Alban Giacomo SpA

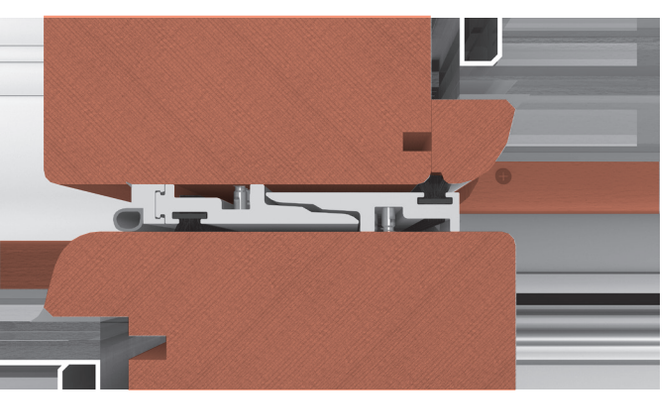
COMPANY WITH QUALITY MANAGEMENT
SYSTEM CERTIFIED BY DNV
= ISO 9001:2008 =

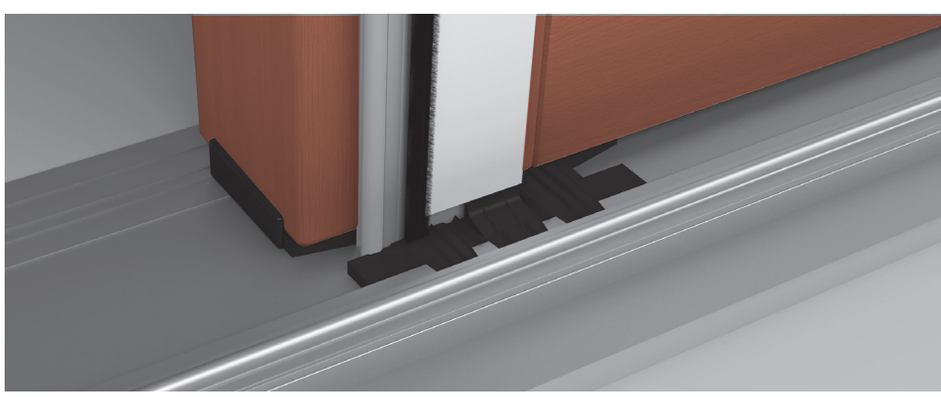
TECHNICAL MANUAL

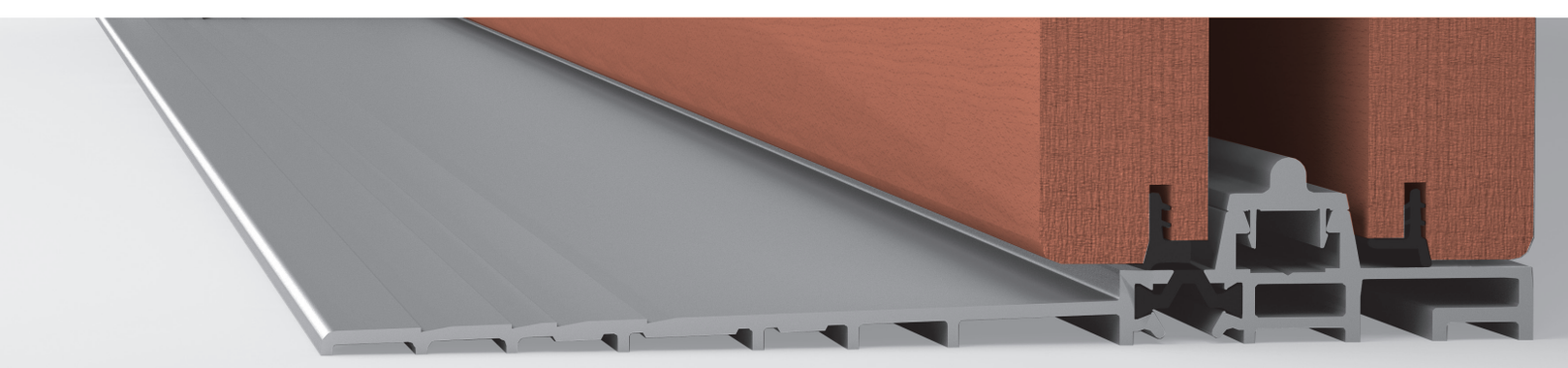
LIFT&SLIDE

Intermediate

- System sections 68x90 mm, 68x100 mm and 68x110 mm.
- Sash with only one bottom transom with the possibility for a baseboard.
- Vertical - bottom outside gasket: balloon gasket with vulcanized EPDM corner.
- Inside face EPDM gasket to cover the milled section.
- PVC top gasket with flap
- Water, air, wind, and soft body impact tests conducted with glass: 44.1/15/33.1 (minimum usable)
- Universal reduced aluminium top guide and aluminium low thermal break threshold
- 10 mm space between the sashes.
- Central point with aluminium with anti-burglar profile
- Pattern E constructed with symmetric central point with aluminium pin holder and end caps for closing the openings
- Exterior brush weatherstripping







Initial Type Testing results for Intermediate

	LAYOUT A		*LAYOUT E*	
	Window and door dimensions		*Window and door dimensions*	
Water	3985x2750 mm	**6A**	3985x2750 mm	**6A**
Air	3985x2750 mm	**4**	3985x2750 mm	**4**
Wind	3985x2750 mm	**4A**	3985x2750 mm	**2C**
Noise abatement with glass 43 db - 55.4/15/44.1	3985x2750 mm	**40db**	3985x2750 mm	**39db**
Noise abatement with glass 41 db - 44.1/15/33.1	3985x2750 mm	**38db**	3985x2750 mm	**38db**
NB. *Door or window thickness 68x110 mm*				
Heat transmittance	3000x2350 mm	**1,63 W/m²K**	4000x2350 mm	
NB. *Ug 1.4, improved glass spacer, Section 68x110 mm*				
Soft heavy body impact	1600x1500 mm	**5**	4000x2750 mm	**4**

Using a 45 mm thick frame instead of a 56 mm frame will not change the heat transmittance and mechanical resistance characteristics of the door or window. Therefore, this configuration is also covered by AGB cascading. In this manual, both configurations are considered.

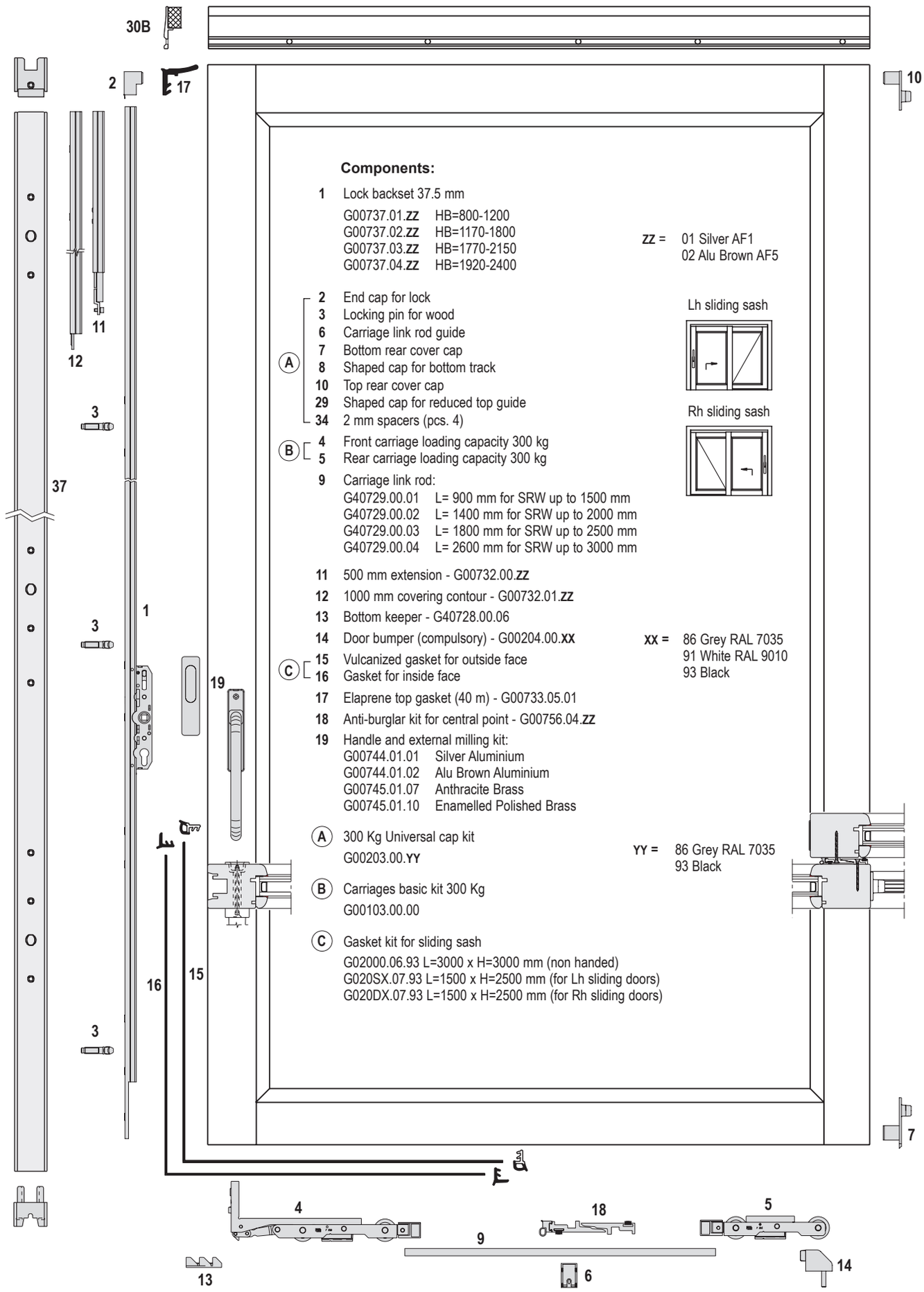
Window and door manufacturers benefitting from the AGB cascading contract are required to install glass with the following minimum requirements:

Minimum thickness 44.1/15/33.1 Shatterproof

Ug 1.4 W/m2K or better (e.g. Ug 1.1 W/m2K)

INDICE

Hardware diagram - Sash



Components:

1 Lock backset 37.5 mm

G00737.01.**ZZ** HB=800-1200
G00737.02.**ZZ** HB=1170-1800
G00737.03.**ZZ** HB=1770-2150
G00737.04.**ZZ** HB=1920-2400

ZZ = 01 Silver AF1
02 Alu Brown AF5

(A)
2 End cap for lock
3 Locking pin for wood
6 Carriage link rod guide
7 Bottom rear cover cap
8 Shaped cap for bottom track
10 Top rear cover cap
29 Shaped cap for reduced top guide
34 2 mm spacers (pcs. 4)

Lh sliding sash

Rh sliding sash

(B)
4 Front carriage loading capacity 300 kg
5 Rear carriage loading capacity 300 kg

9 Carriage link rod:
G40729.00.01 L= 900 mm for SRW up to 1500 mm
G40729.00.02 L= 1400 mm for SRW up to 2000 mm
G40729.00.03 L= 1800 mm for SRW up to 2500 mm
G40729.00.04 L= 2600 mm for SRW up to 3000 mm

11 500 mm extension - G00732.00.**ZZ**

12 1000 mm covering contour - G00732.01.**ZZ**

13 Bottom keeper - G40728.00.06

14 Door bumper (compulsory) - G00204.00.**XX**

XX = 86 Grey RAL 7035
91 White RAL 9010
93 Black

(C)
15 Vulcanized gasket for outside face
16 Gasket for inside face

17 Elaprene top gasket (40 m) - G00733.05.01

18 Anti-burglar kit for central point - G00756.04.**ZZ**

19 Handle and external milling kit:
G00744.01.01 Silver Aluminium
G00744.01.02 Alu Brown Aluminium
G00745.01.07 Anthracite Brass
G00745.01.10 Enamelled Polished Brass

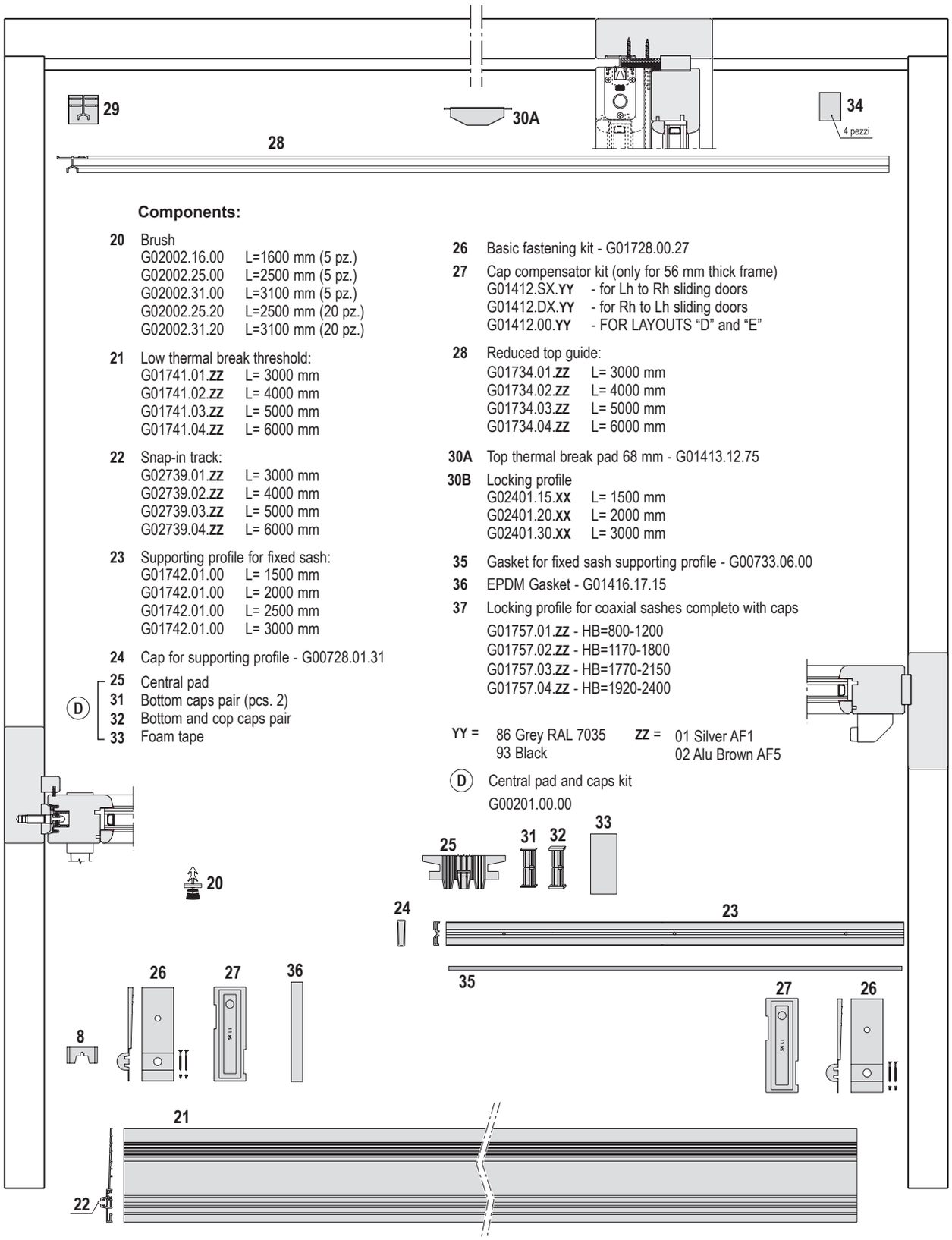
(A) 300 Kg Universal cap kit
G00203.00.**YY**

YY = 86 Grey RAL 7035
93 Black

(B) Carriages basic kit 300 Kg
G00103.00.00

(C) Gasket kit for sliding sash
G02000.06.93 L=3000 x H=3000 mm (non handed)
G020SX.07.93 L=1500 x H=2500 mm (for Lh sliding doors)
G020DX.07.93 L=1500 x H=2500 mm (for Rh sliding doors)

Hardware diagram - Frame



Components:

20 Brush
G02002.16.00 L=1600 mm (5 pz.)
G02002.25.00 L=2500 mm (5 pz.)
G02002.31.00 L=3100 mm (5 pz.)
G02002.25.20 L=2500 mm (20 pz.)
G02002.31.20 L=3100 mm (20 pz.)

21 Low thermal break threshold:
G01741.01.**ZZ** L= 3000 mm
G01741.02.**ZZ** L= 4000 mm
G01741.03.**ZZ** L= 5000 mm
G01741.04.**ZZ** L= 6000 mm

22 Snap-in track:
G02739.01.**ZZ** L= 3000 mm
G02739.02.**ZZ** L= 4000 mm
G02739.03.**ZZ** L= 5000 mm
G02739.04.**ZZ** L= 6000 mm

23 Supporting profile for fixed sash:
G01742.01.00 L= 1500 mm
G01742.01.00 L= 2000 mm
G01742.01.00 L= 2500 mm
G01742.01.00 L= 3000 mm

24 Cap for supporting profile - G00728.01.31

(D) **25** Central pad
31 Bottom caps pair (pcs. 2)
32 Bottom and cop caps pair
33 Foam tape

26 Basic fastening kit - G01728.00.27

27 Cap compensator kit (only for 56 mm thick frame)
G01412.SX.**YY** - for Lh to Rh sliding doors
G01412.DX.**YY** - for Rh to Lh sliding doors
G01412.00.**YY** - FOR LAYOUTS "D" and "E"

28 Reduced top guide:
G01734.01.**ZZ** L= 3000 mm
G01734.02.**ZZ** L= 4000 mm
G01734.03.**ZZ** L= 5000 mm
G01734.04.**ZZ** L= 6000 mm

30A Top thermal break pad 68 mm - G01413.12.75

30B Locking profile
G02401.15.**XX** L= 1500 mm
G02401.20.**XX** L= 2000 mm
G02401.30.**XX** L= 3000 mm

35 Gasket for fixed sash supporting profile - G00733.06.00

36 EPDM Gasket - G01416.17.15

37 Locking profile for coaxial sashes completo with caps
G01757.01.**ZZ** - HB=800-1200
G01757.02.**ZZ** - HB=1170-1800
G01757.03.**ZZ** - HB=1770-2150
G01757.04.**ZZ** - HB=1920-2400

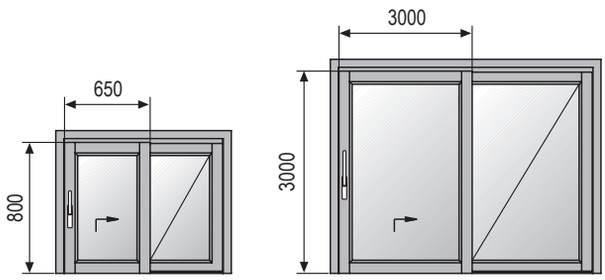
YY = 86 Grey RAL 7035
93 Black

ZZ = 01 Silver AF1
02 Alu Brown AF5

(D) Central pad and caps kit
G00201.00.00

	The following screws are required for assembly:	
	With STST = 56	**With STST = 45**
	3x40mm 3,5x30mm 4x40mm 4,5x35mm 4,5x60mm 4,5x70mm 5x70mm	3x40 mm 3,5x30mm 4x40mm 4,5x35mm 4,5x50mm 4,5x60mm 5x60 mm 5x70mm
With 68x90 profile	6x100 mm e 6x120 mm (fully threaded screws or turbo screws)	
With 68x100 profile	6x120 mm (fully threaded screws or turbo screws)	
With 68x110 profile	6x140 mm (fully threaded screws or turbo screws)	

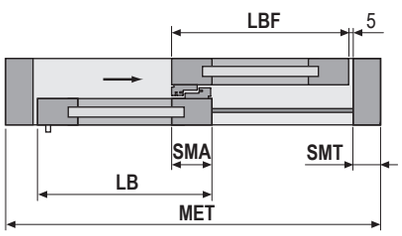
Dimensional limits



Height of sliding doors calculation

Layout A

1 fixed door and 1 sliding door

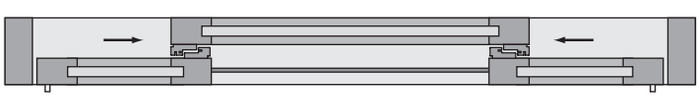


LB = [MET-2x(SMT+5)]:2+SMA:2

E.g.: [4000-2x(56+5)]:2+90:2 LB = 1984 mm

Layout D

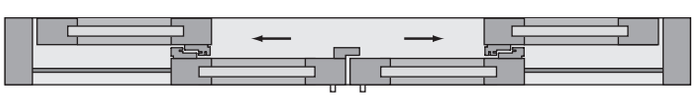
1 fixed door and 2 sliding doors



LB = [MET-2x(SMT+5)]:4+SMA:2

Layout E

2 fixed doors and 2 sliding doors



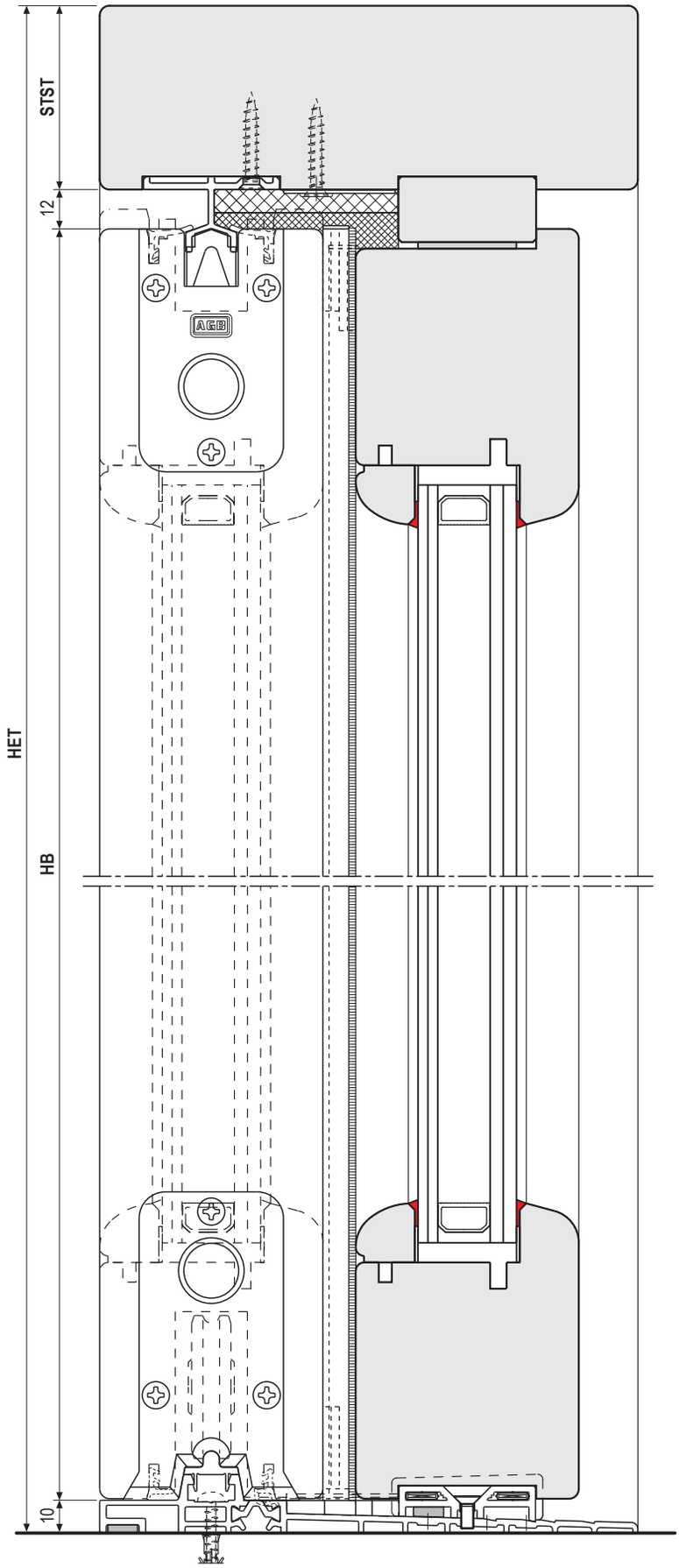
LB = [MET-(2xSMT+3x5)]:4+SMA:2

Key legend of symbols and abbreviations

LB = Door width
MET = Outside frame measurement
SMT = Door frame jamb thickness
SMA = Sash jamb thickness
LBF = Width of fixed door
Aria = 5 mm

= Silicone or suitable gasket
= Neutral silicon bead with Primer

Height of sliding doors calculation (with locking profile or thermal break pad)

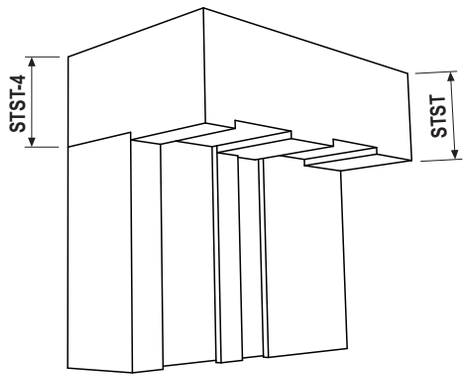


HET = Outside frame height
HB = Sliding door height
STST = Thickness of top frame rail

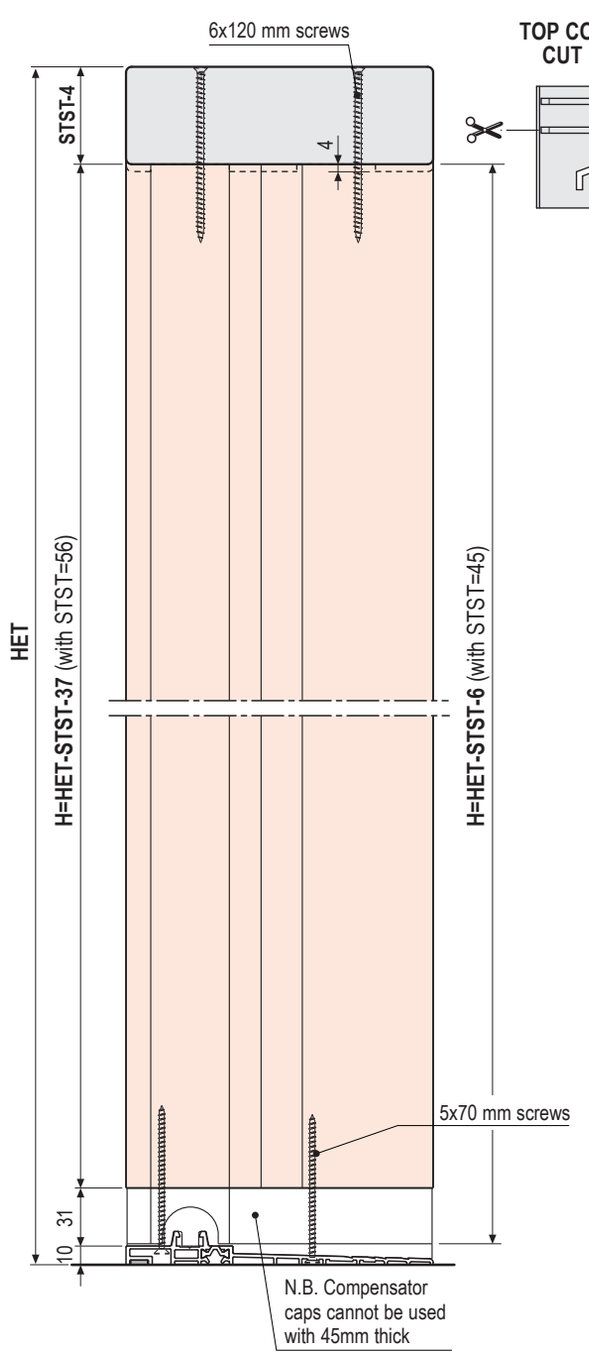
Tolerance **HB** ±0,5
STST = 45/56 mm

HB = HET - (STST+12+10)

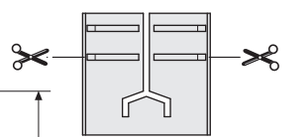
Calculation of stiles and listels measurements



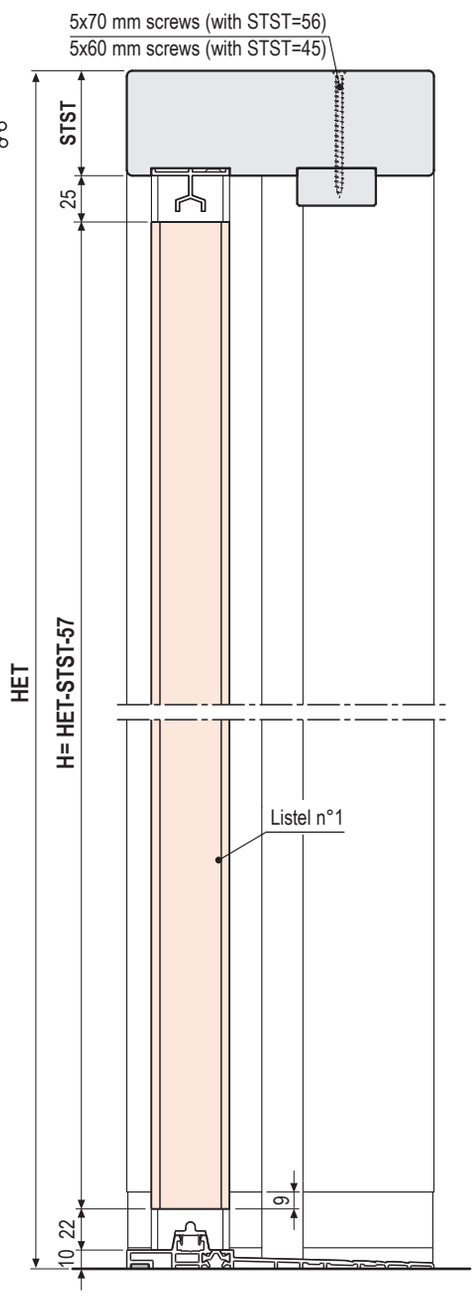
STILES HEIGHT CALCULATION



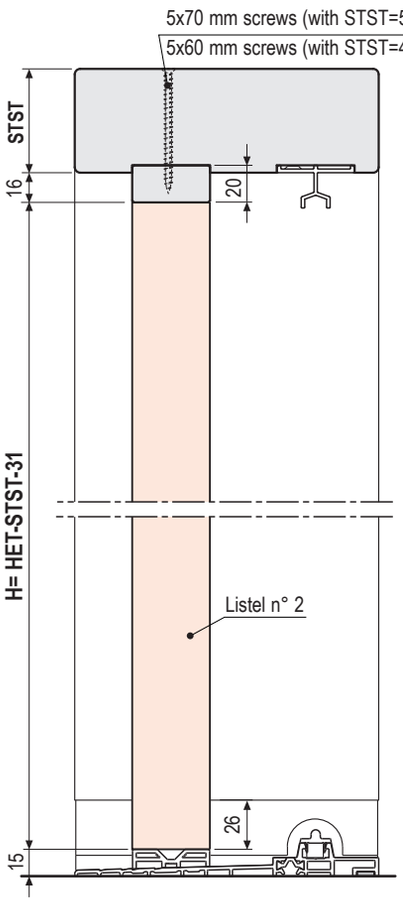
TOP COVER CAP CUT DETAIL



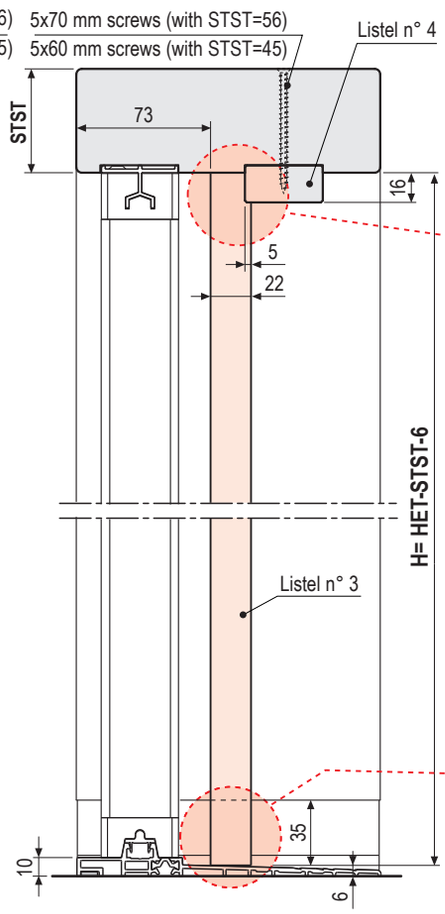
LISTEL N° 1 HEIGHT CALCULATION

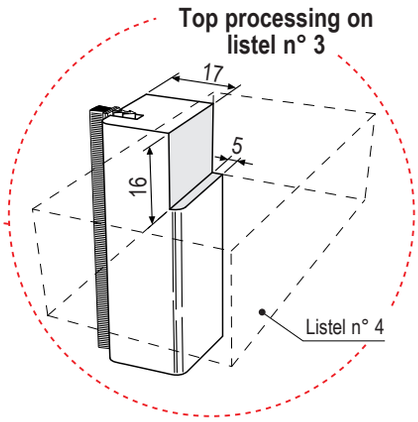


LISTEL N° 2 HEIGHT CALCULATION

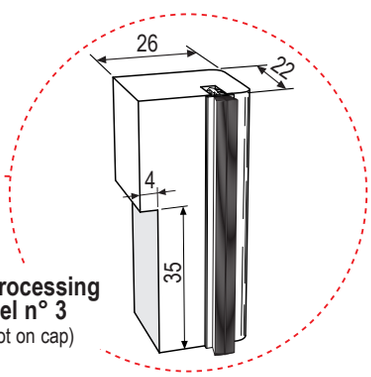


LISTEL N° 3 HEIGHT CALCULATION

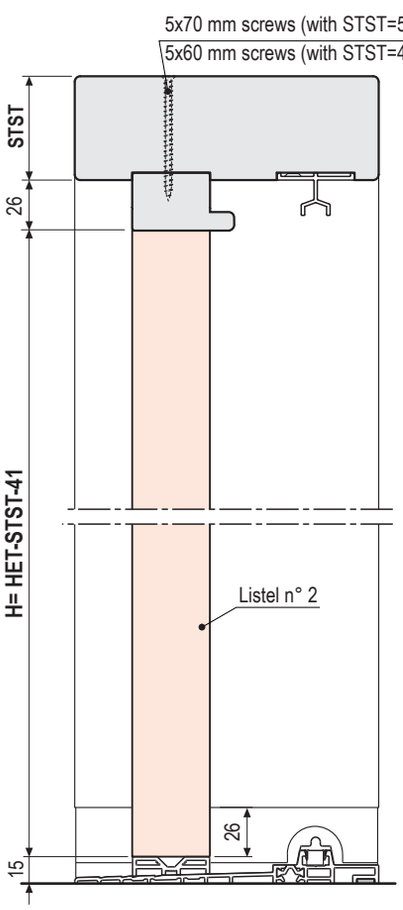




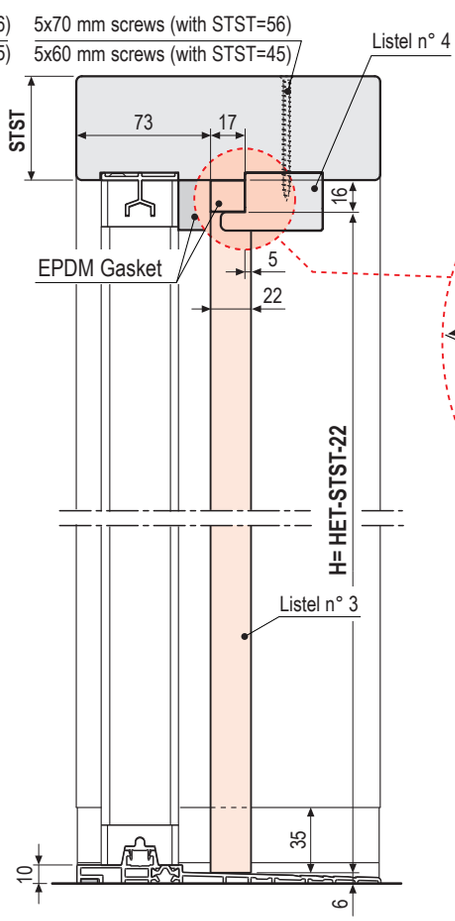
HEIGHT CALCULATION OF LISTELS WITH TOP THERMAL BREAK PAD

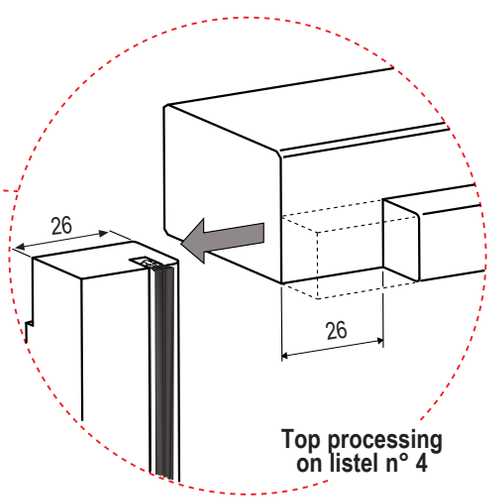


LISTEL N° 2 HEIGHT CALCULATION



LISTEL N° 3 HEIGHT CALCULATION



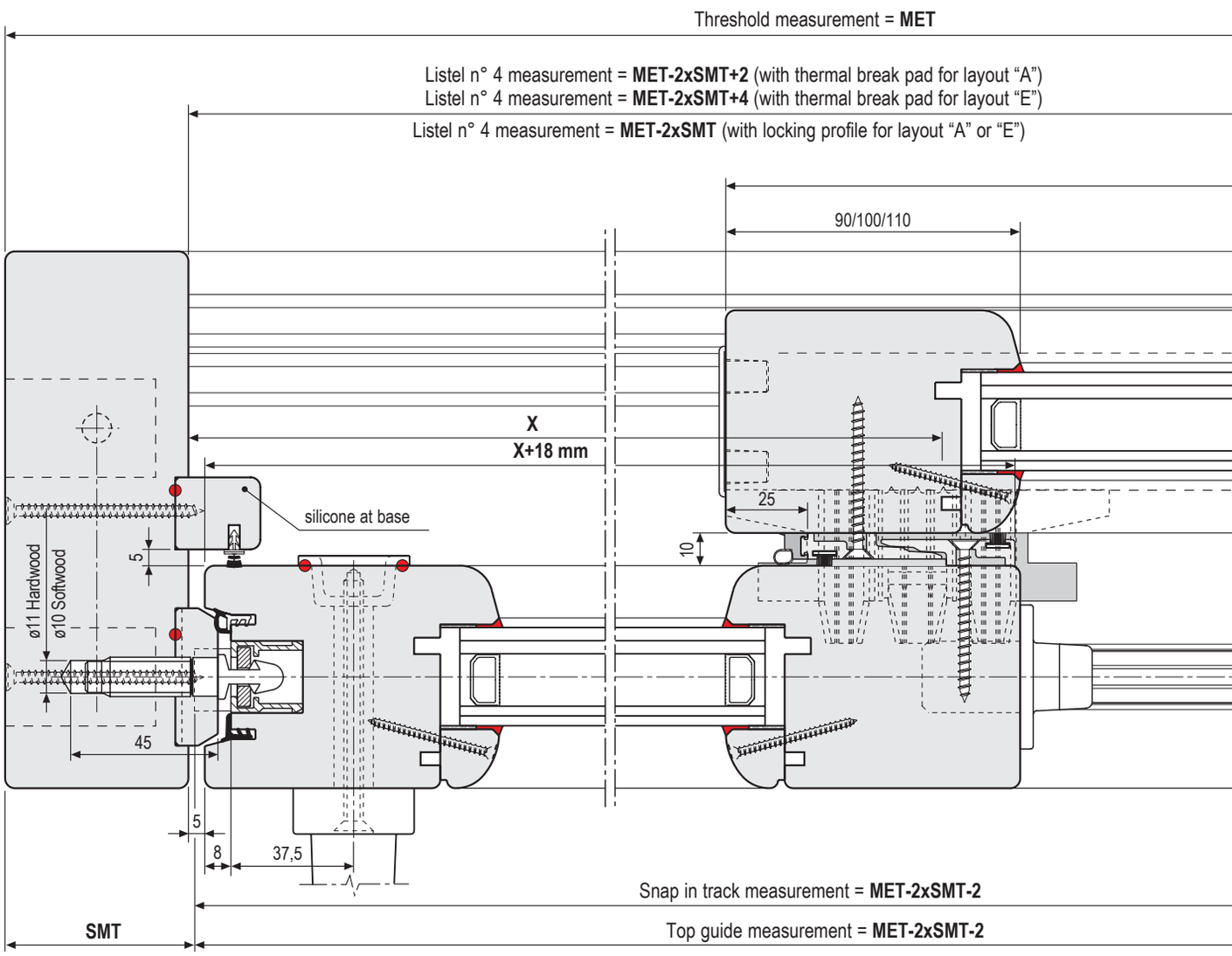


LISTEL HEIGHTS CALCULATION WITH LOCKING PROFILE

Horizontal section

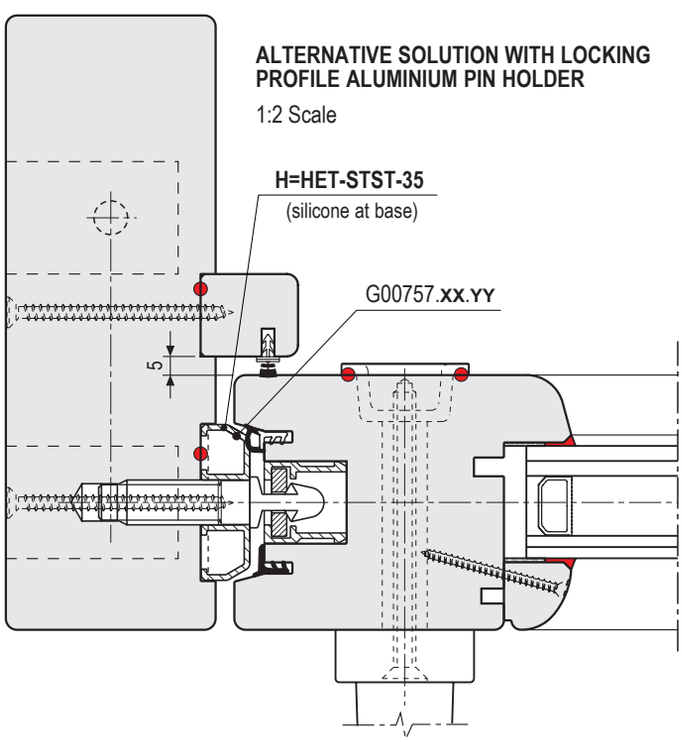
1:2 Scale

STST = 45/56 mm



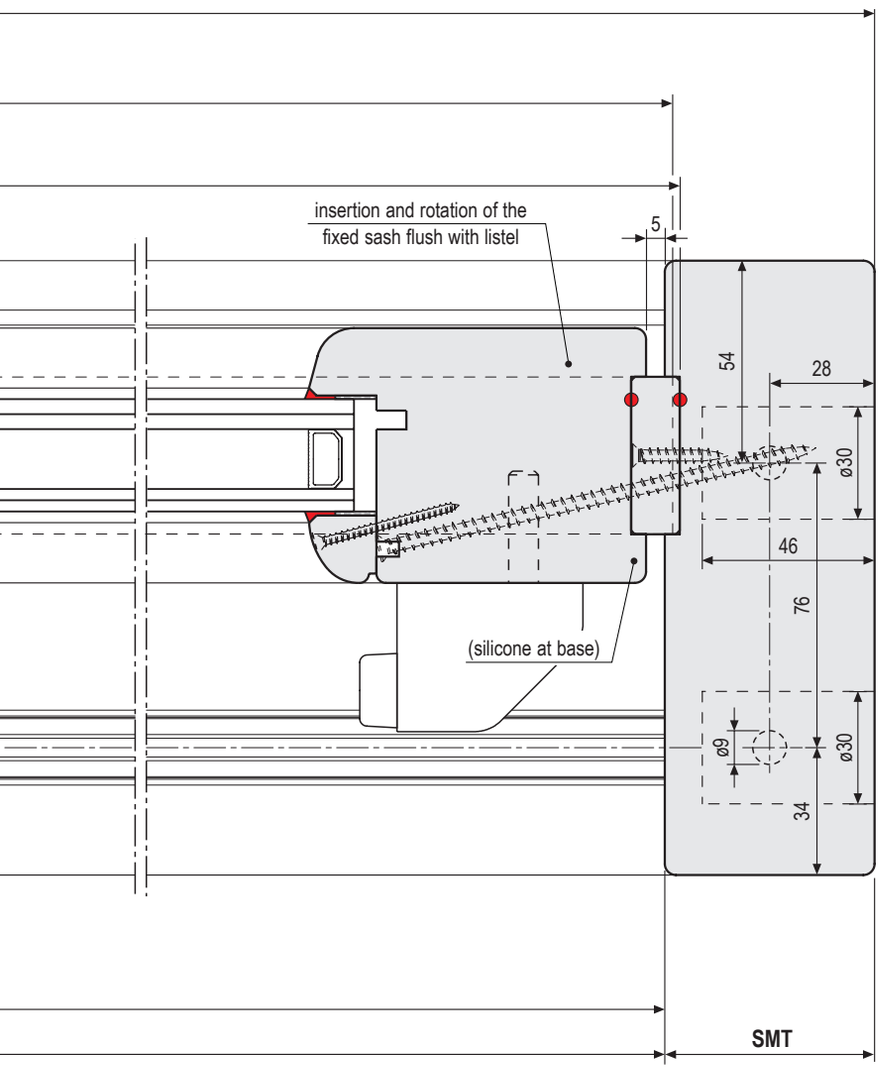
ALTERNATIVE SOLUTION WITH LOCKING PROFILE ALUMINIUM PIN HOLDER

1:2 Scale

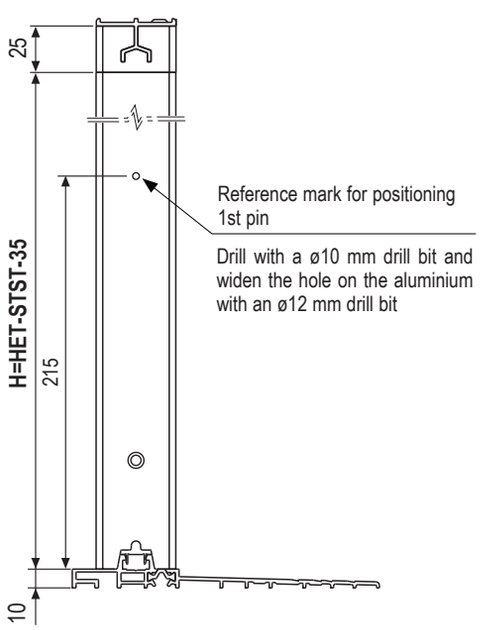


XX = 00 (HB 800 - 1800)
01 (HB 1770 - 2900)

YY = 01 Silver AF1
02 Alu Brown AF5

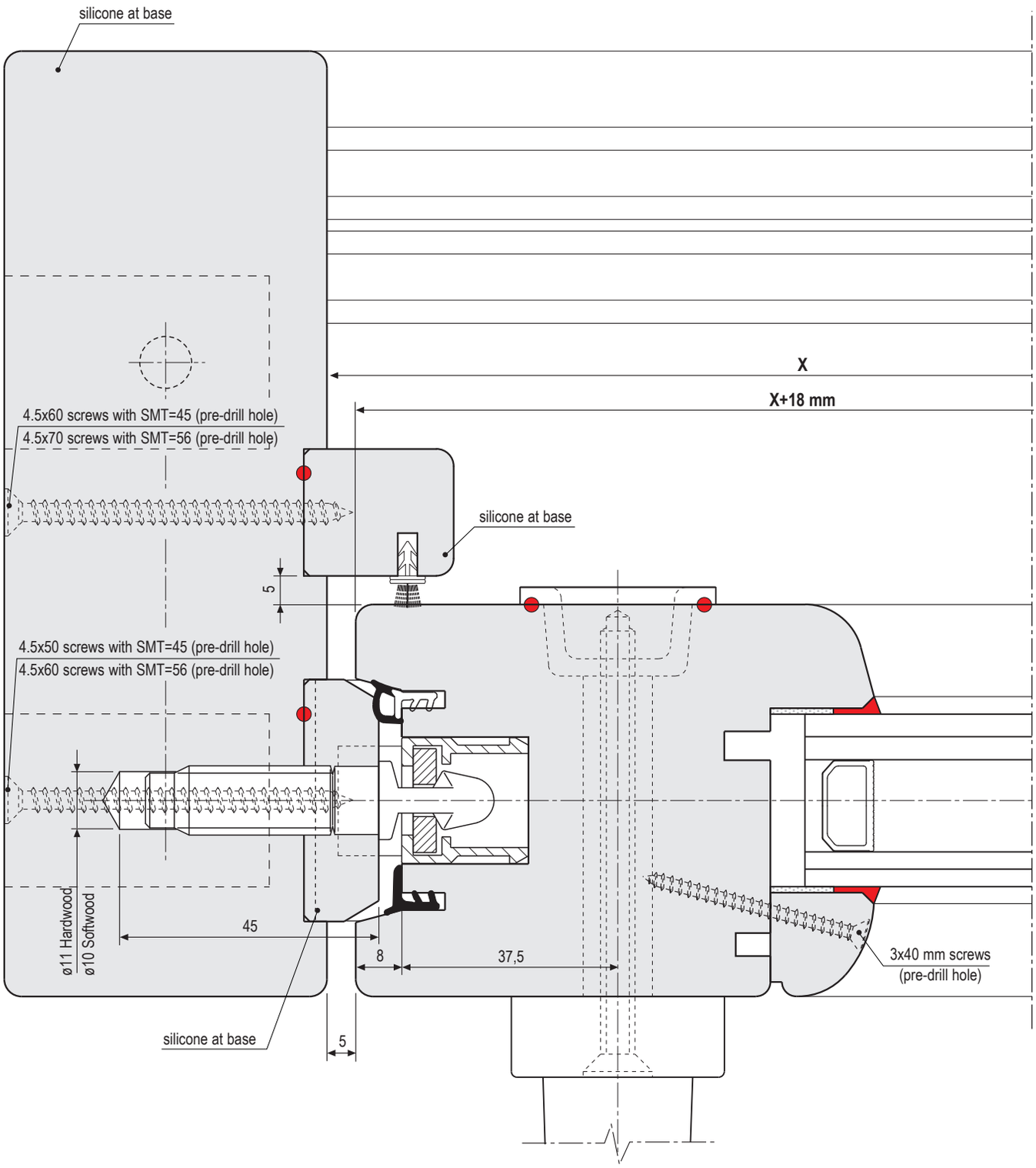


BOTTOM PART PROFILE CUT



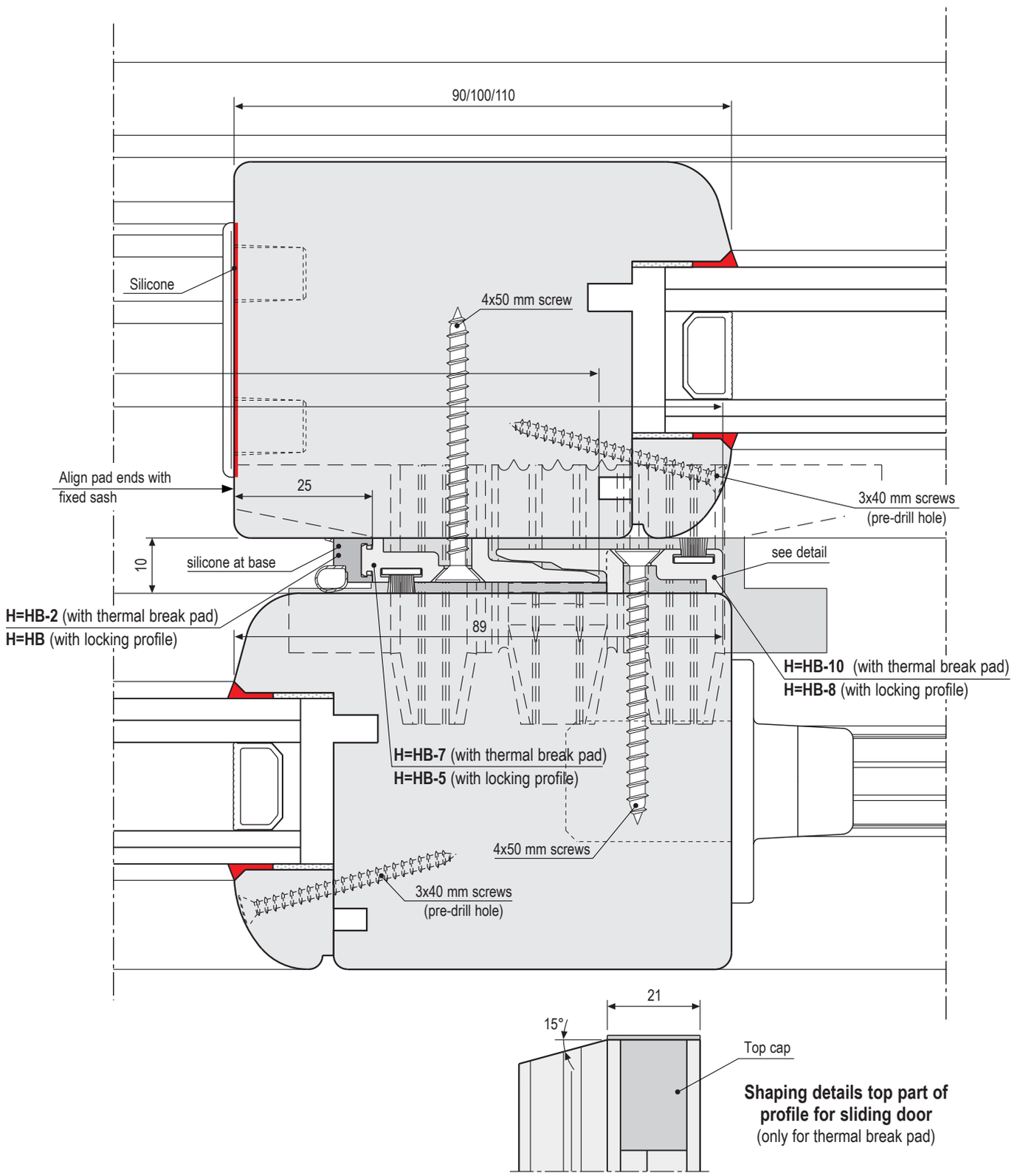
Horizontal section – sliding door side point

1:1 Scale



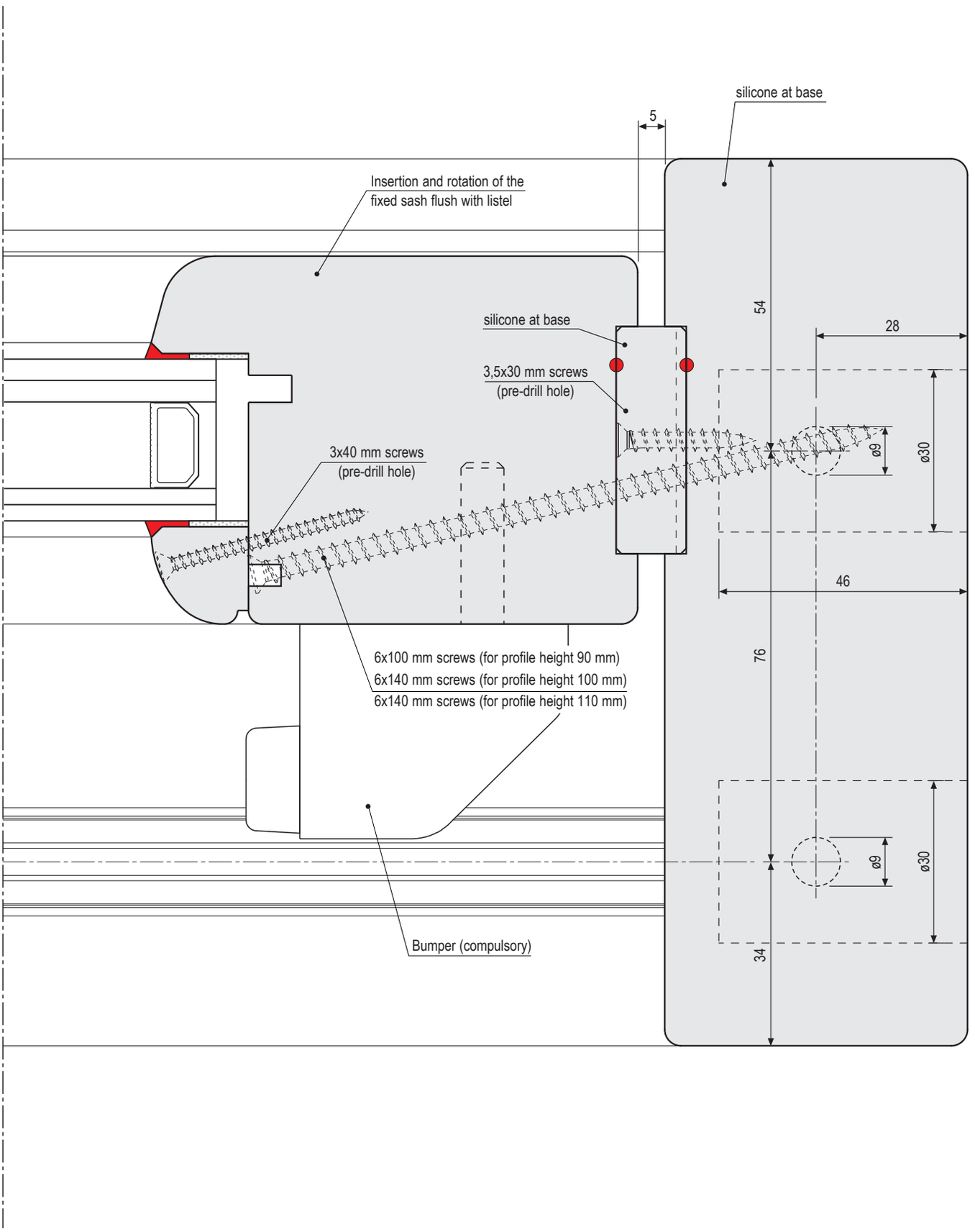
Horizontal section - central point

1:1 Scale



Horizontal section – fixed sash side point

1:1 Scale



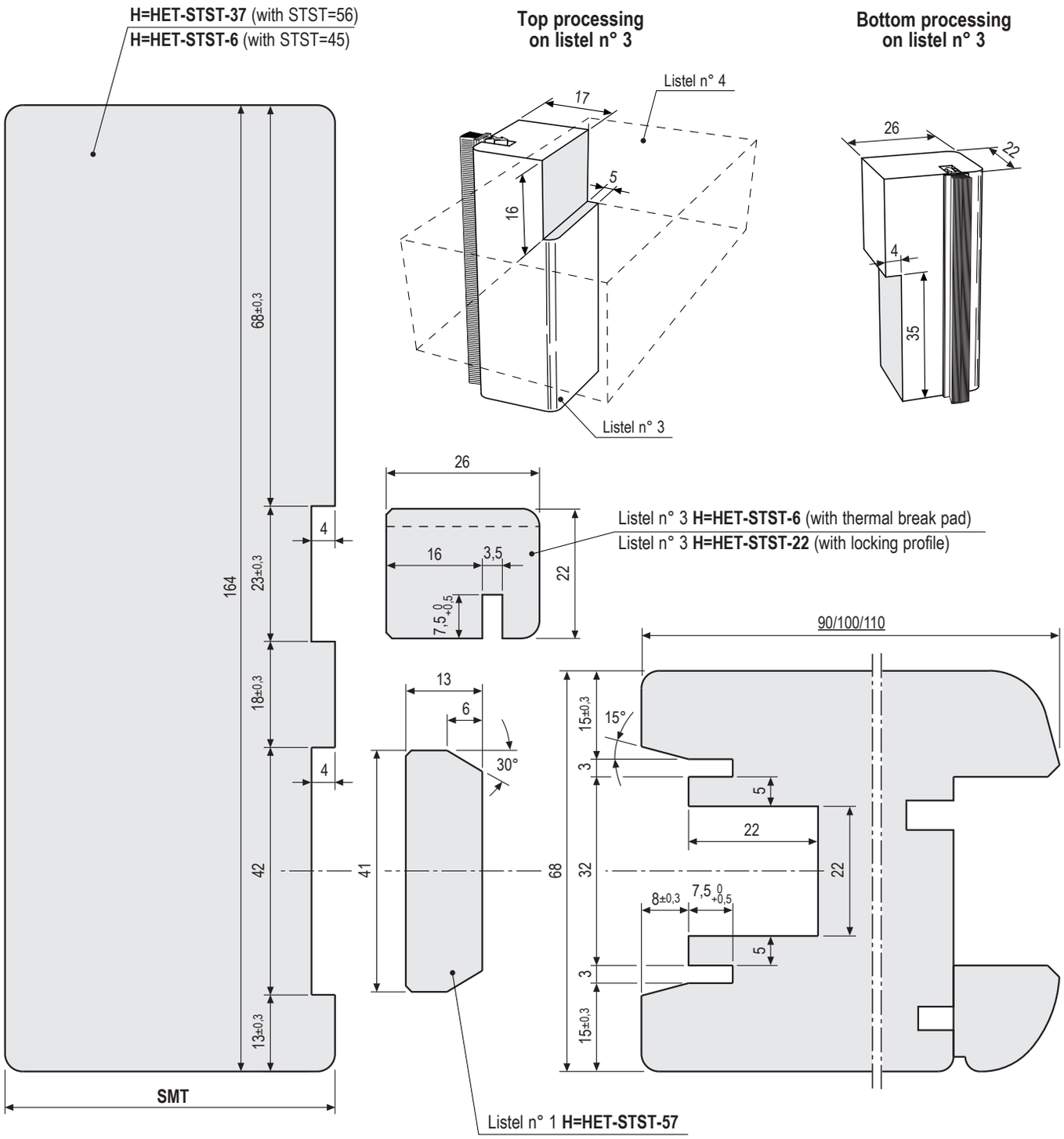
Sash/frame processing and assembly

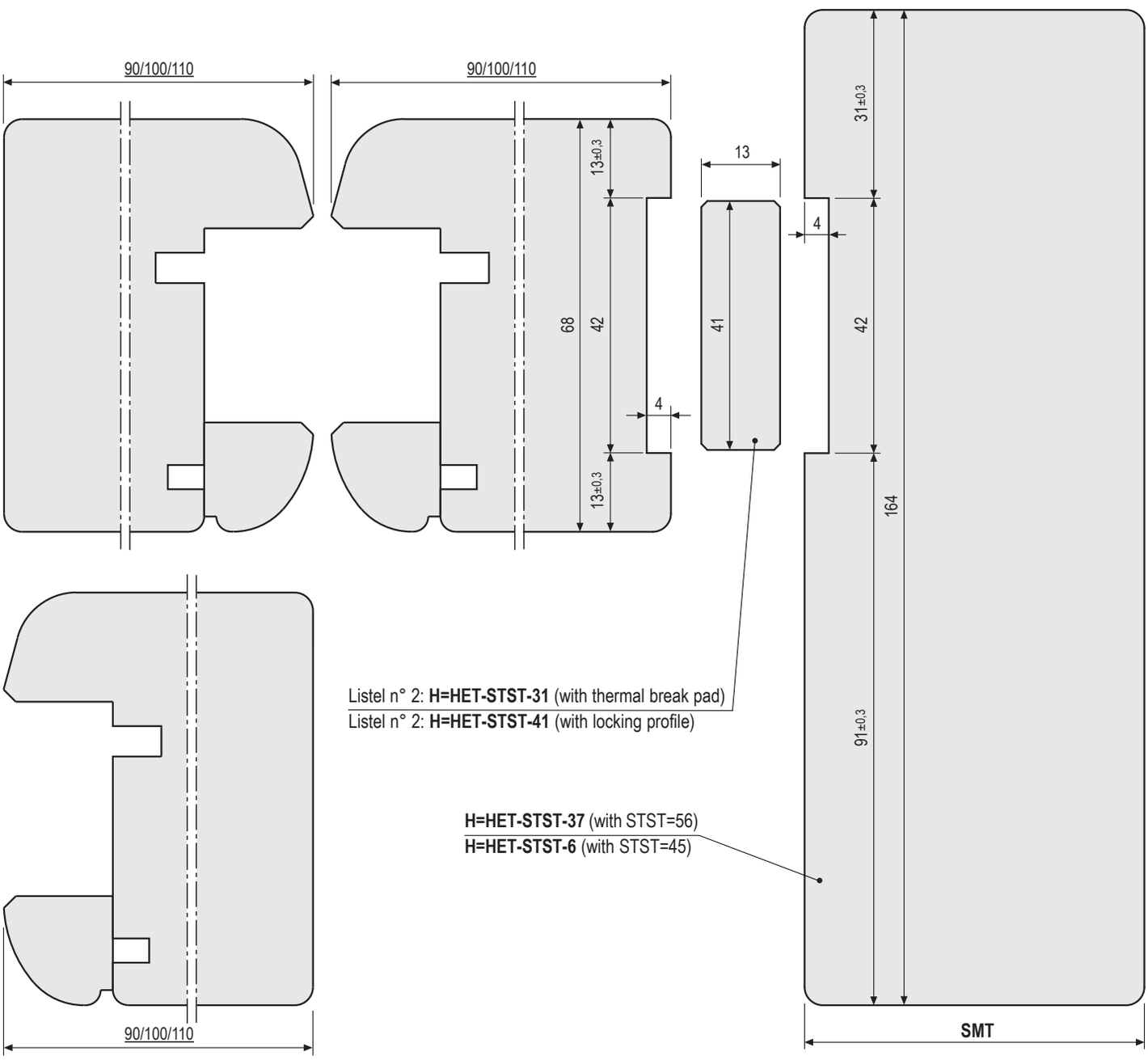
Wood detailing: horizontal sections

1:1 Scale

STST = 45/56 mm

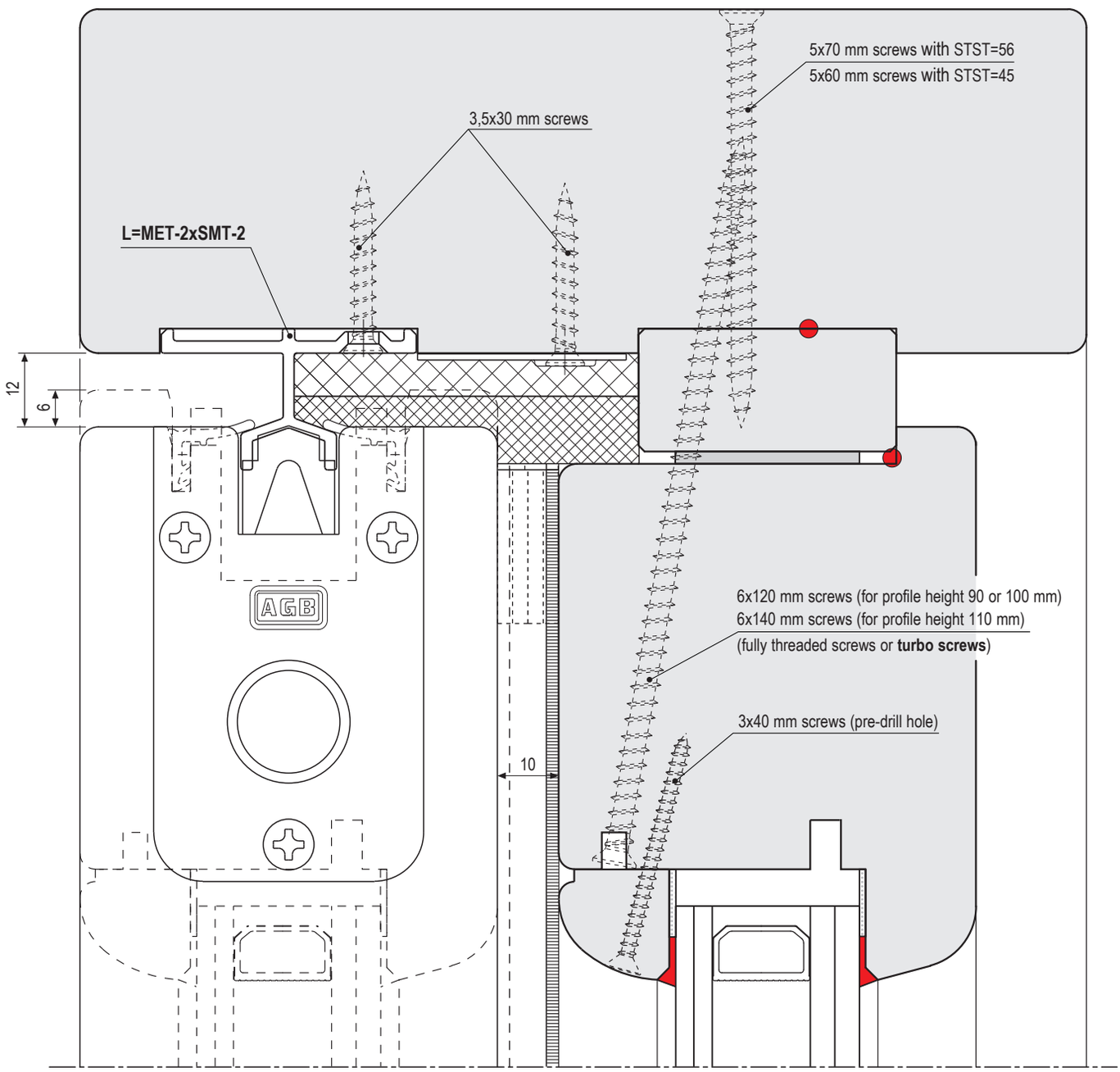
SMT = 45/56 mm



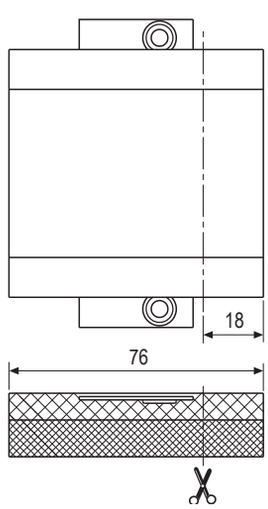

90/100/110
90/100/110
13±0,3
68
42
4
13±0,3
13
41
4
31±0,3
42
164
91±0,3
SMT
90/100/110
Listel n° 2: **H=HET-STST-31** (with thermal break pad)
Listel n° 2: **H=HET-STST-41** (with locking profile)
H=HET-STST-37 (with STST=56)
H=HET-STST-6 (with STST=45)

Vertical section top point with thermal pad

1:1 Scale

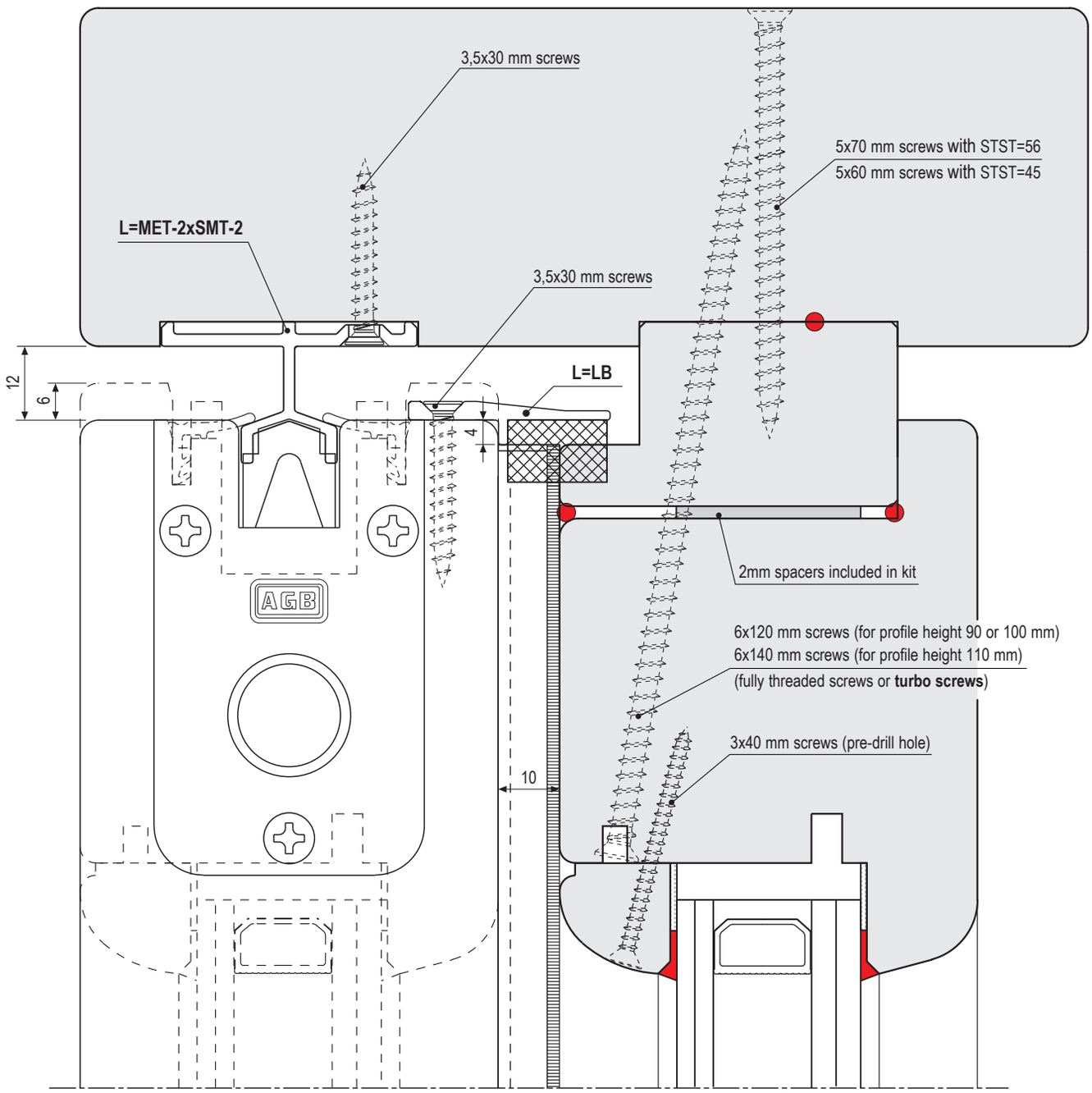


TOP PAD CUT DETAIL



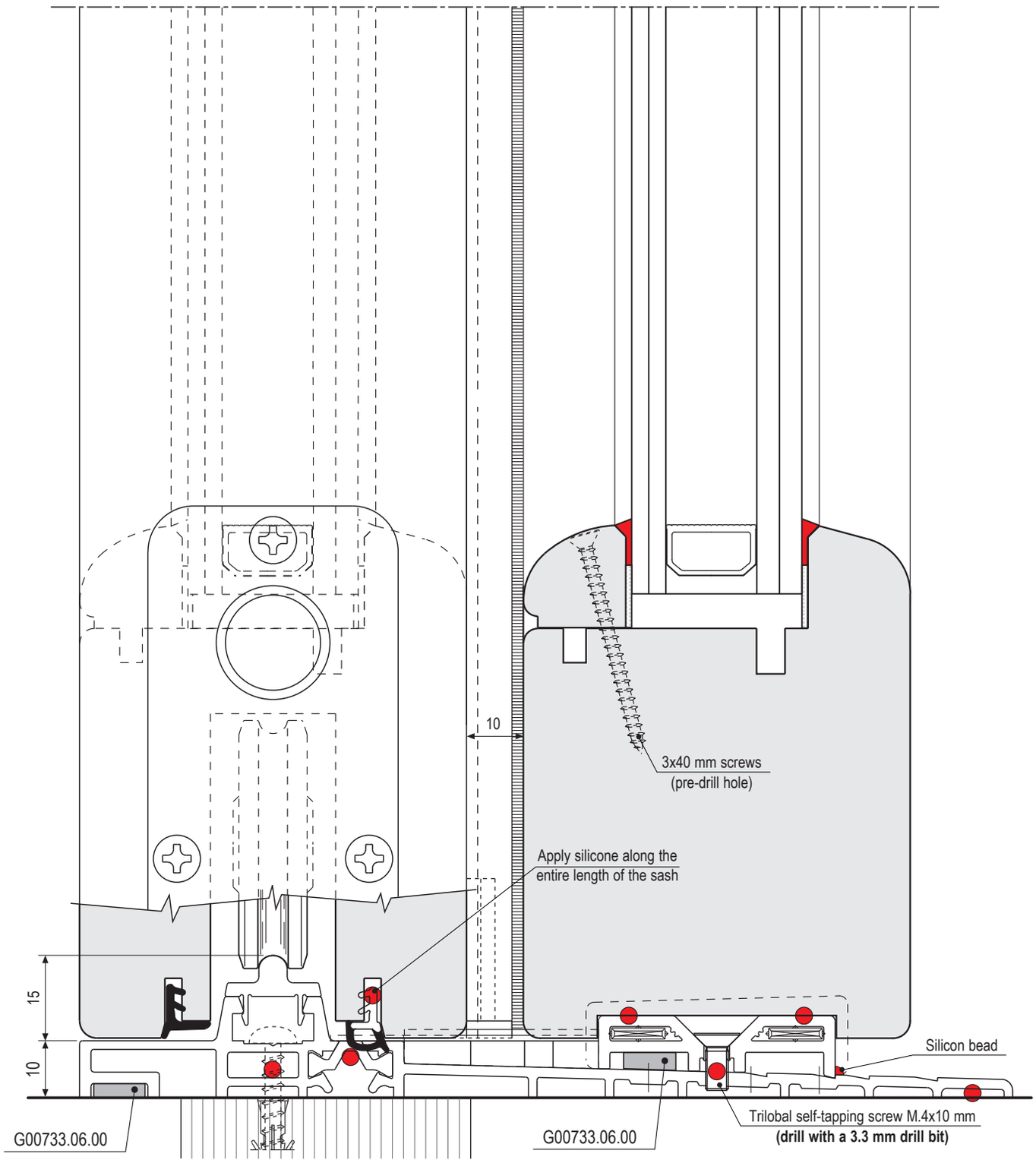
Vertical section top point with locking profile

1:1 Scale



Bottom point vertical section

1:1 Scale

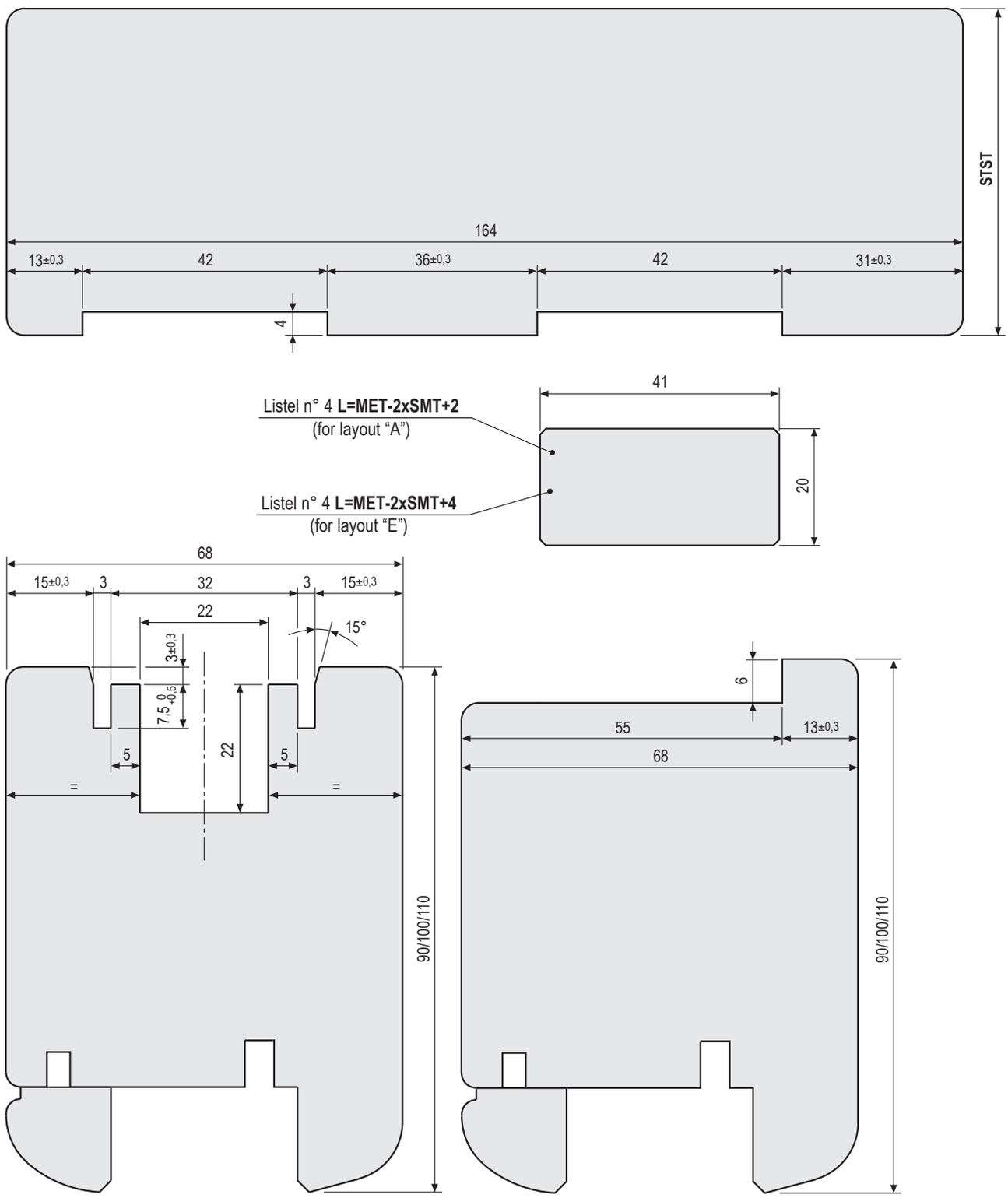


Wood detailing: vertical sections

1:1 Scale

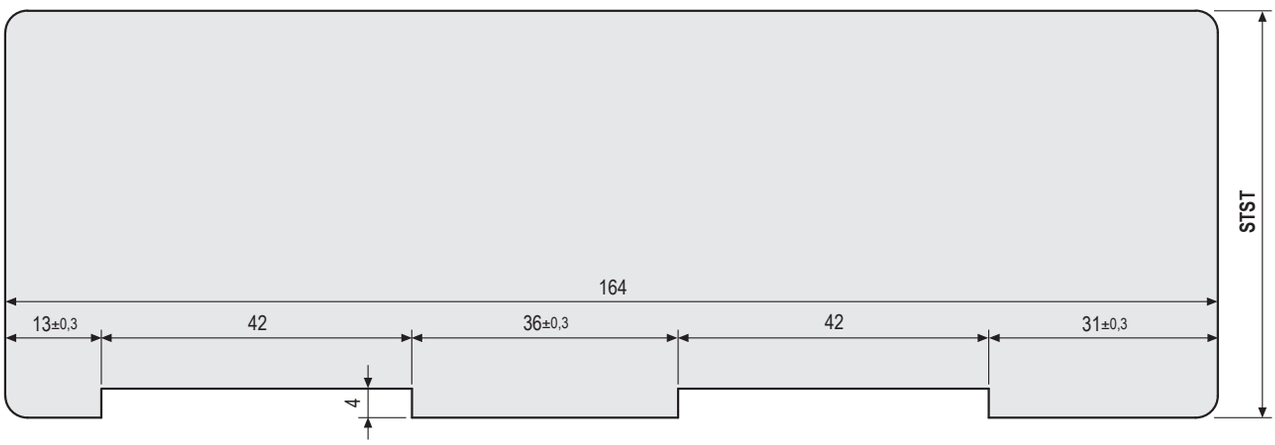
TOP POINT WITH THERMAL BREAK PAD

STST = 45/56 mm

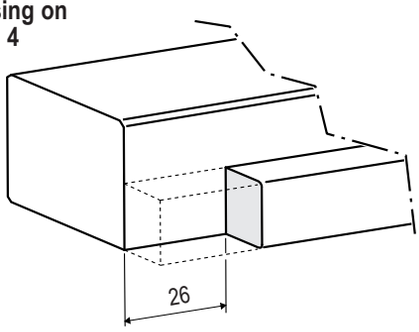


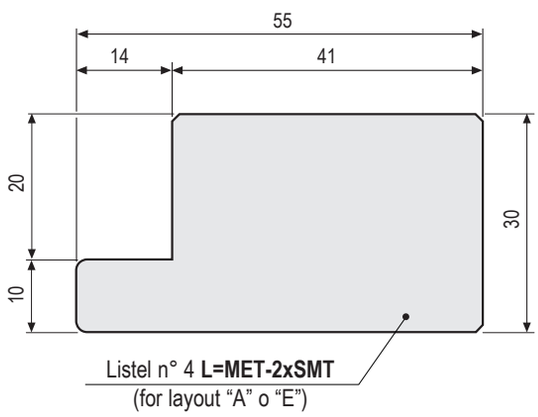
TOP POINT WITH LOCKING PROFILE

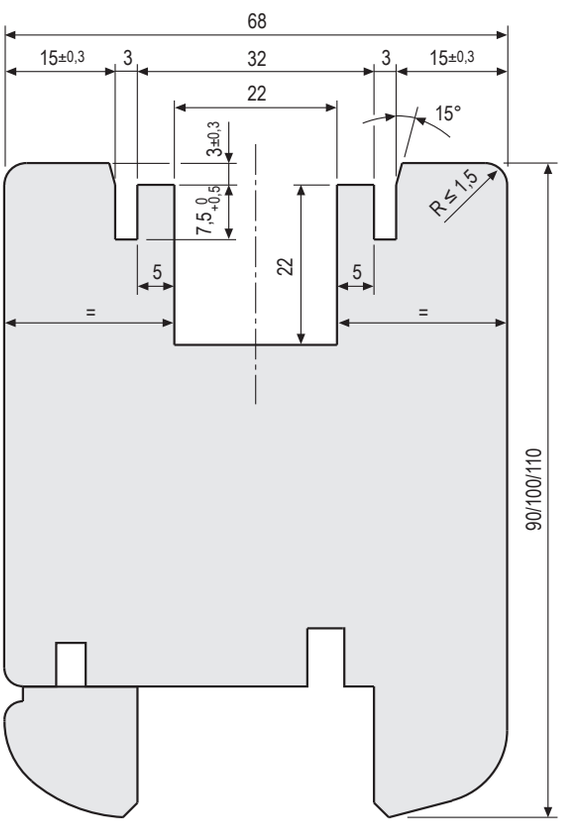
1:1 Scale

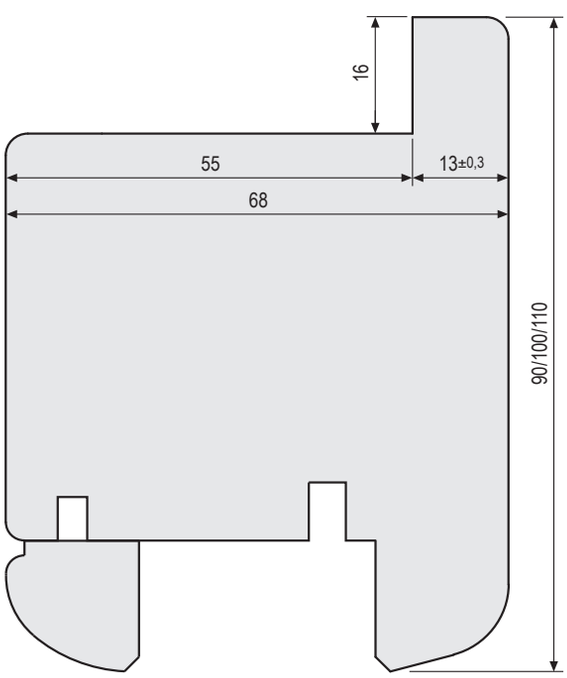


Top processing on listel n° 4



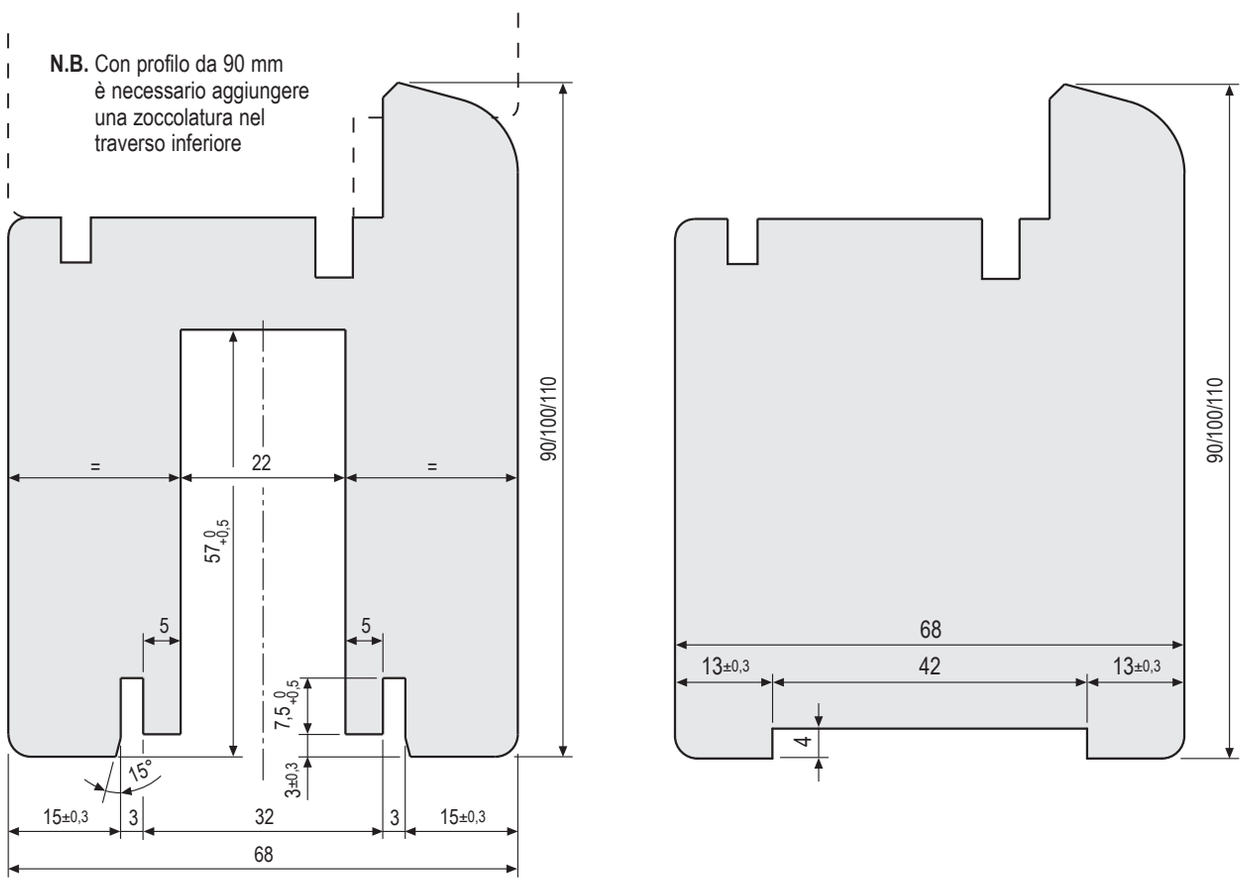




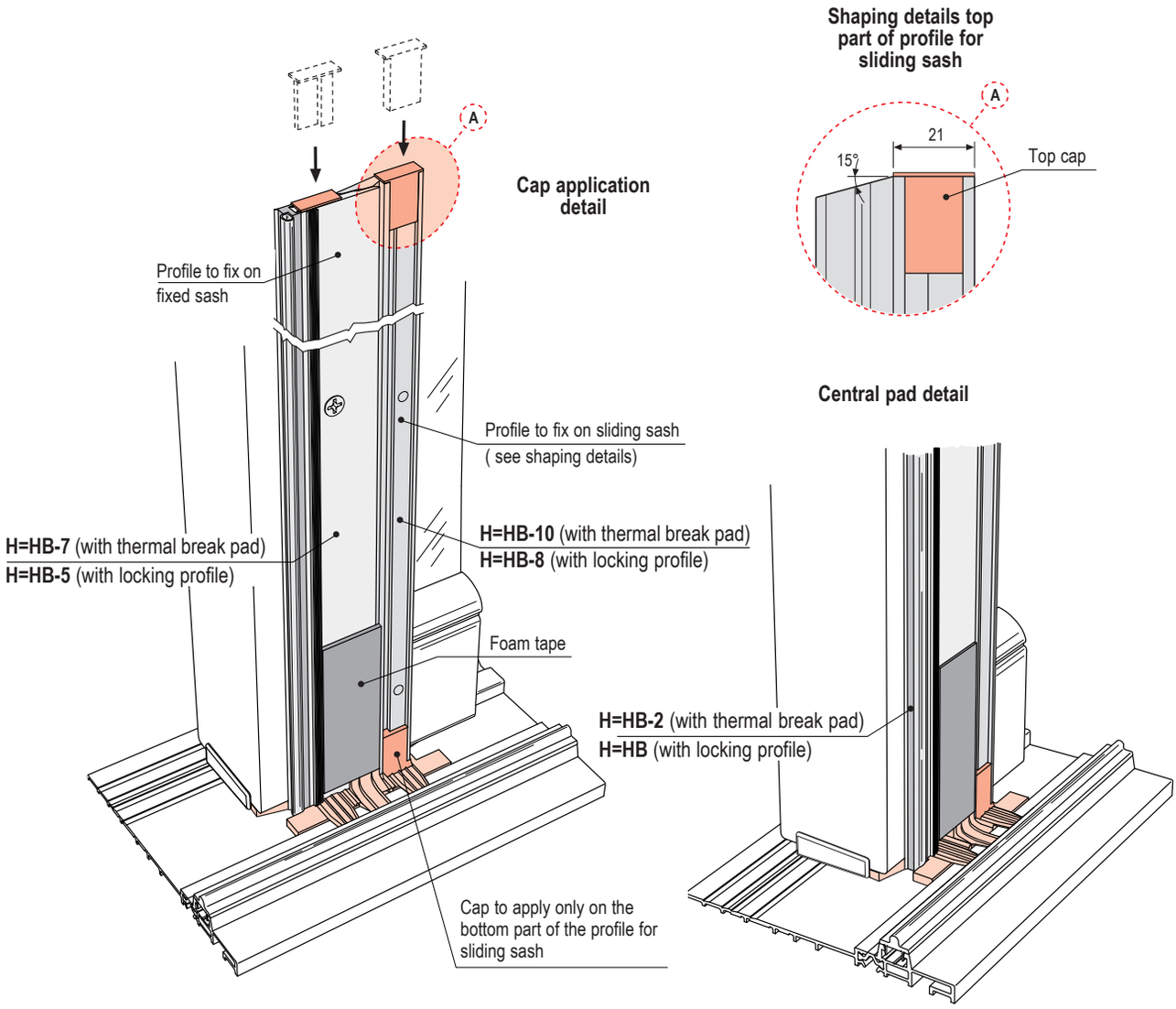


BOTTOM POINT

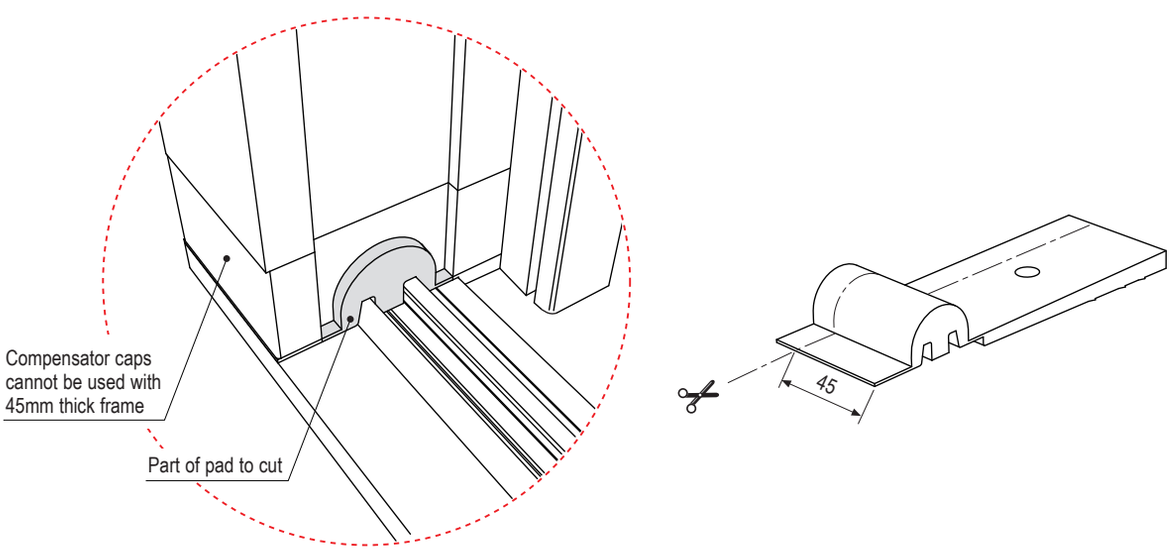
1:1 Scale



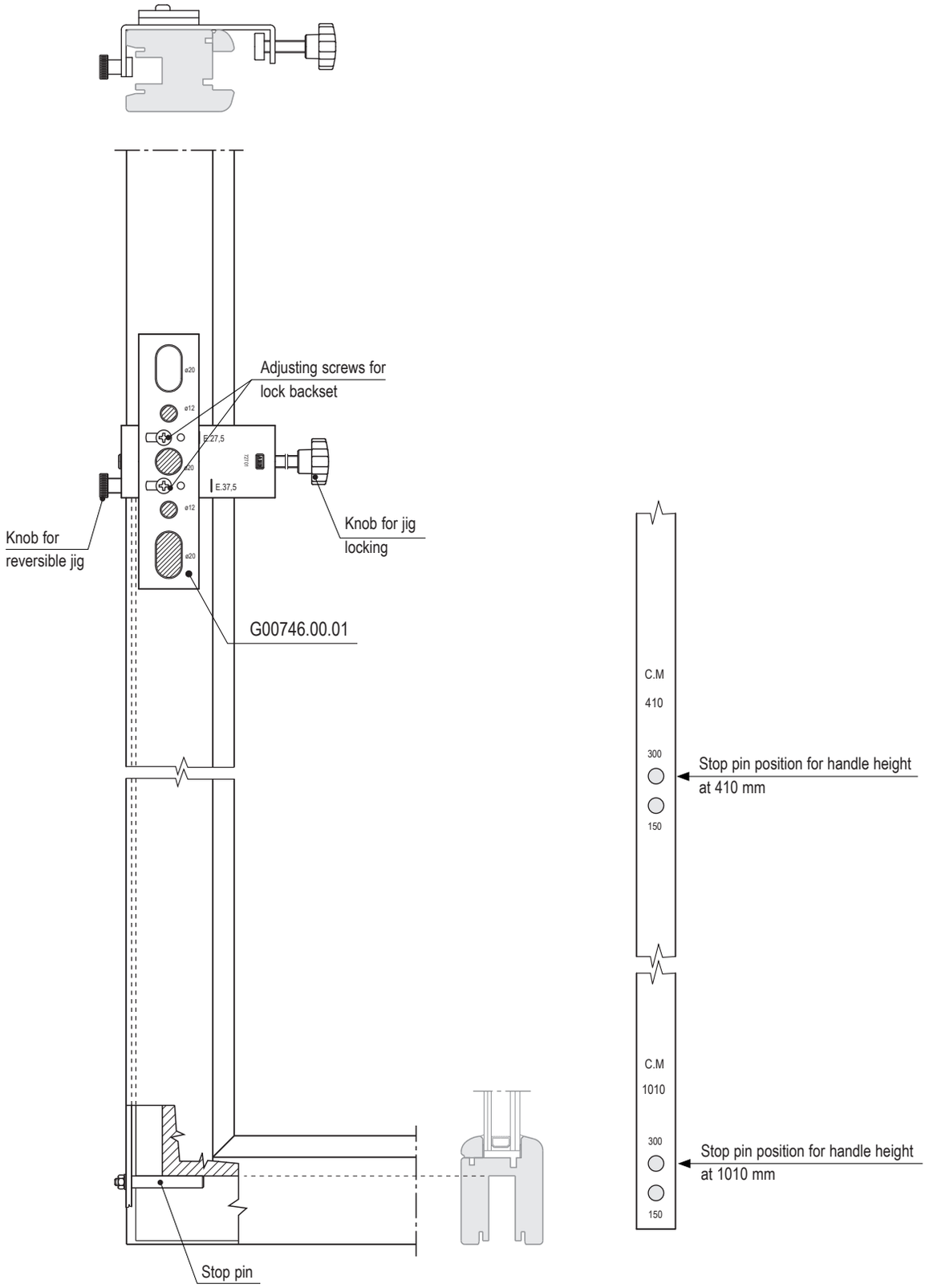
Central pad and caps application



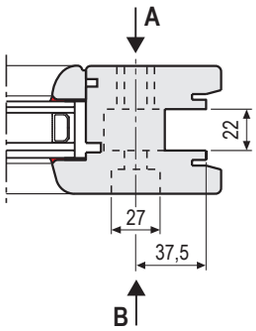
Bottom rubber pads on stiles cut detail (with 45mm thick frame)



Jig application for lock holes

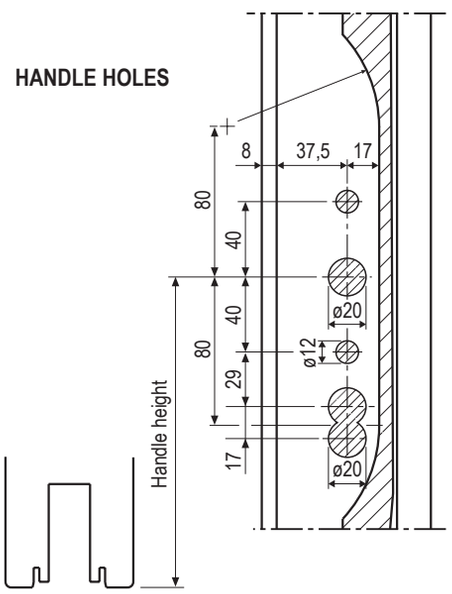


Lock/handle holes and assembly



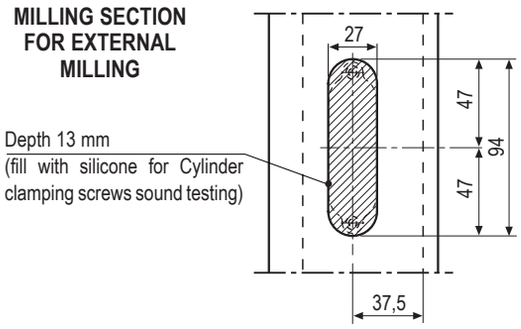
VIEW "A"

HANDLE HOLES

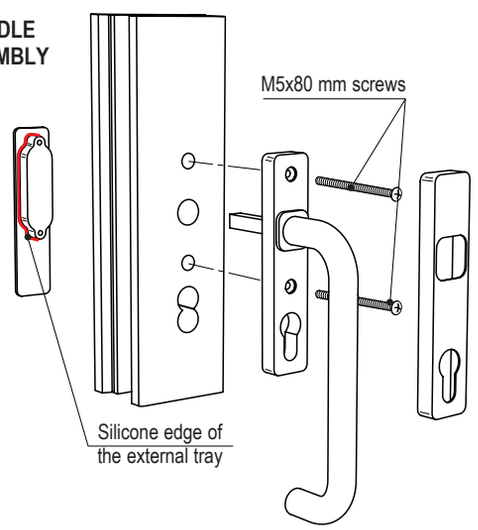


VIEW "B"

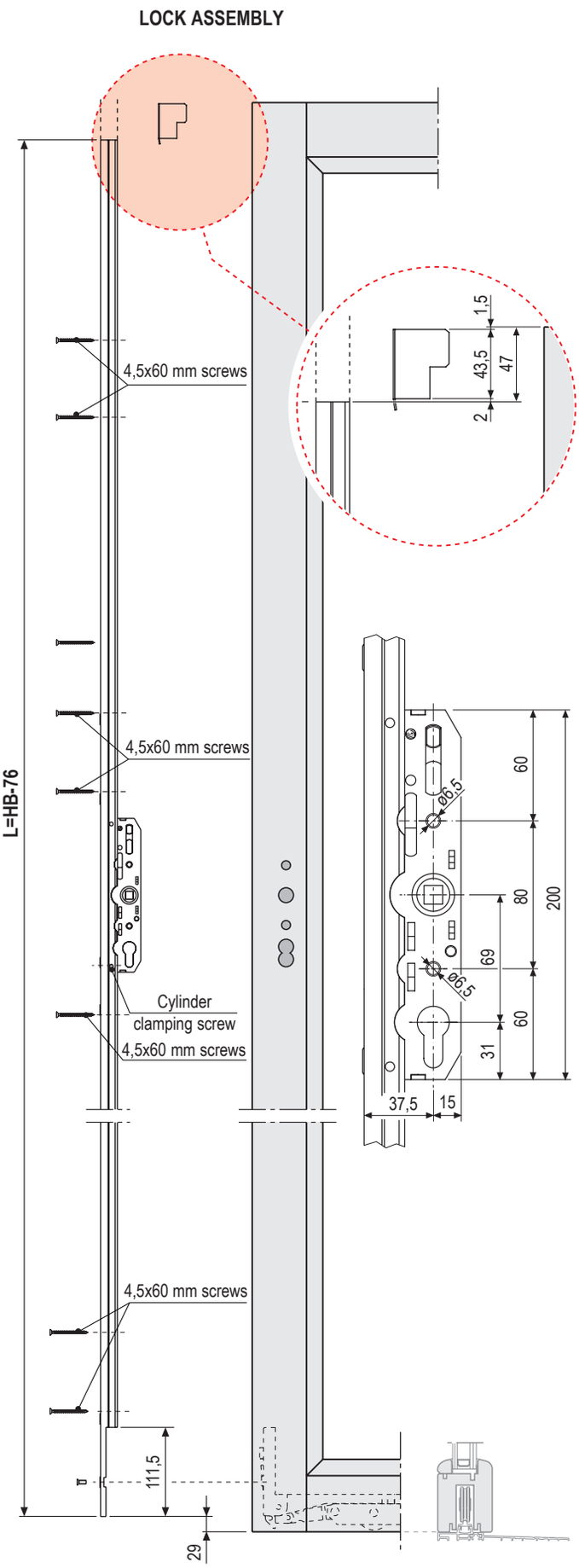
MILLING SECTION FOR EXTERNAL MILLING



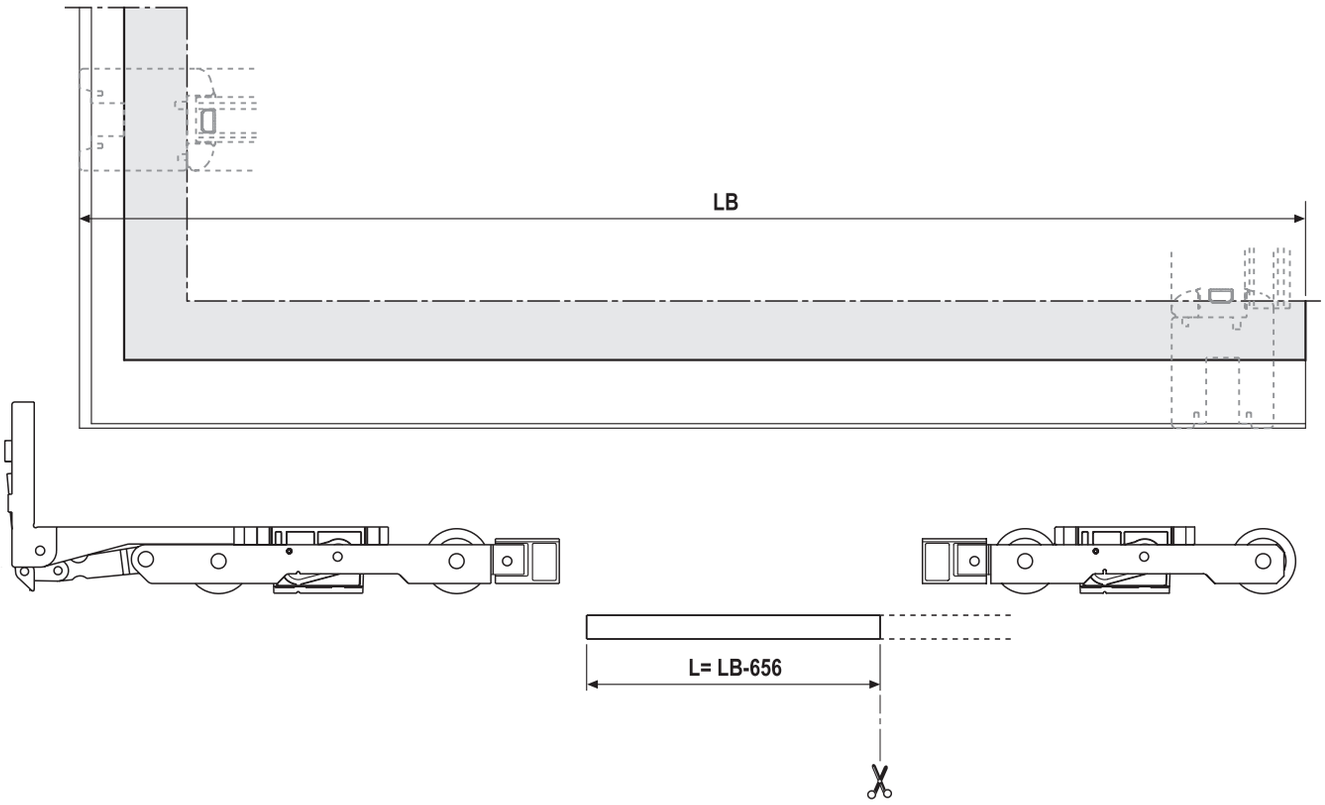
HANDLE ASSEMBLY

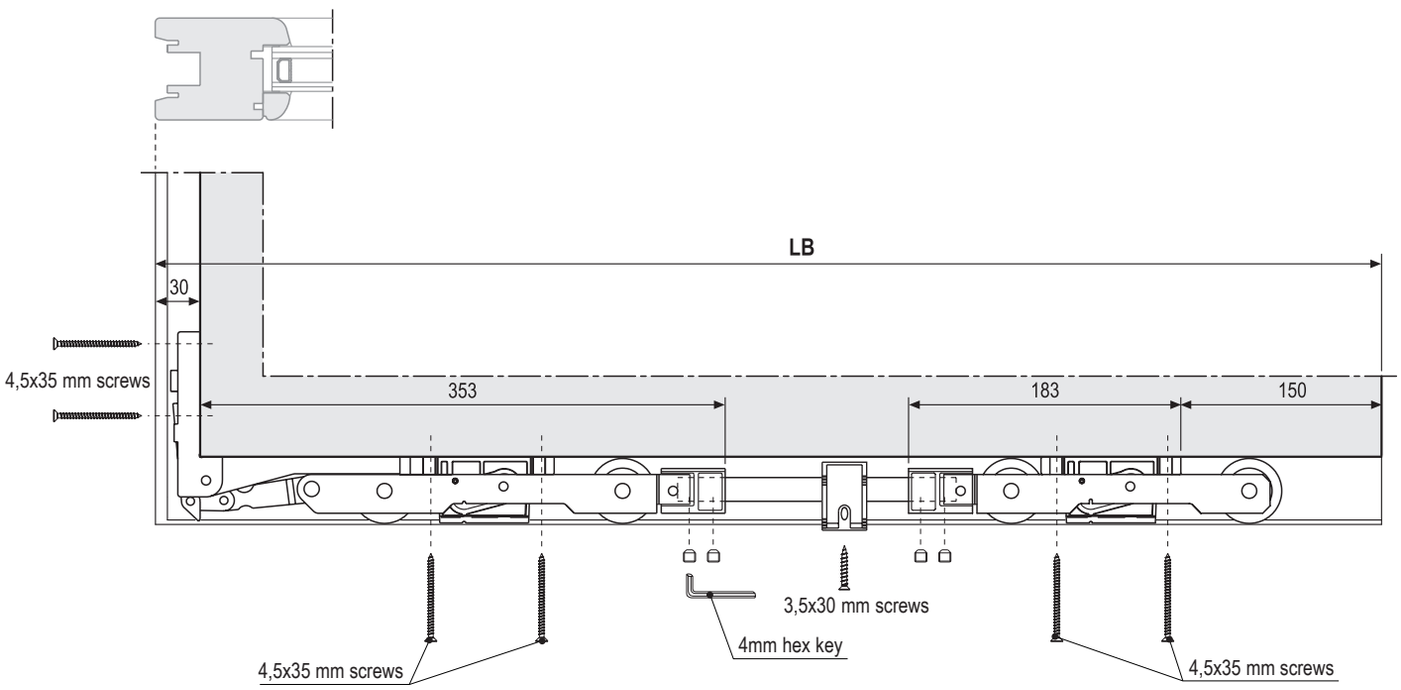


LOCK ASSEMBLY

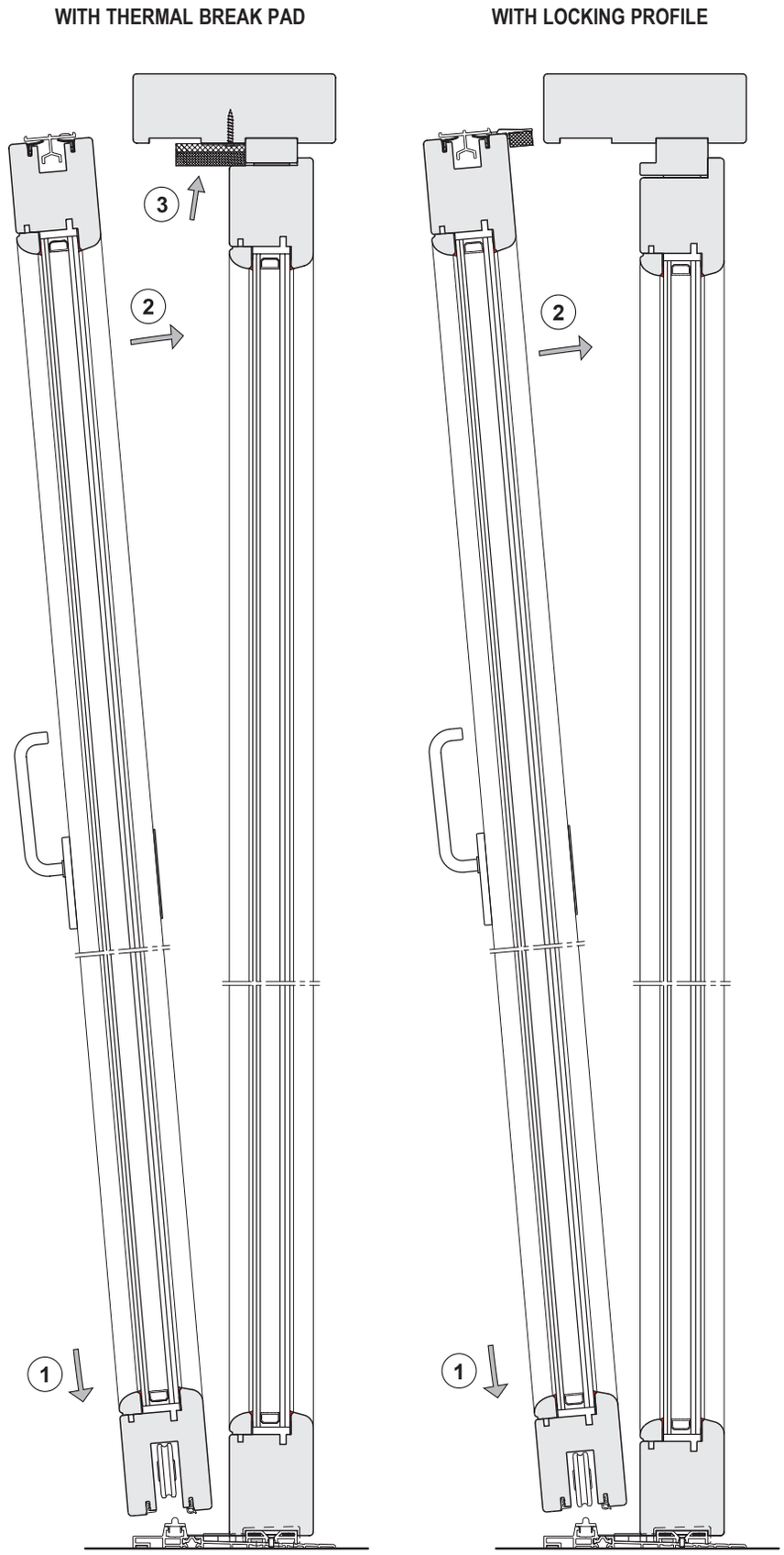


Carriage installation

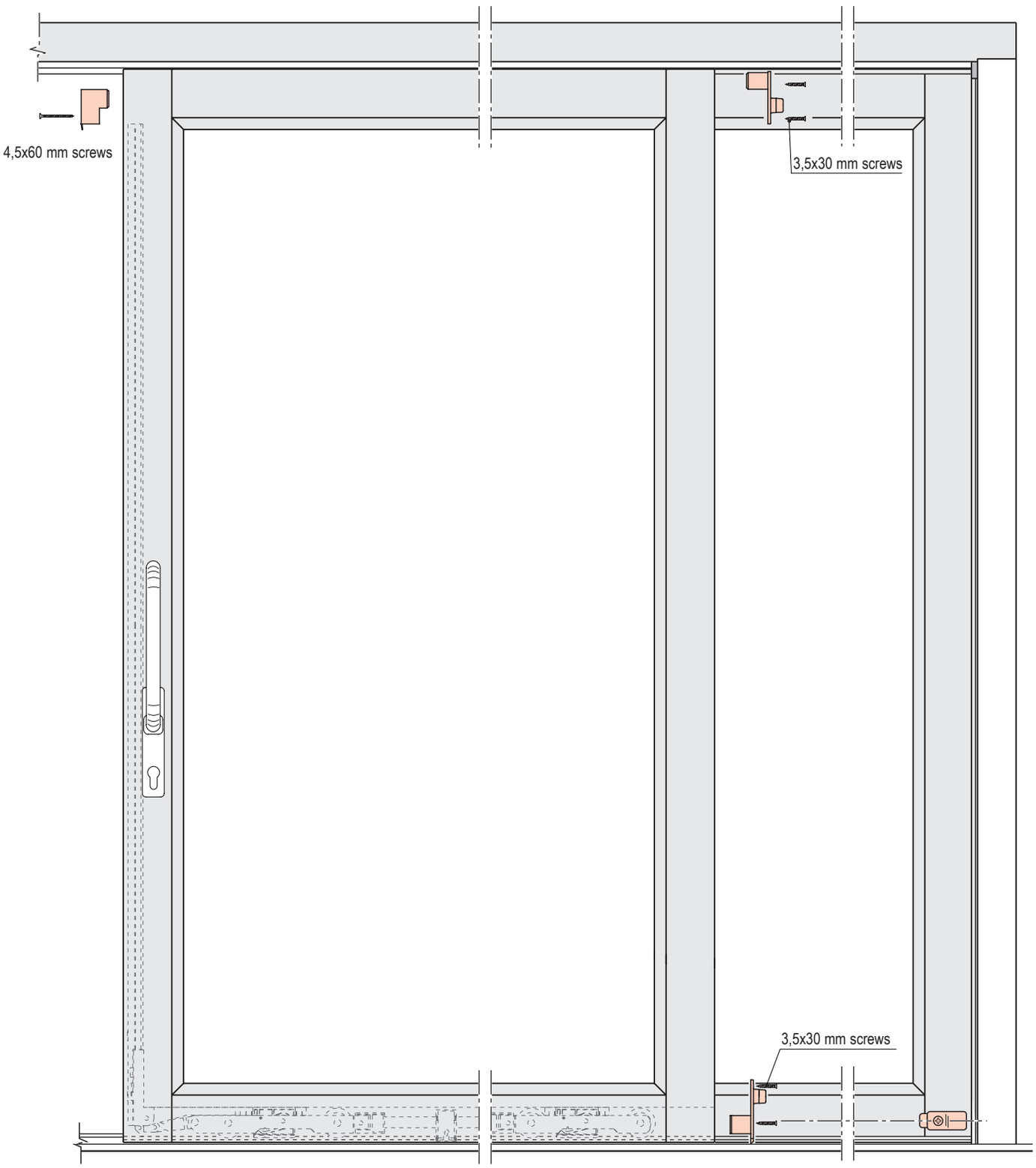




Sash assembly

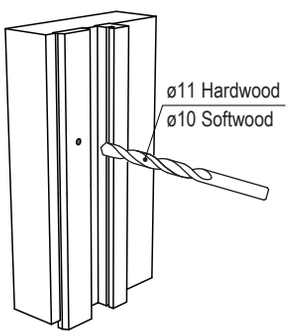


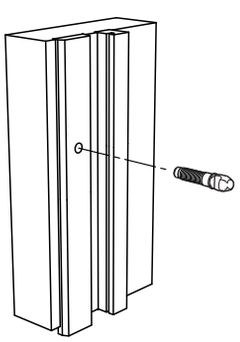
Top and bottom end caps and door bumper assembly

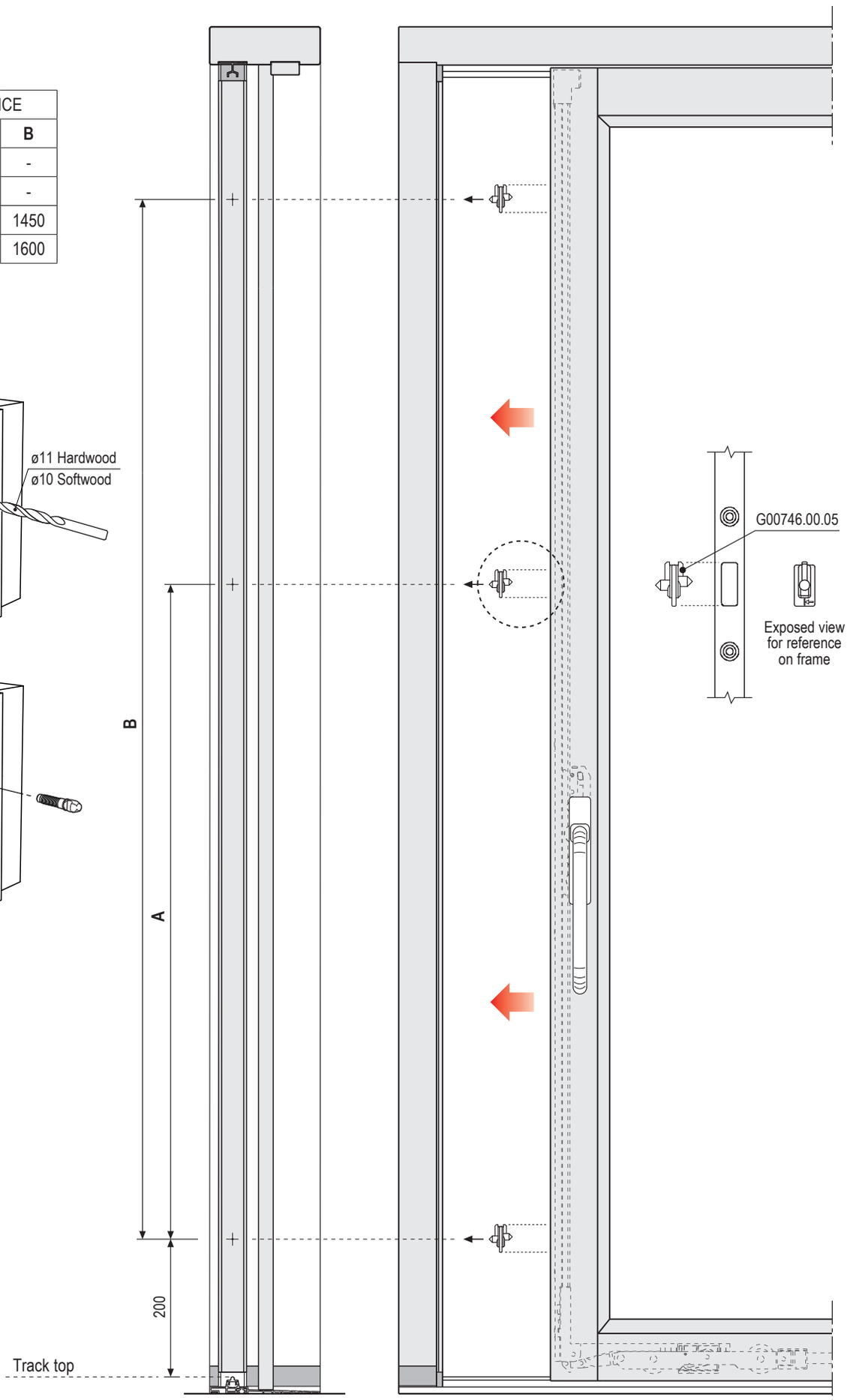


Locking pins assembly

PIN DISTANCE		
GR	**A**	**B**
1	450	-
2	850	-
3	980	1450
4	980	1600

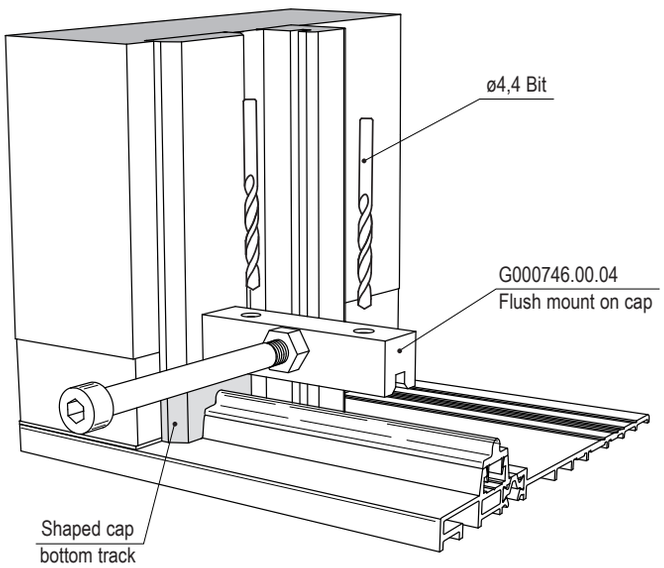




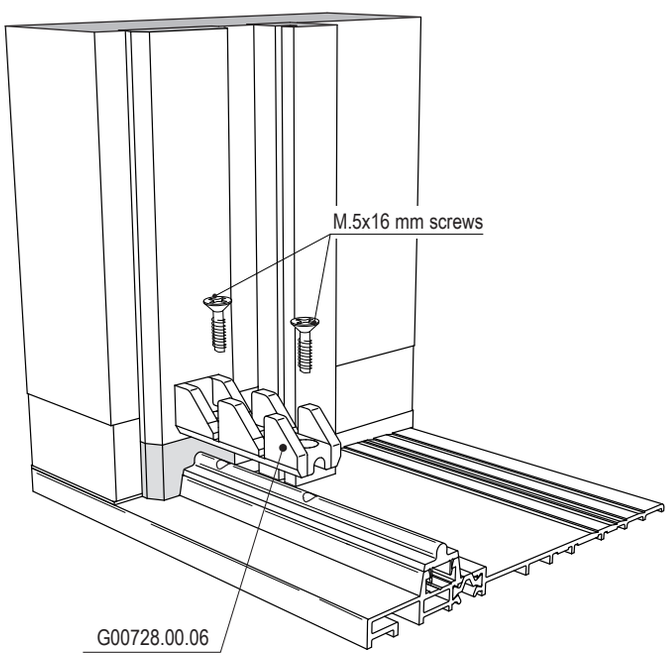


Ventilation striker application

JIG FOR VENTILATION STRIKER APPLICATION DETAIL



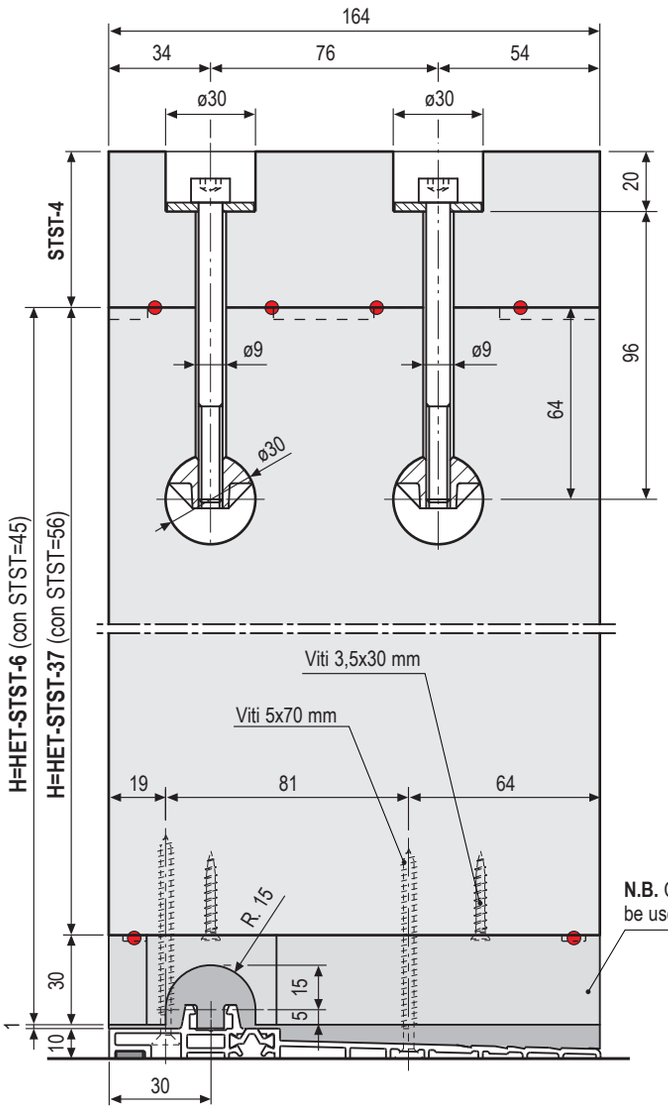
VENTILATION STRIKER APPLICATION DETAIL



Frame corner joints (alternative solution)

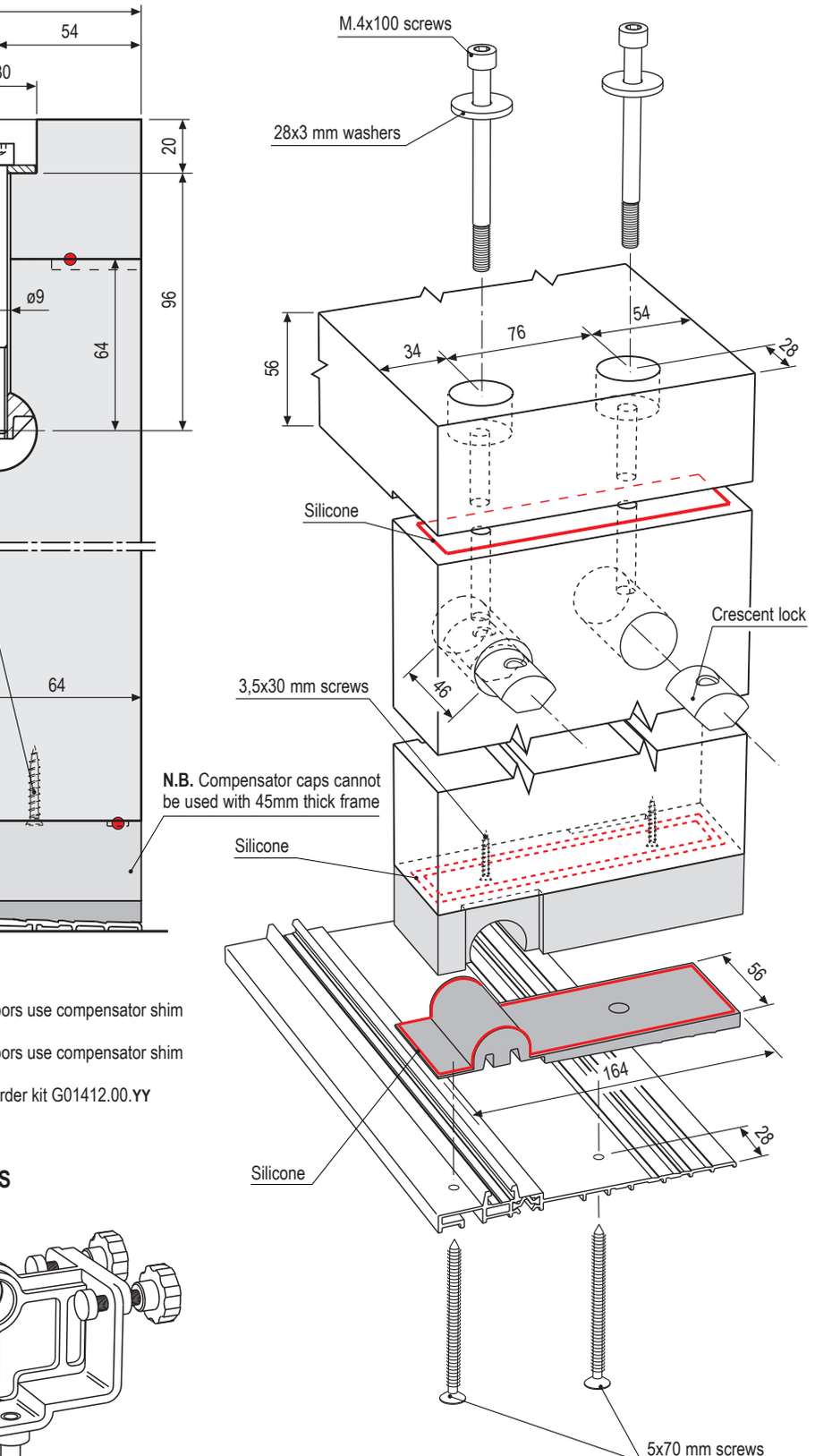
The jamb - transom assembly of the frame using the G00728.00.23 guarantees simple and safe assembly of the entire system, a perfect mechanical seal and protection against humidity.

VERTICAL SECTION (with bottom cap)

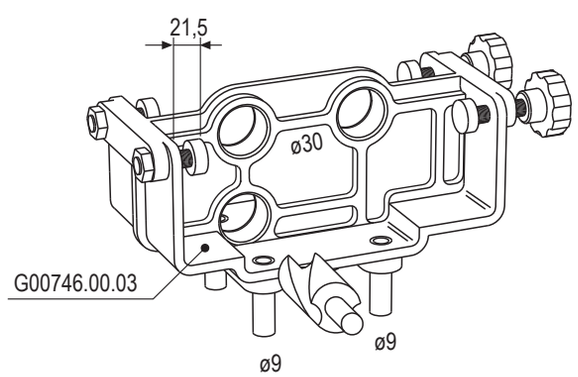


YY = 93 Black
86 Grey RAL 7035

- For Lh to Rh sliding doors use compensator shim kit G01412.SX.**YY**
- For Rh to Lh sliding doors use compensator shim kit G01412.DX.**YY**
- For layouts D and E, order kit G01412.00.**YY**

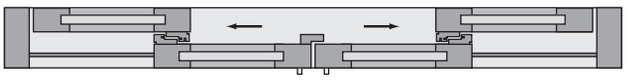


JIG FOR CRESCENT LOCKS

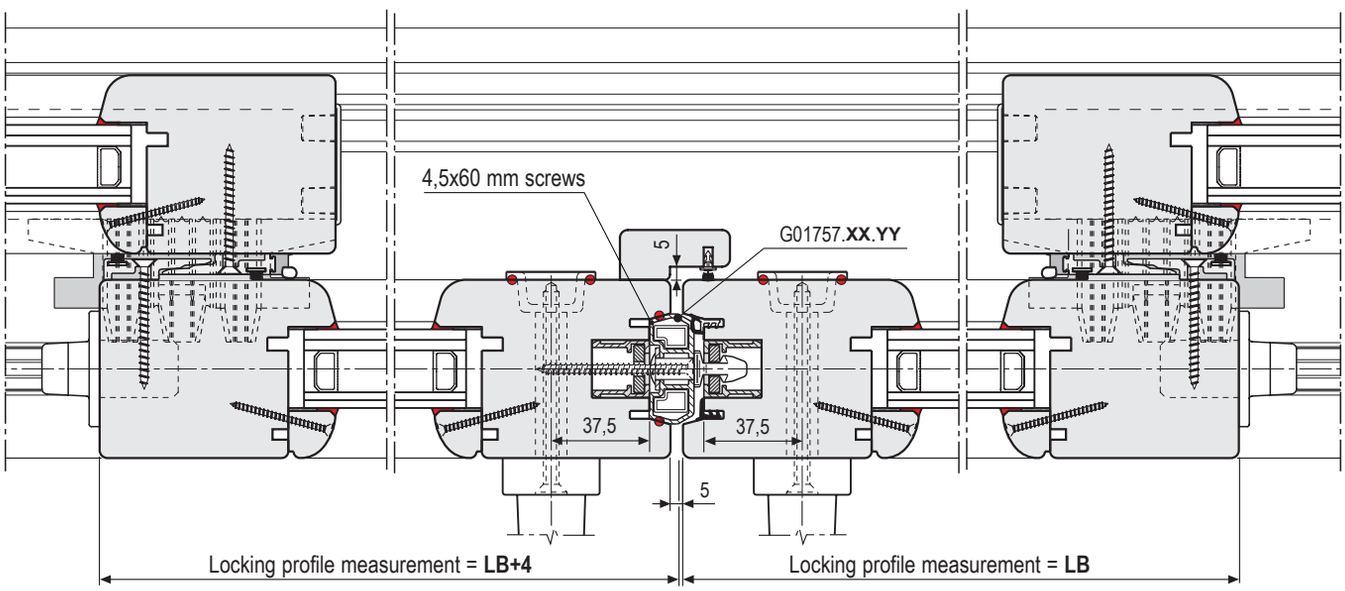


Solution for central point with coaxial sashes (layout E)

SYMMETRIC SOLUTION WITH ALUMINIUM PROFILE



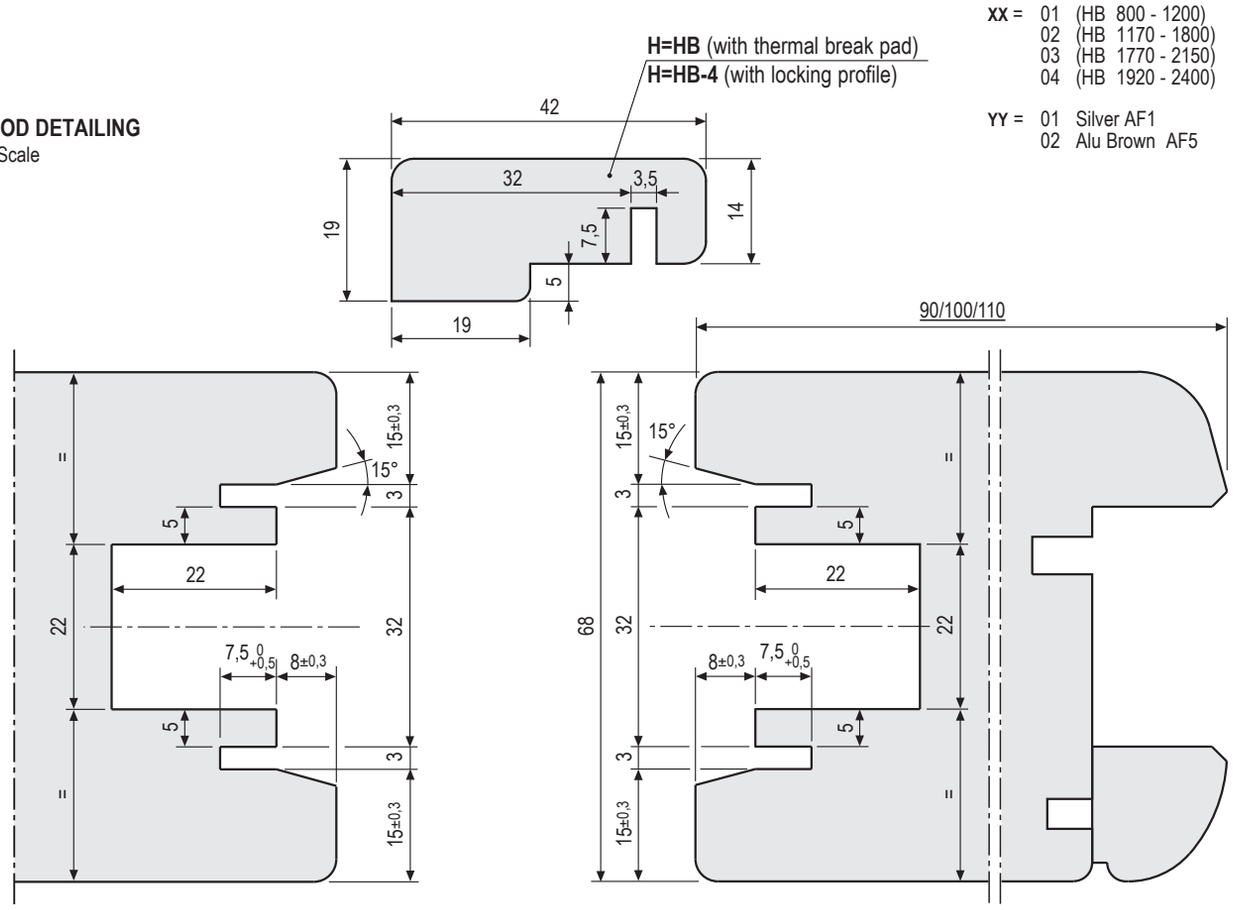
Layout E - 2 fixed doors and 2 sliding doors



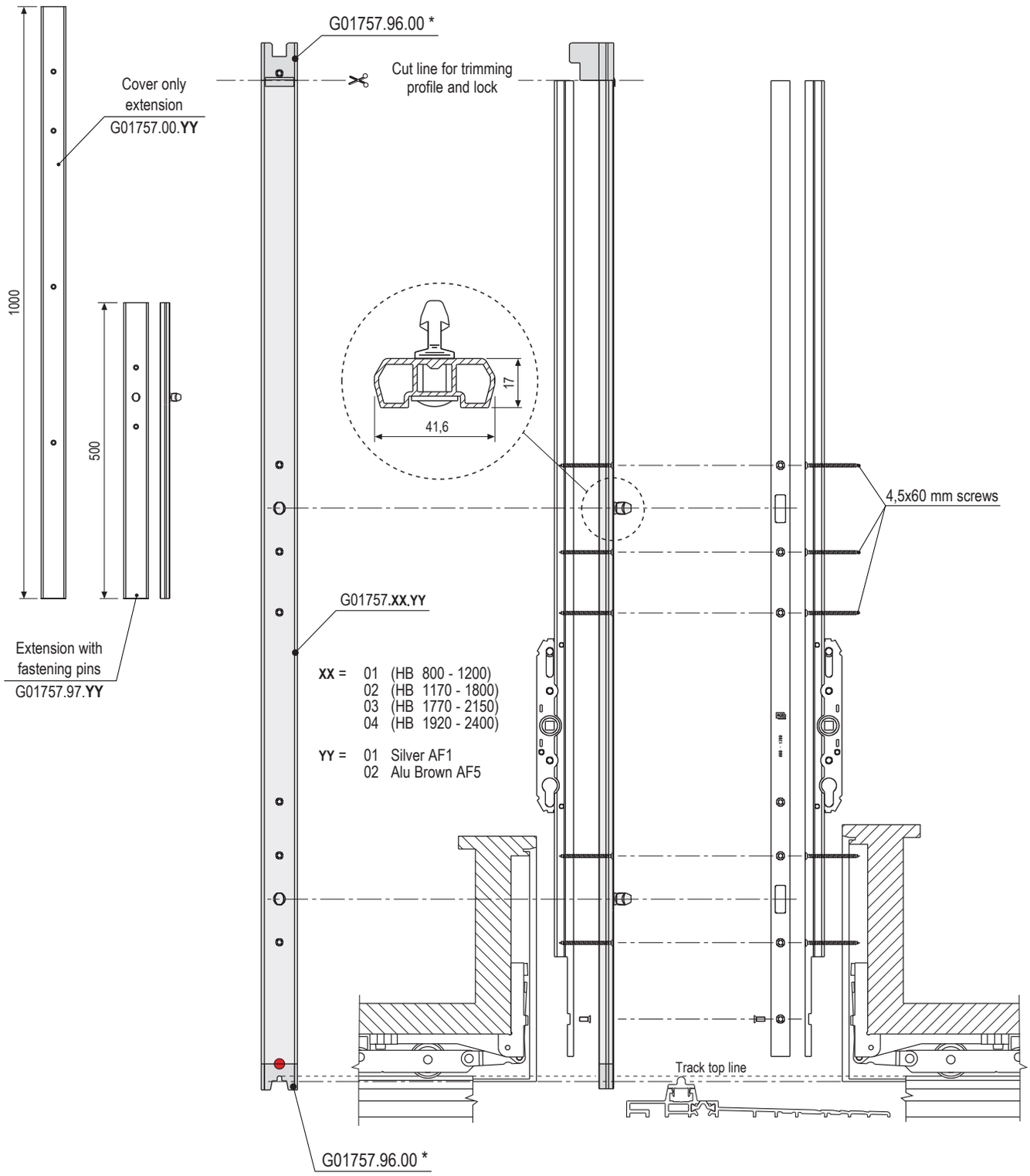
XX = 01 (HB 800 - 1200)
02 (HB 1170 - 1800)
03 (HB 1770 - 2150)
04 (HB 1920 - 2400)

YY = 01 Silver AF1
02 Alu Brown AF5

WOOD DETAILING
1:1 Scale

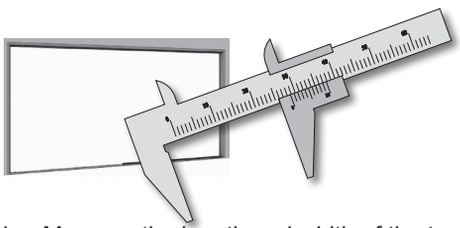


Locking profile for central point with symmetric coaxial sashes detail



* Code G01757.96.00 indicates the kit containing top and bottom cap

Steps to take for factory process control (FPC)



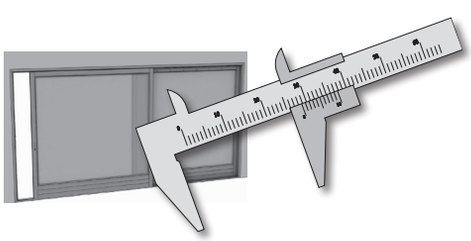
Frame component measurements and techniques for air-water tightness

1 - Measure the length and width of the top rail and the vertical jambs

2 - Check that the width and depth of the milled housing for the aluminium top guide and the wooden listels conform to the instructions included in this technical manual.

3 - Verify the width and length of the listels.

4 - Control that the length of the fixed sash supporting profile and the bottom track match the instructions in this technical manual.



Sash component measurements and techniques for air-water tightness

1 - Based on the frame measurements, calculate, according to the instructions in this technical manual, the measurement of the sashes (LxH) and verify that the dimensions of the sash produced conform to those calculated.

2 - Verify the orthogonality (square) of the sashes by measuring the diagonals: it is very important that they are the same for correct operation and closing.

3 - Verify that the thickness of the sash is exactly 68 mm.

4 - Verify that the width of the milled housings for the carriages are 22mm and check that they are exactly in the centreline of the 68 mm thickness.

5 - Check the depth of the milled housings for the gaskets, making sure that they are free from dirt and paint, or glue residue

6 - Check the depth and position of the lock hole.

7 - Control the coplanarity of the bottom jamb/transom joints of both sashes. Level with stucco if required, in order not to compromise the seal.

8 - The double glazing sheets should have silicone applied on both on the rebate support as well as around the outer perimeter.

9 - Silicone the inner glazing beads or use specific gaskets.

10 - Make a silicone bead inside the groove for the bottom outer gasket before inserting it.
Under the bottom gasket fin, apply a thin line of silicone between the wood and fin along the entire length of the sash.

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