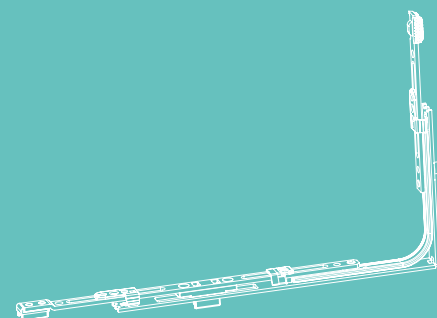
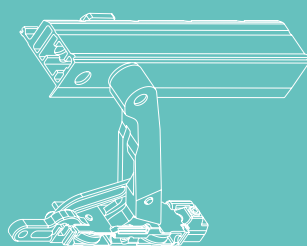
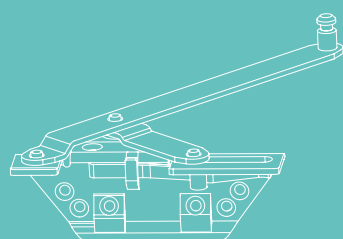




TECHNOLOGY IN MOTION

# MACO RAIL-SYSTEMS

SLIDE & TILT HARDWARE



## ASSEMBLY INSTRUCTIONS

12 Air Self-locking

**Exclusively for certified specialists!**

# Table of contents

<b>Important Information</b>	<b>4 - 11</b>
<b>Key and Abbreviations</b>	<b>12</b>
<b>Version and Application Areas</b>	<b>13 - 14</b>
<b>Parts overview</b>	<b>16 - 17</b>
<b>Preparation of sash frame</b>	<b>18 - 19</b>
Drive gear fixed	18
Drive gear lockable	19
<b>Cutting to length and Central Locking assembly</b>	<b>20 - 21</b>
<b>Sash assembly</b>	<b>22 - 25</b>
Stay-connecting profile for tilt stay assembly	22
Handle assembly	22
Scissor slider on drives assembly	23
Connecting rod assembly	24
Assembly of connecting rod	25
<b>Frame assembly</b>	<b>26 - 29</b>
Striker plate assembly	26 - 27
Guide track and roller track assembly	28 - 29
<b>Sash and frame assembly - tilt stay</b>	<b>30 - 32</b>
Tilt stay assembly in guide track	30
Hinging the sash with tilt stay	31
Cover cap, stay connecting profile, tilt stay assembly	32



<b>Sash and frame assembly scissor slider</b>	<b>33 - 34</b>
Hinging sash with scissor slider	33 - 34
<hr/>	
<b>Sash and frame assembly</b>	<b>35 - 38</b>
Guide block assembly	35
Horizontal sash orientation	36
Sash pressure adjustment	37
Buffer stop assembly	37
Cover cap assembly	38
<hr/>	
<b>Cross-sections</b>	<b>39 - 42</b>
Opening width 125	39
Upper vertical cross-section tilt stay	40
Upper vertical cross-section scissor slider	41
Lower vertical cross-section	42
<hr/>	
<b>Scheme C</b>	<b>43 - 44</b>
Guide track assembly	43 - 44
<hr/>	
<b>Frame assembly</b>	<b>45 - 46</b>
Strike plate assembly Scheme C	45 - 46
<hr/>	
<b>Scheme C</b>	<b>47</b>
Horizontal cross-sections	47

# Important Information

## General Information

The current version of our General Terms & Conditions can be found on the MACO website ([www.maco.eu/en-INT/Terms-and-conditions](http://www.maco.eu/en-INT/Terms-and-conditions)). Retain these assembly instructions for later use and maintenance.

Failure to comply with these assembly instructions releases MACO from any liability. Please note your obligation to inform your customer regarding the operation and maintenance of the system as well as all safety related information.

**MACO as a customer-oriented and service-oriented company offers you the "Operating and Maintenance Instructions for SKB Standard, Self-locking, Positive Control and PAS END USER" (Order number 757956) and "Maintenance and setting instructions for SKB Standard, Self-locking, Positive Control and PAS SPECIALIST" (Order number 757961) for passing on to end customers. You can find the documents in the download area on [www.maco.eu](http://www.maco.eu). Please hand over the user manual to the end user and ensure they are briefed.**

## Target Group

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

## Certification

The MACO hardware mentioned in the assembly instructions are tested and regularly monitored in standardised tests in accordance with EN 13126. The achieved Class H3 standard does not refer to your individual element system. Due to a wide range of influencing factors, individual element systems may experience minor deviations from standardised testing, such as:

- › the influence of processing tolerances
- › the effect of assembly tolerances after installation of the element in the building envelope
- › the use of accessories (e.g. weather seals, seal rails, handles, etc.)
- › the use of attachments (e.g. Aluminium shells, sun protection on the sash, insect protection)
- › environmental influences (e.g. humidity, sunlight, high or low temperatures, temperature fluctuations, etc.)
- › room-side influences (moisture, aggressive cleaning agents, etc.)

## Important Information

### General Safety Information

It is important to follow these instructions to ensure people's safety!

When reading this document and the safety instructions, please note the following signs and colours:



This indication indicates a situation that may arise if the instructions are not followed and which can lead to fatal injuries.



This indication indicates a situation that may arise if the instructions are not followed and which can lead to fatal and/or serious injuries.



This indicates a situation that may arise if the instructions are not followed and which can lead to minor injuries.



This note indicates important additional information that is relevant to the error-free assembly / function of the product.

Please pay attention to the VHBE guideline (hardware for windows and balcony doors) of the Gütegemeinschaft Schlösser und Beschläge e.V. (quality assurance association for locks and hardware). This guideline describes all safety-relevant topics for end users for window and balcony door hardware.

# Important Information

## General Safety Information



### **WARNING!**

In order to ensure the long-term functionality and thus the operating safety of windows and balcony doors over their expected service life, the fastening of safety-relevant hardware parts is of particular importance.

MACO indicates explicitly that large sash weights are moved and accelerated during opening and closing. This applies particularly to sliding elements. It is at the discretion and the responsibility of the respective manufacturer (window builder), installers and dealers of windows and balcony doors, in particular of lift&slide doors, to offer corresponding movement restrictors or similar.

Incorrect assembly can lead to serious injuries. The installation must be carried out by personnel who have been instructed according to the state of the art and recognised rules of technology.

Due to overuse or improper operation of the slide and tilt hardware, the sash may jump out of its guide rails, fall out and thereby cause serious injuries.

Due to the high weight of the element, always pay attention to the correct securing of the element during manufacture, transport and assembly on the construction site.



### **ATTENTION!**

If under special circumstances (use in schools, kindergartens, etc.), it is to be expected that the sliding element could be overstressed, this must be prevented by appropriate measures such as moving the stop buffers to reduce the opening width.

Improper handling may lead to crushing. Ensure users are aware of the risk in case of improper handling. This applies particularly to customers with small children.

Injuries may occur in the event of improper handling, in particular if persons or parts of the body are between the frame and the sash when closing or between the sash and the reveal or adjacent components.



## Important Information

### **Note:**

These instructions describe all assembly steps required to set up standard version hardware. The hardware must be greased/oiled before commissioning (see operating and maintenance instructions).

The slid and tilt hardware (SKB) are only intended for use in stationary buildings. They are used for horizontally opening and closing windows and balcony doors. The slide and tilt elements must be installed perpendicular and never in an inclined position.

Handle position middle (1/2 SRH). With a handle position below 1/2 SRH, operational comfort may be affected.

# Important Information

## Intended use

The areas of application mentioned on page 13 apply to the MACO SKB hardware. Screw-in torque settings are binding and must be followed.

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

To fasten the hardware, use the specified screw sizes! These must reach into the steel reinforcement when using PVC profiles.

Be sure to follow the profile manufacturer's processing policy.

The hardware may not be used for timber with aggressive content / surface treatments.

The hardware parts described in these assembly instructions are made of colourless passivated steel and sealed in accordance with DIN EN 12329. They must not be used in environments with aggressive, corrosive air content. If you are not sure, please ask your MACO contact person for advice.

The hardware manufacturer shall not be liable for any malfunctions or damage to the hardware or to the windows or balcony doors equipped with them, if they are subject to use of third-party hardware, inadequate tendering, failure to comply with the installation rules or application diagrams.

The fabricator is responsible for compliance with the functional dimensions specified in these assembly instructions as well as for flawless hardware assembly and secure fastening of all components.

In order not to affect the lightness of the hardware, turn the screws straight (unless otherwise indicated) and do not over-tighten!

Fix the screws of the supporting components (e.g. rollers, roller rail and guide rail) in the reinforcement profile.

With the spacer-block setting, observe the technical guideline No. 3 of the glazier trade "Blocking of glazing units".

Keep the roller track and all latches free from deposits and dirt to avoid damage to the hardware and ensure optimal functionality. In particular, protect the hardware from cement or plaster residues.

Do not make any constructive changes to the hardware parts.

Always close and lock the window and balcony door sash when windy or drafty. For the purposes of this definition, wind and draught are present if the window or window door sashes located in one of the opening positions are caused to move by air pressure or air suction of their own accord and uncontrollably open or close.



The resistance to wind loads in the closed and locked state depends on the respective construction of the windows and balcony doors. If wind loads in accordance with DIN EN 12210 (in particular test pressure  $p_3$ ) are to be expected, suitable hardware are to be selected and agreed on separately in conjunction with the respective window construction and the frame material.

The defined maximum sash weights for the individual hardware designs must not be exceeded. The component with the lowest permissible load capacity determines the maximum sash weight. Application diagrams and component mappings must be observed.

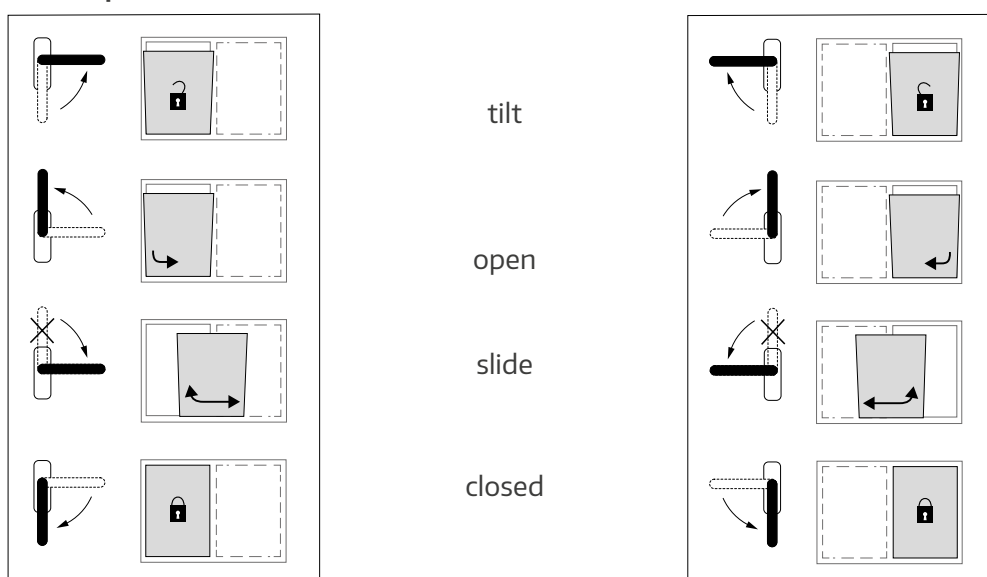
The hardware and the rebate spaces must be sufficiently ventilated, especially during the construction phase, so that they are not exposed to direct moisture or condensation.

The hardware are to be kept free of deposits and contamination by building materials (construction dust, gypsum plaster, cement etc.), therefore windows must be covered accordingly.

The hardware must only be cleaned or polished with mild, pH-neutral detergents in diluted form.

Attach the operating label in a clearly visible manner to the built-in lift and slide sash. The operating label is located in the basic box or in the "corner deflection" package.

### Handle positions



DIN EN 12519 left

DIN EN 12519 right

# Important Information

## **Improper use**

The respective hardware system may only be assembled with hardware components from the MACO slide hardware range. In the event of improper installation of the hardware and/or the use of non-original or non-factory approved system accessories, no liability will be accepted.

Do not use vinegar-based or acid-curing sealants, as these can lead to corrosion of the hardware parts. Further information on MACO surfaces can be found on our website [www.maco.eu](http://www.maco.eu) or in brochure Order No. 49510 (in the download area).

The lift and slide elements may only be surface treated before the hardware is installed. Any subsequent surface treatment may restrict the functionality of the hardware. In this case, no warranty claims against the hardware manufacturer shall be accepted.

Protect the hardware from damage by angular or sharp tools.

If you are not sure, please ask your MACO contact person for advice.



## Important Information

### Storage and Handling

Check the following immediately after delivery:

- › Completeness of delivery (as per the delivery note)
- › Any damage to the packaging
- › Any damage to the materials
- › Improper storage or transport of hardware parts can affect the surface quality. To prevent this, the following points must be observed:
  - › It must be ensured that the room air is permanently dry
  - › Major temperature fluctuations leading to condensation must be prevented. Condensation on hardware causes the galvanised surfaces to be attacked
  - › Avoid aggressive vapours from cleaning agents or assembly aids such as silicone and the like, even for a short time. Vapours from such substances can very quickly lead to corrosion of hardware
  - › Salty air polluted by trade and industry also leads to corrosion on galvanised surfaces and is also not suitable for storage areas.

### Transport










Finished elements must be stored and transported as follows:

- › Upright
- › Slip and tilt secured on suitable surfaces (e.g. G. transport frames)
- › Protected from dirt and damage
- › Avoid loads on mechanical connections!
- › Use special transport devices!

For intermediate storage outdoors:

- › ensure elements and hardware are covered or packaged

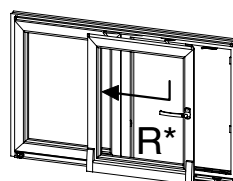
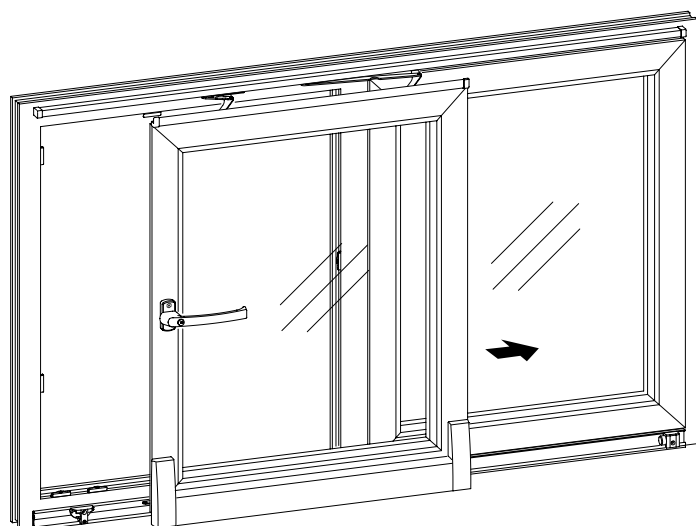
## Key and Abbreviations

	<b>FB</b>	Sash width (SW)
	<b>RAB</b>	Frame outer width (FOW)
	<b>RAH</b>	Frame outer height (FOH)
	<b>FFB</b>	Sash rebate width (SRW)
	<b>FFH</b>	Sash rebate height (SRH)
	<b>FFK</b>	Sash rebate edge (SRE)
	<b>FG</b>	Sash weight (SW)
	<b>OKFF</b>	Top edge finished floor (TEFF)
	<b>GM</b>	Handle height (HH)
	<b>DM</b>	Backset drive (BS)
	<b>Gr.</b>	Size (Sz.)
	<b>O</b>	optional (o)

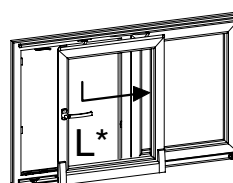
All dimensions without a unit definition are given in mm

## Version and Application Areas

### Version



Version on the right



Version on the left

The illustrations in this document show the version on the left.

To install the version on the right, the applied information must be mirrored.

### SKB Self-locking application area

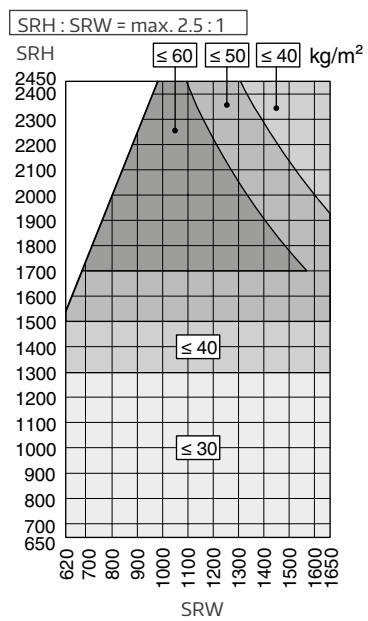
The limits of the areas of application listed here are binding and must not be deviated from. Observe the permissible application sizes, manufacturing specifications, and processing policies as set by the profile manufacturer.

Item	unit	area
Sash rebate width (SRW)	(mm)	620 - 1650
Sash rebate height (SRH)	(mm)	840 - 2450
Sash weight	(kg)	160
Burglary prevention		possible

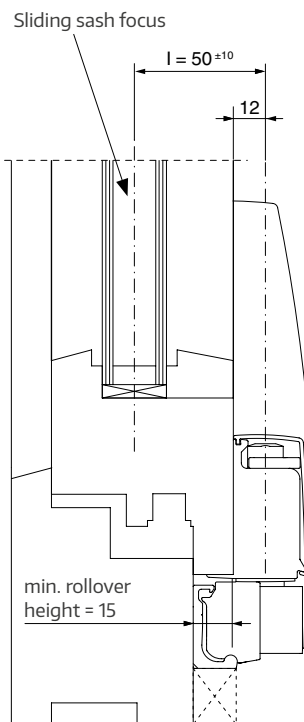
# Version and Application Areas

## Application Diagram

### Application 160 kg



valid for an I-value of 50<sup>±10</sup>



## Fixing screws for the hardware

These are not included. The length must be chosen according to the profile used.

Countersunk screws 4.0 x ... mm

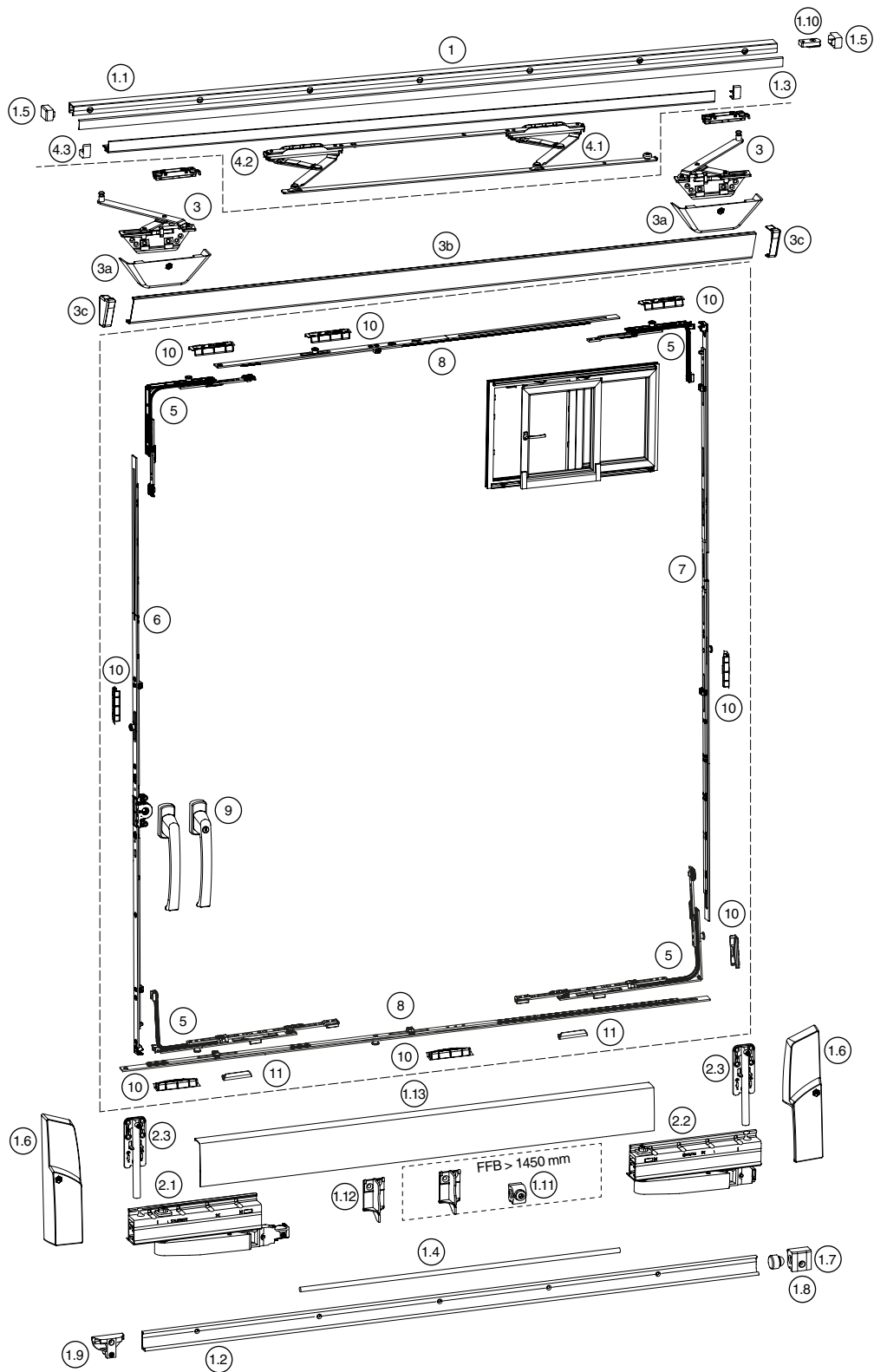
Countersunk screws 4.0 x ... mm, **Important:** head diameter 7 mm

Countersunk screws 4.8 x ... mm



## Notes

# Parts overview







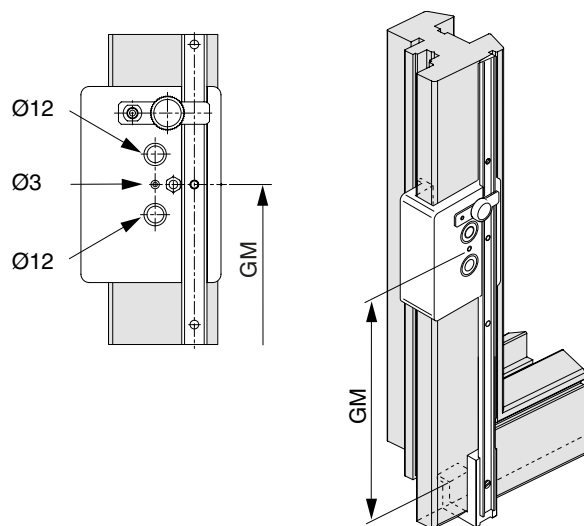
## Parts overview

- ① Pack of profile set
  - ①.1 Guide track
  - ①.2 Roller track
  - ①.3 Cover profile PVC
  - ①.4 Connecting rod
  - ①.5 Cover cap for guide rail
  - ①.6 Bottom cover cap
  - ①.7 Bottom buffer stop
  - ①.8 Rubber mushroom buffers
  - ①.9 Bottom guide block
  - ①.10 Top buffer stop
  - ①.11 Support buck
  - ①.12 Support part
  - ①.13 Cover profile
- ② Rollers pack SKB-S/SE
  - ②.1 Rollers 160 kg with guide
  - ②.2 Rollers 160 kg without guide
  - ②.3 Reinforcement part
- ③ Pack of adjustable scissor sliders SKB S/SE
  - ③a Adjustable cover caps for scissor slider SKB-S/SE
  - ③b Adjustable track cover for scissor slider SKB-S/SE
  - ③c Adjustable cover cap for track cover scissor slider SKB-S/SE
- ④ Pack of tilt stays and track cover
  - ④.1 Tilt stay
  - ④.2 Stay-connecting profile
  - ④.3 Cover cap for stay-connecting profile
- ⑤ Packs of corner elements
- ⑥ Drive gear
- ⑦ Height connectors
- ⑧ Width connectors
- ⑨ Handles
- ⑩ Striker plate
- ⑪ Locking plate

# Preparation of sash frame

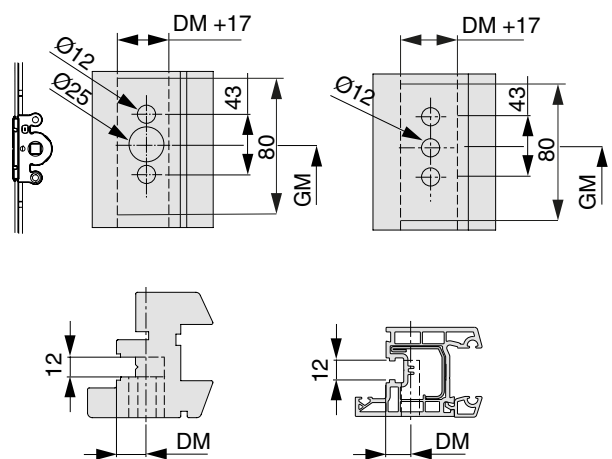
## Drive motor fixed

Article number: 10523



Timber

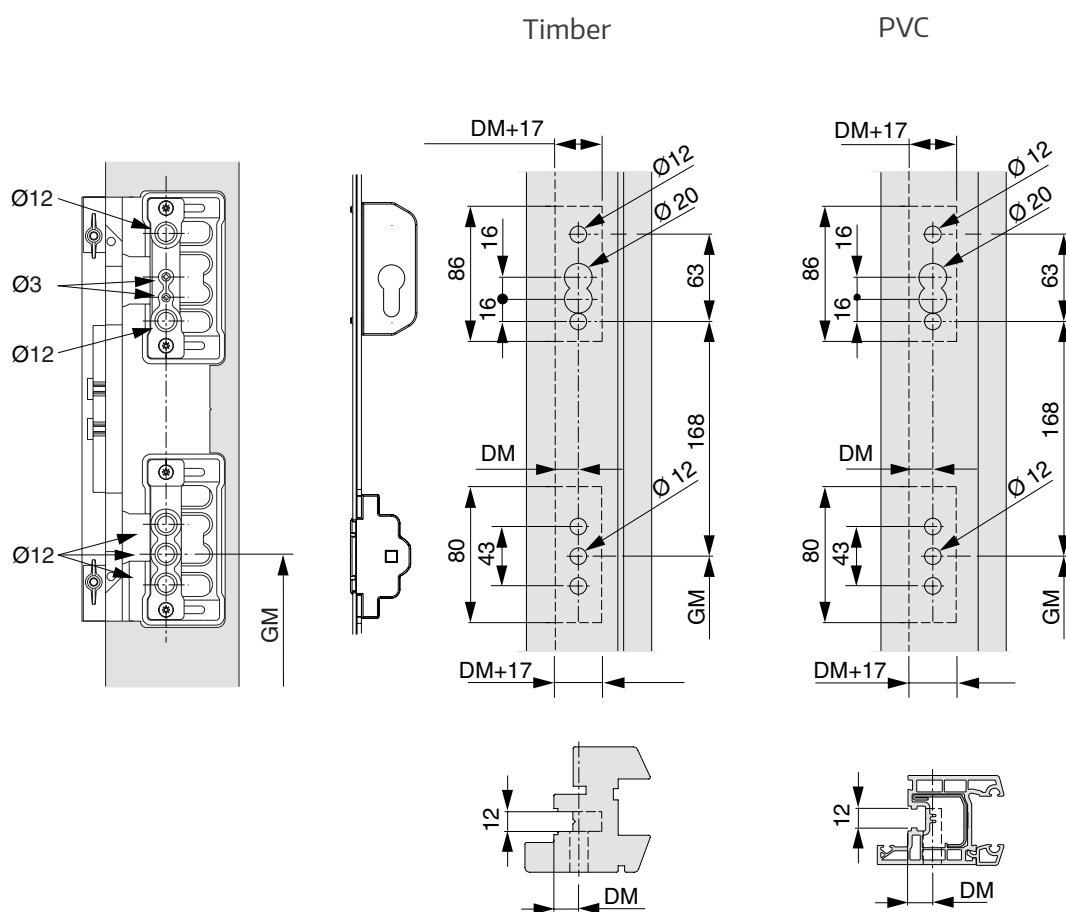
PVC



# Preparation of sash frame

## Lockable drive gear

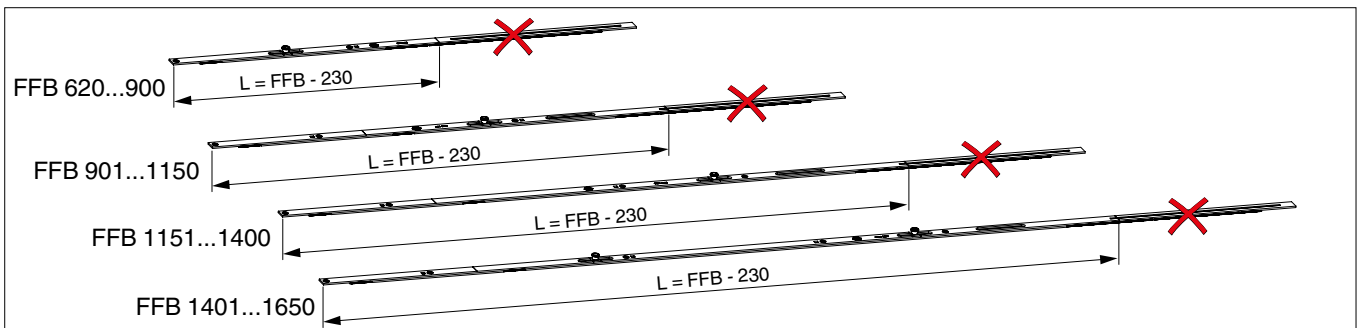
Article number: 29038



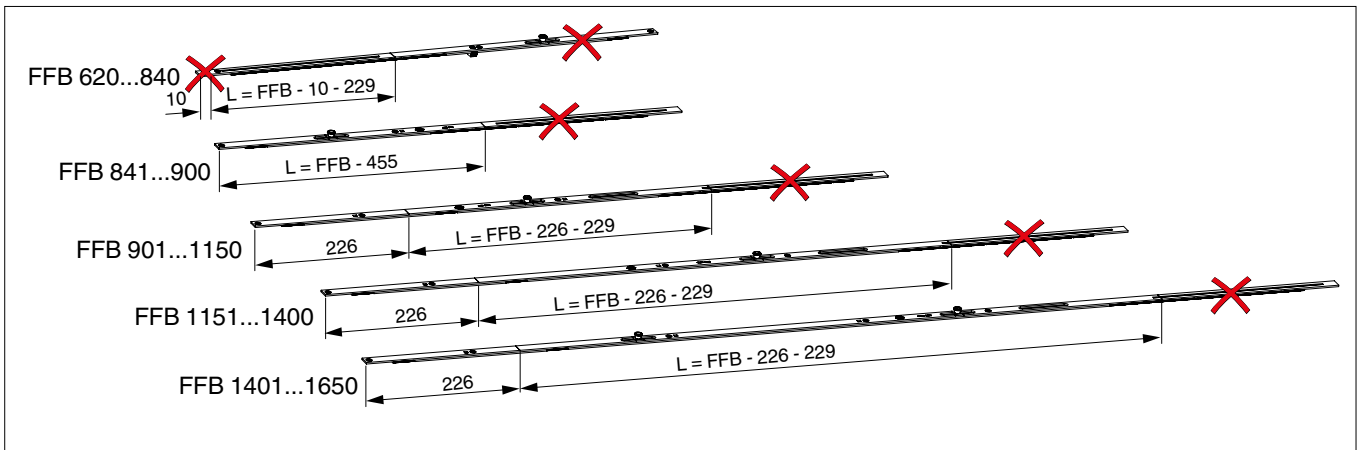
## Cutting to length and Central Locking assembly

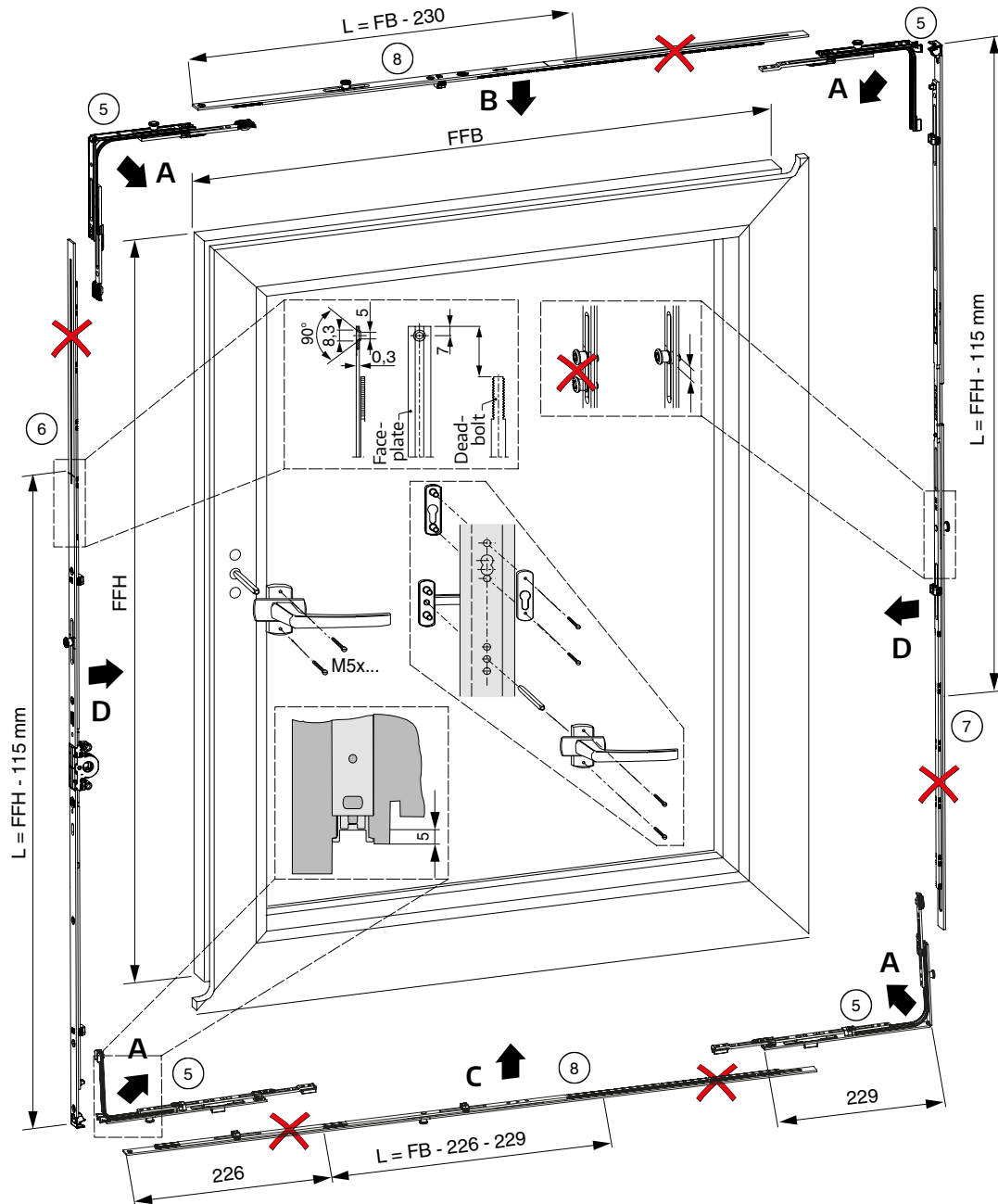
- A Screw in the upper and lower corner elements (5).
- B Cut the upper part of the width (8) to length and screw it on.
- C Cut the lower part of the width (8) to length and screw it on.
- D Shorten and screw on the vertical section (7) and gearbox (6).

**B**

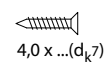


**C**





Hardware screw



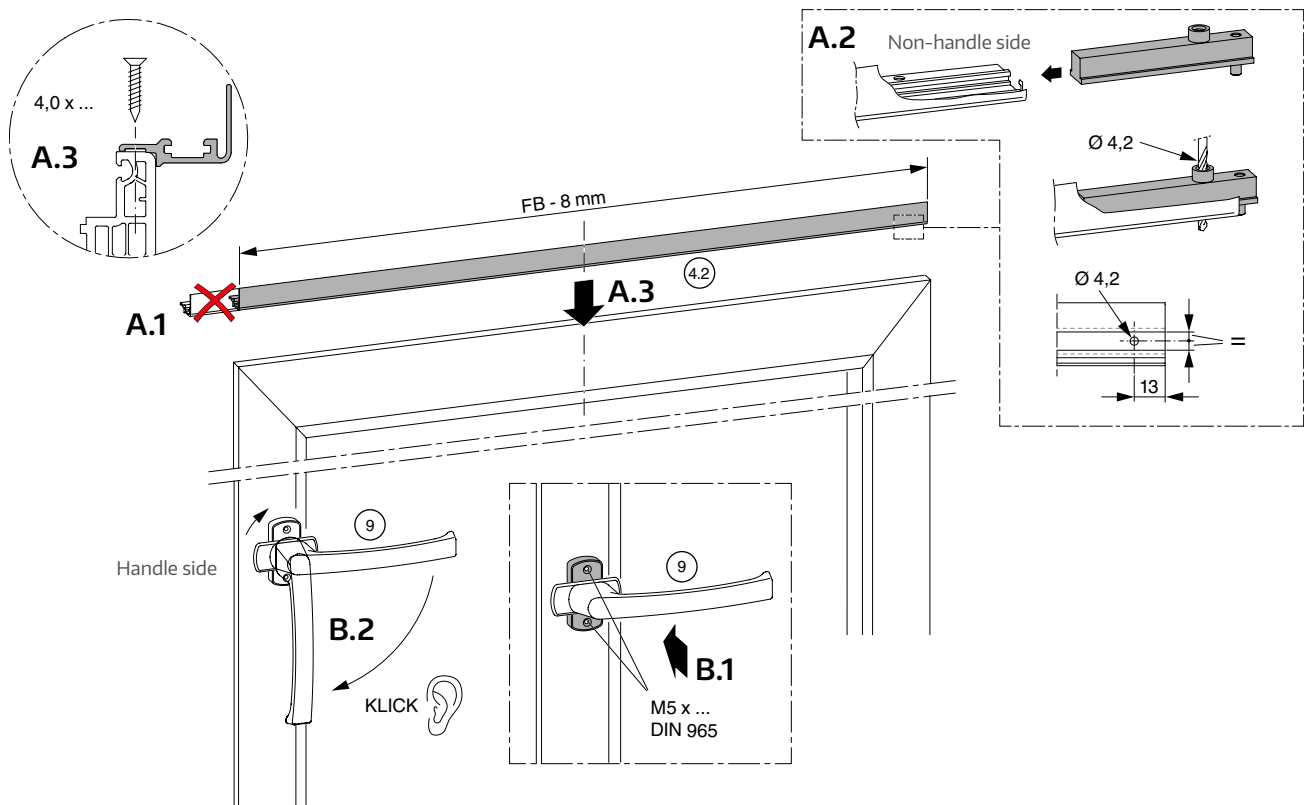
# Sash assembly

## Assembly of stay-connecting profile for tilt stay

- A.1** Cut to length the stay-connecting profile (4.2) on the **handle side**, sash width minus 8 mm.
- A.2** Stay-connecting profiles without holes (storage lengths) must be drilled to the scissor slider on the **non-handle side**.
- A.3** Screw in the stay-connecting profile in the centre of the sash.

## Handle assembly

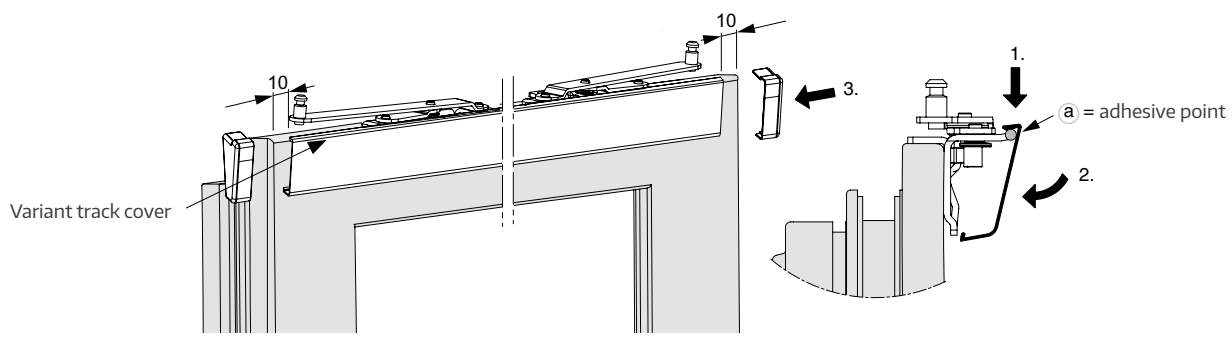
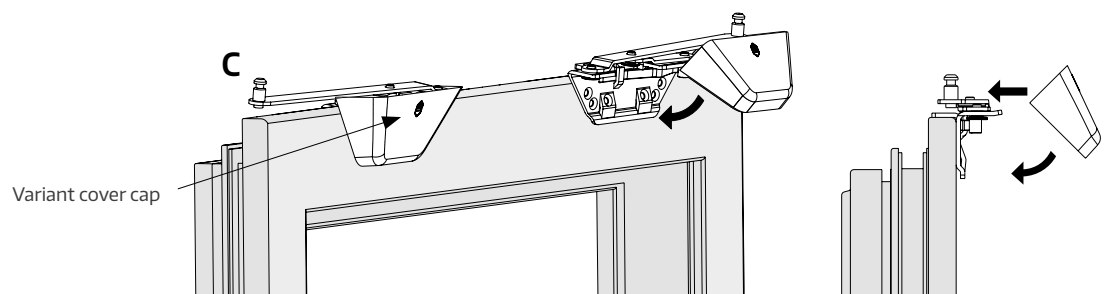
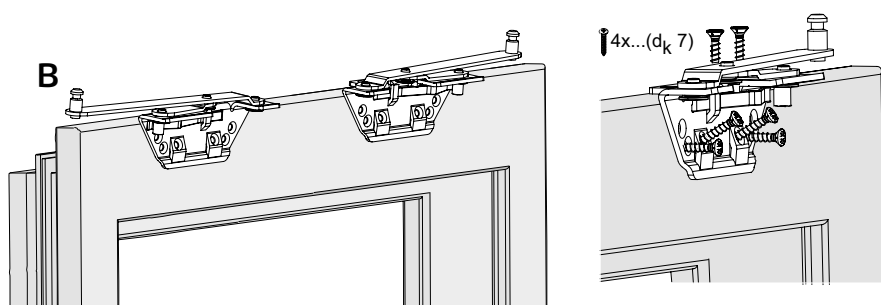
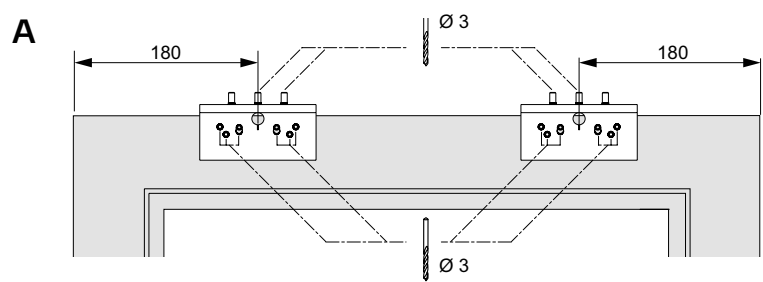
- B.1** Set the handle (9) to 90° position on the sash, twist the cover and screw in the handle with 2 M5 x screws. Check functionality of the central locking for lightness.
- B.2** Turn back the handle cover.



# Sash assembly

## Scissor-slider assembly

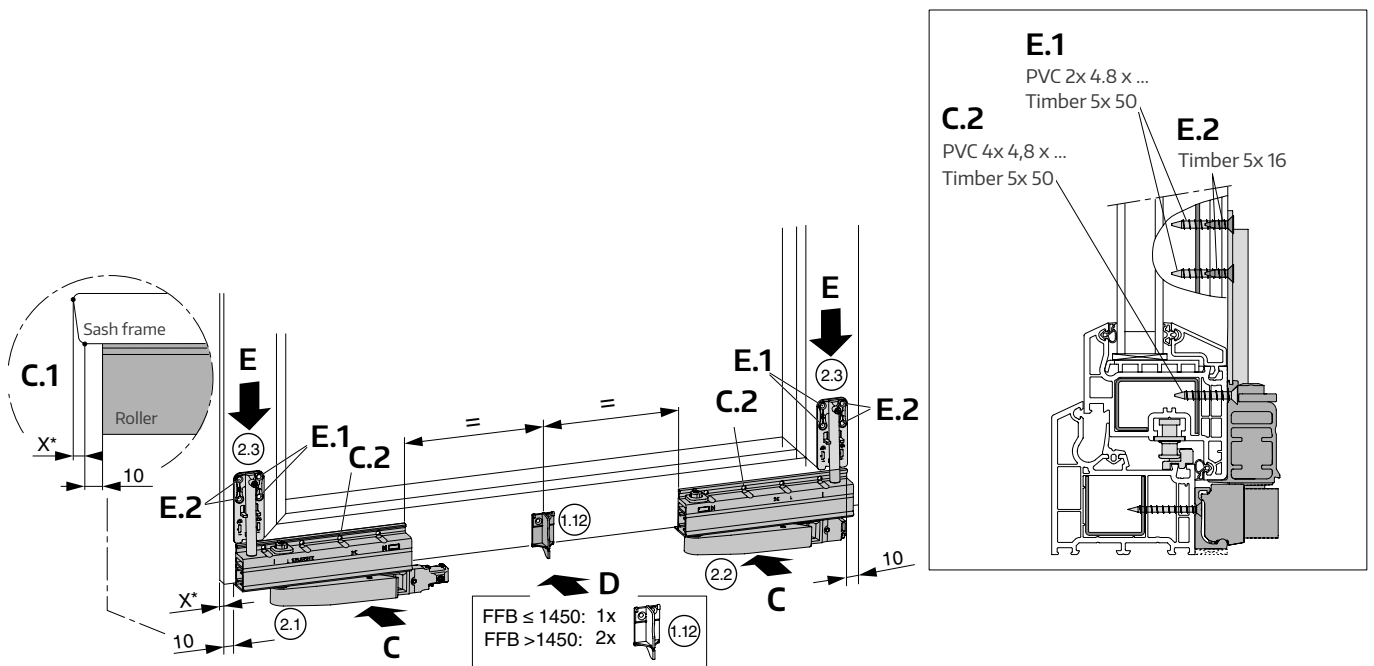
- A Pre-drill the sash.
- B Screw on the scissor slider.
- C Assemble scissor slider cover.



# Sash assembly

## Assembly of drives

- C** Screw rollers (2.1) / (2.2) onto the sash frame with 4 screws each 4.8 x ... for PVC, for timber 5 x 50 at a lateral distance of 10 mm to the sash outer edges and flush to the bottom edge (reference edge for profiles with edge radius (C1)).  
The length of the screws in PVC systems is to be chosen in such a way that they can grip in the steel reinforcement (C2).
- D** Fix the cover support bracket (1.12) with 2 screws 4.8 x ... in the middle of the rollers.  
With SRW > 1450, screw both supports evenly between the rollers.
- E** Insert the reinforcement parts (2.3) into the profiles of the rollers, snap in and screw on as follows:
  - E.1:** With PVC, use 2 screws 4.8 x ... so that the screws find grip in the steel reinforcement.
  - For timber, use 2 screws 5 x 50.
  - E.2:** For timber, use 2 screws 5 x 16.



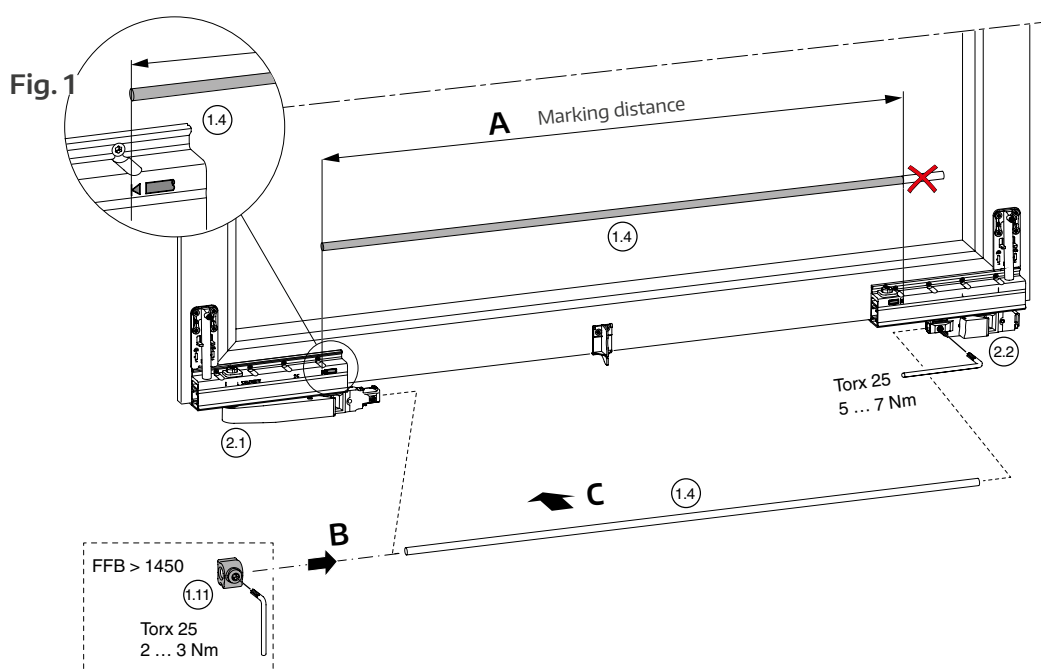
\*) Definition of X is required for the later assembly of the guide block



# Sash assembly

## Assembly of connecting rod

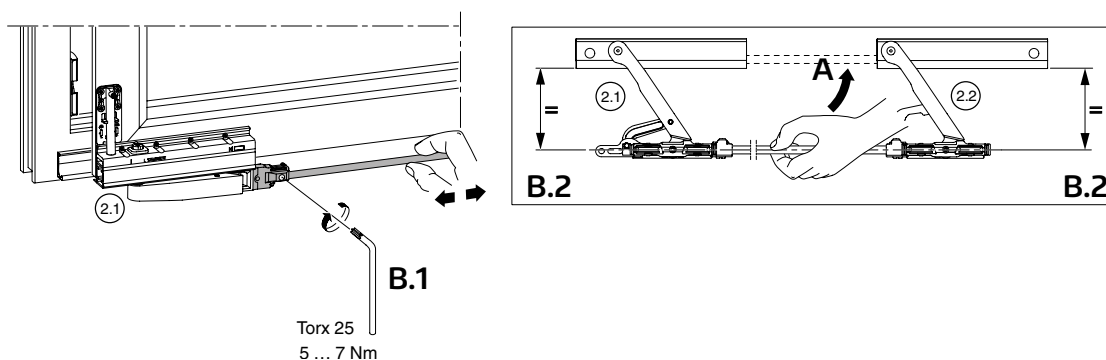
- A** Cut the connecting rod (1.4) to length according to the markings on the rollers (Fig. 1).
- B** With SRW > 1450: Push the support block (1.11) to the middle attach to the connecting rod (Torx 25, 2 ... 3 Nm).
- C** Insert connecting rod into the roller clutches (2.1) and (2.2) Attach the drive to (2.2) of the non-handle side with Torx 25 (5 ... 7 Nm).



## Align rollers in parallel

(to ensure an even run-in of the sash into the frame)

- A** Grip the connecting rod in the middle and put it into the closed position.
- B** In this position, tighten the connecting rod on the handle-side roller (2.1) (Torx 25, 5 ... 7 Nm) (B.1). Both rollers (2.1) and (2.2) must now also be parallel in the open position (B.2).



# Frame assembly

## Striker plate assembly

Position the striker plates (10) / (11) and attach according to figure/table.

Scheme C: See cross-section «Scheme C» (P. 45 - 46).



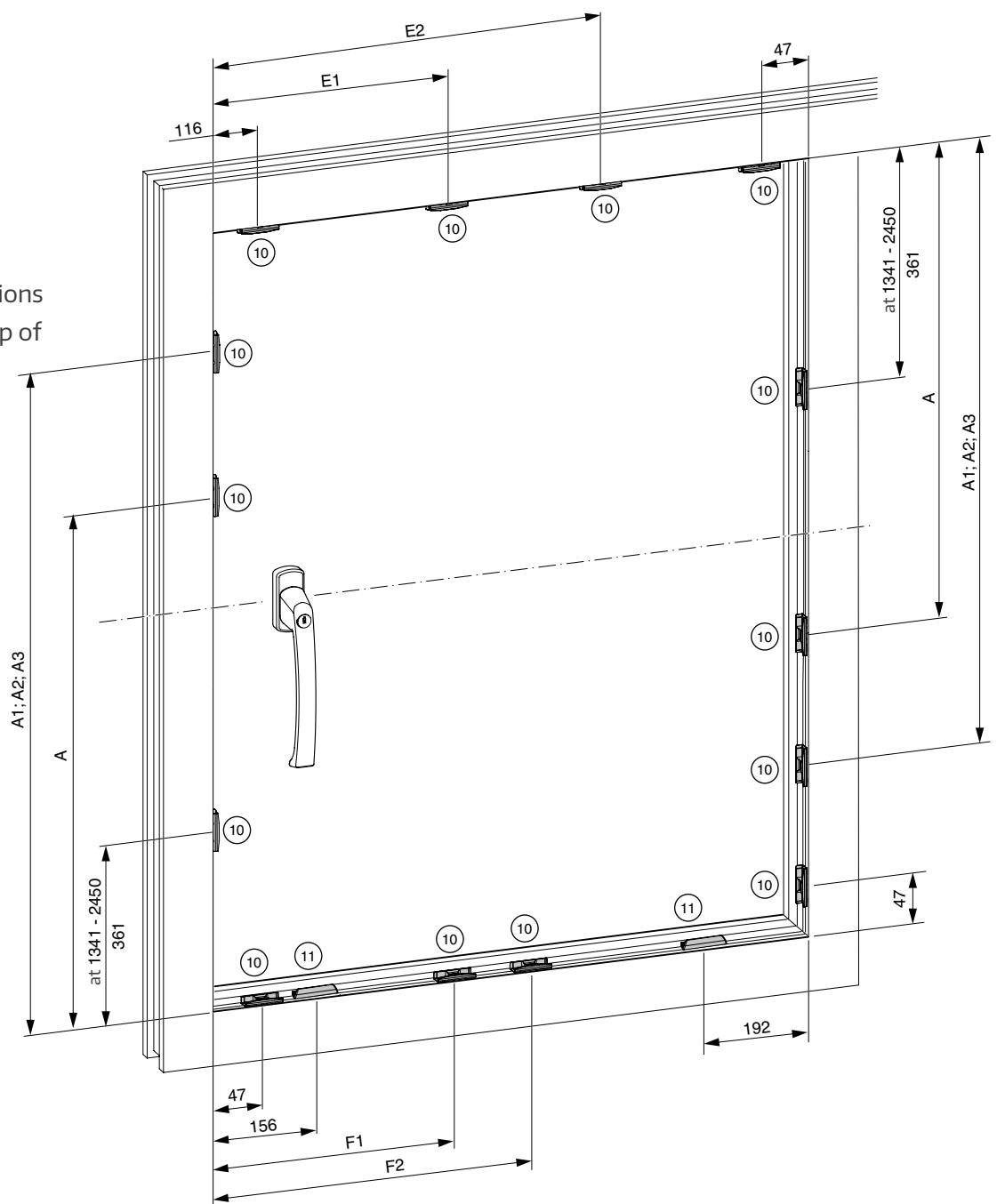
To use:

Hardware screw:

4.0 x ... Head 7 mm



All specified dimensions apply to a rebate gap of 12 mm.





## Frame assembly

### Striker plates assembly Scheme A

Positioning of striker plates, sash lifters for fixed drive gear 12 mm rebate gap

Drive gear size	SRH	A	A1	A2	A3	Handle position without rebate gap
1090	841 - 1090	586	-	-	-	400
1340	1091 - 1340	686	-	-	-	500
1590	1341 - 1590	-	921	-	-	600
1700	1591 - 1700	-	1021	-	-	700
1950	1701 - 1950	-	796	1466	-	1050
2200	1951 - 2200	-	796	1466	-	1050
2450	2201 -2450	-	796	1466	1966	1050

Positioning of striker plates, 12 mm rebate gap

Width connector size	SRW	E1	E2	F1	F2
Gr. 1	620 - 840	330	-	-	-
	841 - 900		-	373	-
Gr. 2	901 - 1150	565	-	381	-
Gr. 3	1151 -1400	800	-	616	-
Gr. 4	1401 - 1650	565	1035	381	851

# Frame assembly

## Guide track and roller track assembly

### Assembly of guide track on frame installation

- A Cut to length the guide track <sup>(1.1)</sup>. Distance between sash outer edges and the slide and fixed sashes minus 8 mm.
- B Assemble the guide track using screws 4.0 x ... (head 7), as shown **(B.1)**.



Important Information

**The screw-heads must not protrude above the guide track!**

If the screw-heads are protruded, this results in material damage **(B.2)**!

Oil the sliding surface of the guide track over the entire length of the track **(B.3)**.

- C Cut the cover profile <sup>(1.3)</sup> to the dimensions of the guide track and click onto the guide track.

### Assembly of the roller track on the frame installation

- D Cut the roller track <sup>(1.2)</sup> flush to the sash outer edges of the slide and fixed sashes.
- E Fix the roller track with 35 + 1 mm distance from the bottom edge of the roller track to the bottom edge of the sash frame with screws 4.0 x ... (head 7) on the frame installation **(E.1)**.



Important Information

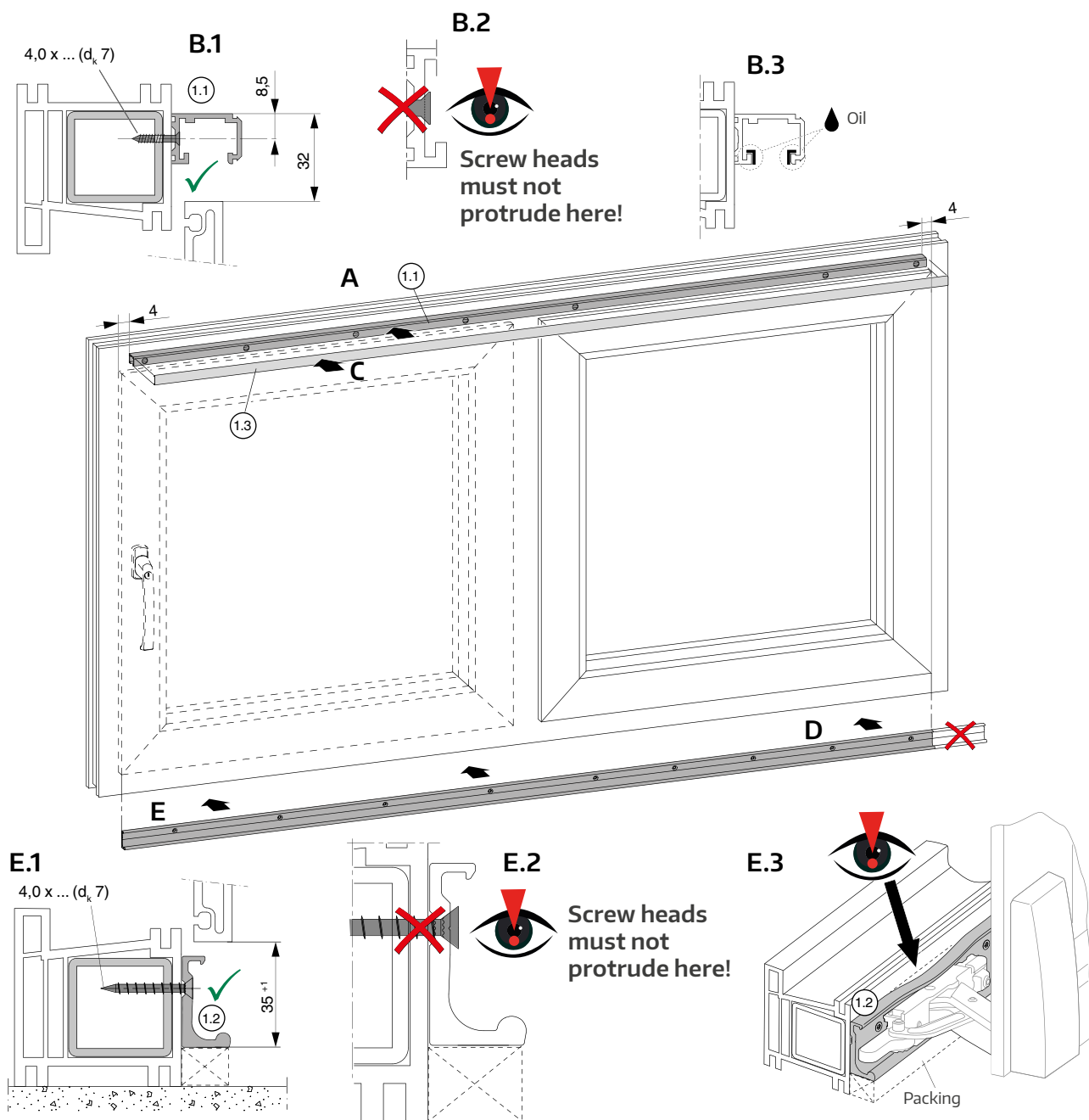
**The screw-heads must not protrude above the roller track!**

If the screw-heads are protruded, this results in material damage **(E.2)**!

In case of visible deformations or unusual (clearly audible) noise in the area of the roller track, it must be continuously underpinned for load transfer **(E.3)**.

# Frame assembly

## Guide track and roller track assembly



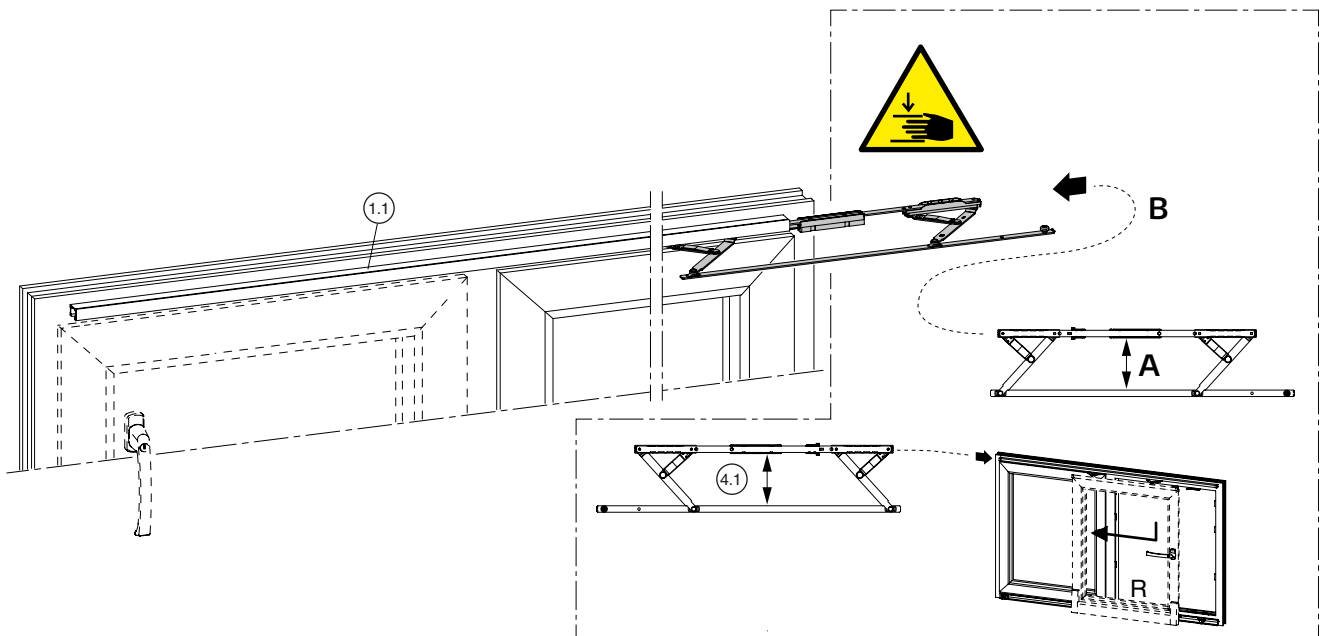
# Sash and frame assembly of tilt stay

## Assembly of tilt stay in the guide track

Open tilt stays ④.1 (A) and slide in the guide rail as shown ①.1 push (B).



When opening and closing the tilt stays ④.1 there is a risk of crushing and clamping!



## Sash and frame assembly of tilt stays

### Hinging sash with tilt stays

#### Set the sash frame on the roller track

**A** Turn handle to slide position. Lift the sash slightly tilted inwards and use the rollers to lower onto the front edge of the roller track (1.2) (**Fig. 1**). Check the position of the rollers by pushing the sash and, if necessary, adjust them.

#### Connect sash frame with guide track

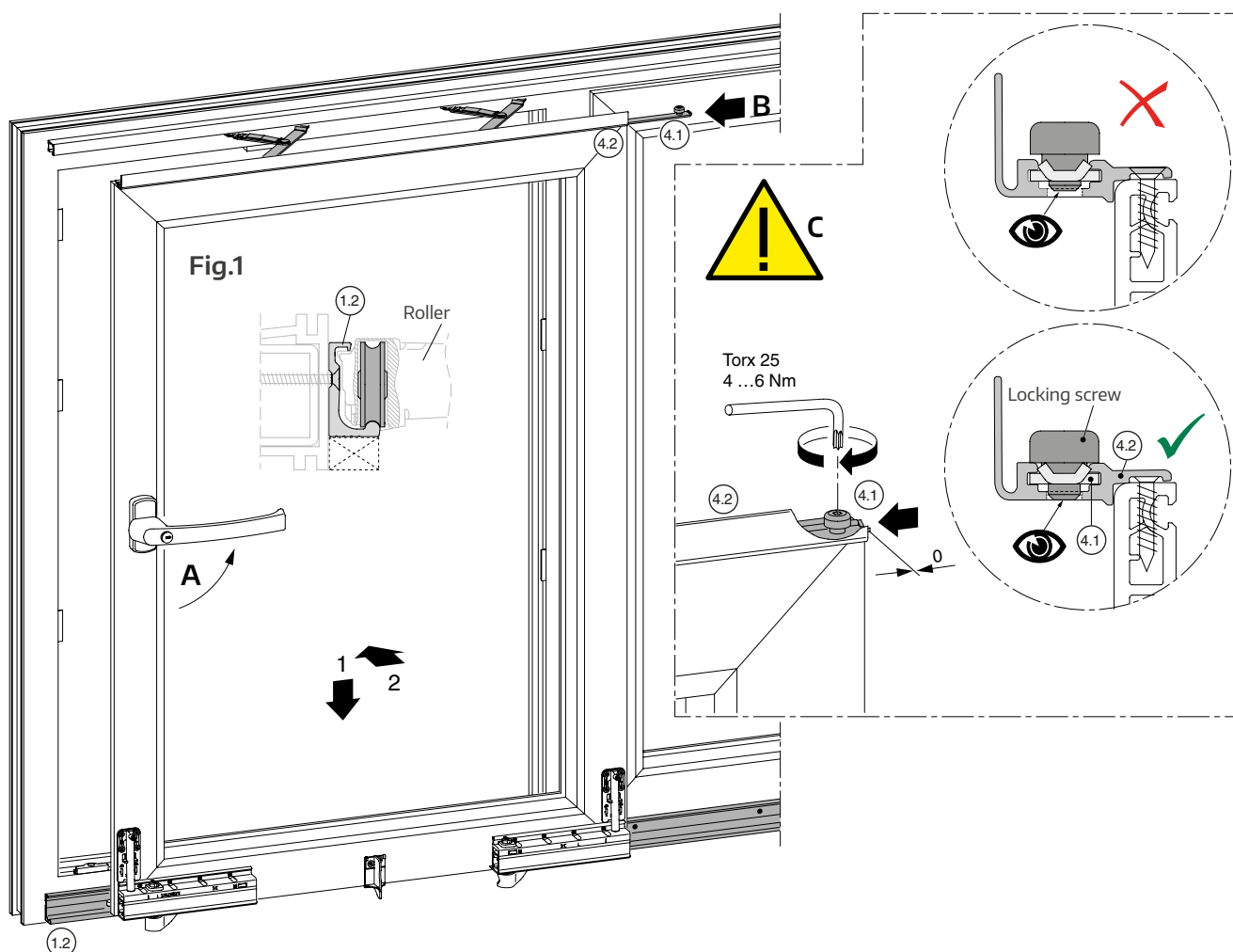
**B** Slide the tilt stay (4.1) into the stay connecting profile (4.2).

**C** Position the tilt stay (4.1) flush to the sash edge, tighten the safety screw (Torx 25, 4...6 Nm).



### WARNING!

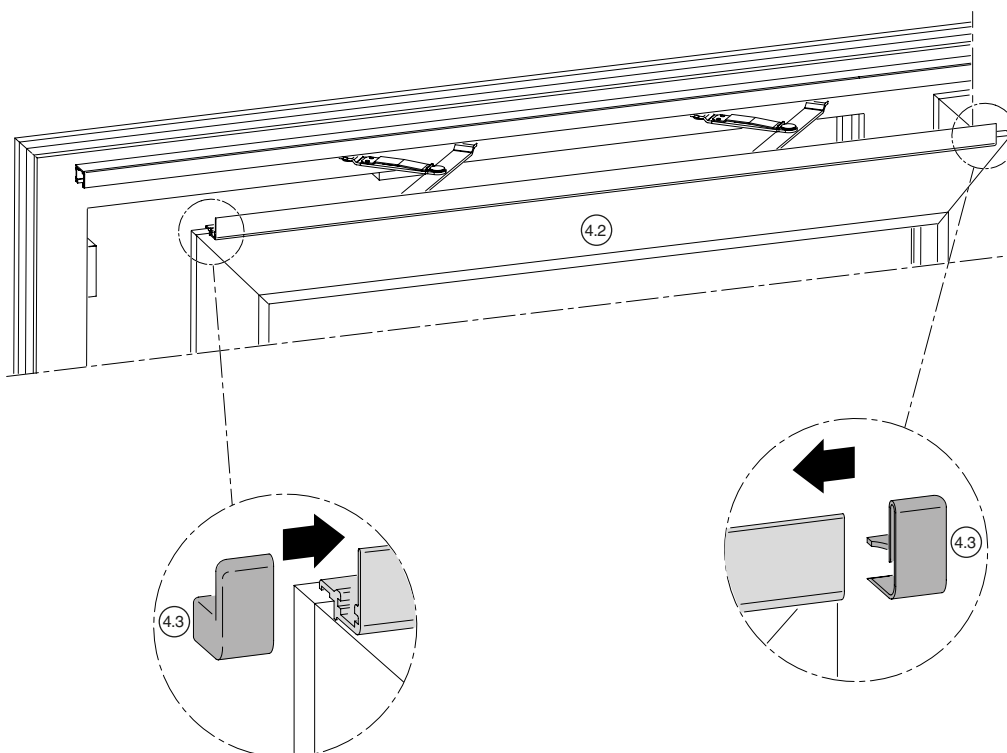
The safety screw must sit interlocking in the hole of the stay-connecting profile (4.2). If the safety screw is not visible, the window sash is not adequately secured. Serious bodily injuries can occur!



## Sash and frame assembly of tilt stays

### Assembly of cover caps, stay-connecting profile, tilt stay

- A Insert the cover caps ④.3 left and right on the ends of the stay-connecting profile ④.2.





# Sash and frame assembly scissor slider

## Hinging sash with scissor slider

### Set the sash frame on the roller track

**A** Turn handle to slide position. Lift the sash slightly inclined inwards and place it with the drive rollers on the front edge of the roller track (1.2). Check the position of the rollers by pushing the sash and, if necessary, adjust them.

### Connect sash frames with guide track

**B** Slide the stay cams from below into the centre slider openings until they snap into the sliders (audible clicking noise!) (1). Correctly fixed position of the rotary cams in the sliders (2).

**C** If properly assembled, the side safety sliders are aligned flush to the edges of the slider housing.

**D**

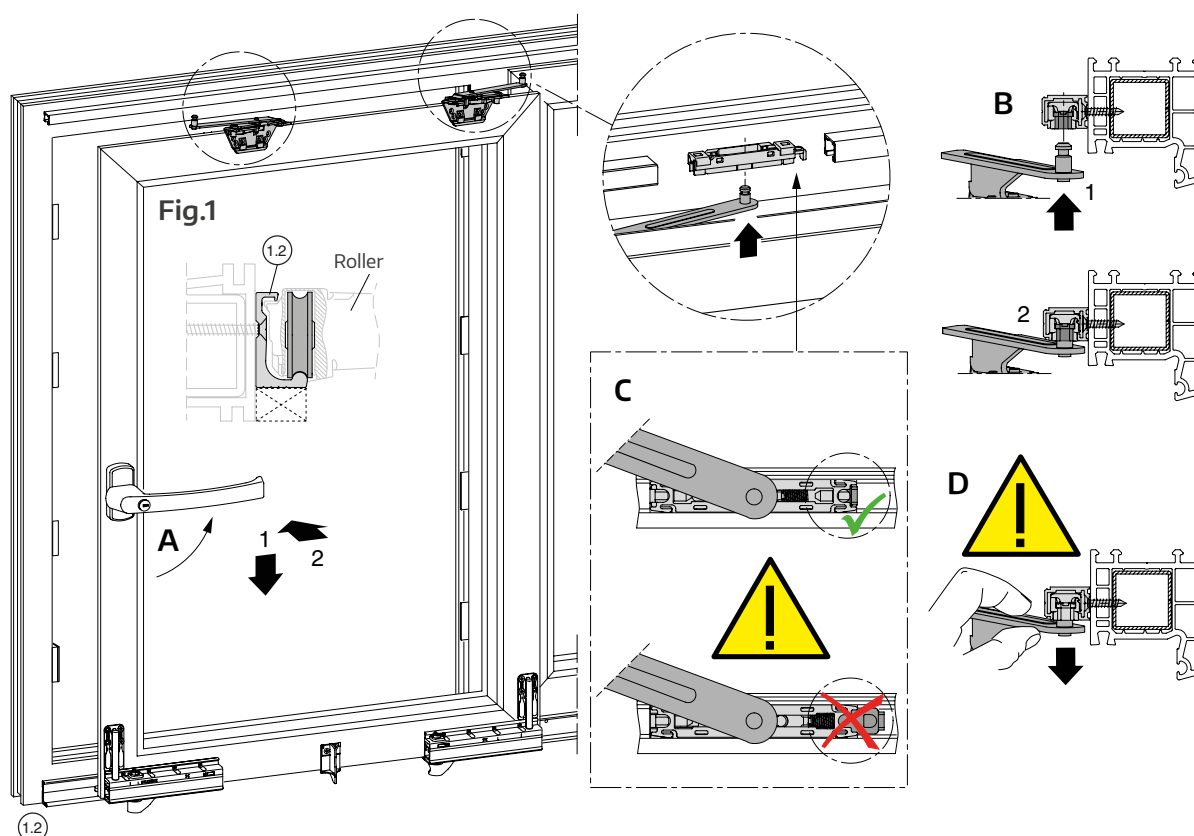


## WARNING!

If the stay cams are not securely positioned in the sliders, the window sash is not secured against falling out.

Serious bodily injuries can occur!

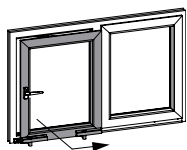
Be sure to carefully check the secure connections by pulling down/pressing the scissor arms!



# Sash and frame assembly scissor slider

## Hinging sash with scissor slider

### Note on unhinging the sash



Open the sash. Put the roller safety device in the released position (P. 36, A). Push the release pin from below flush into the roller opening next to the safety latch (1).

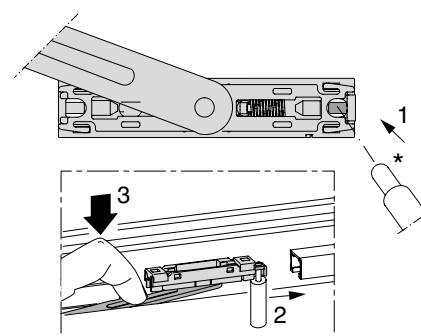
Pull out the safety latch with the release pin sideways from the runner (2).

Push out the stay cam downwards from the runner (3).

Repeat the process on the second runner.

Tilt the released sash and lift it off the roller track (without fig.).

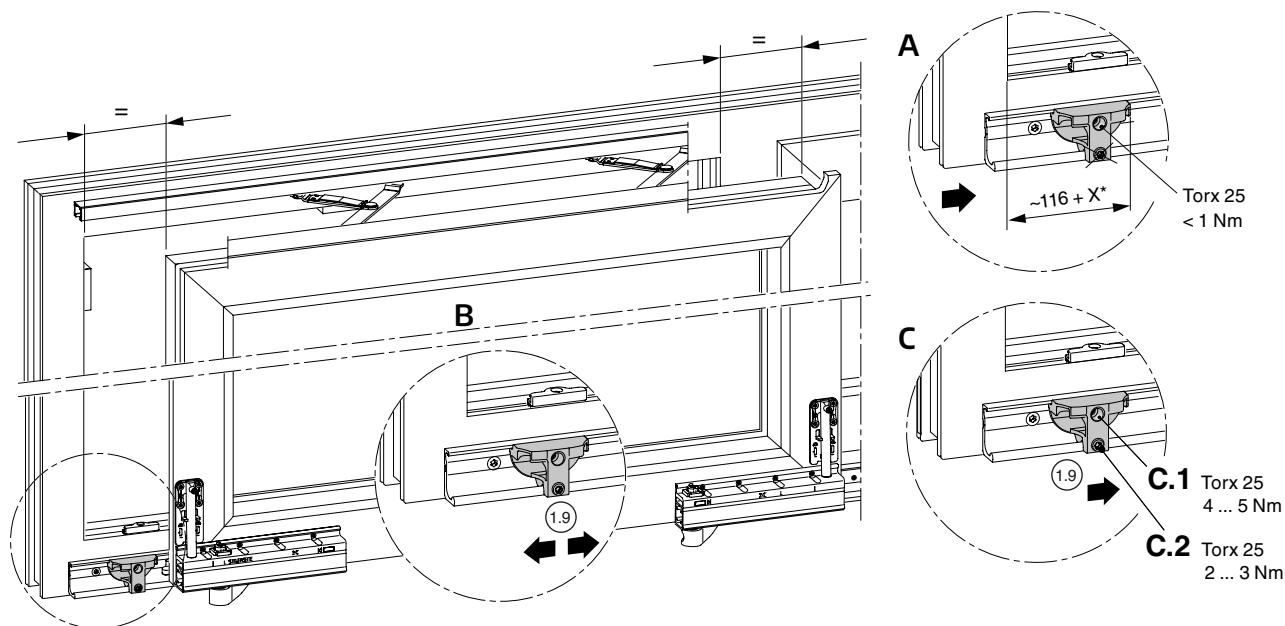
<sup>\*)</sup> Contained in basic package



## Sash and frame assembly

### Guide block assembly

- A** Position the control block (1.9) on the handle side approx.  $116 \text{ mm} + X^*$  from the outer edge of the roller track. Initially tighten only slightly with the upper screw (Torx 25,  $< 1 \text{ Nm}$ ).
- B** Put the sash in the tilt position and check the rebate gap on both sides (12 mm). If necessary, reposition the control block.
- C** Tighten the top screw on the control block tightly (Torx 25,  $4 \dots 5 \text{ Nm}$ ) (C.1). Then, tighten the bottom screw (Torx 25,  $2 \dots 3 \text{ Nm}$ ) (C.2).



\* Determination of X: see page 22 "Assembly of drives"

# Sash and frame assembly

## Horizontal orientation of the sash

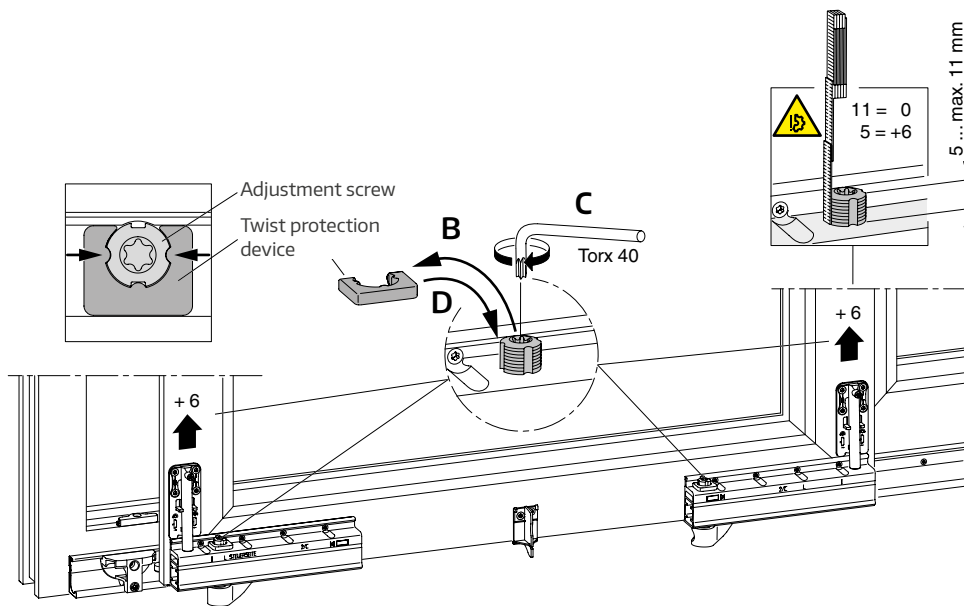
- A Check the rebate gap at the top and bottom on both sides (without Fig.).
- B Remove twist protection devices.
- C Lift the rollers using adjustment screws (Torx 40) to align the sash.



**ATTENTION!**

The adjustment screws may be screwed out to max. 11 mm. If the adjustment screws are screwed out more than 11 mm, the rollers will be destroyed.

- D Replace the twist protection devices on the adjustment screws, and slightly correct the alignment of the adjustment screws beforehand if necessary. The twist protection devices must sit parallel to the outside edge of the rollers.

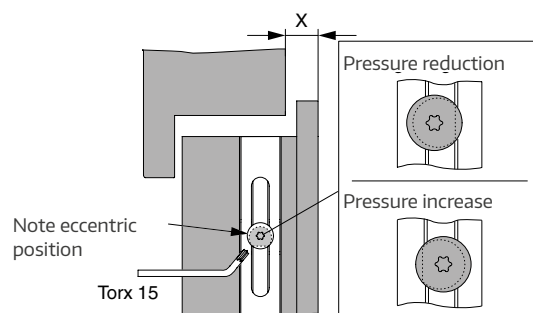


## Sash and frame assembly

### Adjusting the sash pressure (rebate height)

Check closing behaviour of the sash.

Adjust the sash pressure by adjusting the rebate height (X) using Torx 15.

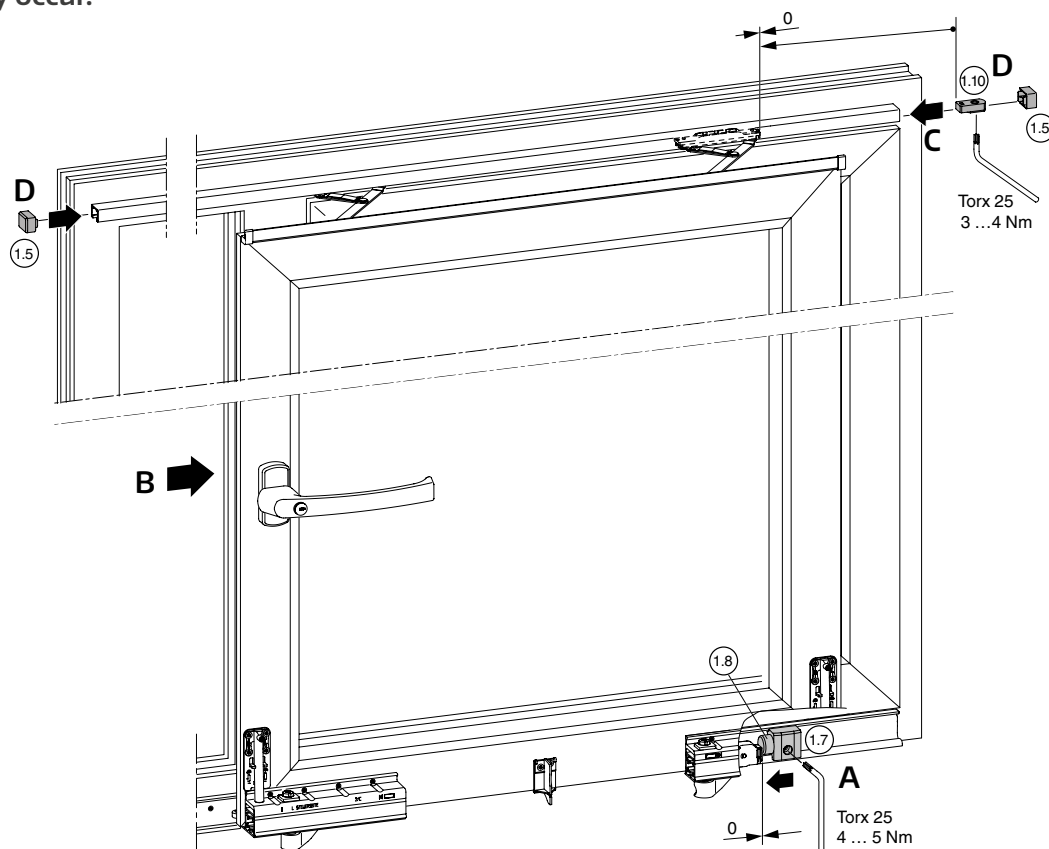


### Buffer stop assembly

- A Screw in the lower buffer stop (1.7) with rubber mushroom buffer (1.8) in the desired position on the roller track (Torx 25, 4 ... 5 Nm).
- B Push the sash frame right up to the buffer stop.
- C Insert the upper buffer stop (1.10) right up to scissor stay in the guide rail and screw in tightly (Torx 25, 3 ... 4 Nm).
- D Insert the cover caps (1.5) on the ends of the guide rail.



If the sash does not evenly move against the upper and lower buffer stops, material damage may occur.



# Sash and frame assembly

## Cover cap assembly

### Activate the roller protection devices

A Push the roller protection device (1) backwards on both rollers until it snaps in at the position shown (2).



**WARNING!**

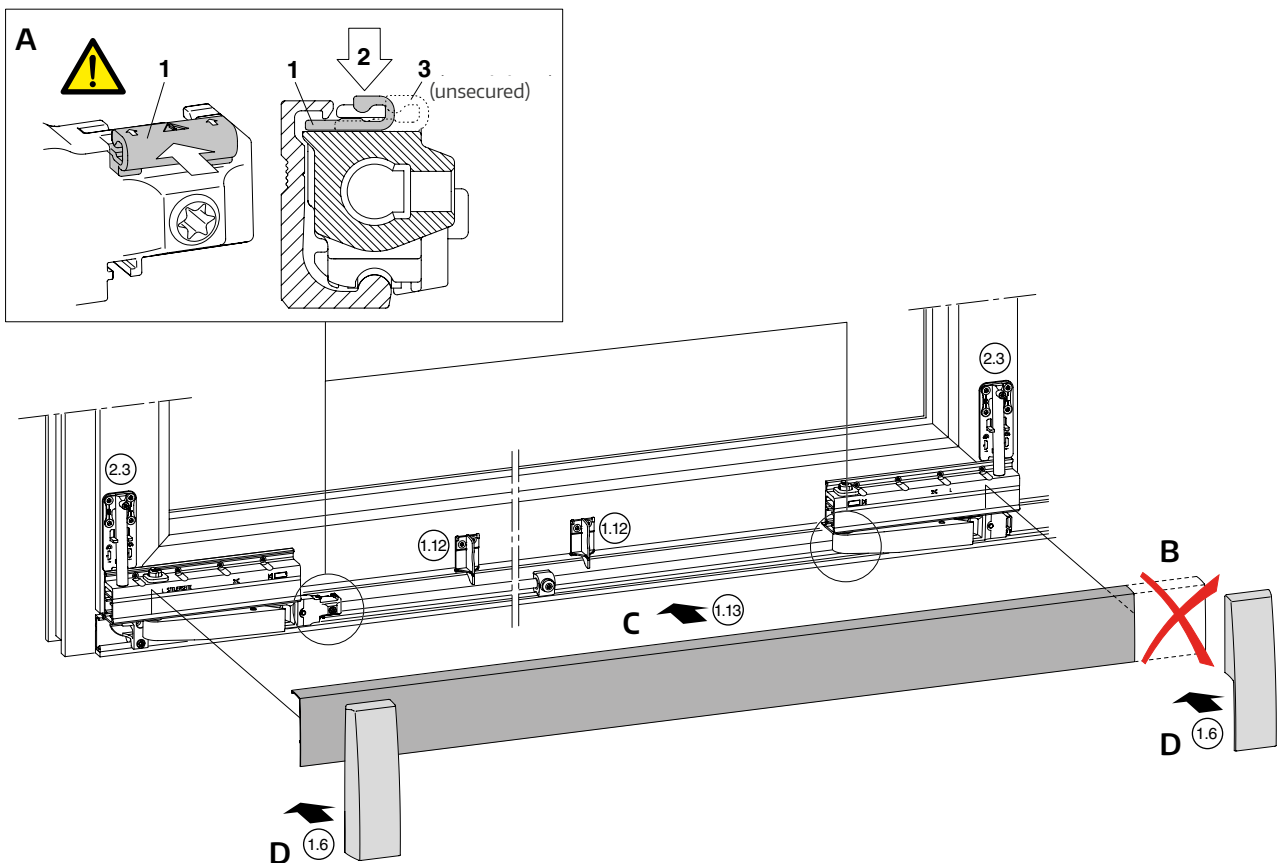
If the roller protection device is not correctly positioned or missing from the position shown (2), the window sash is not adequately secured (3).  
Serious bodily injuries may occur!

### Assemble roller covers

B Cut the cover profile (1.13) to length according to the markings on the rollers.

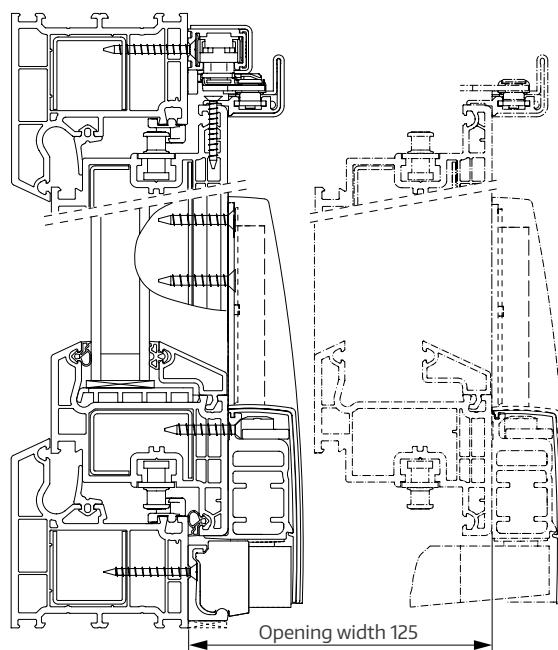
C Align the cover profile to the roller markings and clip onto the roller profiles as well as the cover support bracket(s) (1.12).

D Clip on the cover caps at the bottom left (1.6) and at the bottom right on the reinforcement parts (2.3).

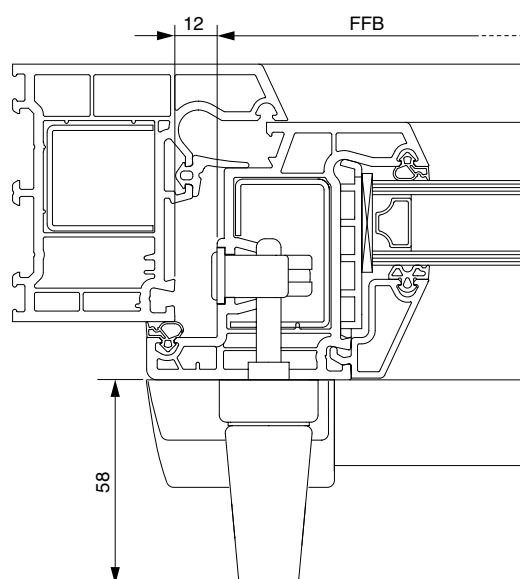


## Cross-sections

Opening width 125



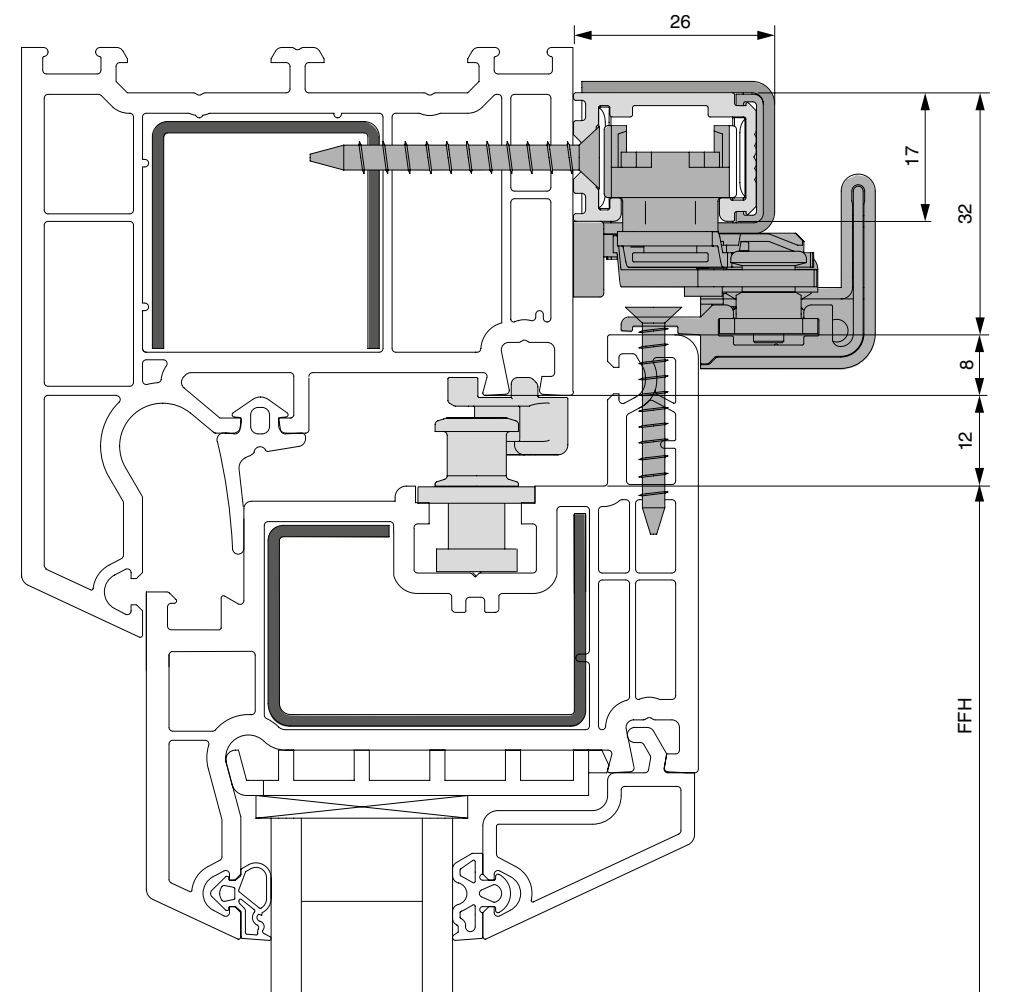
## Horizontal cross-section Handle EG



# Cross-sections

## Vertical cross-section above tilt stay

Scale 1:1

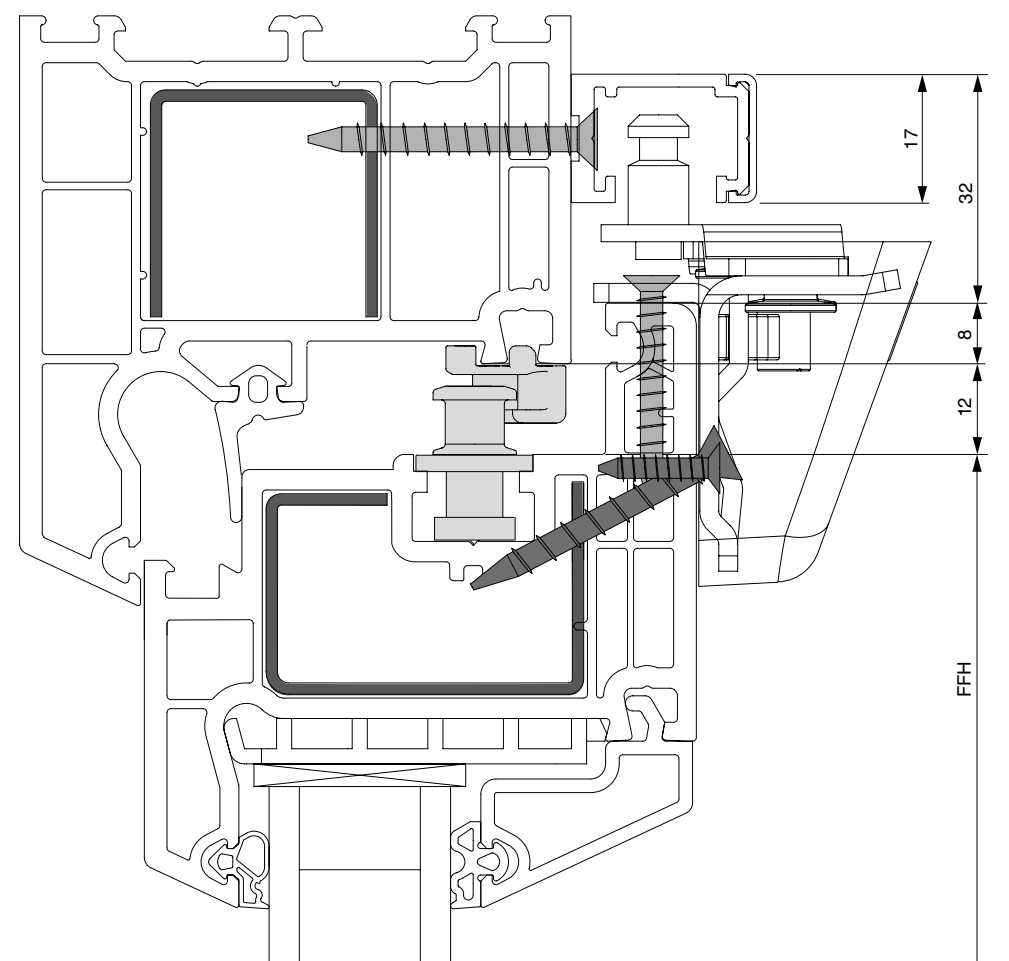




## Cross-sections

### Vertical cross-section above scissor stay

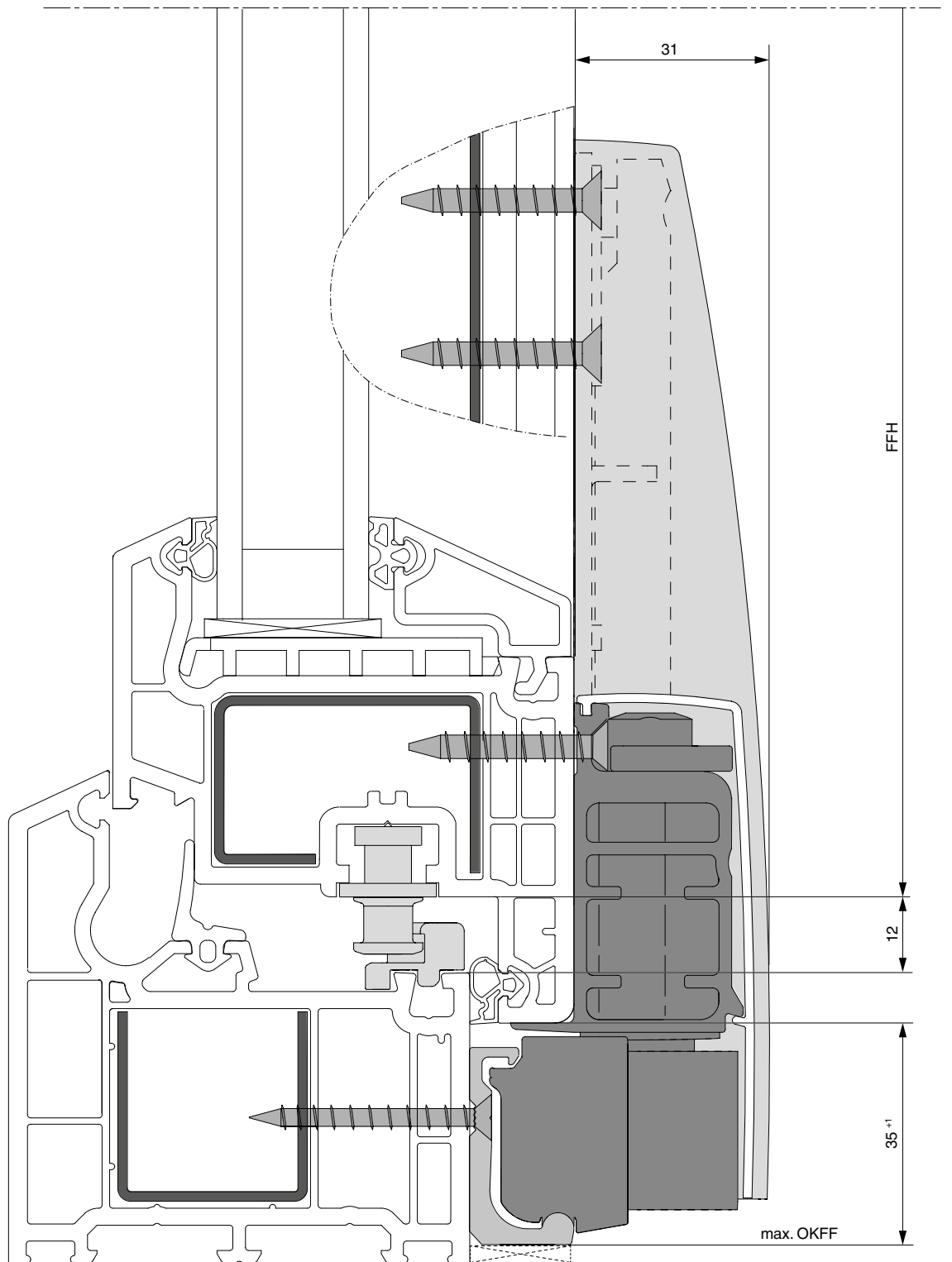
Scale 1:1



# Cross-sections

## Vertical cross-section below

Scale 1:1



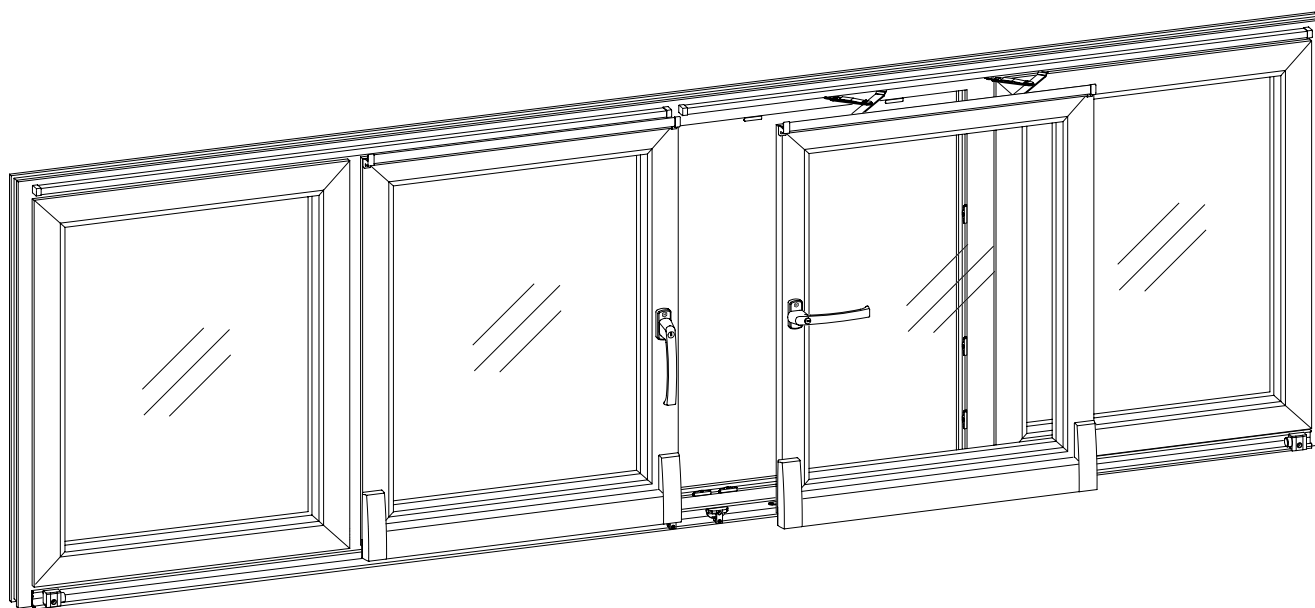
## Scheme C

### Guide track assembly

If insufficient space:

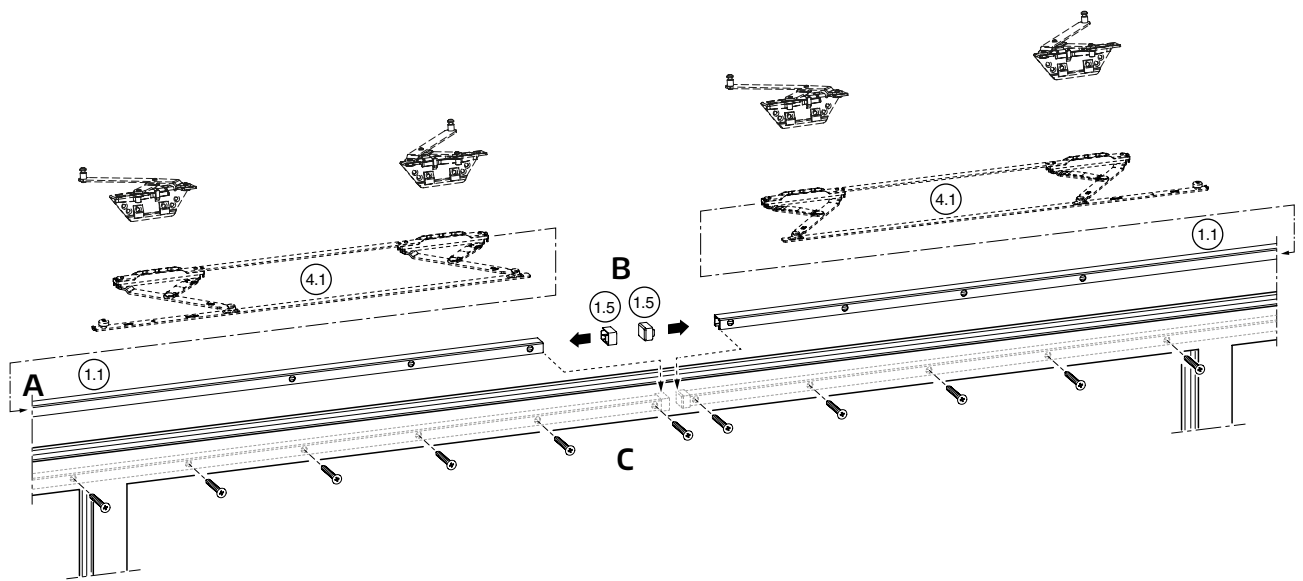
- A Push both tilt stays (4.1) sideways into the guide tracks (1.1).
- B Insert the cover caps (1.5) on the ends of the guide tracks.
- C Assemble the guide tracks by means of screws 4.0 x ... (head 7) on the frame.

See also "Guide track assembly" section.



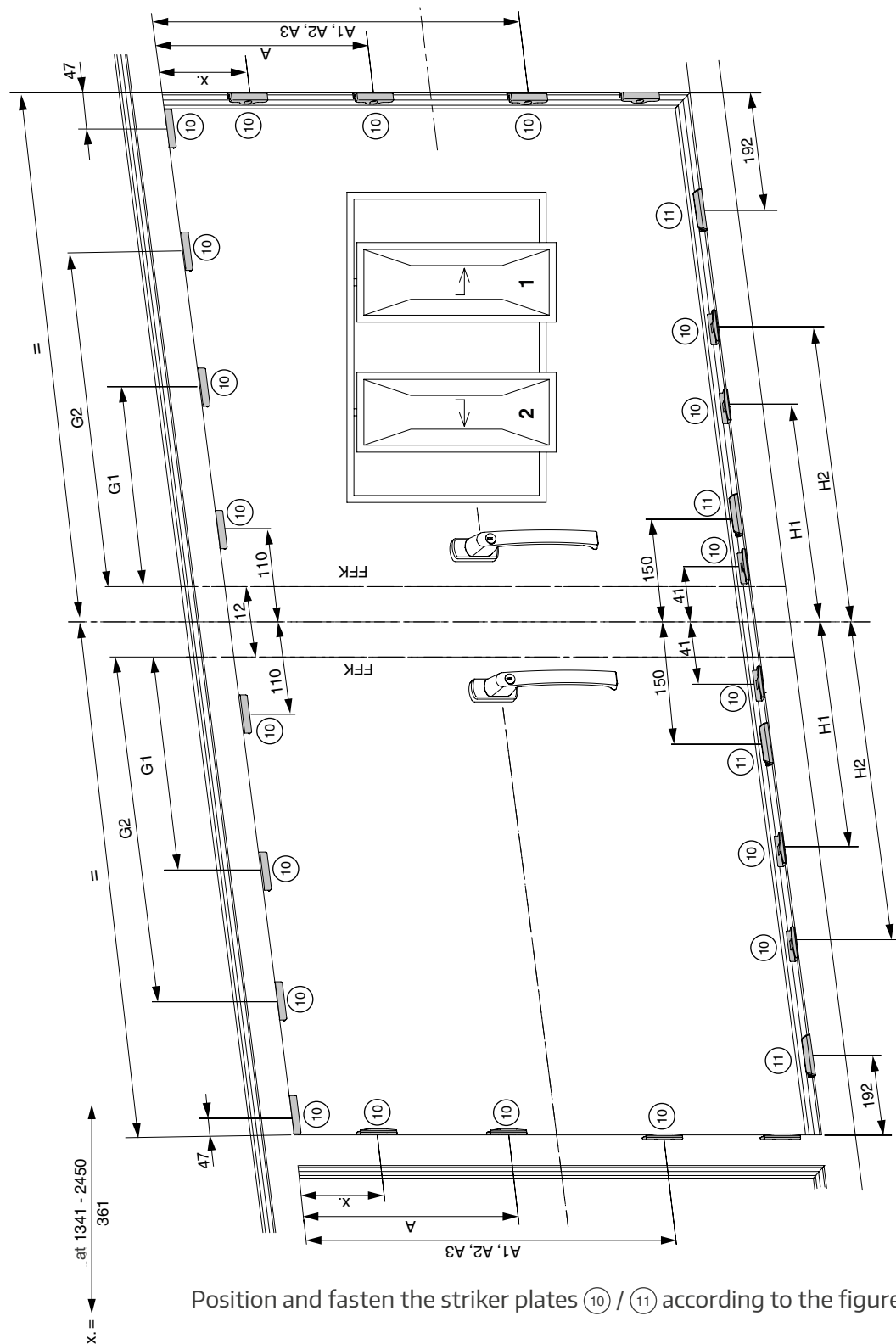
# Scheme C

## Guide track assembly



# Frame assembly

## Striker plate assembly Scheme C



Use:

Hardware screw  
4.0 x ... head 7 mm



All specified dimensions are valid for a rebate gap of 12 mm.

Position and fasten the striker plates (10) / (11) according to the figure/table.

## Frame assembly

### Striker plate assembly Scheme C

Positioning of striker plates, sash lifters for fixed drive gear, 12 mm rebate gap

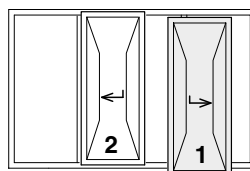
Drive gear size	SRH	A	A1	A2	A3	Handle position without rebate gap
1090	841 - 1090	586	-	-	-	400
1340	1091 - 1340	686	-	-	-	500
1590	1341 - 1590	-	921	-	-	600
1700	1591 - 1700	-	1021	-	-	700
1950	1701 - 1950	-	796	1466	-	1050
2200	1951 - 2200	-	796	1466	-	1050
2450	2201 -2450	-	796	1466	1966	1050

Positioning of striker plates for width connector, 12 mm rebate gap

Width connector Size	SRW	G1	G2	H1	H2
Gr. 1	620 - 840	324	-	-	-
	841 - 900		-	367	-
Gr. 2	901 - 1150	559	-	375	-
Gr. 3	1151 -1400	794	-	610	-
Gr. 4	1401 - 1650	559	1029	375	845

# Scheme C

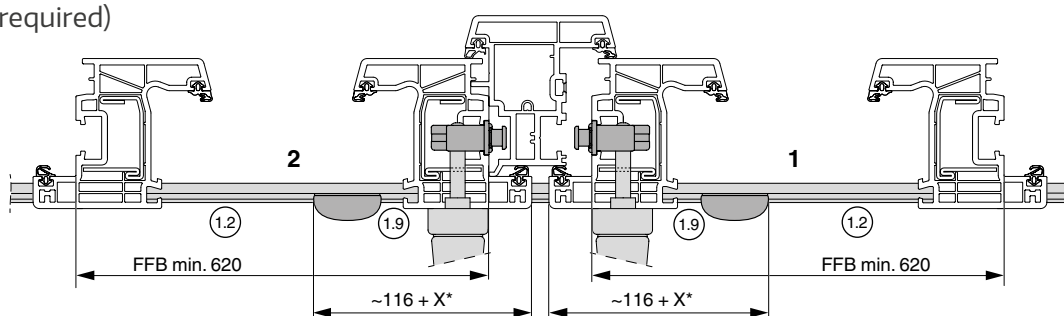
## Horizontal cross-sections



\*) Determination of X: see page 22, "Mounting of drives"

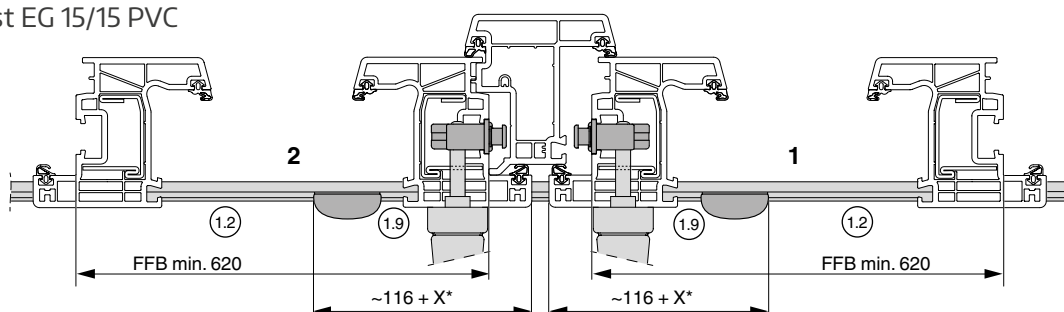
### Variant 1:

PVC – with loose post EG 15/15  
(special striker plate required)



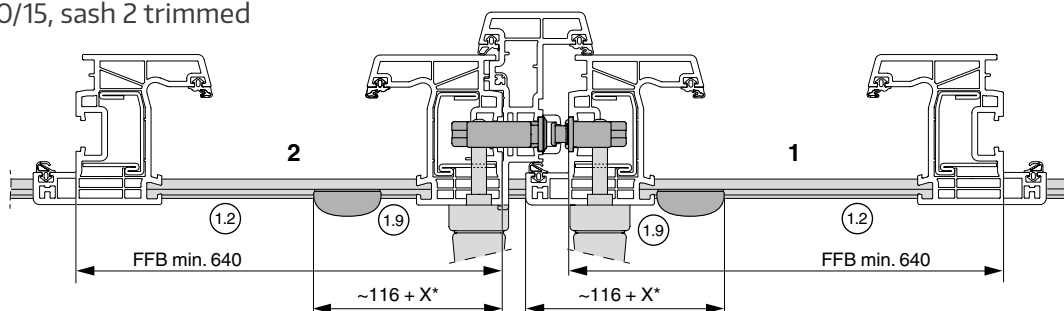
### Variant 2:

PVC – with loose post EG 15/15 PVC



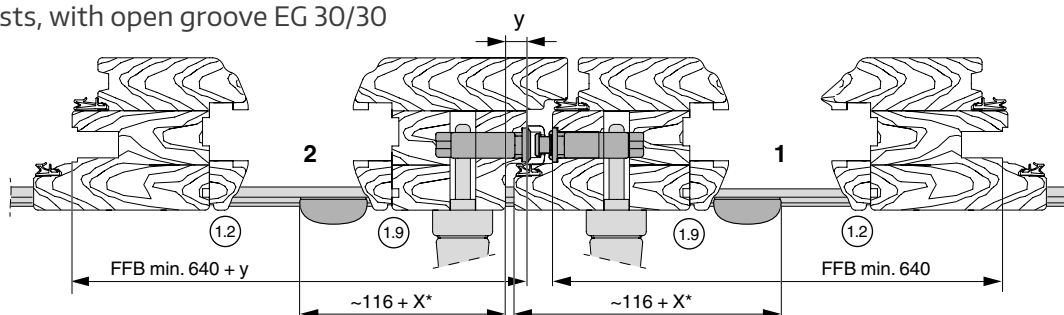
### Variant 3:

with loose post EG 30/15, sash 2 trimmed



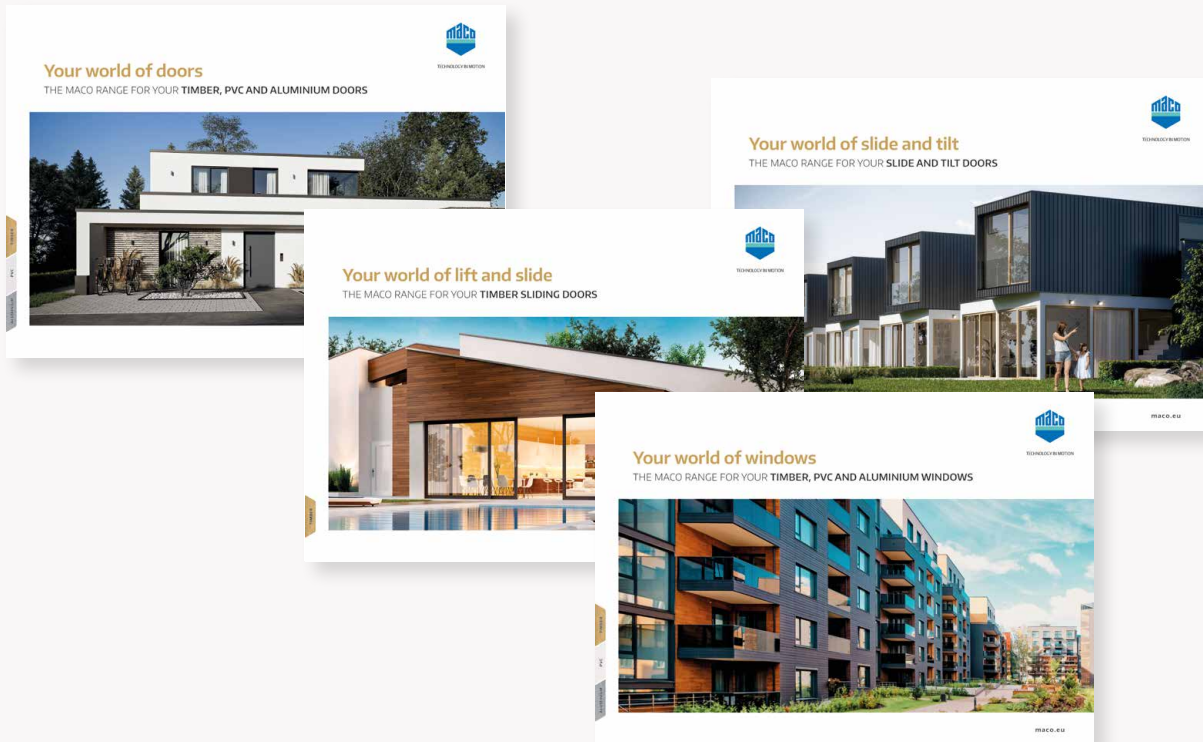
### Variant 4:

Timber – without posts, with open groove EG 30/30



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