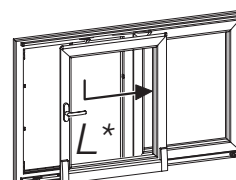
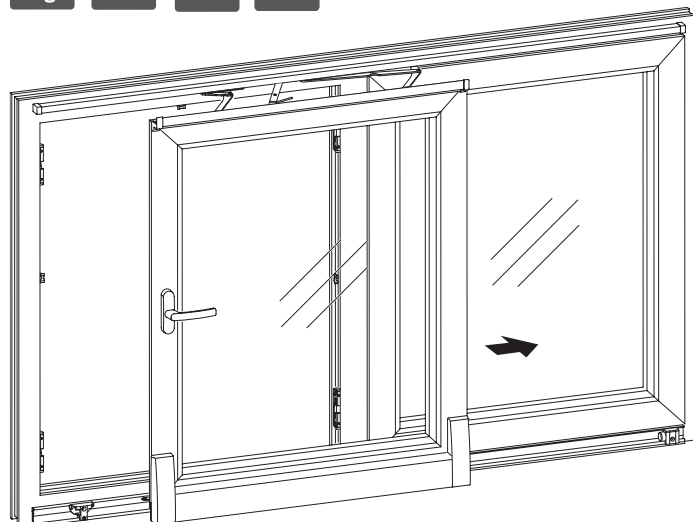
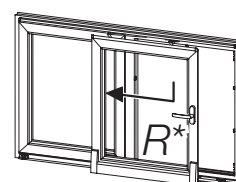


# ATRIUM® Alu-SP comfort

## Mounting instructions – FH < 2180, FB < 1280



\* HAUTAU version Left  
= DIN EN 12519 Right  
(right-opening)



\* HAUTAU version Right  
= DIN EN 12519 Left  
(left-opening)

The figures within these mounting instructions refer to HAUTAU version Left (DIN EN 12519 Right).

For HAUTAU versions Right (DIN EN 12519 Left) measures have to be applied mirrored.

### Notes:

- This instruction specifies the installation with HAUTAU central locking components/hardware. If different hardware is being used please follow installation instructions of central locking manufacturer.
- Handle position centered ( $\frac{1}{2}$  FH). A handle position below  $\frac{1}{2}$  of the sash height (FH) may interfere with the comfortable operation.
- For further **mounting applications** you need **following additional instructions**:
  - ATRIUM® Alu-SP comfort additional instruction – TWIN for sash weight > 160 kg, FH > 2180, FB > 1280; item code 241354.
  - ATRIUM® Alu-SP comfort additional instruction – version without night vent; item code 238934.
  - ATRIUM® Alu-SP comfort additional instruction – burglary-resistance version (RC2 applicable); item code 238940.
  - ATRIUM® Alu-SP comfort additional instruction – scheme C; item code 238946.
- **Before start-up, the fitting parts are to be greased** acc. to Maintenance and operating instructions (item code: 235870).

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Applications, abbreviations, Screws .....	3	Mounting spring stay and stay system .....	15
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Fittings D10 .....	5	Horizontal sash alignment, Alignment of support arms .....	17
Fittings D6 .....	6	Installation of guide blocks .....	18
Sash preparation, Mounting of stay connecting profile ..	7	Setting of sash closing pressure (overrebat height), Installation of buffers .....	19
Cutting to size and preparation of locking rods D10 ....	8	Bogie safety device, cover installation .....	20
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## Important information

### Intended use

Parallel-slide-fittings ATRIUM® Alu-SP comfort are intended for use only in stationary buildings. They are used for the horizontal opening and closing of windows and window doors. The Parallel-slide-elements must be installed perpendicularly, and under no circumstances may they be in a skewed position.

### Prerequisite

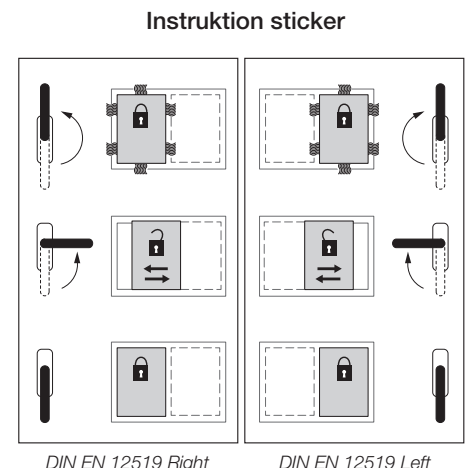
- These installation instructions and the installation of the fittings demand specialist knowledge corresponding to successfully completed training in at least one of the following trades: construction carpenter, construction metal worker, window and glass facade installer.
- Applications mentioned on page 3 of these mounting instructions apply to HAUTAU fitting system ATRIUM® Alu-SP comfort. Quoted tightening speeds and torques are binding.
- When **installing the fittings**, use screws **delivered** with the package.
- **Under all circumstances comply with the handling guidelines of the profile manufacturer.**
- Fittings can be used for aluminium profiles, only. Guide track and bottom track must **not be varnished**.
- Parallel-slide-elements may be surface-treated only **before** the installation of the fitting parts.  
**Subsequent surface treatment** may have a negative effect on the operability of the fitting parts.  
 In this case, all guarantee claims against the fitting manufacturer are nullified.
- The steel component parts described in these installation instructions have been passivated and sealed as per DIN EN 12329 using a colourless process. They must not be used in environments with aggressive and corrosive air components.
- Keep the runner rail and all rebates free of deposits and contamination, in order to avoid damage to the fitting and to ensure optimum functioning. **In particular, protect the fitting from cement or plaster residues.**
- Do not use acid-curing sealants, as these can result in corrosion of the fitting parts.
- Use acid- and solvent-free oils and greases, only.
- Avoid directly exposing the fitting to moisture, and prevent acid-containing cleaning agents from coming into contact with the fitting.
- The fitting manufacturer shall not be liable for any malfunction of or damage to the fittings as well as the windows or French doors fitted, if the malfunctions of the Parallel-slide-fittings hardware can be traced back to the use of bought-in fittings, insufficient invitation to tender, non-observation of the rebating instructions or application diagrams.
- The installing party shall be responsible for the adherence to the functional dimensions given in these mounting instructions and workshop drawing as well as for a perfect installation of the fittings and safe attachment of all components.

### Safety

- Do not open or disassemble the individual fitting parts (especially the stay system and power storage unit). Failure to comply with these instructions can result in bodily injuries. Send defective fitting parts back to the factory.

### User information

- Hand out product together with maintenance and operating instructions to end-user (Item-Code: 235870).
- Chose a clearly visible position at installed window sash for instruction sticker (sliding direction DIN left and DIN right). For HAUTAU central locking: instruction sticker can be found in box “Bogies for ATRIUM® Alu-SP comfort”.
- **Please comply with the “Requirements/instructions on the product and on liability (VHBH)”. Please inform the end-user about the content of the “Requirements/instructions for end-users (VHBE)”.**
- Keep these installation instructions in a safe place.



## Applications

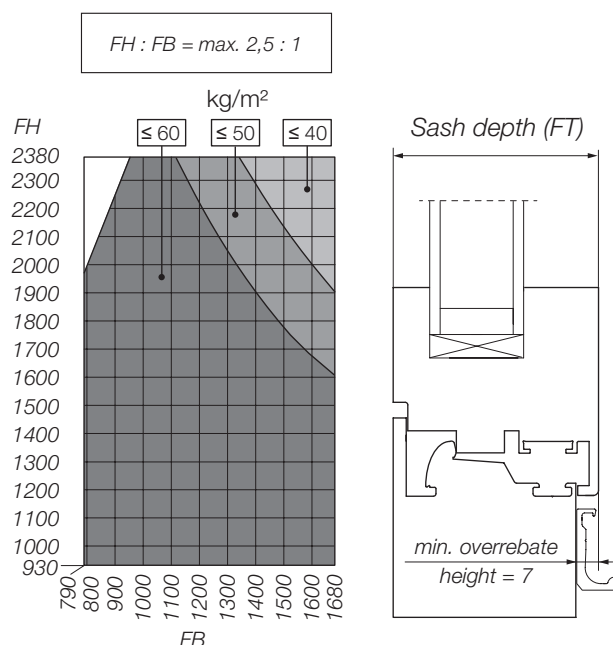
The limits of application quoted in these instructions are binding and must not be exceeded.  
Please also comply with admissible sizes, manufacturing instructions and processing guidelines given by the profile manufacturer.

### ATRIUM® Alu-SP comfort

Sash width (FB)	[mm]	790 bis 1680
Sash height (FH)	[mm]	930 bis 2380
Sash weight (FG)	[kg]	max. 160
Sash depth (FT)	[mm]	max. 87
Overrabate height	[mm]	min. 7
Handle position		½ FH

Max. sash profile depth (FT) 87 mm.  
Sash profile depths > 87 mm are possible.  
To be used only after technical approval of curve, sash centre of gravity and subsequent release of product.

The use of a spring stay is required for sash weights > 100 kg. A spring stay can't be used for sash widths (FB) 790 mm to 930 mm.



## Fixing screws for fittings

(included in scope of delivery)

for component(s)	number	size	diameter to drill	drive
Bogies ①/②, cover fillet supports ④	12	4.8 x 50	4.2	Torx 15
Bottom track ⑥	40	3.9 x 45*	3.2	Torx 15
Stay connecting profile ⑧	10	4.2 x 9,5	4.2	Torx 15
Support arms ③	4	M5 x 25	7.1 (for riveting nut)	Torx 25
Espag support for handle UG ⑤	2	M5 x 12 DIN 965	-	Phillips recessed head
Guide track ⑤	40	3.9 x 45*	3.2	Torx 15
Espag EG ⑨	2	3.9 x 22	-	Torx 15
Espag EG/Pzl + EG/PzlA ⑩	3	3.9 x 22	-	Torx 15
Support set ⑭	4	M5 x 10	5.2	Phillips recessed head

\*Important: Head diameter  $d_K$  7 mm

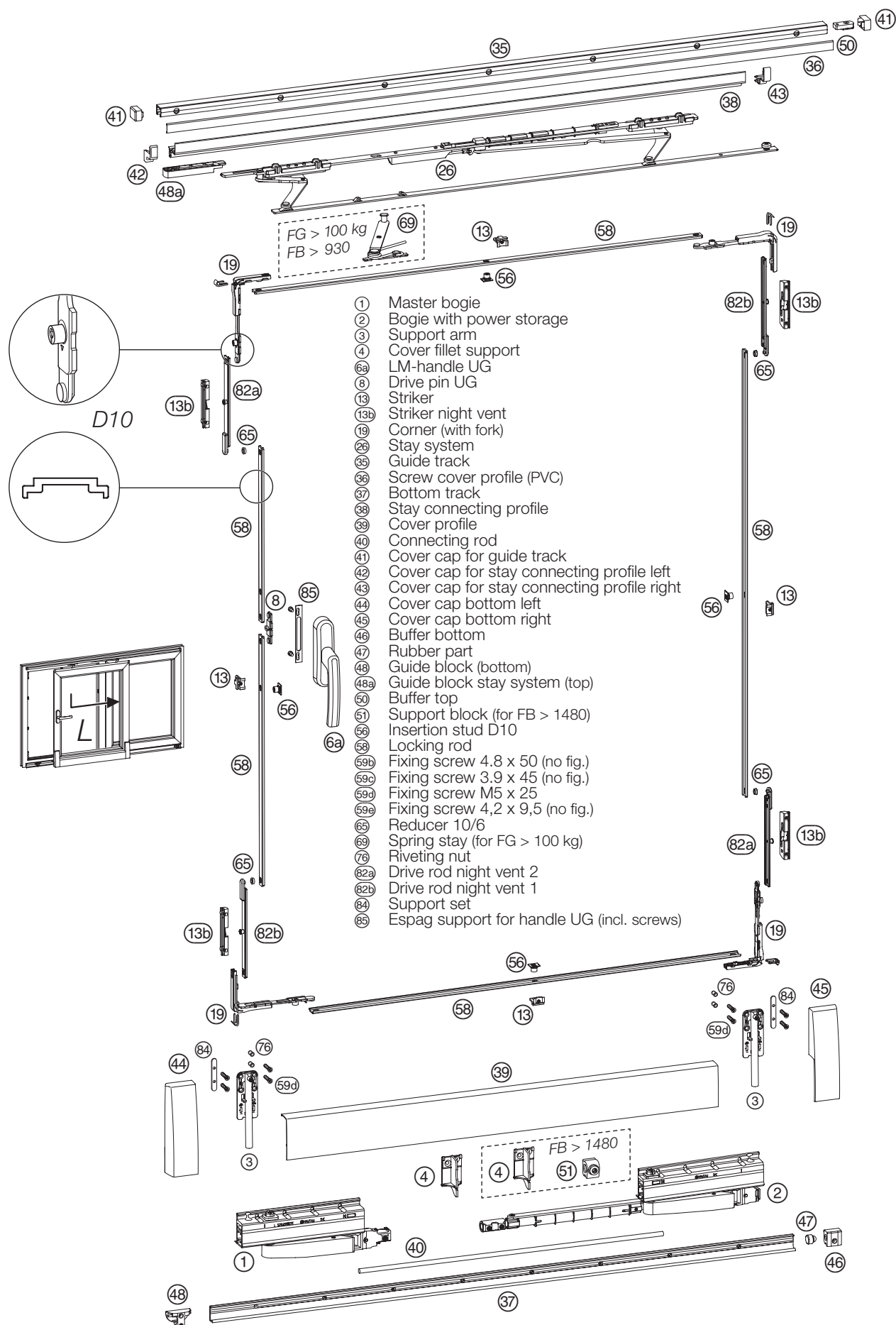
## Abbreviations

D	Backset	Griff UG	Handel for gear with fork drive
EG	Gearbox espag	Griff UG-S	Handel for gear with fork drive, lockable
Handle EG	Handle for gearbox espag	FB	Sash width
Handle EG-S	Handle for gearbox espag, lockable	FH	Sash height
EG/Pzl	Lockable gearbox espag for profile cylinder (inside)	FT	Sash depth
EG/PzlA	Lockable gearbox espag for profile cylinder (inside/outside)	FG	Sash weight
EG-oS	Gearbox espag without night vent	OKFF	Top edge finish-floor level
		Gr	Size

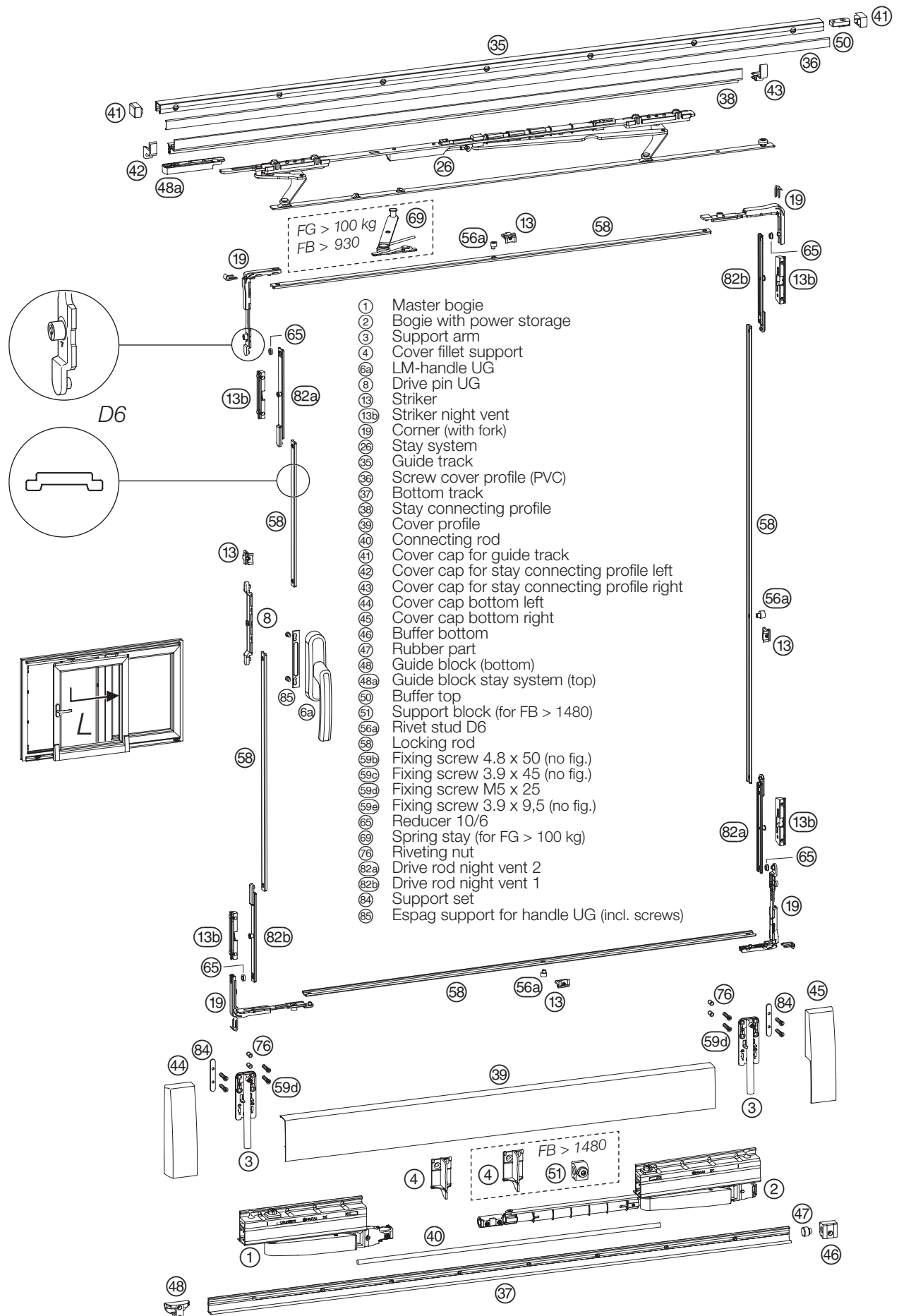
**All measurements in these instructions are indicated in millimetres (mm).**

ATRIUM® Alu-SP comfort

## Fittings D10



## Fittings D6





# Sash preparation, Mounting of stay connecting profile for stay systems

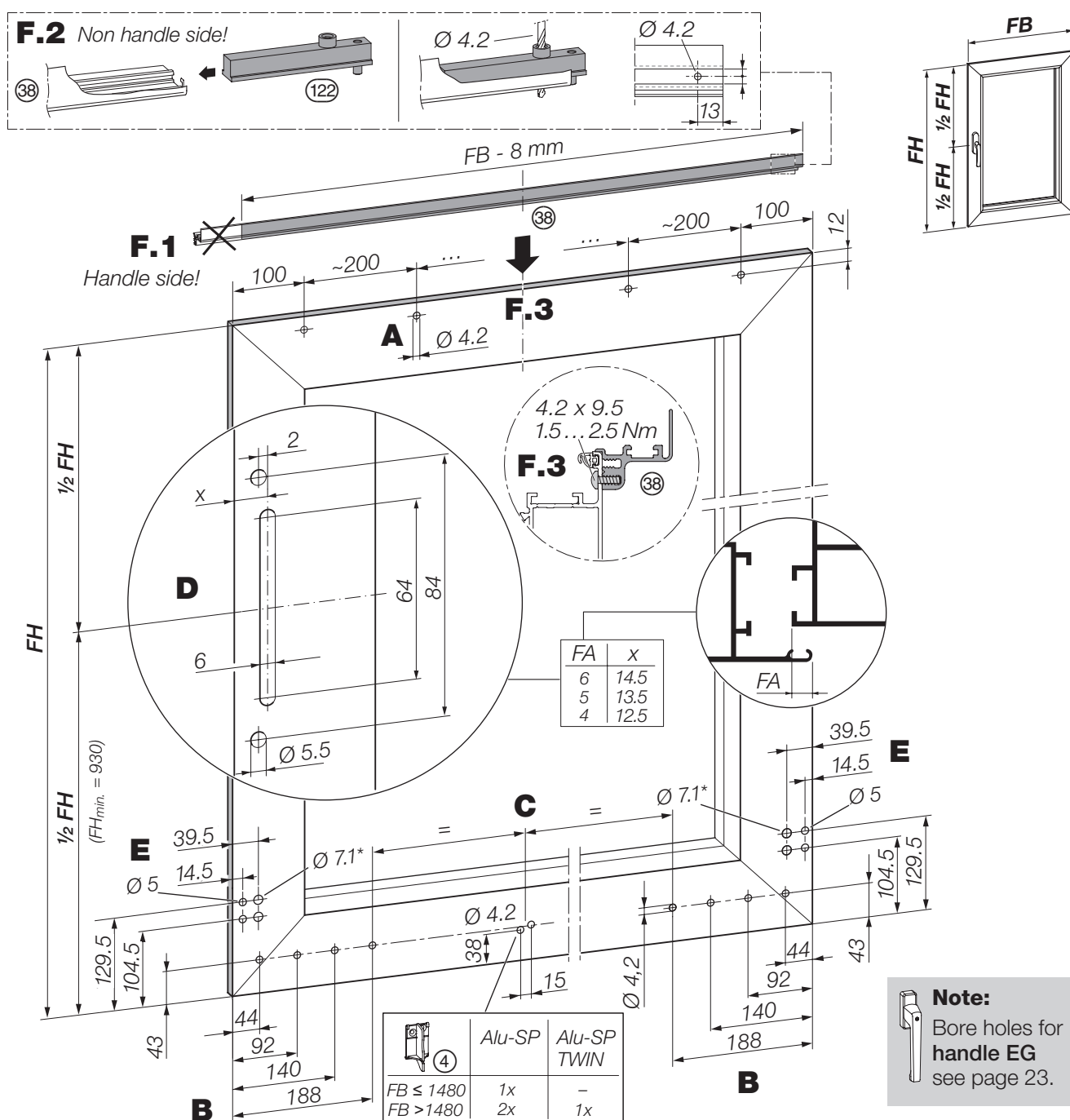
## Bore holes for handle UG, bogies, stay connecting profile and cover fillet support(s)

- A** Mark bore holes  $\varnothing 4.2$  for stay connecting profile ③⑧ with a distance of approx 200.
- B** Mark bore holes  $\varnothing 4.2$  for bogies ①/② and drill.
- C** Distribute bore holes marks  $\varnothing 4.2$  for cover fillet support ④ (for FB > 1480 two fillet supports) equally between bogies. For FB < 860 (< 1460 for TWIN-model) **must not use** cover fillet supports.
- D** Mark  $\frac{1}{2}$  FH (center of sash, handle position) and bore holes  $\varnothing 5.5$ ;  $\varnothing 6$  long hole pattern for handle UG ⑥⑨.
- E** Mark bore holes  $\varnothing 5$  and  $\varnothing 7.1^*$  for support arms ③ and drill.

\* Full material, no riveting nuts can be used. In this case drill  $\varnothing 4.2$ .

## Mounting of stay connecting profile for stay systems

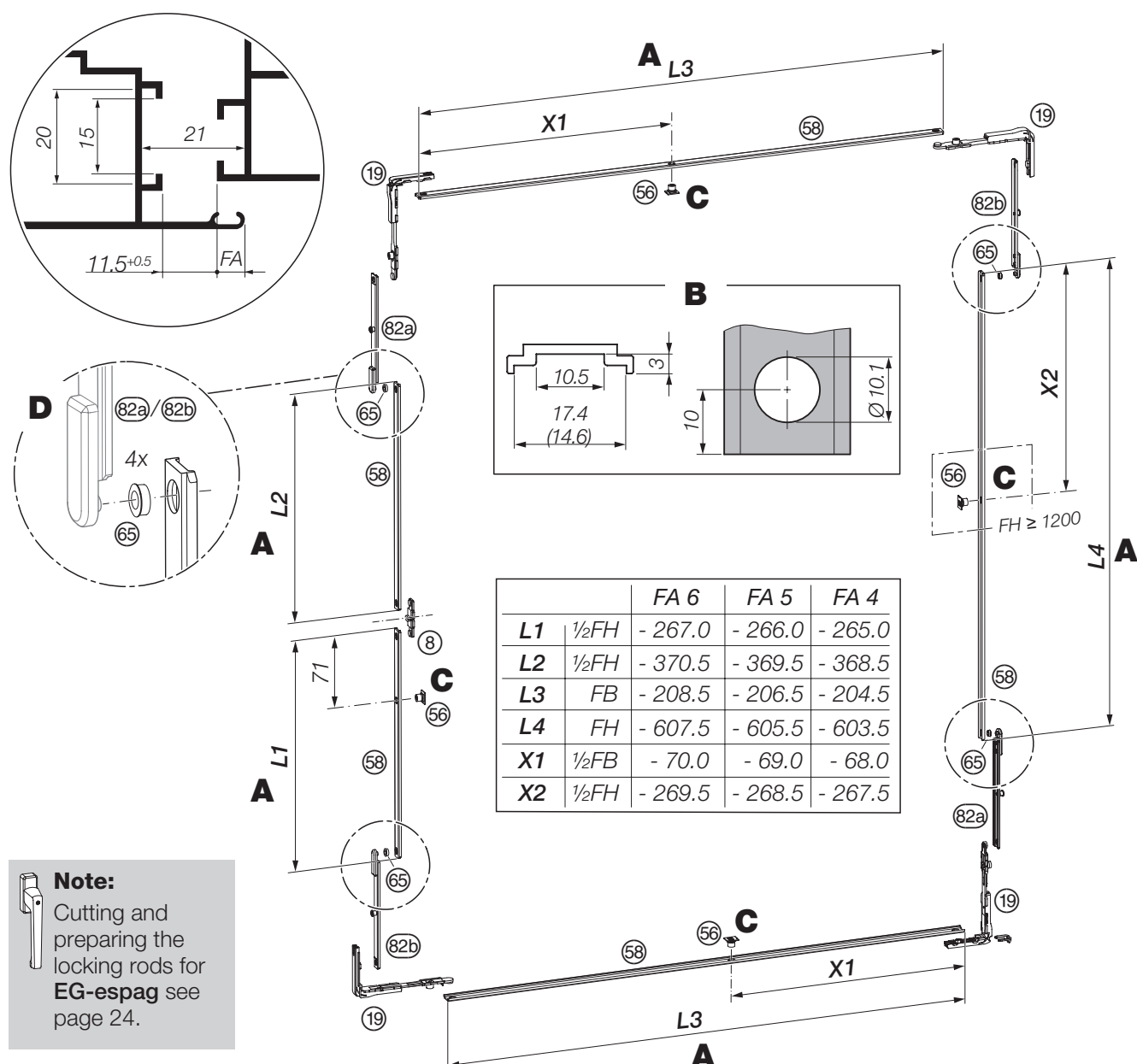
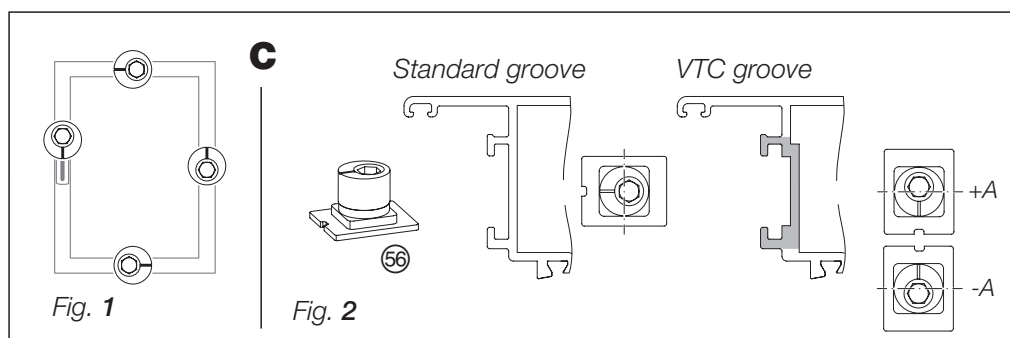
- F (F.1)** Cut stay connecting profile ③⑧ from handle side to size, sash width minus 8 mm. **(F.2)** Stay connecting profile must be drilled at **non handle side** for fixation of the stay system (Jig ⑫② Item-Code 243493 or refer to hole pattern). **(F.3)** Screw stay connecting profile centered to sash  $4.2 \times 9.5$  Torx 15, 1.5 ... 2.5 Nm.



# Cutting to size and preparation of locking rods D10

## Cutting to size and preparation of locking rods D10

- A** Cut locking rods 58. Subtraction measures see table below.
- B** Punch Ø 10,1 holes through the locking rods.
- C** Pay attention to equal direction of closing at locking pins (Fig. 1). Align insert pin D10 56 according to profile groove (Fig. 2) and press into locking rods. At VTC-groove: +A = Possibility to enlarge sash closing pressure; -A = Possibility to decrease sash closing pressure.
- D** Put reducer 65 (4 pieces) into locking rod 58 (alignment as illustrated).

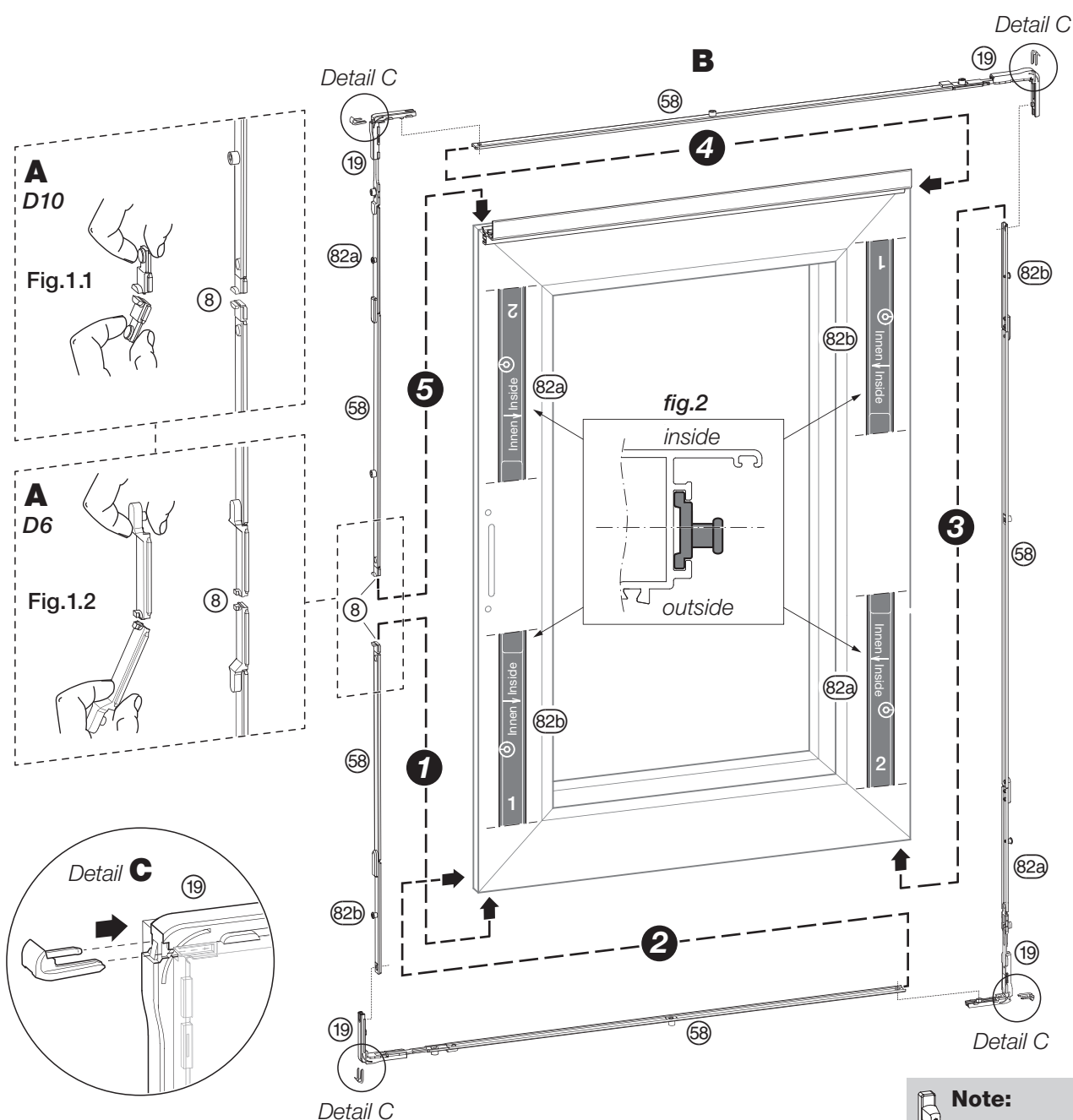




## Installation of central locking

### Installation of central locking

- A** Break the drive pin UG ⑧, for D10 (Fig.1.1) or D6 (Fig. 1.2), in the middle.
  - B** Connect the concerning parts of the central locking step-by-step to each other and slide them, by sequence (1...5), into the profile groove of sash.
- Important note:** Install the drive rods night vent ⑧2a/⑧2b at the positions shown below, regardless of the opening direction (left opening window [DIN EN 12519 left] or right opening window [DIN EN 12519 right]). **Do not** install them “mirrored”. The arrow (Innen/Inside) on the drive tracks must point toward the sash rebate (Fig. 1).
- C** Lock corners ①9.
  - D** Check function of central locking via drive pin ⑧ (without figure).

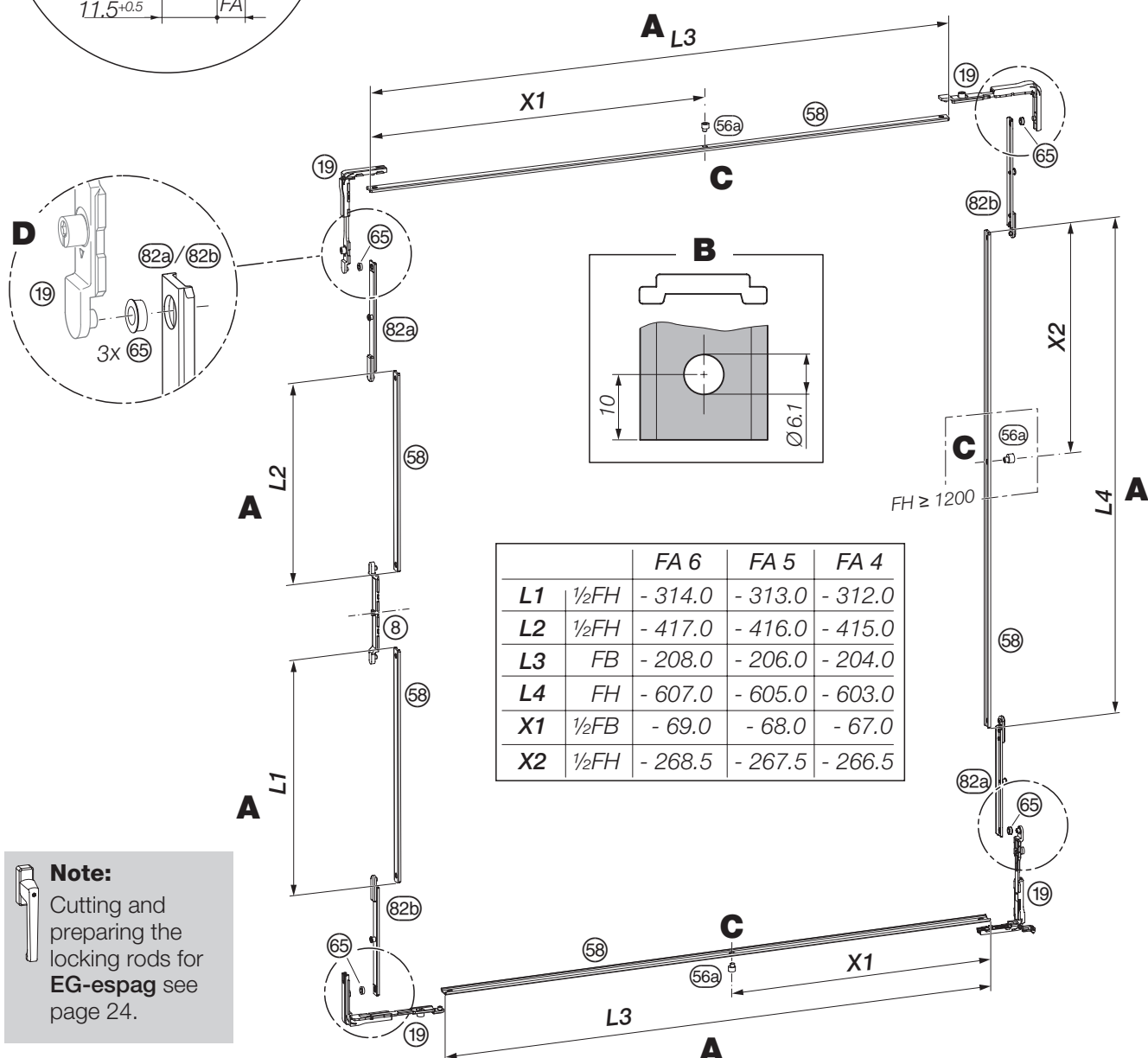
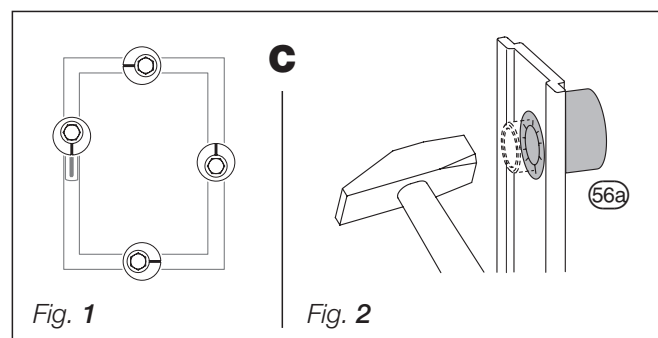
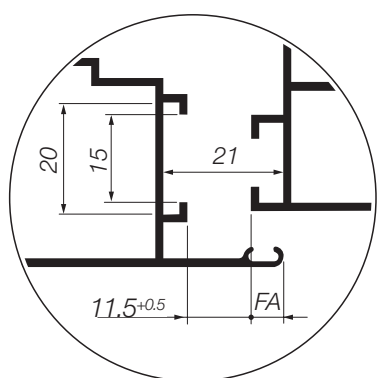


**Note:**  
 Mounting  
**EG-espag**  
 see page 24.

# Cutting to size and preparation of locking rods D6

## Cutting to size and preparation of locking rods D6

- A** Cut locking rods 58. Subtraction measures see table below.
- B** Punch Ø 6,1 holes through the locking rods.
- C** Pay attention to equal direction of closing at locking pins (Fig. 1).  
Rivet stud D6 56a (Fig. 2) and rivet them into locking rods.
- D** Put reducer 65 (4 pieces) into drive rods 82a/82b (alignment as illustrated).



**Note:**  
Cutting and preparing the locking rods for **EG-espag** see page 24.

## Mounting of handle and bogies

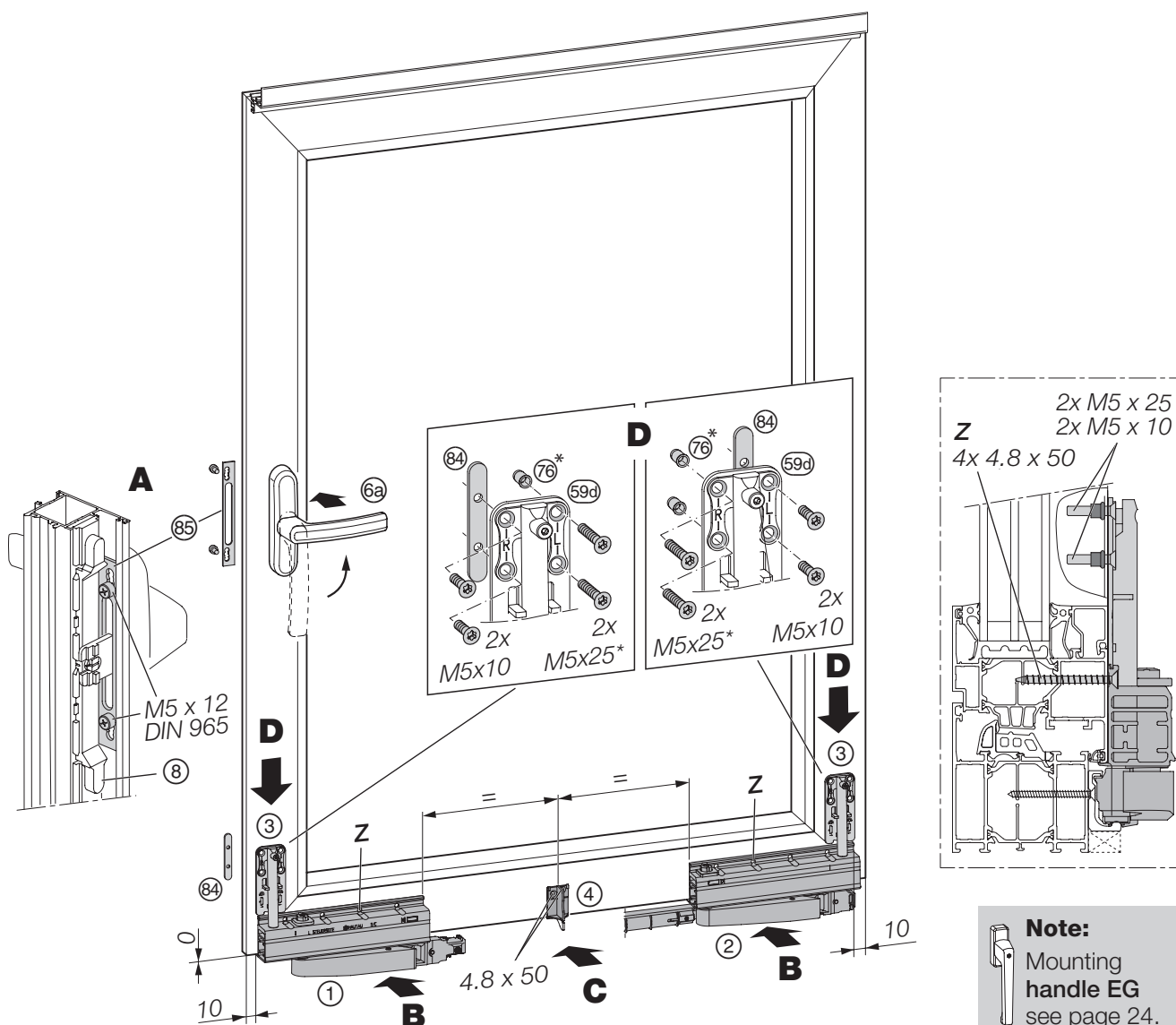
### Mounting of handle

- A** Put espag support ⑧⑤ over connecting link and couple connecting link with drive pin ⑧ (as example: version D6). Reposition handle, if necessary. Tighten handle and espag support with 2 screws M5 x 12. Make sure that handle can be moved easily. Check central locking, if necessary (no Fig.).

### Mounting of bogies

- B** Tighten bogie ①/② with 4 screws 4.8 x 50 each at sash. Keep a lateral distance of 10 mm to outer sash edges and ensure flush positioning with bottom edge.
- C** Fix cover fillet support ④ (for FB > 1480 two fillet supports arranged equally between bogies) with 2 screws 4.8 x 50 between bogies. For FB < 860 **must not use** cover fillet supports.
- D** Fix 2 riveting nuts\* ⑦⑥ Ø 7 in the designated holes. Insert and click support arms ③ into the profiles of the bogies and fasten with 2 screws M5 x 25 each, into the riveting nuts. Put support set ⑧④ into the sash overrabate and fix it with 2 screws M5 x 10, through the support arms.

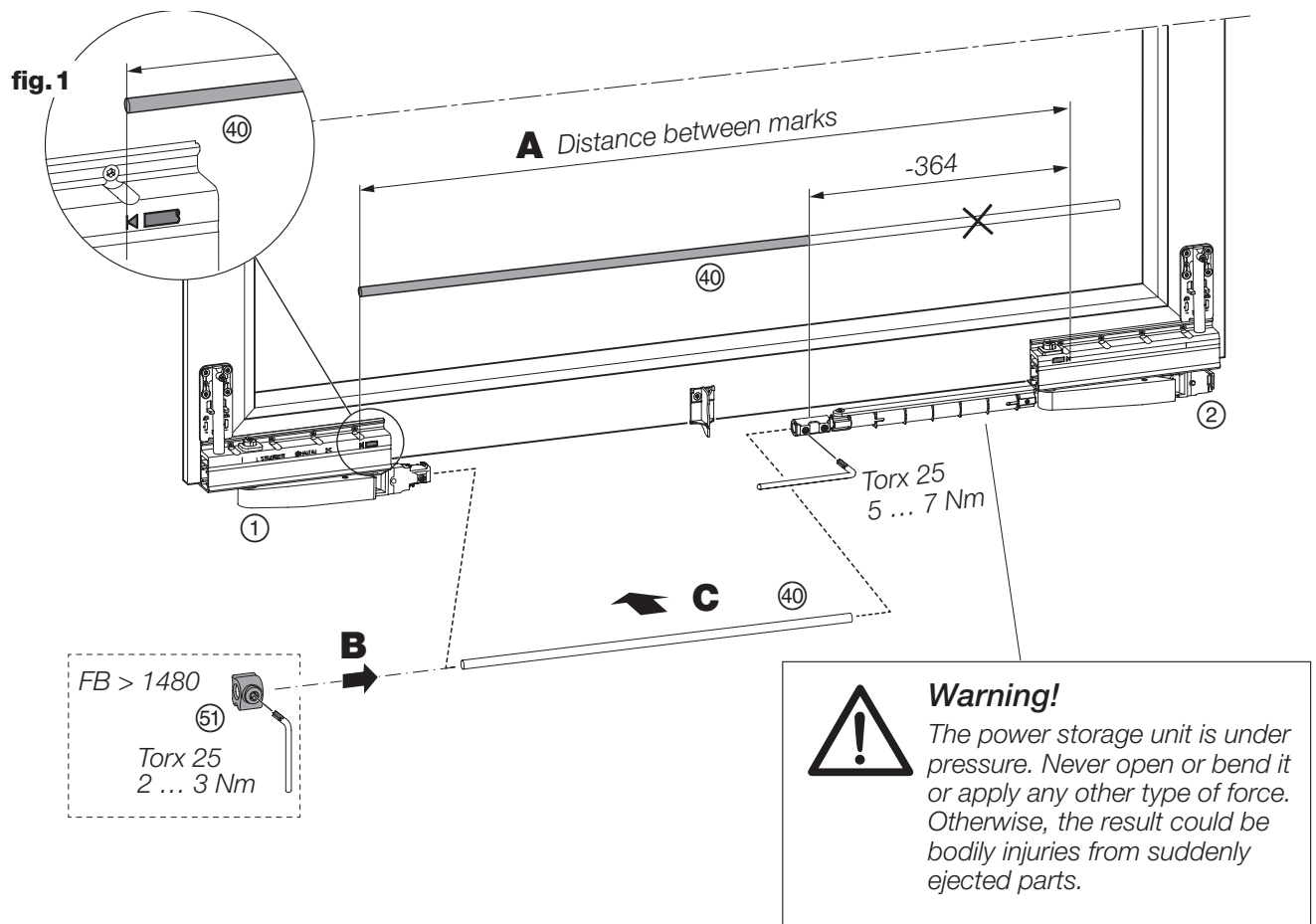
\* Full material, no riveting nuts can be used. In this case fix the support arms with screws 4.8 x ....



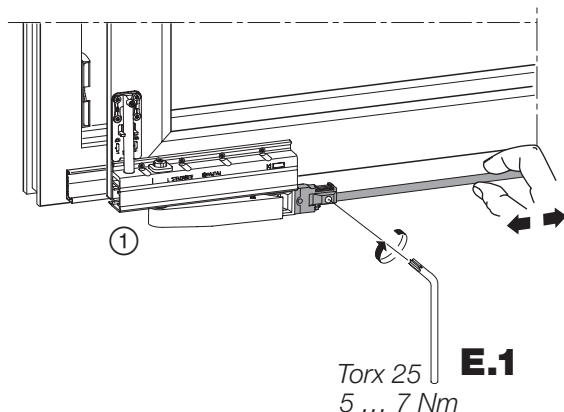
## Mounting connecting rod, parallel alignment of bogies

### Mounting connecting rod

- A** Cut connecting track ④⑩ to size according to marks on bogies (Fig. 1) - 364.
- B** For FB > 1480: move support block ⑤① in centre position of connecting rod. Fasten with Torx 25, 2 ... 3 Nm.
- C** Insert connecting rod in couplings of bogies ① and ②.  
Tighten with Torx 25 (5 ... 7 Nm; at first, tighten bogie ② on non-handle side).



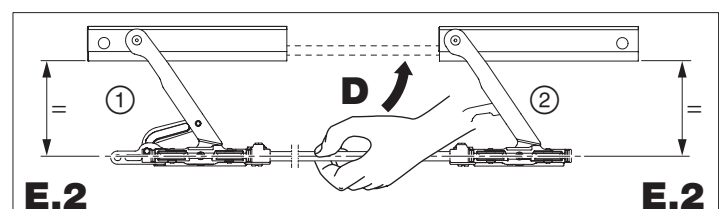
### Parallel alignment of bogies (to ensure uniform entry of sash into frame)



**D** Grab connecting rod centered and bring it into position "close".

**E E.1:** In this position, tighten connecting rod firmly at bogie ① on handle side (Torx 25, 5 ... 7 Nm).

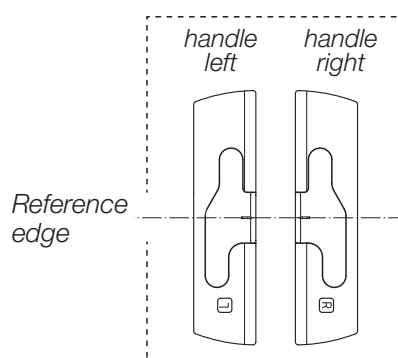
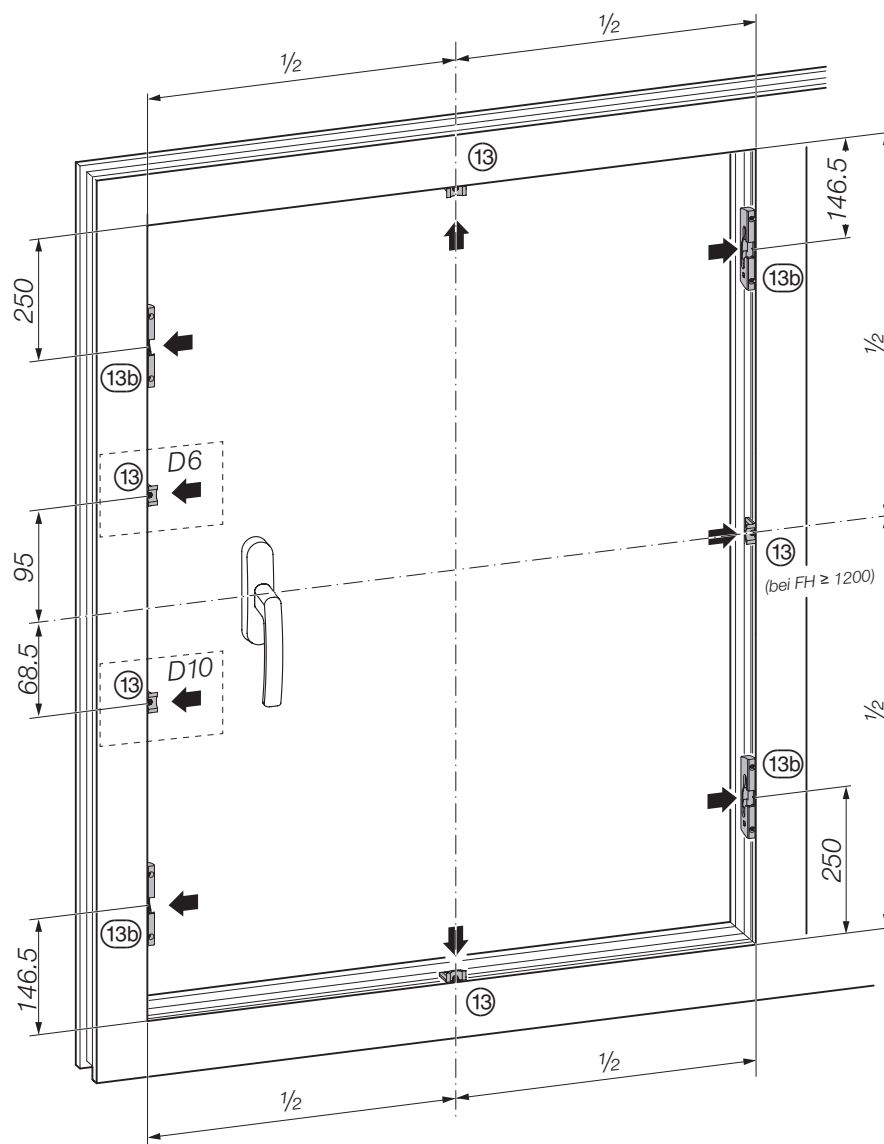
**E.2:** Now, both bogies ① and ② have to be parallel in position "open", too.



## Mounting of strikers

### Mounting strikers to frame

Fix strikers ⑬/⑬b according to figure below (Torx 10).



**Note:**  
 For EG-espag  
 different measures.  
 See page 23.

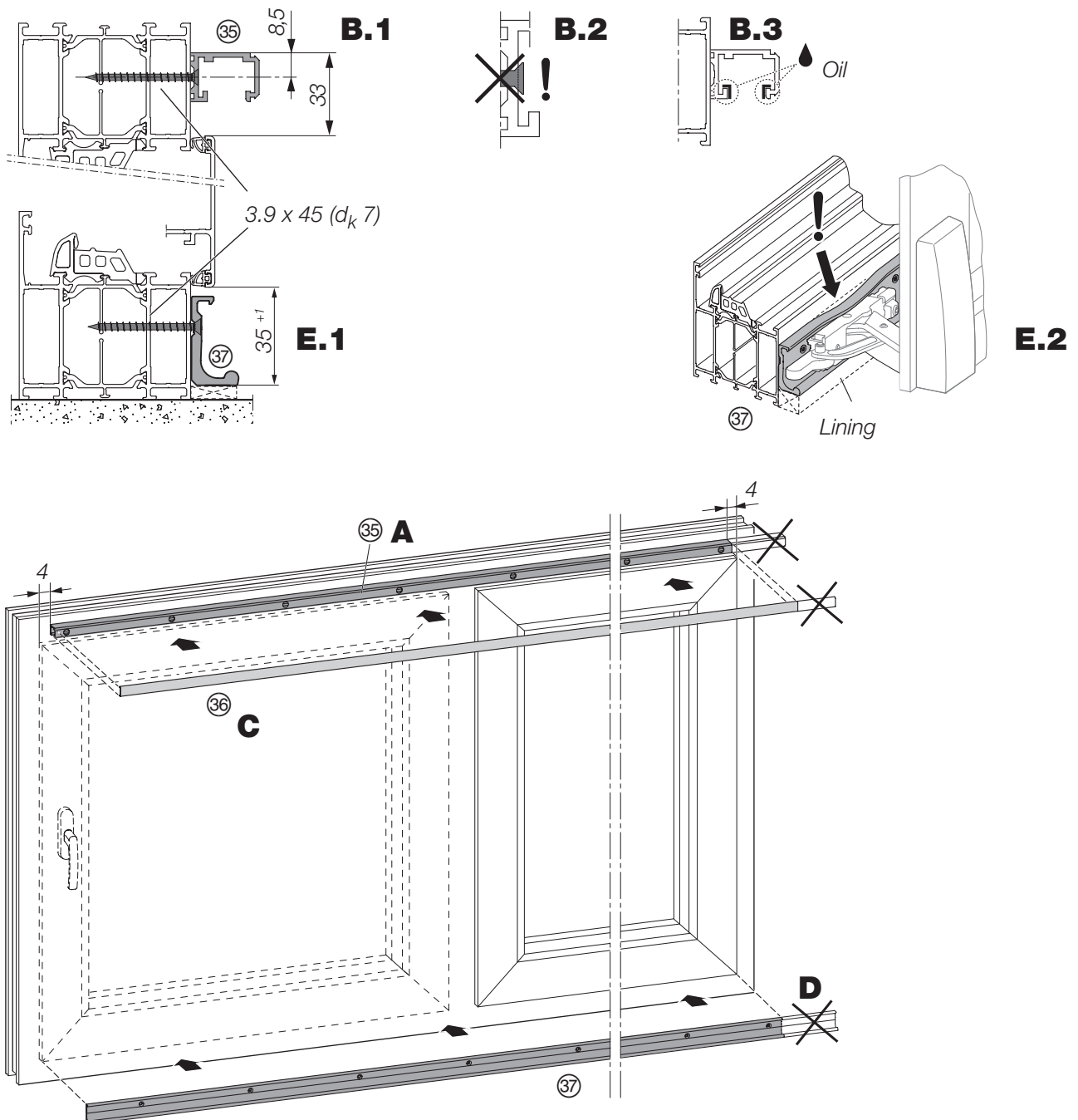
# Mounting of guide track, and bottom track

## Mounting guide track to frame

- A** Shorten guide track ③⑤: distance between outer edges of sliding sash and fixed sash minus 8 mm.
- B** Tighten guide track with screws 3.9 x 45 ( $d_k$  7) as shown (B.1).  
Make sure that the screw heads do not protrude, since this can result in material damage! (B.2)  
Oil the sliding surfaces along the entire length of the guide track (B.3).
- C** Shorten cover profile ③⑥ according to size of guide track and clip on guide track.

## Mounting bottom track to frame

- D** Shorten bottom track ③⑦ until it is flush with outer corners of sliding sash and fixed sash.
- E** Fix bottom track at frame at a distance of 35 +1 mm from bottom edge of bottom track to bottom edge of sash. Use screws 3.9 x 45 ( $d_k$  7) (E.1). In case of FG > 160 kg, visible deformation or unusual (well audible) noise in the area of bottom track, provide continuous lining (on site) at bottom track for load transfer (E.2).





# Mounting spring stay and stay system

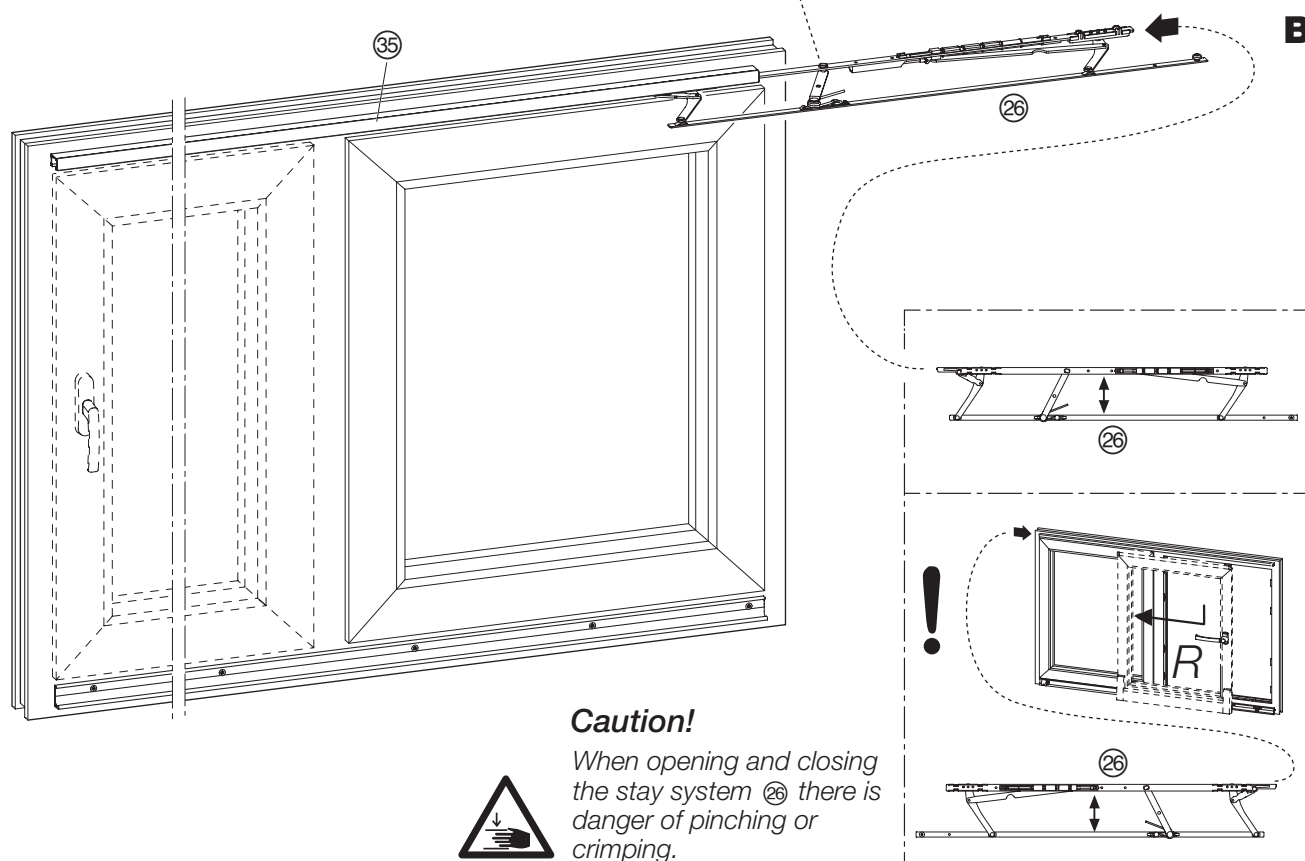
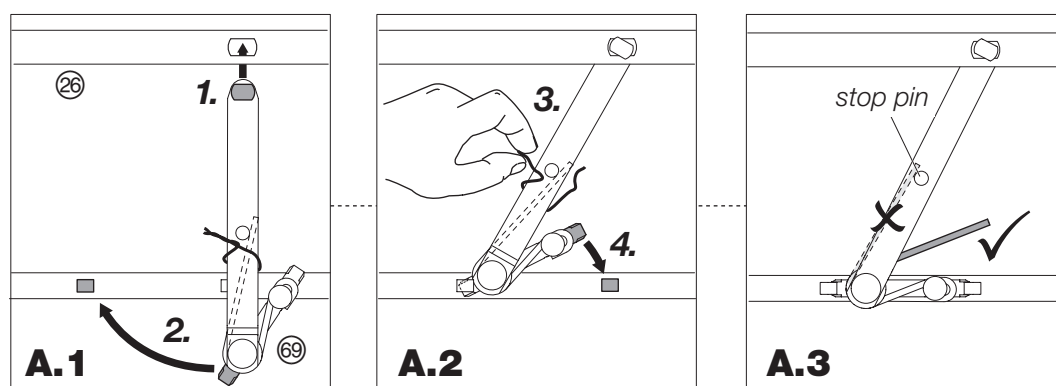
## Installation the spring stay

- A.1** Open the stay system (26). Hook in the pin of the secured spring stay (69) from below into the stay system (1.). Move the base plate of the spring stay with the smaller part into the first retainer (2.).
- A.2** Remove the spring stay fixation (3.) and turn the longer end of the base plate into the second retainer of the stay system (4.).
- A.3** End of spring must be positioned in front of the spring stop pin. Otherwise the system will not function properly.

## Installation of stay system into the guide track

- B** Slide the open stay system (26) into the guide track as shown in the illustration.  
Tip: Hold the hooked in spring stay in position during installation as it will not be fixed in place by the guide rail until installation is complete.

Spring Stay (26)  
for sash weight  
FG > 100 kg  
FB > 930



## Hanging sash


### Installing sash onto guide track

- A** Bring handle in slide position. Lift sash slightly in oblique position and place it together with bogie rollers on front edge of guide track 37 (Fig. 1). Check position of rolls by sliding the sash and adjust, if necessary.

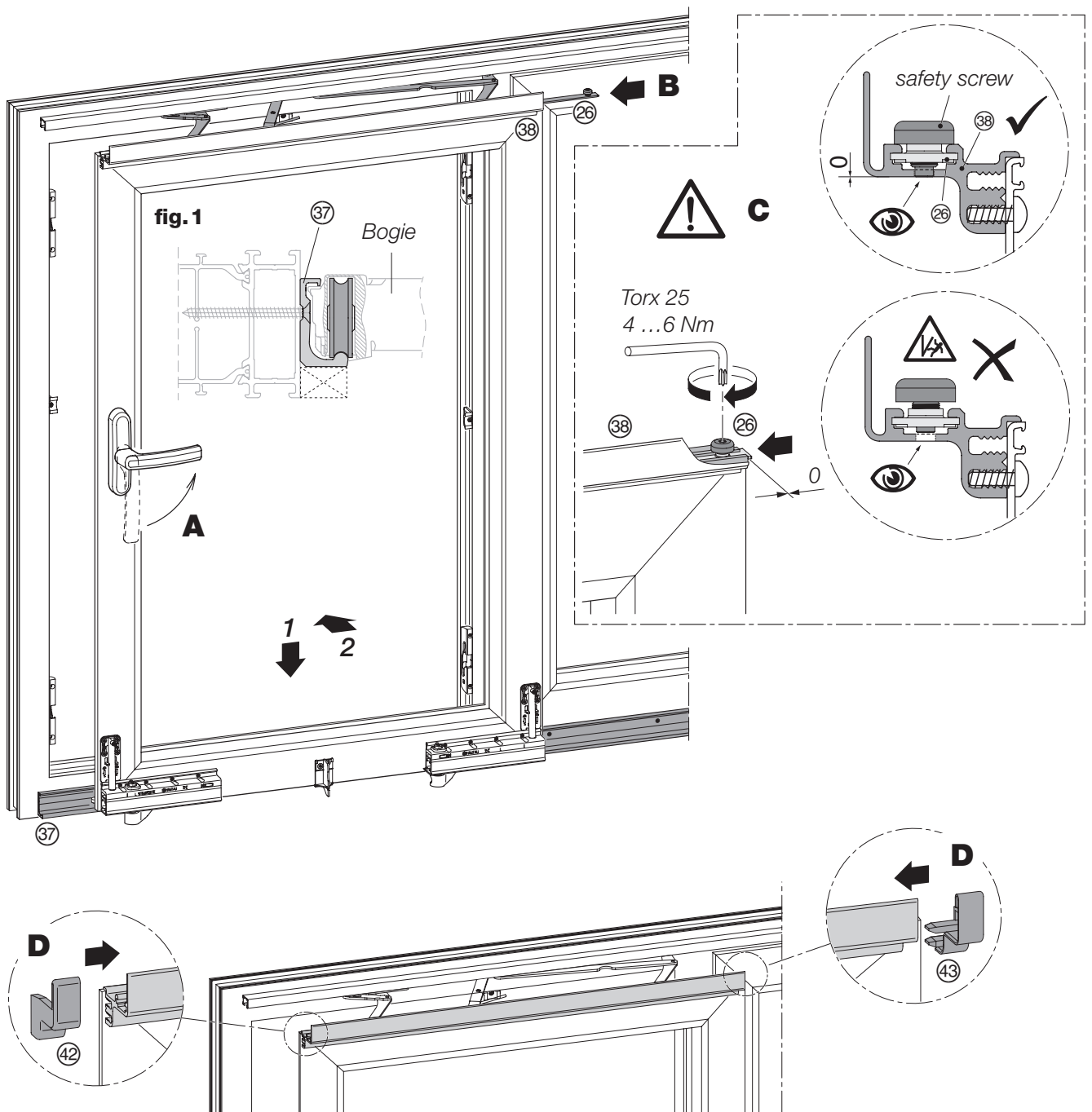
### Connecting sash with guide track

- B** Push stay system 26 into stay connecting profile 38.

- C** Put stay system in flush position with sash border and tighten safety screw (Torx 25; 4 ... 6 Nm).

 **Warning:** The safety screw must be positive fitted into the hole of the stay connecting profile 38. If you could not see the screw, the sash is not sufficiently secured. Severe injuries could be the consequence.

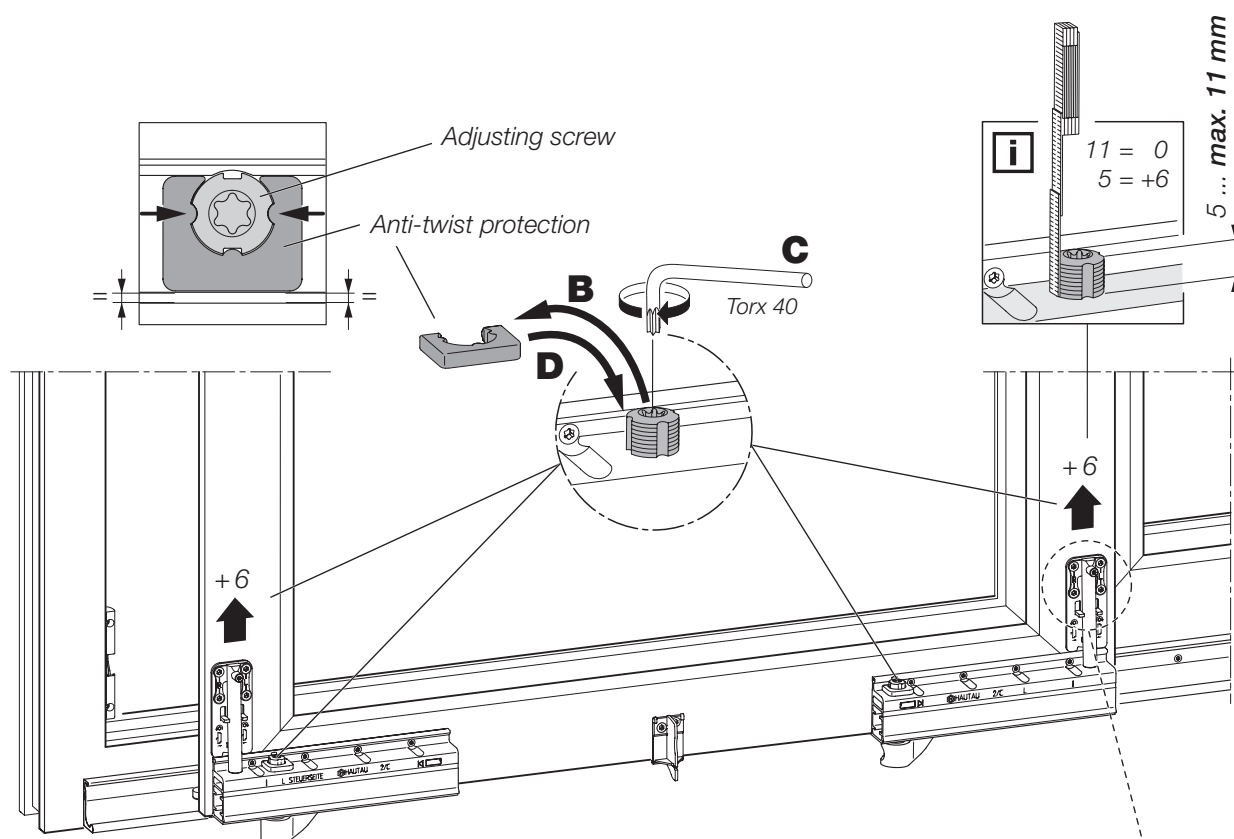
- D** Attach cover caps left 42 and right 43 on ends of stay connecting profile.



# Horizontal sash alignment, alignment of support arms

## Horizontal sash alignment

- A** Check fittings cavity top and bottom on both sides (no fig.).
- B** Remove anti-twist protections.
- C** Lift bogies (Torx 40) by means of adjusting screws in order to align sash.  
**Note:** If the height of the bogies is set to different levels, the guide block stay system (48a) must be realigned (see page 18).
- ⚠ Attention:** If the adjusting screws are turned out more than 11 mm, the bogies will be destroyed.
- D** Put anti-twist protections on adjusting screws; at first, correct orientation of adjusting screws, if necessary. The anti-twist protections have to be positioned parallel to the outer edge of the bogies.

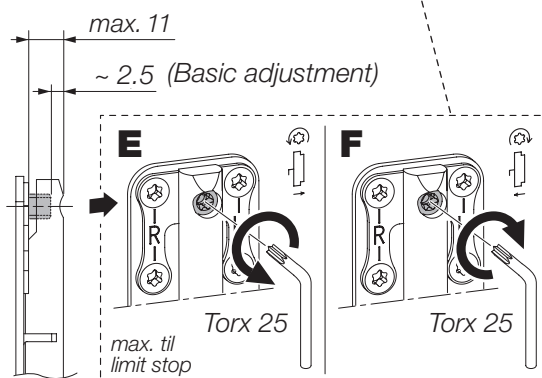


## Alignment of support arms

(to achieve optimum for easy sash entry into frame)

- E** To ease entry of sash.
- F** To ease opening of sash.

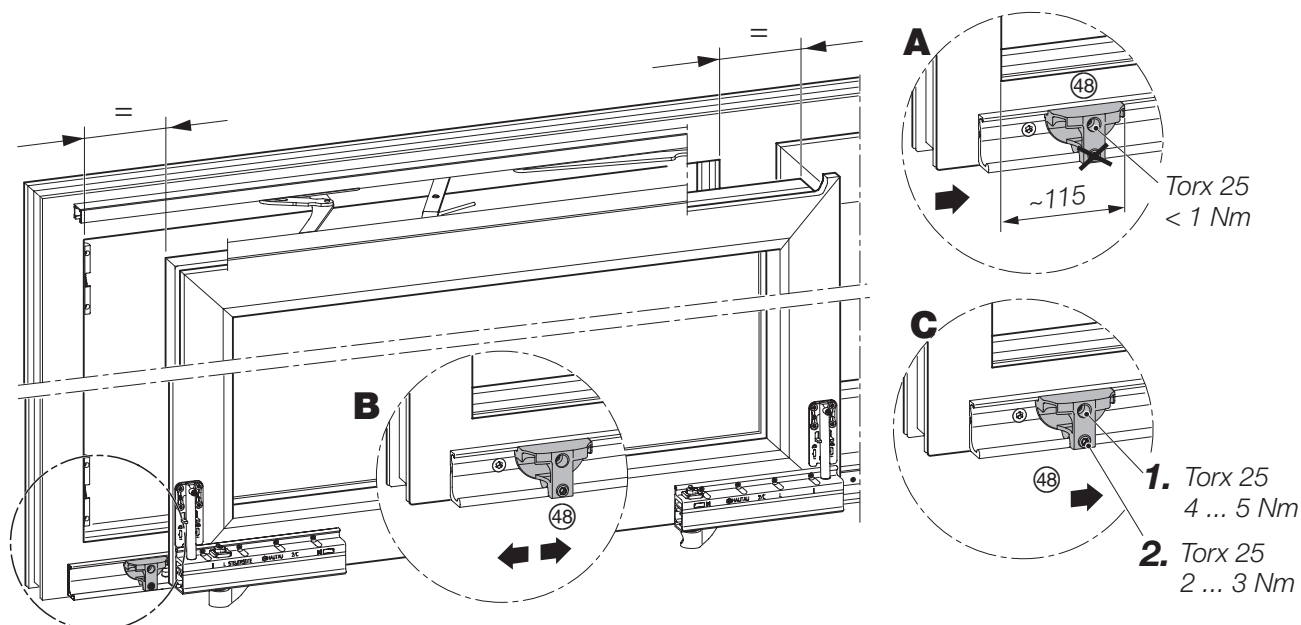
**i Important note:** Both support arms have to be adjusted in the same way in direction **E** only (coming from basic adjustment). If adjustment in direction **E** is too heavy, depending on profile and sash weight, dragging bogies may occur. In this case drive the screw back acc. **F**, until the bogies run correct.



## Installation of guide blocks

### Installation of guide block, bottom

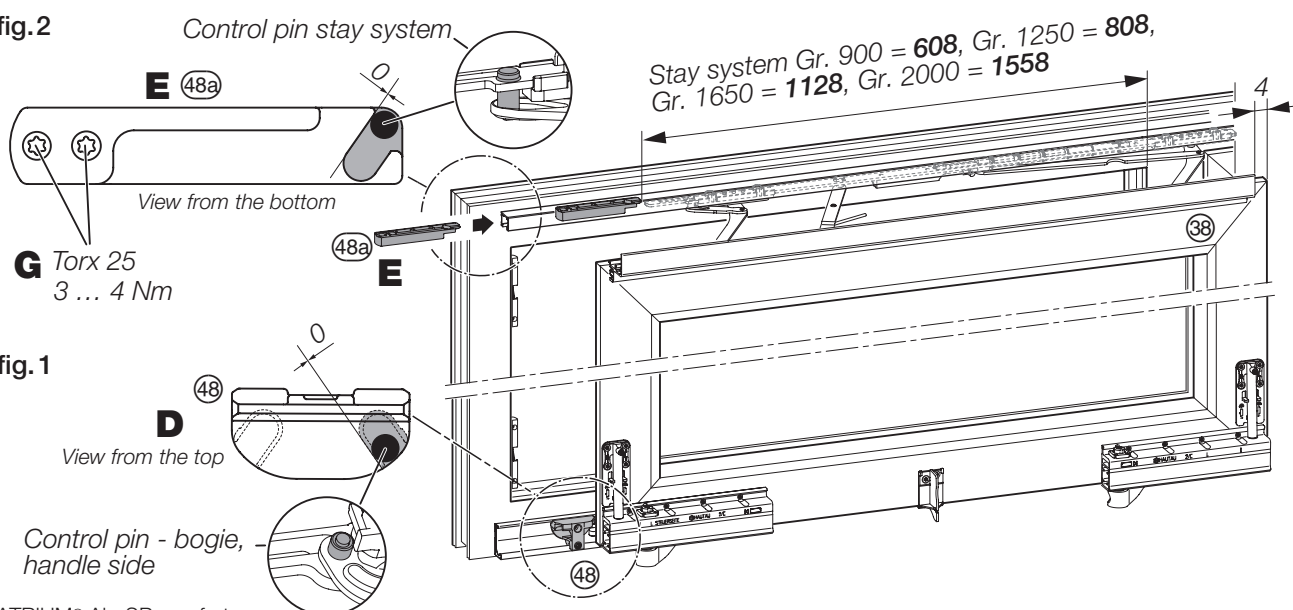
- A** Set guide block ④⑧ on handle side at a distance of approx. 115 mm from the inner edge of the frame. At first tighten it slightly with the upper screw (Torx 25, <1Nm).
- B** Put sash in slide position and check fittings cavity on both sides ( $11.5^{+0.5}$  mm). Reset guide block, if necessary.
- C**
  1. Tighten upper screw firmly at guide block (Torx 25, 4 ... 5 Nm).
  2. Then tighten bottom screw (Torx 25, 2 ... 3 Nm).



### Installation of guide block, top (to parallel running of the sash into the frame)

- D** Slide the sash towards the guide block bottom ④⑧ as shown in Fig.1 until the control pin of the 'master bogie' ① (on handle side) is in contact with the entry curve, but is NOT yet sliding in.
- E** Slide the guide block, top ④⑧a into the track until it reaches the control pin of the stay system (Fig.2). Slightly tighten the screws (Torx 25) of the guide block.
- F** Put sash in "closed position" and check fittings cavity on both sides ( $11.5^{+0.5}$  mm). Reset guide block, if necessary (no Fig.).
- G** Tighten both screws of the guide block firmly (Torx 25, 3 ... 4 Nm).  
**Another option** is to measure the position of the guide block, top ④⑧a. See dimensioning shown in the illustration. The dimensions are based on a fittings cavity of  $11.5^{+0.5}$  mm, a sash rebate width of 20 mm and a correctly positioned stay connecting profile ③⑧ (4 mm of the sash rebate width).

fig.2

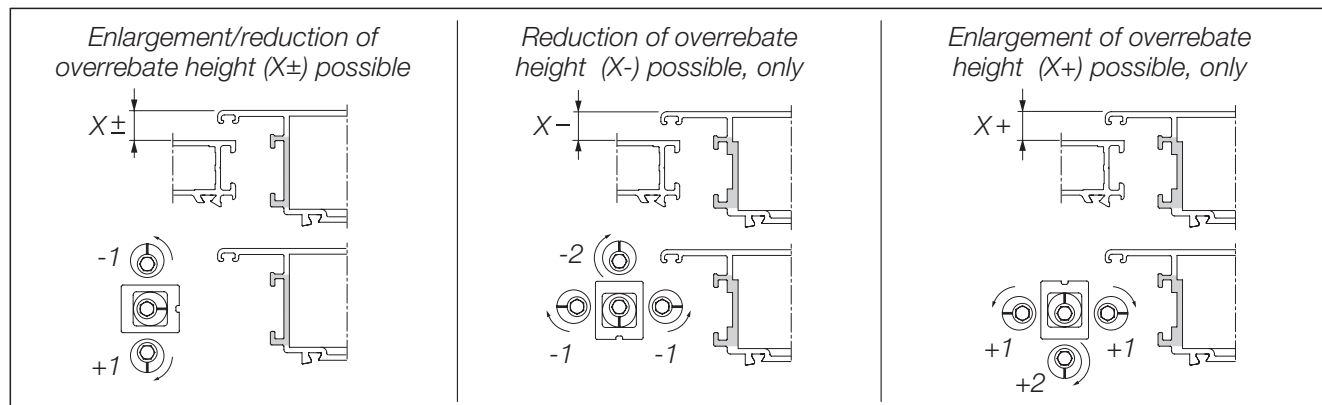


# Setting of sash closing pressure, buffer installation

## Setting of sash closing pressure (set overrebate height)

Check closing behaviour of sash.

Set of sash closing pressure: adjust overrebate height (X) by means of allen key size 4.



## Installation of buffers

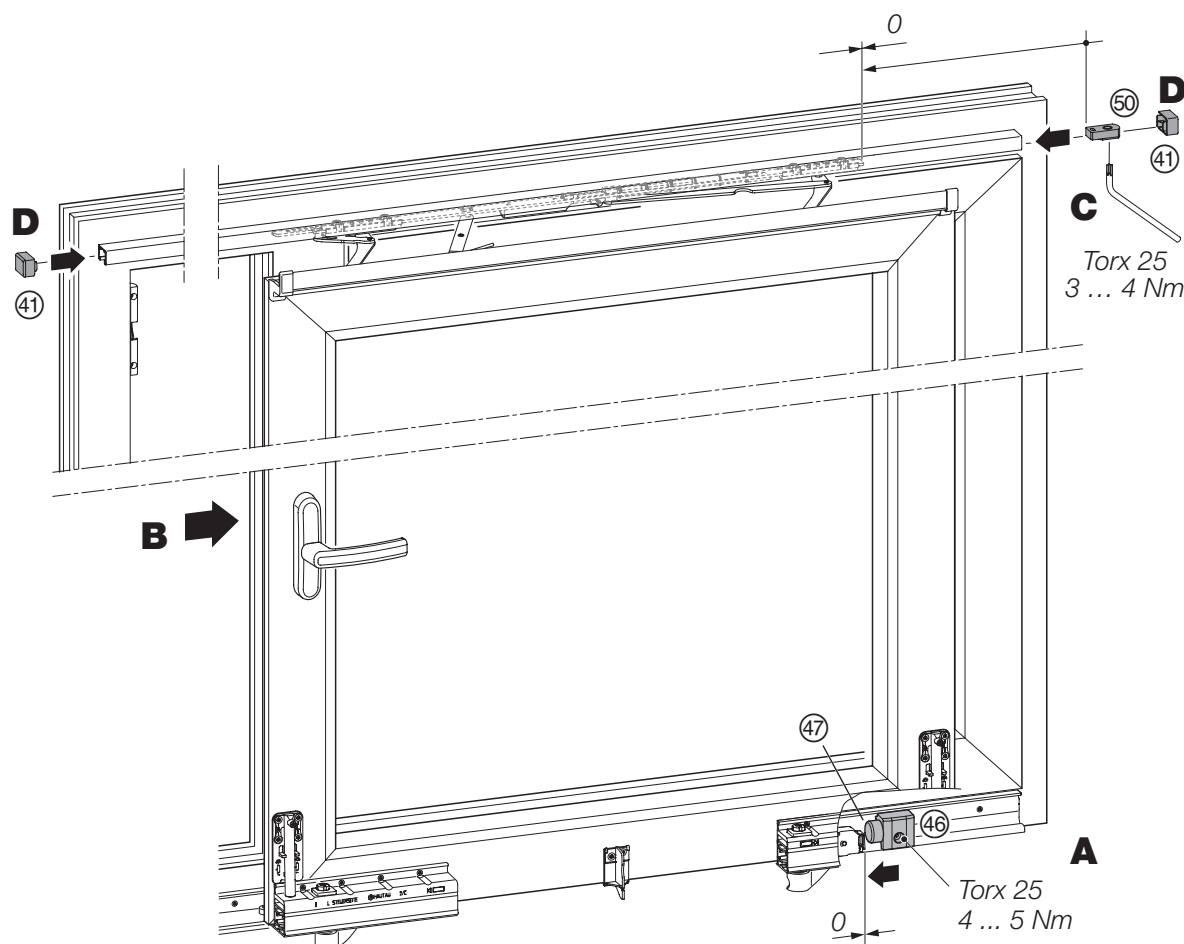
**A** Screw bottom buffer ④⑥ with attached rubber part ④⑦ in required position at bottom track (Torx 25, 4 ... 5 Nm).

**B** Move sash right to buffer.

**C** Insert top buffer ⑤⑩ into guide track (until stay system) and tighten it firmly (Torx 25, 3 ... 4 Nm).

**D** Attach cover caps ④① on ends of guide track.

**i Important information:** If the window sash does not run simultaneously to upper and lower end stop, material damages can be the consequence.



# Bogie safety device, cover installation

## Activate bogie safety device

**A** Move bogie safety device (1) of both bogies backwards until they engage in position as shown (2).

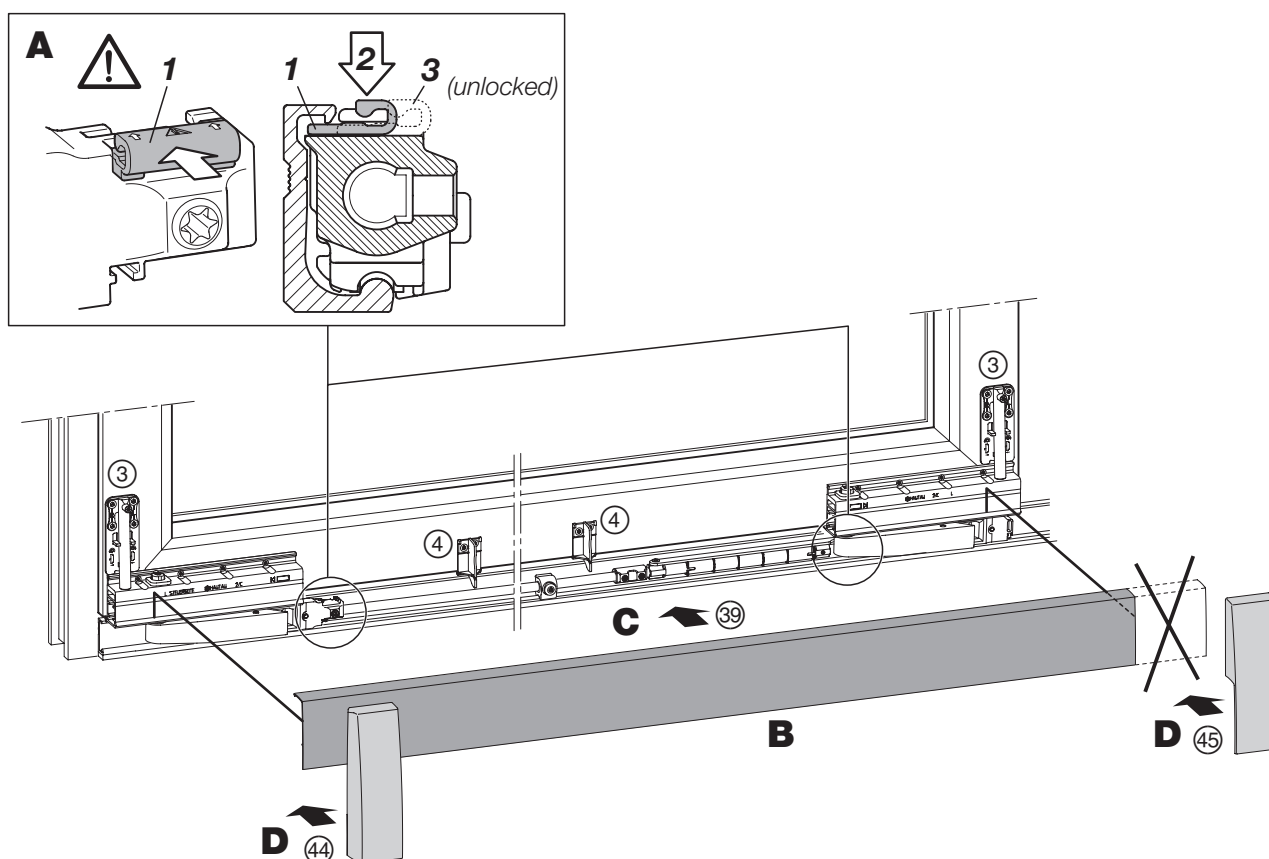
 **Warning:** If the bogie safety device has not locked correctly or not locked at all in position (2) as shown, the sash is not sufficiently secured (3). Severe injuries could be the consequence.

## Assemble covers for bogies

**B** Cut cover profile (39) to size according to bogie marks.

**C** Align cover profile according to bogie marks and clip on the bogie-profiles as well as on the cover fillet support(s) (4).

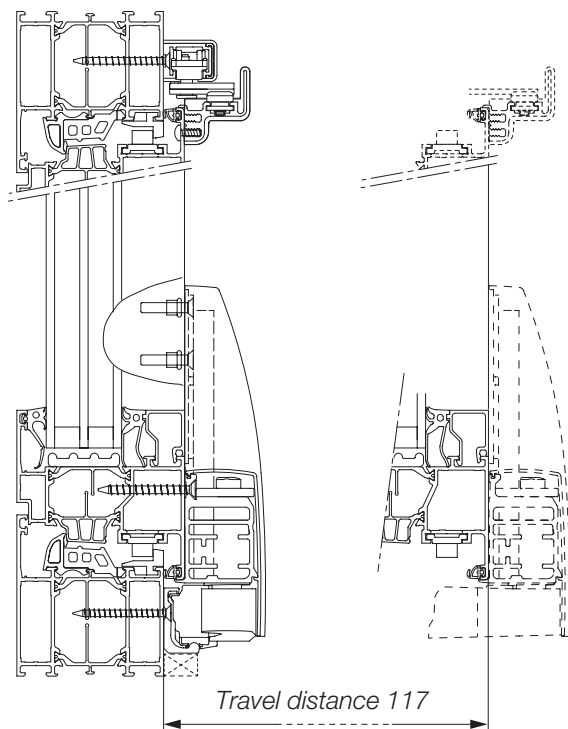
**D** Clip cover cap down left (44) and cover cap down right (45) to cover fillet supports (3).



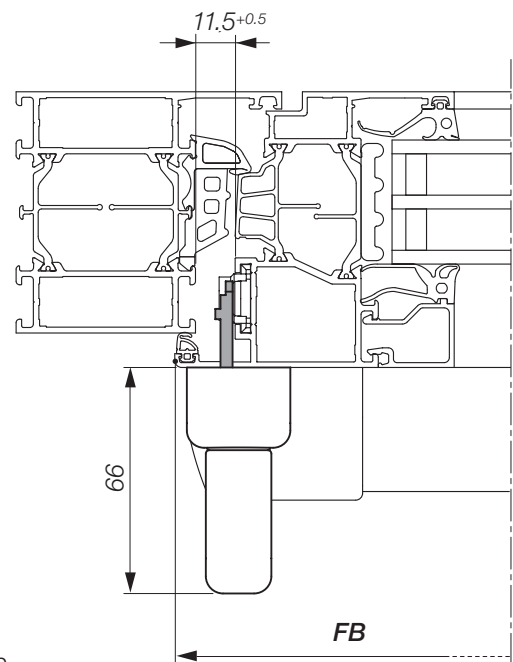


# Vertical section top, horizontal section handle UG

Vertical section

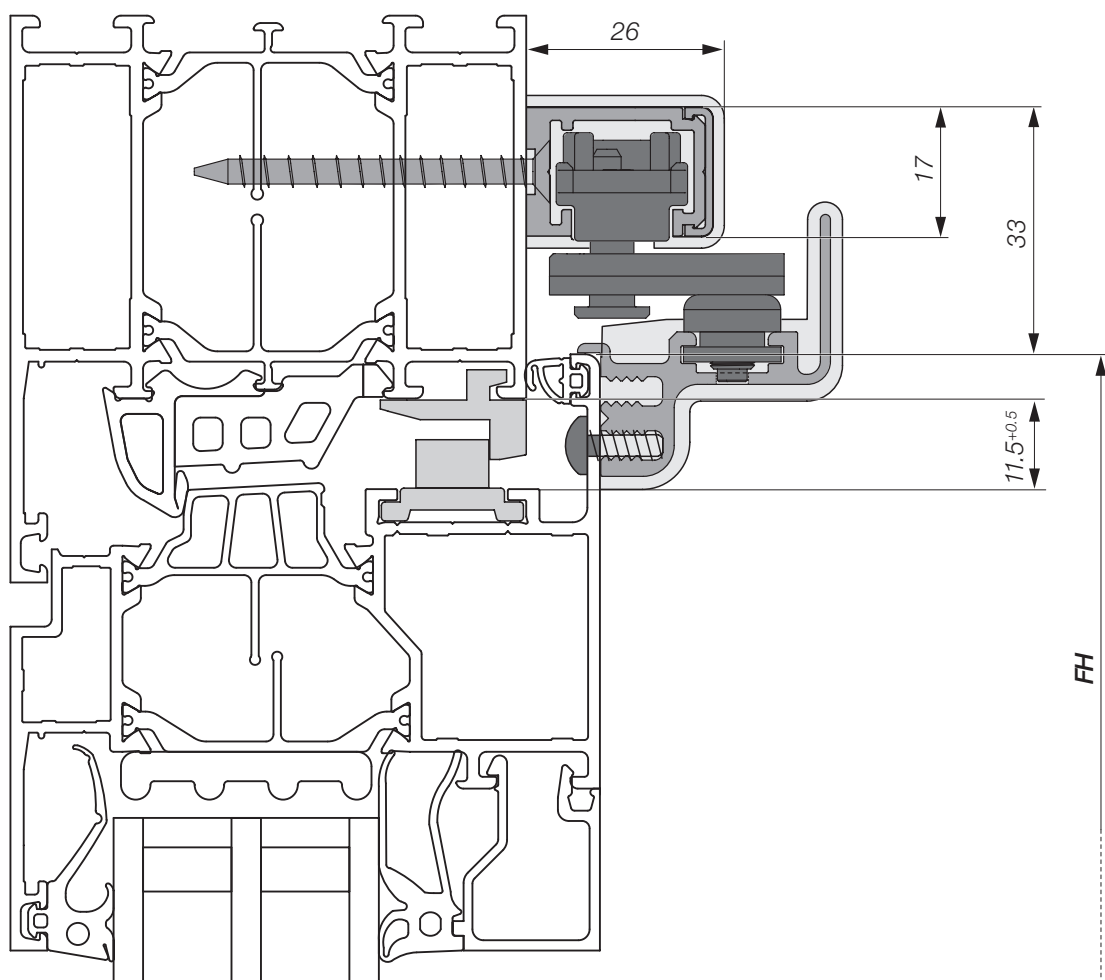


Horizontal section handle UG



No scale

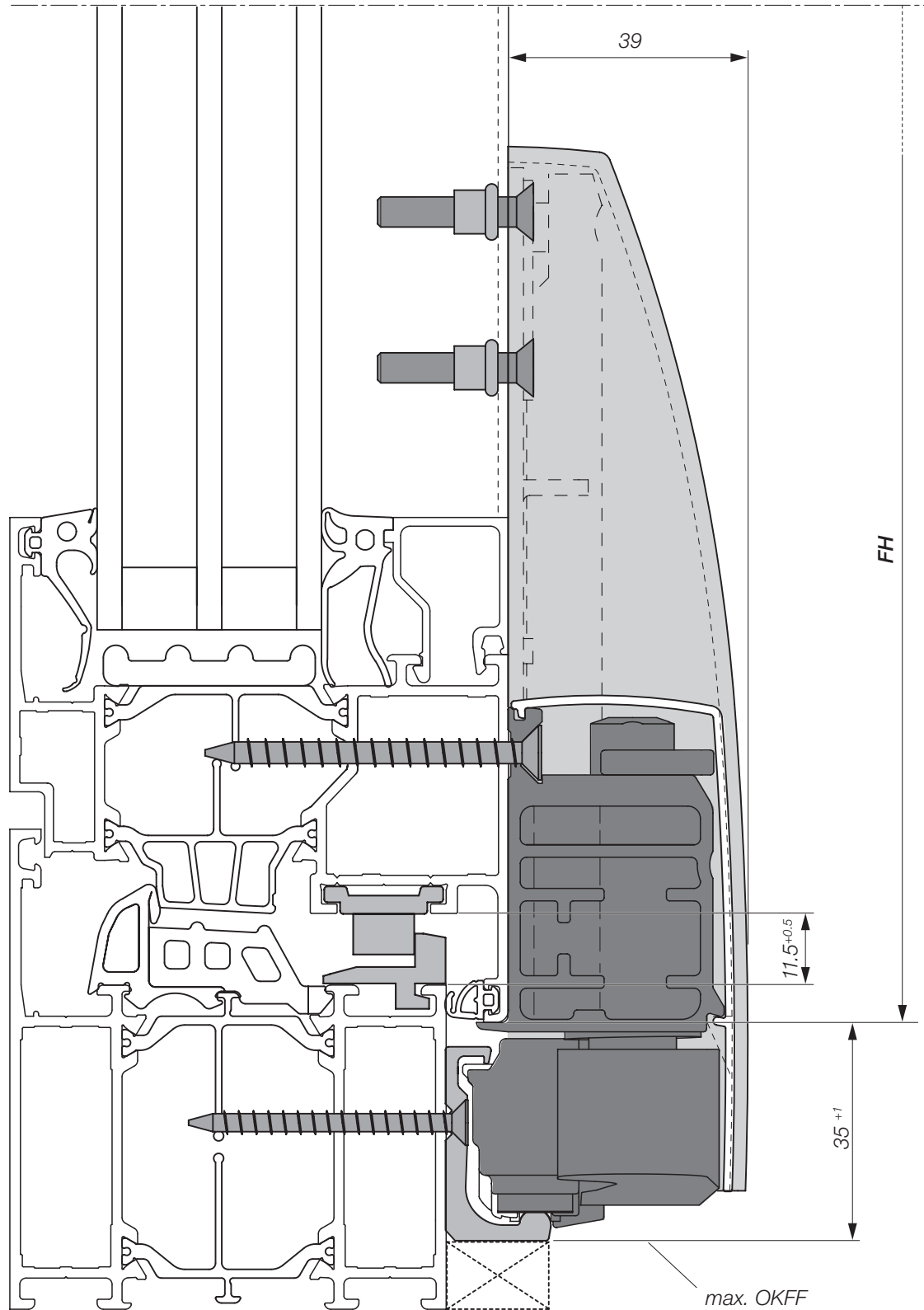
Vertical section top  
Scale 1:1



## Vertical section bottom

Vertical section bottom

Scale 1:1



Position striker (EG)  
Sash preparation (EG)

## Position striker EG

**A** Positon striker ⑬ (espag side) as shown. Position of all other strikers like handle UG (see page 13).

## Drilling/milling EG

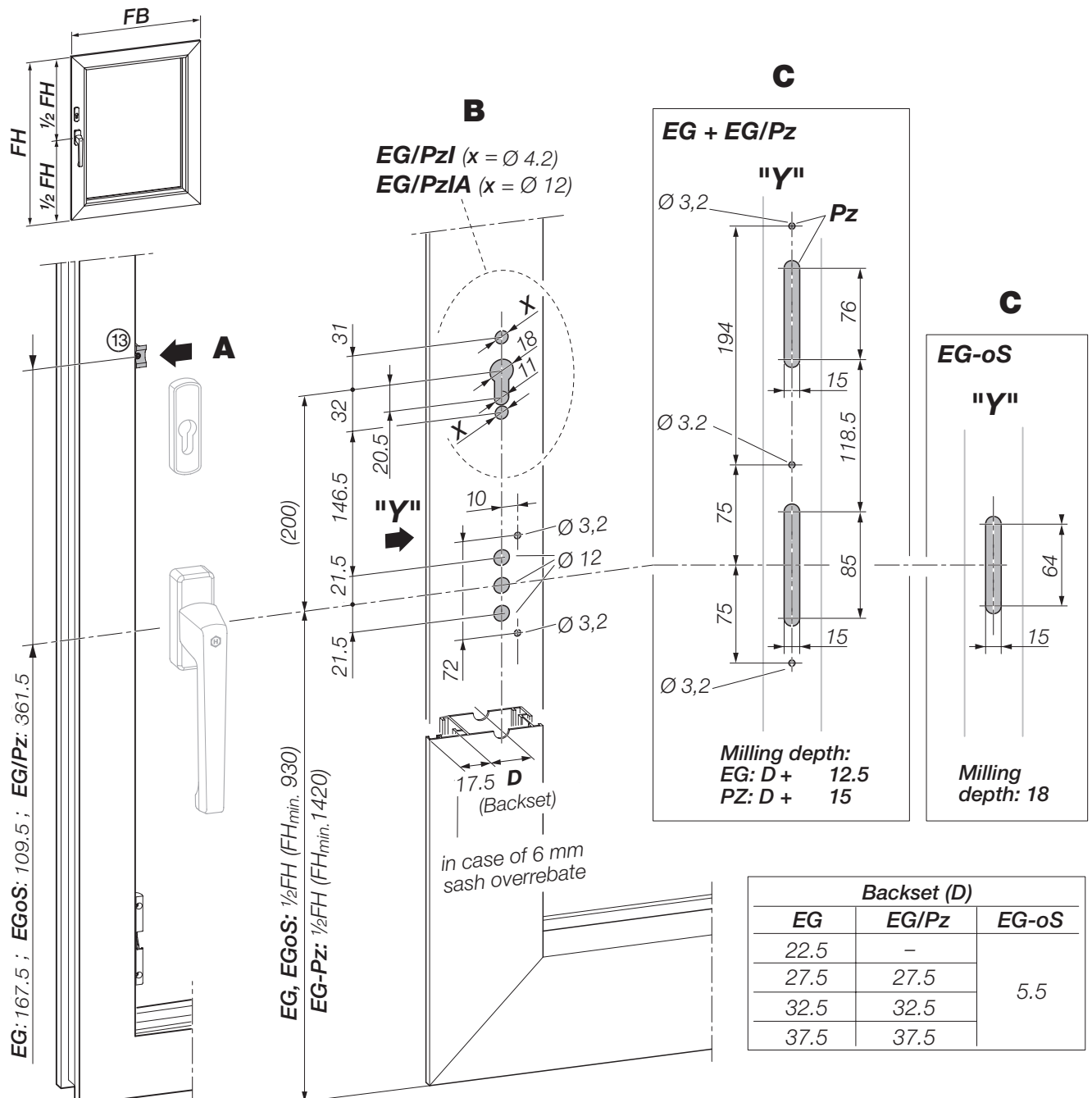
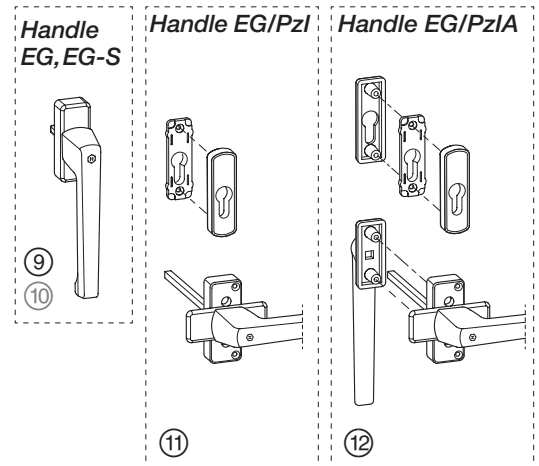
**B** Handle (sash inside): 3x Ø 12  
2x Ø 3.2 for screws 3.9 x ...

Profile cylinder Pul/PzIA: 1x Ø 18 and 1x Ø 11

Rosette EG/Pzl: 2x Ø 4.2 (X)

Rosette EG/PzIA: 2x Ø 12 (X)

**C** View **Y**: cutouts for gearbox.  
(Top cutting and drilling only for EG/Pz 30).



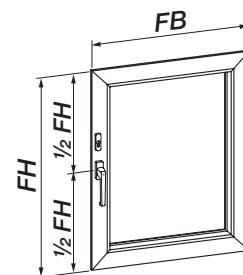
# Cutting to size, preparation, mounting locking rods and espag (EG)



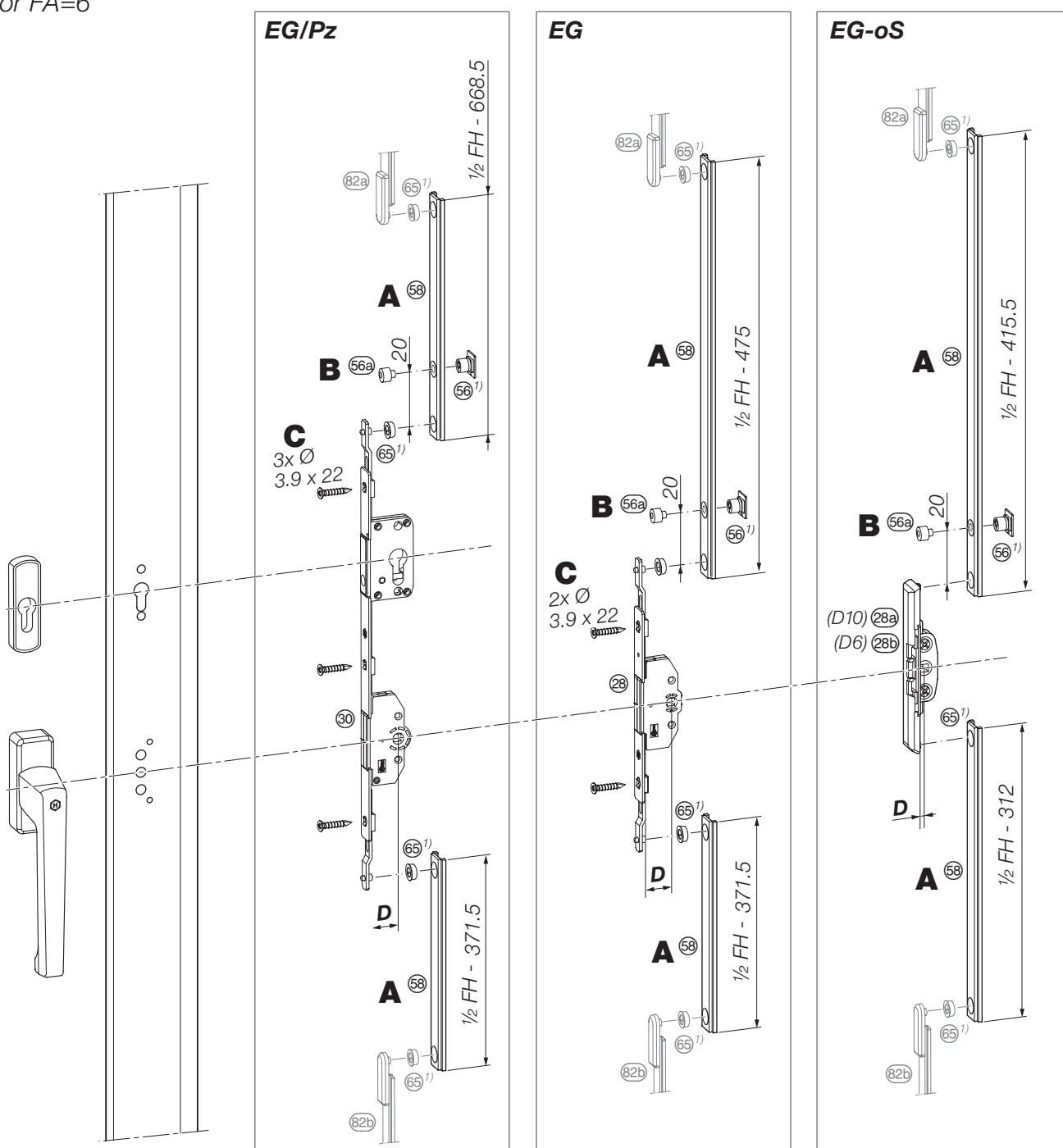
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**Note:** This shown mounting instructions refers only to handle side and espags EG/Pz, EG and EG-oS. Prepare and mount all other parts of central locking as shown on page 8 (D10) and page 9 (D6).

- A** Cut locking rods 58 (at handle side) to size for EG/Pz 30 res. EG 28 or EG-oS 28a. Cut locking rod with  $\varnothing 10,1$  (D10) or  $\varnothing 6,1$  (D6).
- B** Fix insertion stud 56 (D10) res. rivet stud 56a (D6) at locking rod.
- C** Mount central locking as shown on page 10. After this insert espag EG/Pz 30 res. EG 28 in the sash, connect with locking rods and fix with self-drilling screws  $\varnothing 3.9 \times 22$ . The Espag EG-oS 28a is fixed with the spring-bolt from the espag box.



*Subtraction measures  
for FA=6*



<sup>1)</sup> in case of  $\varnothing 10.1$  (D10)