge.[quality assurance association for locks and hardware] www.schlossindustrie.de) / EN 13126-8.



1. Place the rebated corner support in the Eurogroove and screw tightly into place with nine screws Ⓐ at least Ø 4 x 25 mm .

Optional:

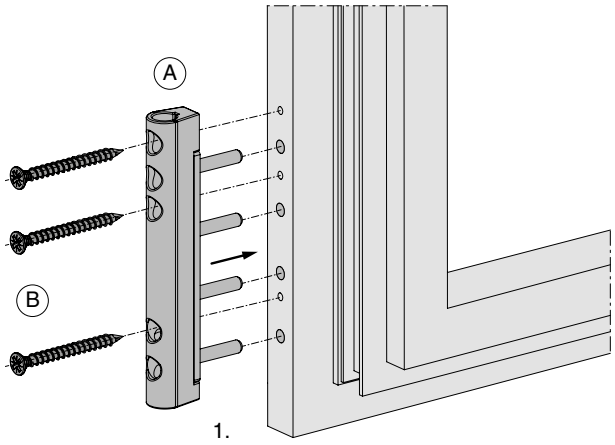


1. The packer Ⓐ (Item No. 363306 = 2 mm, Item No: 363307 = 3 mm) is used with the rebated corner support Ⓑ to adjust it to different rebate leg dimensions.

Assembly of Corner Support PVC MULTI MAMMUT

DANGER!
The bearing parts must be screwed in place in accordance with the requirements of the TBDK guideline (Gütegemeinschaft Schlösser und Beschläge [quality assurance association for locks and hardware] www.schlossindustrie.de) / EN 13126-8.

CAUTION!
The fastening at the rebate leg must go through at least two profile walls!
Be sure to select screws for fastening that do not have a cylindrical shaped head, since this would otherwise produce a friction point between the screw and the pivot post bolt.

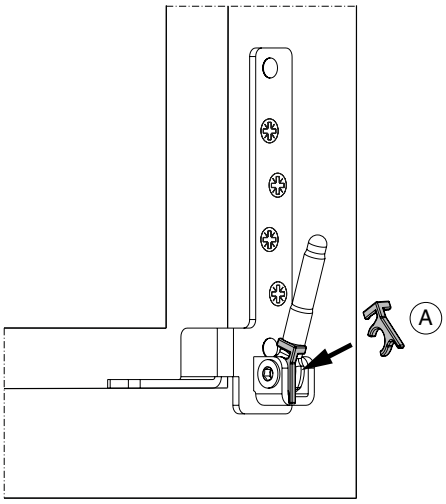


1.

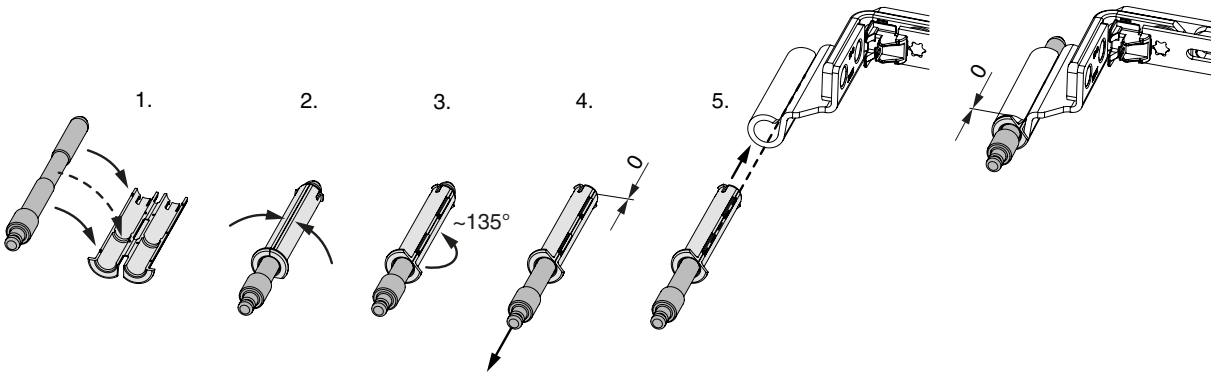
1. Insert the Corner Support Ⓐ in the holes and screw tight with the three, longest possible screws Ⓑ.

Hinging the sash (turn-only and turn&tilt sash)

Hinging the sash (turn-only and turn&tilt sash)



1. Attach the insertion tool Ⓐ to pivot post pin and hinge the sash at a 90° opening angle in the pivot post.

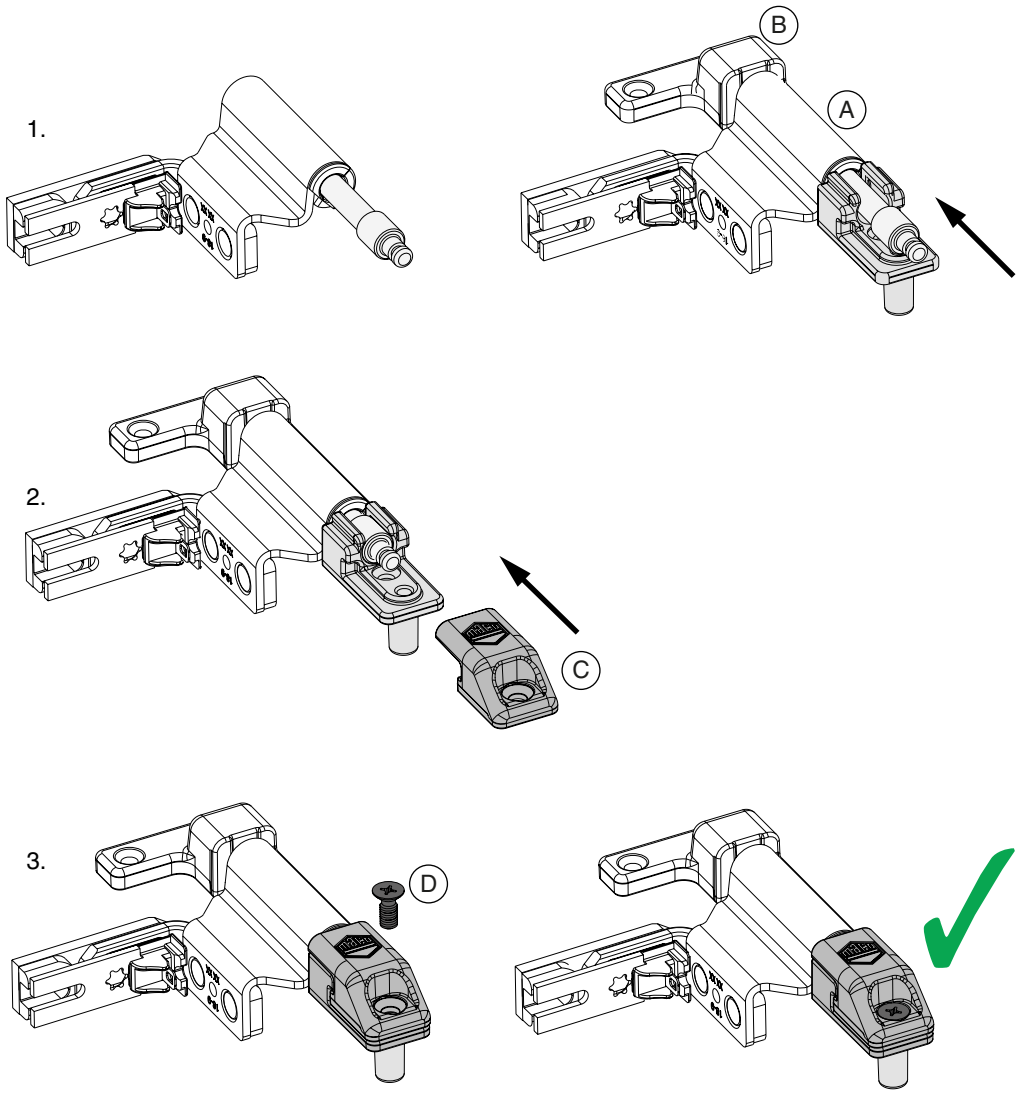


1. Place the scissor stay hinge pin in the correct position in the PVC sleeve.
2. Close the PVC sleeve.
3. Turn the PVC sleeve into the assembly position (observe the flat area on the collar).
4. Pull the scissor stay hinge pin out of the PVC sleeve as far as it will go.
5. Slide the PVC sleeve as far as it will go into the rebated scissor stay support arm roll.

Hinging the sash (turn-only and turn&tilt sash)

DANGER!
Failure to comply may lead to the sash falling out!
This could result in personal injury or damage to property!

DANGER!
If the scissor stay hinge pin lock or countersunk screw are missing, the window sash must not be mounted because the sash could fall out when opening!
This could result in personal injury or damage to property!

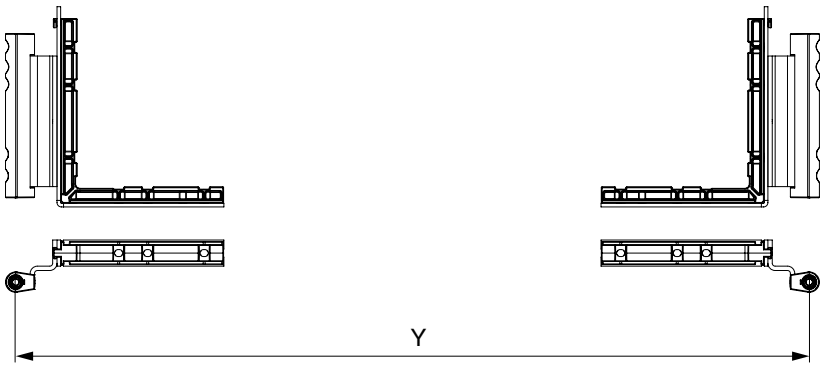


1. Hinge the rebated scissor stay support arm with scissor stay hinge pin Ⓐ in the scissor stay hinge Ⓑ and push the scissor stay hinge pin upwards.
2. Push the scissor stay hinge pin lock Ⓒ as far as it will go in the scissor stay hinge.
3. Fix the scissor stay hinge pin lock Ⓒ with the countersunk screw Ⓓ.

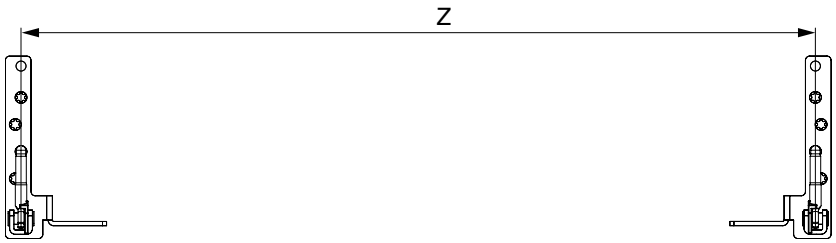
   The scissor stay hinge pin lock safety device (Article No. 364675) and the countersunk screw (Article No. 364676) are also available individually!

Hinging the sash (tilt-only sash 250 kg)

1. Check the air gap before hinging the sash:
   First measure the dimension Y on the sash.



   Then check the dimension Z on the frame.



DANGER!
If not observed, the sash can fall out.
Non-compliance can result in personal injury or material damage.

If dimension Z does not match dimension Y, the pivot post pins must be adjusted to dimension Y. This adjustment must never only be made on just one side, as otherwise the air gap on the left side would be larger or smaller than that on the right side. This is prevented by adjusting both pivot posts.
The adjustment must be made to the same extent inwards or outwards. This is the only way to ensure that the air gap is the same on the left and right.

2. Place the sash on BOTH pivot posts AT THE SAME TIME.
3. Put the sash into the frame. The scissor stay hinge bolts must run freely in the scissor stay hinge. Otherwise, this must be enabled using the side adjustment of the scissor stay.
4. **Then the scissor stay hinge pin lock must be fitted on both sides.**

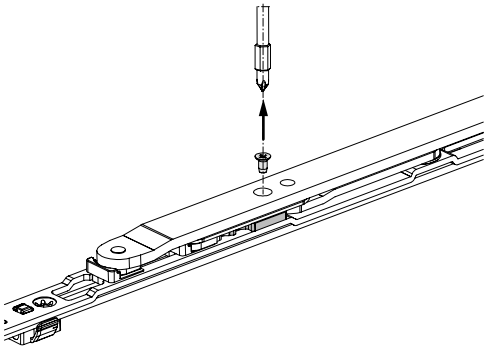
Hinging the sash (tilt-only sash 250 kg)

DANGER!
If not observed, the sash can fall out. Non-compliance can result in personal injury or material damage.

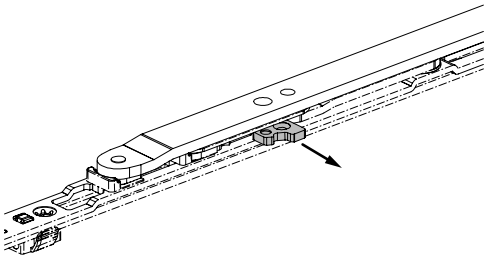
Inserting the tilt-only sash:

The sash must be hinged/unhinged by several people or using suitable aids (lifting gear) according to the size and weight.

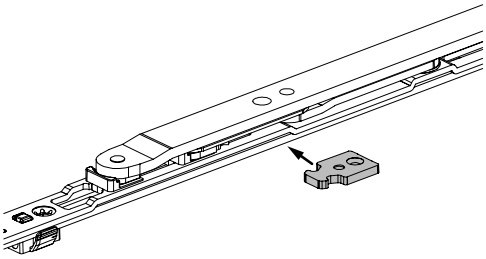
Replacement – anti-slam device/scissor stay restrictor



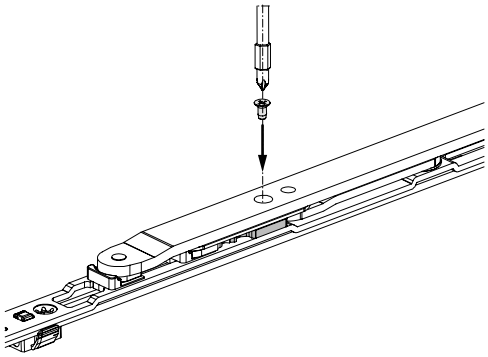
1. Unscrew the screw.



2. Pull the anti-slam device heavy (Item No. 368075 = delivery state) out laterally.

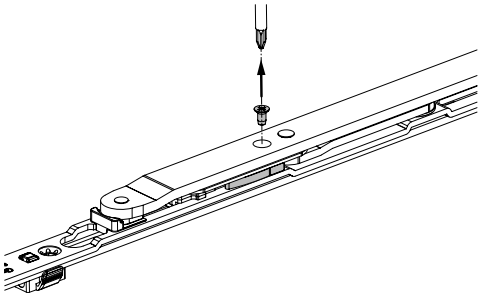


3. Insert the anti-slam device light (Item No. 368076) or scissor stay restrictor (Item No. 368077).

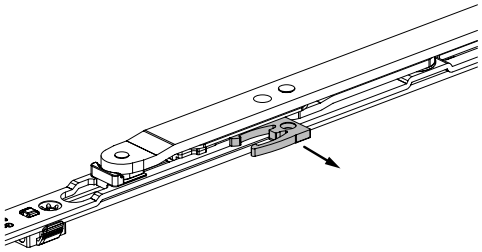


4. Screw the anti-slam device/scissor stay restrictor in place.

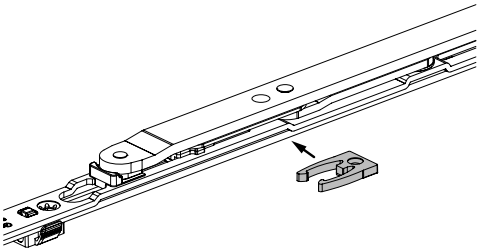
Replacement – anti-slam device/scissor stay restrictor



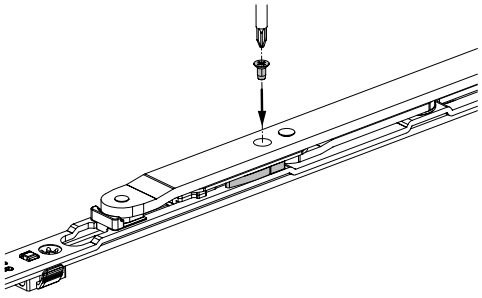
1. Release screw.



2. Remove anti-slam device sideways.



3. Insert anti-slam device.

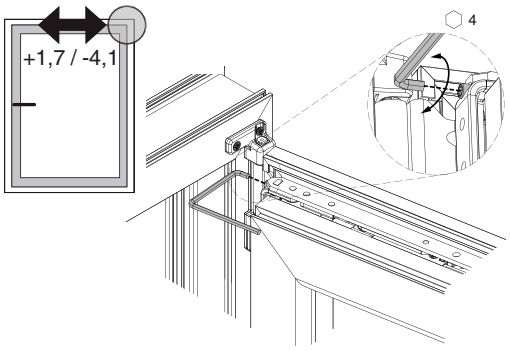


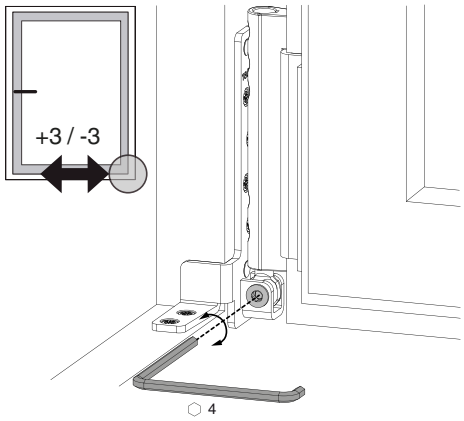
4. Screw in anti-slam device.

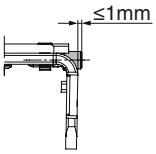
Settings – pivot post and scissor stay hinge

Side adjustment

DANGER!
The side adjustment of the scissor stays up to version 2 requires the use of feeler gauge Item No. 468684 to ensure that the minimum adjustment measurement is met.

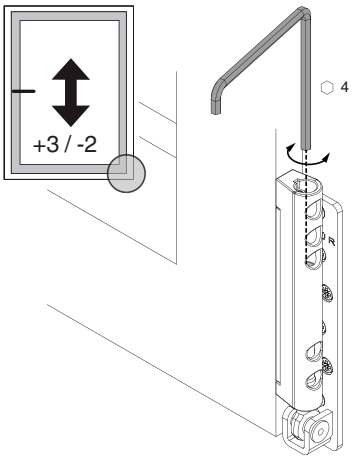




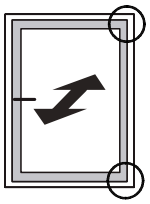


The adjustment screw may only protrude by max. 1 mm.

Height adjustment



The gasket compression



The gasket compression settings on the pivot post and scissor stay hinge are made via the centre lock or compression device in the immediate vicinity of the pivot post/via the vertical corner element on the rebated scissor stay.

Setting – tilt-only sash 250 kg

Side adjustment

Side adjustment can only be carried out on the pivot posts when the sash is unhinged.

Side adjustment can only be carried out on the scissor stays when the scissor stays are unhinged.
The scissor stay hinge bolts must always run freely in the scissor stay hinges!

DANGER! **The scissor stay may only be unhinged for the adjustment period.**
The sash must be secured from falling out during the adjustment work.

Height adjustment

During all adjustment work, ensure that the weight only ever rests on the pivot posts.
The scissor stays/scissor stay hinges must only be subjected to the weight of the tilted unit.

Gasket compression setting

(See previous page)

DANGER! **During all adjustment work, ensure that the weight only ever rests on the pivot posts.**
The scissor stays/scissor stay hinges must only be subjected to the weight of the tilted unit.

Maintenance instructions

All maintenance information can be found in the maintenance and adjustment instructions, Order No. 757070.

Notes for security windows according to EN 1627

Security windows according to the European standard must be constructed according to precisely defined specifications. You can find more information on our website (www.maco.eu) or from our expert advisors.

Notes

Notes

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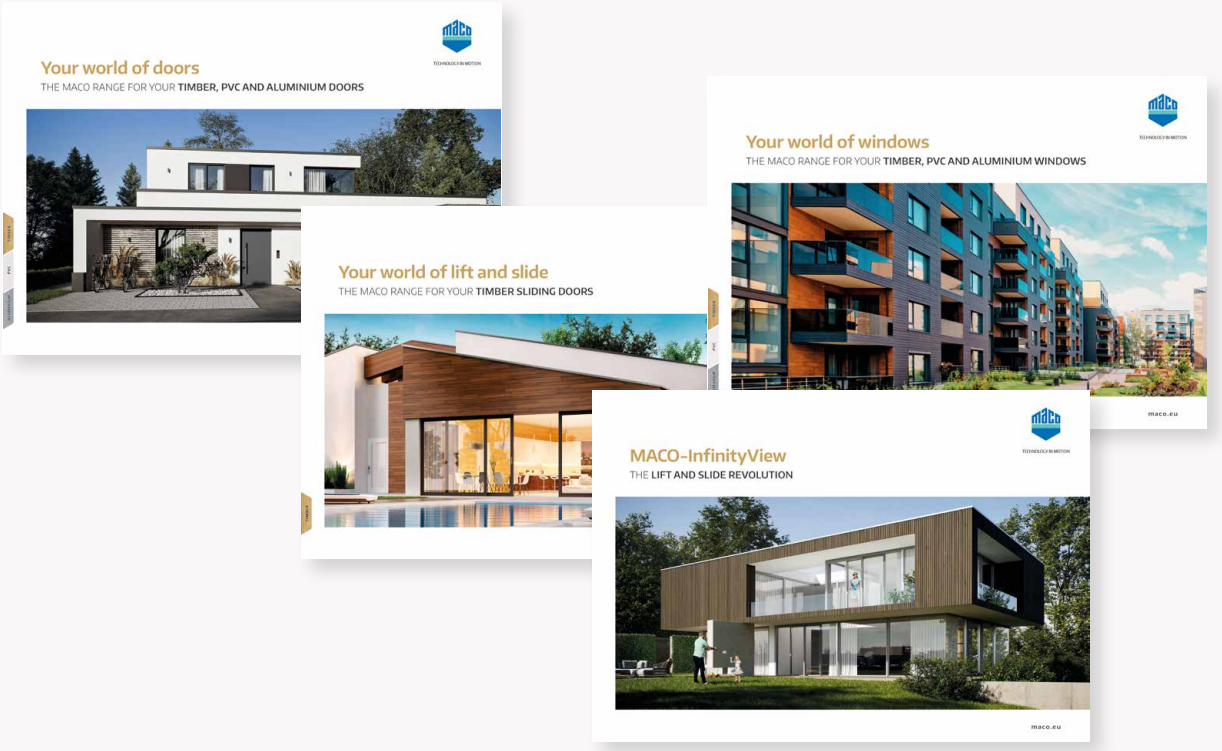
We provide you with complete solutions for sliding doors, windows and doors - for timber, PVC and aluminium. Experience our versatile system offer, comprehensive service included. Discover more of this on our website **www.maco.eu** or contact your MACO representative.



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