



Alban Giacomo SpA

COMPANY WITH
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= ISO 9001 =

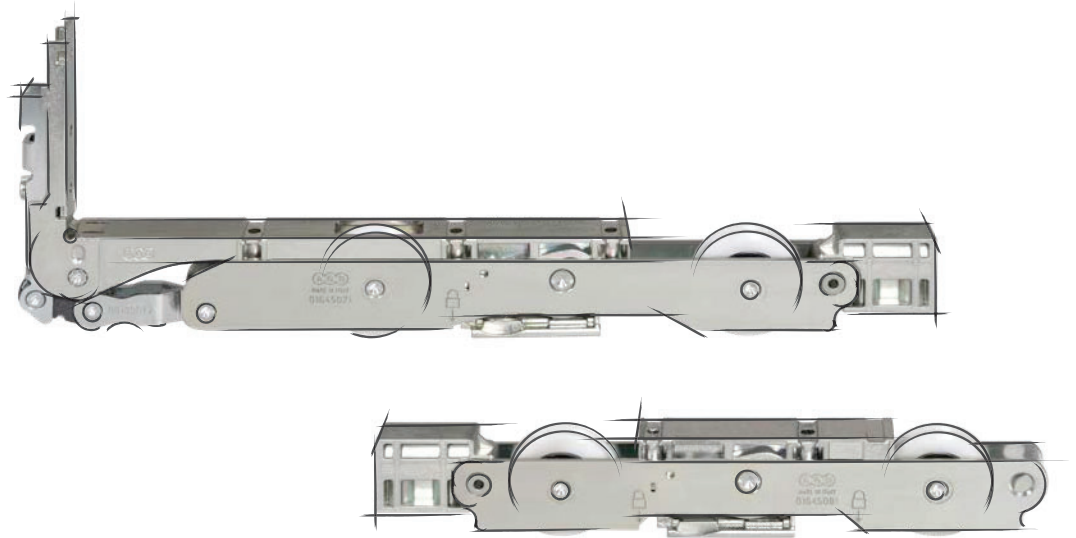
TECHNICAL MANUAL

LIFT & SLIDE

Climatech 68 mm

XC Configuration

Layouts **A** & **E**, Layouts **B** & **F**



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INTRODUCTION

Warnings







Possible changes regarding accessories, assembly and millings will be constantly reported with the periodic update of this manual. Therefore, we suggest to pay attention to the release of new versions in the website www.agb.it.















The producers who use the AGB Certification agreement must install glasses with the following minimum requirements:
Minimum thickness 44.1/15/33.1 Shatterproof

Symbology and abbreviations

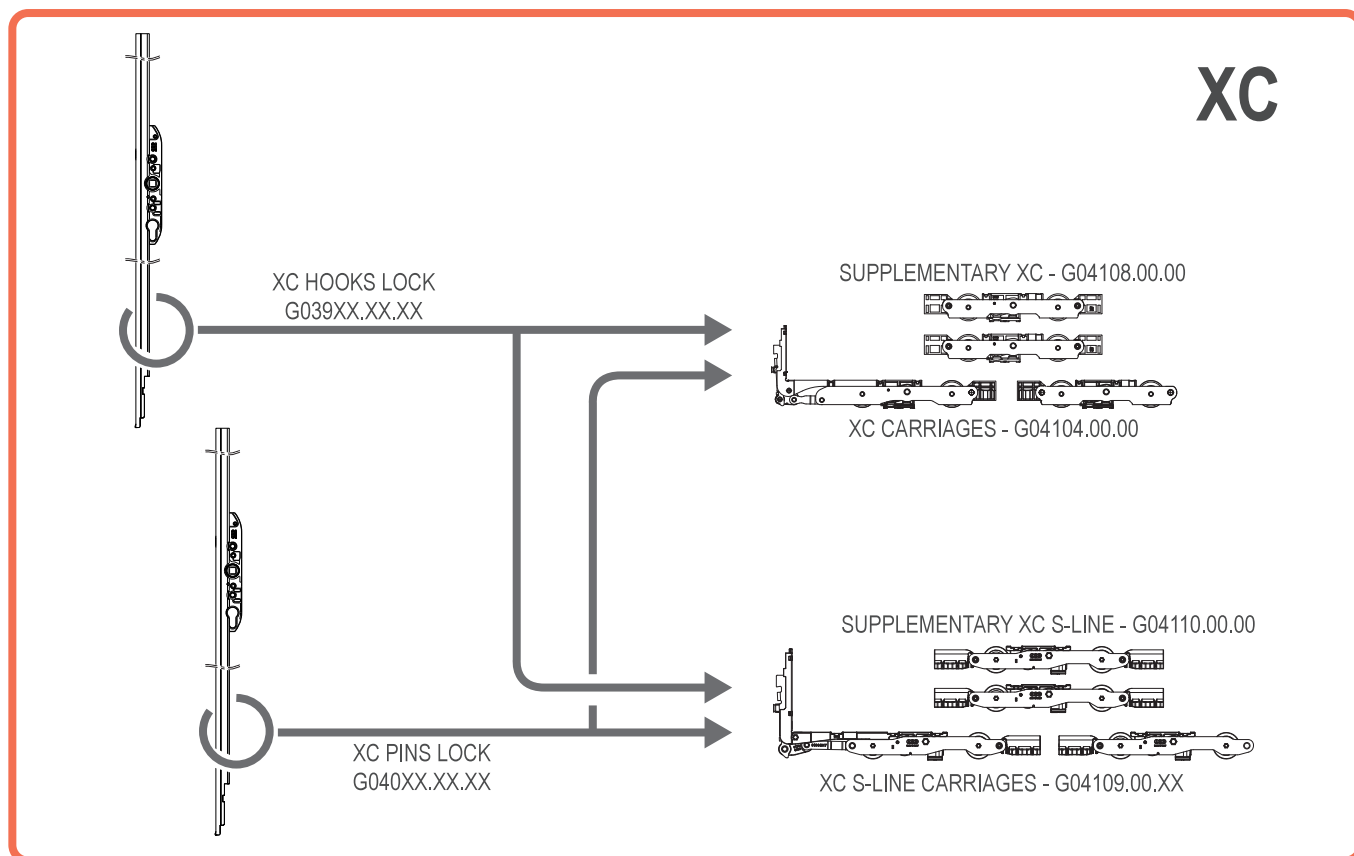
HB	=	Sash height
LB	=	Sash width
MET	=	Frame external measurement
SMT	=	Frame jamb thickness
SMA	=	Sash jamb thickness
LBF	=	Fixed sash width
HET	=	Frame external height
STST	=	Frame upper transom thickness
LG	=	Glass width
HG	=	Glass height
H	=	Component height
L	=	Component length
Gap	=	5 mm
	=	Silicone or suitable gasket
	=	Neutral silicone with Primer
	=	Pre-hole
	=	EPDM tape

Note. All the measurements are in millimeters

	=	Solution detail with high/reduced upper guide
	=	Solution detail with guide 22X13
	=	Solution detail with guide 22X22
	=	Detail solution with XC carriages
	=	Detail solution with XC S-Line carriages
	=	Detail solution with hooks lock
	=	Detail solution with pins lock
	=	Solution with Uni-V central point
	=	Solution with basic point
	=	Solution with central point Easy
	=	Solution with Uni-V Mini central point
	=	Reference page number for details

CONFIGURATION CHOICE AND CALCULATIONS

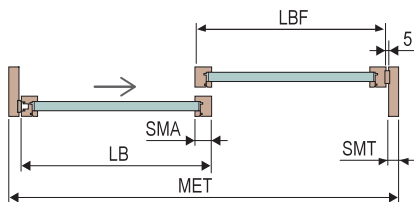
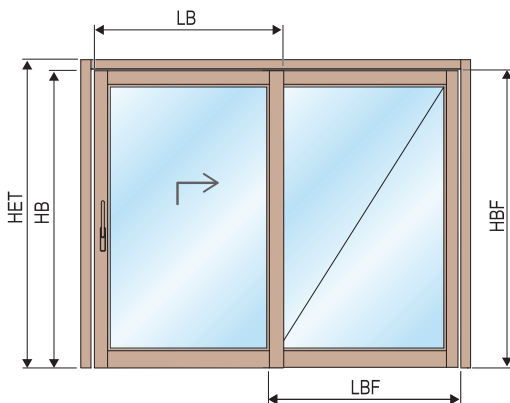
Configurations developed in this manual



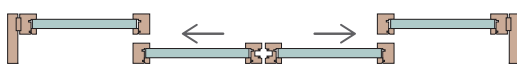
Layouts A & E

- Sash with one transom in the lower part with possibility to have a basement.
- Vertical external gasket - lower: balloon with vulcanized edge in EPDM.
- Covering internal side gasket of the milling in EPDM.
- PVC upper gasket with wing.
- EPDM sponge co-extruded central point gasket.
- Aluminium upper covering profile with waterproof tightness sponge.
- Water, air, wind and impact tests made in glass: 44.1/10/5/10/33.1 (minimum possible).
- Aluminium universal reduced upper guide and threshold in pultruded fiberglass.
- Distance between the sashes 28 mm.
- Layout E made with symmetric central point and aluminium pin holder profile and extremity caps for gaps closing.
- External architrave cable with brush.

Dimensions calculation of sliding sashes



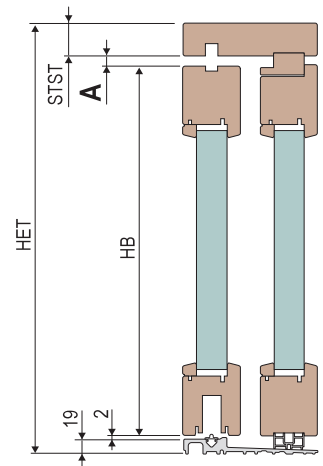
Layout A
 1 fixed sash and 1 sliding sash
 $LB = [MET - 2 \times (SMT + 5)] : 2 + SMA : 2$
 Ex: $LB = [4000 - 2 \times (45 + 5)] : 2 + 100 : 2$ $LB = 2000$ mm



Layout E
 2 fixed sashes and 2 sliding sashes
 $LB = [MET - (2 \times SMT + 15)] : 4 + SMA : 2$



Layout D
 1 fixed sash and 2 sliding sashes
 $LB = [MET - 2 \times (SMT + 5)] : 4 + SMA : 2$



A = 12
 $HB = HET - (STST + 12 + 21)$

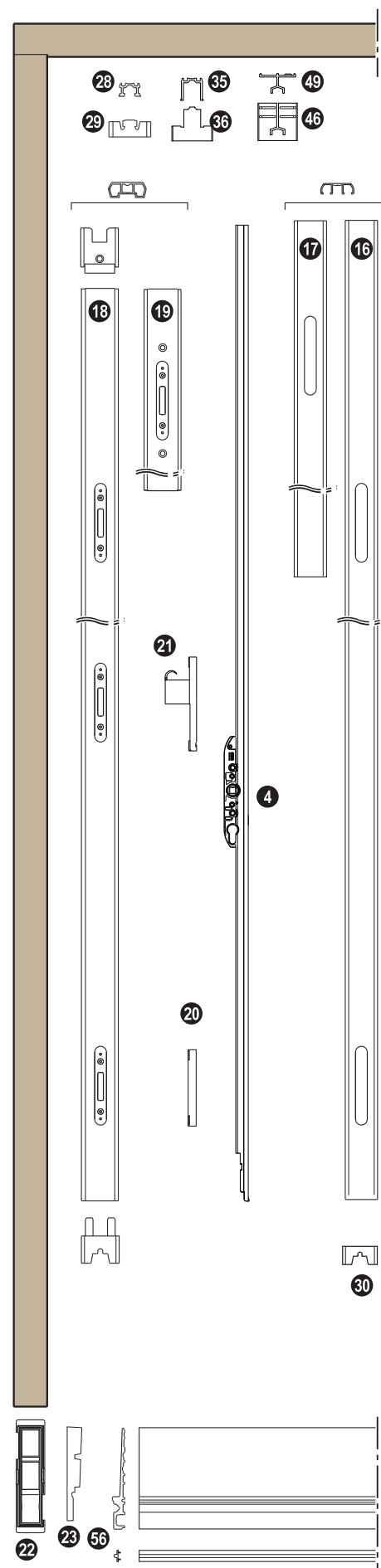
A = 15 (guide 22x22)
 $HB = HET - (STST + 15 + 21)$

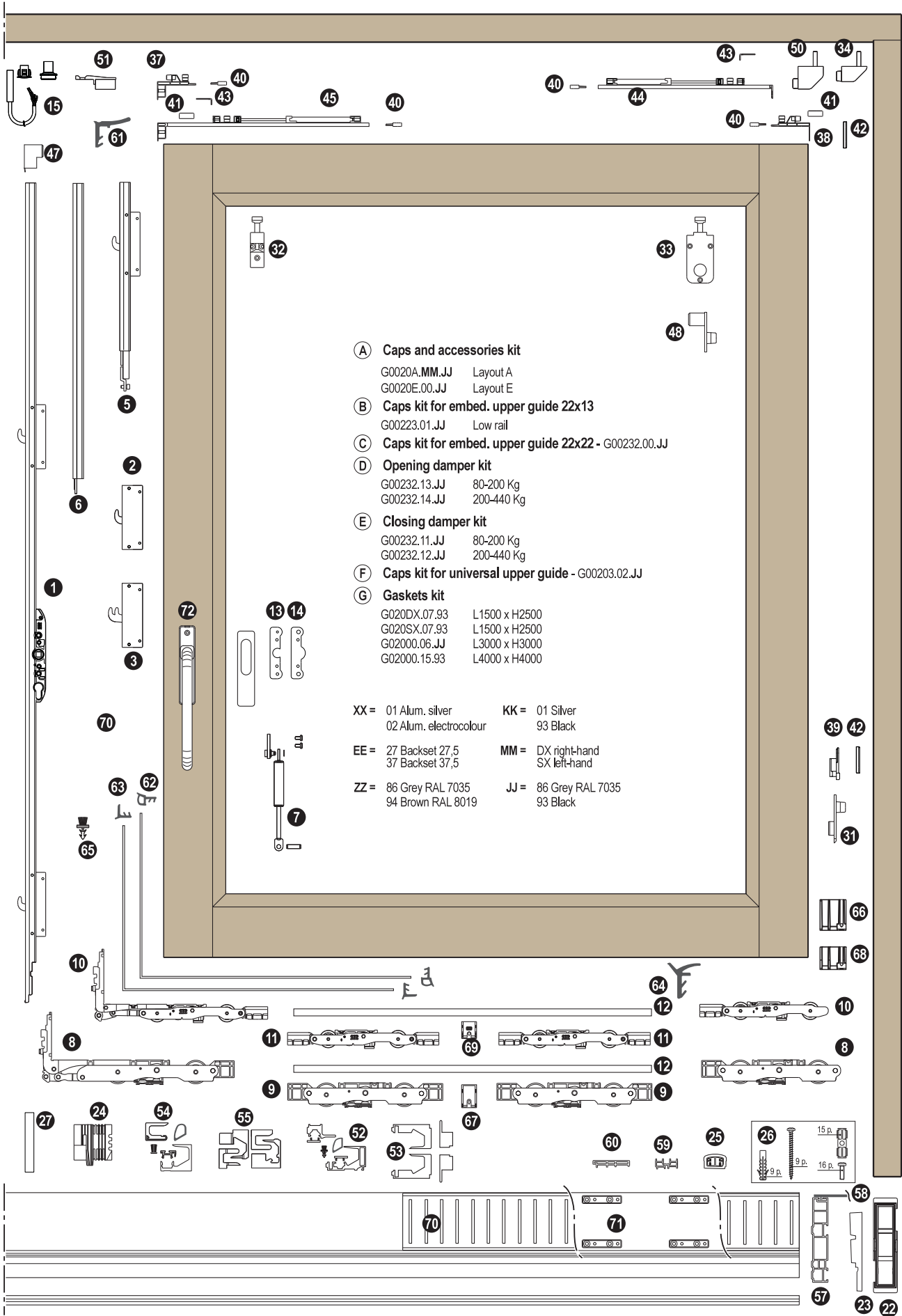
(Tolerance HB ± 0,5)

	G1	G2	G3
A = 12	✓	✓	✓
A = 15	✗	✗	✓

Hardware diagram with hooks lock

- 1 Hooks lock**
G039EE.03.XX HB=1775-2150 Handle H = 1000
G039EE.04.XX HB=1925-2400 Handle H = 1000
G039EE.05.XX HB=2325-2750 Handle H = 1000
- 2 Additional hook kit - G05008.00.00**
- 3 Microventil. addit. hook kit - G05010.00.00**
- 4 Hooks lock for second sash**
GR39EE.03.01 HB=1775-2150 Handle H = 1000
GR39EE.04.01 HB=1925-2400 Handle H = 1000
GR39EE.05.01 HB=2325-2750 Handle H = 1000
- 5 Hooks extension 500 mm - G04600.01.01**
- 6 Covering profile 1000 mm - G04401.02.01**
- 7 Gas spring kit - GMG702.04.00**
- 8 XC carriages basic kit - G04104.00.00**
- 9 XC supplementary carriages kit- G04108.00.00**
- 10 XC S-Line carriages kit - G04109.00.00**
- 11 XC S-Line supplementary carriages kit - G04110.00.00**
- 12 Carriages connecting rod**
G04601.00.01 L=1000 G04601.00.03 L=1800
G04601.00.02 L=1400 G04601.00.04 L=2700
- 13 Handle fastening plate**
G05371.M5.00 hole M5
G05371.M6.00 hole M6
- 14 Anti-burglar plate kit - G05004.00.00**
- 15 Sensors**
G05006.00.86 Grey
G05006.00.93 Black
G05003.00.00 Clip
- 16 Lateral locking profile for hooks lock**
G01359.03.XX GR3 predisposition 2 hooks
G01359.04.XX GR4 predisposition 2 hooks
G01359.05.XX GR5 predisposition 2 hooks
G01359.13.XX GR3 predisposition 3 hooks
G01359.14.XX GR4 predisposition 3 hooks
G01359.15.XX GR5 predisposition 3 hooks
G01359.23.XX GR3 predisp. signal system
G01359.24.XX GR4 predisp. signal system
G01359.25.XX GR5 predisp. signal system
- 17 Extens. for locking prof. for hooks lock**
G01360.01.XX L=500
- 18 Coax. sashes lock. prof. for hooks lock + caps**
G01373.13.XX L=2075 HB=1775-2150 With hook strik.
G01373.14.XX L=2325 HB=1925-2400 With hook strik
G01373.15.XX L=2750 HB=2325-2750 With hook strik
- 19 Extens. for coax. sashes lock. for hooks, 500 mm**
G01364.01.XX With hook strik.
- 20 Strik. for lock hook - G06201.00.XX**
- 21 Strik. for lock hook with sign. system - G06203.00.XX**
- 22 Comp. cap for frame jamb (A)**
- 23 Support for cap (A)**
- 24 Central pad (A)**
- 25 Cap for fixed sash supporting profile (A)**
- 26 Climatech threshold fastening kit (A)**
- 27 EPDM gasket (A)**
- 28 Embedded upper guide 22x13**
G01000.01.XX L=3000 G01000.04.XX L=6000
G01000.02.XX L=4000 G01000.14.XX L=7000
G01000.03.XX L=5000
- 29 Shaped cap for embedd. guide 22x13 (B)**
- 30 Shaped cap for low. rail (B) (C) (F)**
- 31 Rear low. covering cap (B) (F)**
- 32 Cap and glider for front upper guide (B)**
- 33 Cap and glider for front upper guide (B)**
- 34 Red.doop stop for embed.guide - G00204.04.JJ702**
- 35 Embedded upper guide 22x22**
G01002.01.XX L=3000 G01002.04.XX L=6000
G01002.02.XX L=4000 G01002.05.XX L=7000
G01002.03.XX L=5000
- 36 Shaped cap for per embed. guide 22x22 (C)**
- 37 Front glider (C)**
- 38 Rear glider (C)**
- 39 Rear lower pad (C)**
- 40 Glider fastening device (C)**
- 41 Device (C) (E)**
- 42 Cover (C)**
- 43 Magnetic device (D) (E)**
- 44 Opening brake (D)**
- 45 Closing brake (E)**
- 46 Shaped cap for upper guide (F)**
- 47 Terminal cap for lock (F)**
- 48 Rear upper cover. cap (F)**
- 49 Reduced upper guide**
G01734.01.XX L=3000 G01734.04.XX L=6000
G01734.02.XX L=4000 G01734.14.XX L=7000
G01734.03.XX L=5000
- 50 Door stop**
G00204.00.91 White
G00204.00.86 Grey
G00204.00.93 Black
- 51 Upper locking profile**
G02403.15.01 L=1500
G02403.20.01 L=2000
G02403.30.01 L=3000
- 52 Uni-V central point kit**
G02208.25.KK L=2500
G02208.31.KK L=3100
G02208.40.KK L=4000
- 53 Uni-V central point caps kit**
G01610.DX.93 Right G01610.SX.93 Left
- 54 Uni-V Mini central point kit**
G02211.25.KK L=2500 G02211.40.KK L=4000
G02211.31.KK L=3100
- 55 Uni-V Mini central point caps kit**
G01623.DX.93 Right G01623.SX.93 Left
- 56 Climatech threshold kit**
G02268.01.ZZ L=3000 G02268.04.ZZ L=6000
G02268.02.ZZ L=4000 G02268.14.86 L=7000
G02268.03.ZZ L=5000
- 57 Climatech threshold adapter for high threshold**
G01212.01.01 L=3000 G01212.04.01 L=6000
G01212.02.01 L=4000 G01212.14.01 L=7000
G01212.03.01 L=5000
- 58 Gasket for high threshold - 7 meters - G02210.01.00**
- 59 Fixed sash supporting profile**
G01302.02.93 L=2000
G01302.04.93 L=3000
- 60 Thermal profile**
G01310.02.JJ L=2000 G01310.04.JJ L=3000
- 61 PVC upper flexible gasket**
G00733.02.01 L=40 G00733.02.02 L=200
- 62 Ext. side gasket (balloon) (G)**
G020DX.09.93 - G020SX.09.93 L1500 x H2500
G02000.08.93 L3000 x H3000
- 63 Internal side gasket L150 m - G02004.15.93 (G)**
- 64 Flexible gasket for Easy point**
G00733.04.01 L=40
G00733.04.02 L=200
- 65 Brush gasket**
G02002.16.00 L=1600
G02002.25.00 L=2500
G02002.31.00 L=3100
- 66 XC anti-derailed adapt. - G01611.02.00**
- 67 Rod guide - G05102.00.00**
- 68 S-Line anti-derailed device - G01611.01.00**
- 69 S-Line rod guide - G00728.00.29**
- 70 Cover for fiberglass threshold - stainless steel**
G01220.00.08 Thickness 78
G01220.MM.08 Angled
- 71 Fastening kit for thres. cover - G01219.00.01**
- 72 Handle**

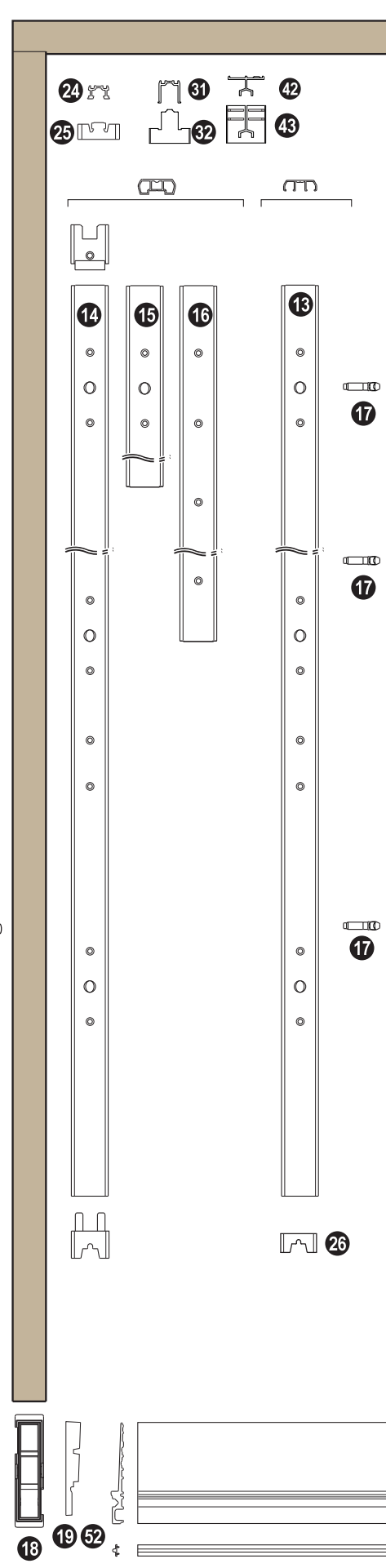


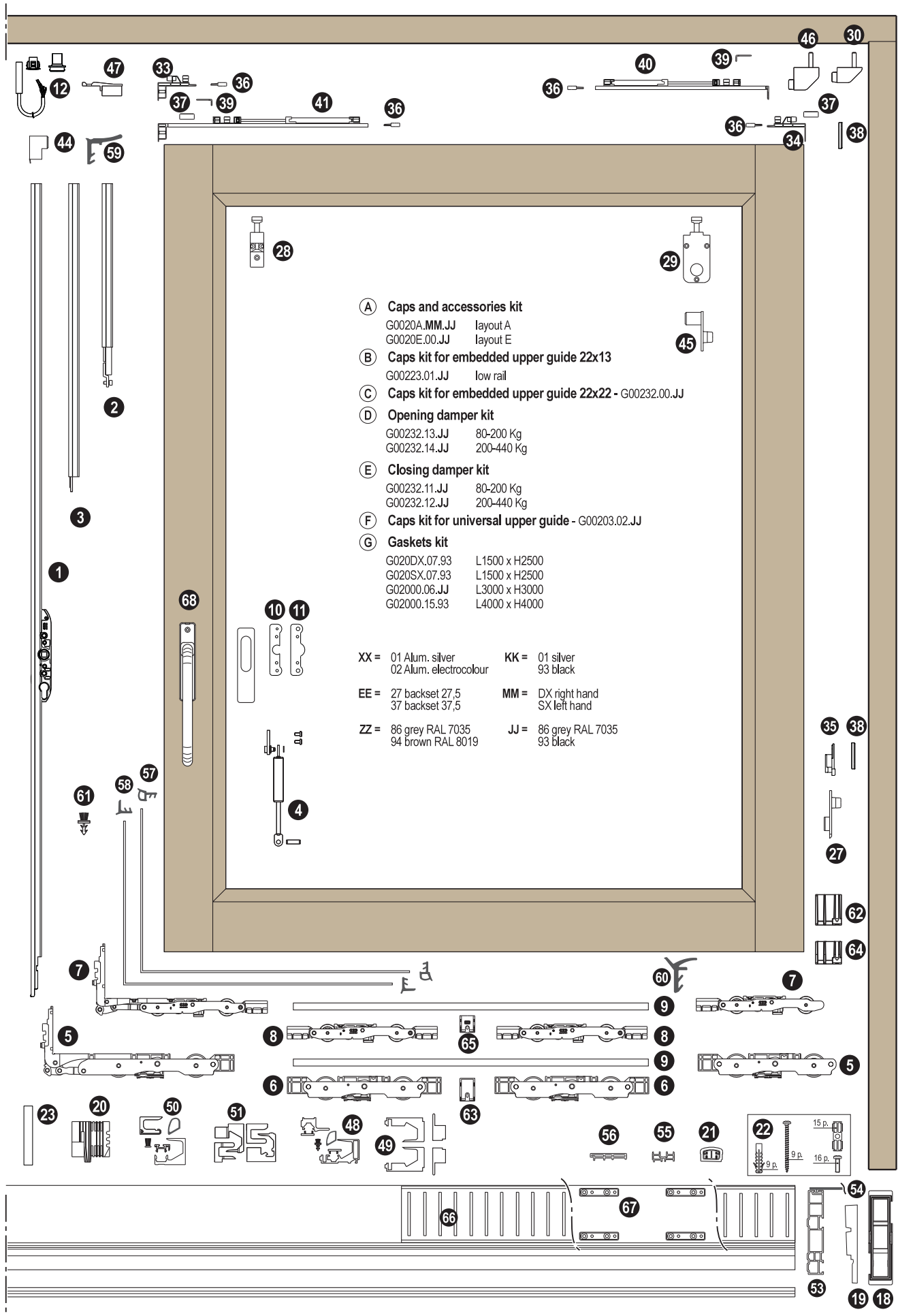


Hardware diagram with pins lock

- 1 Pins lock**
 G040EE.01.XX Handle h = 400 HB=800-1200
 G040EE.02.XX Handle h = 400 HB=1170-1800
 G040EE.03.XX Handle h = 1000 HB=1770-2150
 G040EE.04.XX Handle h = 1000 HB=1920-2400
 G040EE.05.XX Handle h = 1000 HB=2401-2750
- 2 Pins extension 500 mm** - G04401.01.01
- 3 Covering profile 1000 mm** - G04401.02.01
- 4 Gas spring kit** - GMG702.04.00
- 5 XC basic carriages kit** - G04104.00.00
- 6 XC supplementary carriages kit** - G04108.00.00
- 7 XC S-Line carriages kit** - G04109.00.00
- 8 XC S-Line supplementary carriages kit** - G04110.00.00
- 9 Carriages connecting rod**
 G04601.00.01 L=1000
 G04601.00.02 L=1400
 G04601.00.03 L=1800
 G04601.00.04 L=2700
- 10 Handle fastening plate**
 G05371.M5.00 hole M5
 G05371.M6.00 hole M6
- 11 Anti-burglar plate kit** - G05004.00.00
- 12 Sensors**
 G05006.00.86 Grey
 G05006.00.93 Black
 G05003.00.00 Clip
- 13 Pin holder profile for lateral point**
 G01341.00.XX L=1800 HB=800-1800
 G01341.01.XX L=2900 HB=1770-2900
 G01341.02.XX L=2900 HB=2401-2900
- 14 Locking profile for coaxial sashes + caps**
 G01361.01.XX L=1125 HB=810-1200
 G01361.02.XX L=1725 HB=1175-1800
 G01361.03.XX L=2075 HB=1775-2150 with caps
 G01361.04.XX L=2325 HB=1925-2400
 G01361.05.XX L=2750 HB=2325-2750

 G01340.01.XX L=1125 HB=810-1200
 G01340.02.XX L=1725 HB=1175-1800 with caps and
 G01340.03.XX L=2075 HB=1775-2150 ventil. pin
 G01340.04.XX L=2325 HB=1925-2400
 G01340.05.XX L=2750 HB=2325-2750
- 15 Coax. sashes locking profile extens. for pins, 500 mm**
 G01361.97.XX
- 16 Coax. sashes locking profile extens. for pins, 1000 mm**
 G01757.00.XX
- 17 Pin**
 G40728.00.03 for locking
 G04902.01.00 for ventilation
- 18 Comp. cap for frame jamb** (A)
- 19 Support for cap** (A)
- 20 Central pad** (A)
- 21 Cap for fixed sash support. profile** (A)
- 22 Climatech threshold fastening kit** (A)
- 23 EPDM gasket** (A)
- 24 Embedded upper guide 22x13**
- 25 Shaped cap for C track 22x13** (B)
- 26 Shaped cap for lower rail** (B) (C) (F)
- 27 Rear lower covering cap** (B) (F)
- 28 Cap and glider for front upper guide** (B)
- 29 Cap and glider for rear upper guide** (B)
- 30 Reduced door stop for embed.guide** - G0204.04.JJ.702
- 31 Embedded upper guide 22x22**
 G01002.01.XX L=3000 G01002.04.XX L=6000
 G01002.02.XX L=4000 G01002.05.XX L=7000
 G01002.03.XX L=5000
- 32 Shaped cap for embedded guide 22x22** (C)
- 33 Front glider** (C)
- 34 Rear glider** (C)
- 35 Rear lower pad** (C)
- 36 Device for glider fastening** (C)
- 37 Device** (C) (E)
- 38 Cover** (C)
- 39 Magnetic device** (D) (E)
- 40 Opening brake** (D)
- 41 Closing brake** (E)
- 42 Reduced upper guide**
 G01734.01.XX L=3000 G01734.04.XX L=6000
 G01734.02.XX L=4000 G01734.14.XX L=7000
 G01734.03.XX L=5000
- 43 Shaped cap for upper guide** (F)
- 44 Terminal cap for lock** (F)
- 45 Rear upper covering cap** (F)
- 46 Door stop**
 G00204.00.91 White
 G00204.00.86 Grey
 G00204.00.93 Black
- 47 Locking profile**
 G02403.15.01 L=1500
 G02403.20.01 L=2000
 G02403.30.01 L=3000
- 48 Uni-V central point kit**
 G02208.25.KK L=2500
 G02208.31.KK L=3100
 G02208.40.KK L=4000
- 49 Uni-V central point caps kit**
 G01610.DX.93 Right
 G01610.SX.93 Left
- 50 Uni-V Mini central point kit**
 G02211.25.KK L=2500 G02211.40.KK L=4000
 G02211.31.KK L=3100
- 51 Uni-V Mini central point caps kit**
 G01623.DX.93 Destro
 G01623.SX.93 Sinistro
- 52 Climatech threshold kit**
 G02268.01.ZZ L=3000 G02268.04.ZZ L=6000
 G02268.02.ZZ L=4000 G02268.14.86 L=7000
 G02268.03.ZZ L=5000
- 53 Climatech threshold adapter for high threshold**
 G01212.01.01 L=3000 G01212.04.01 L=6000
 G01212.02.01 L=4000 G01212.14.01 L=7000
 G01212.03.01 L=5000
- 54 Gasket for high threshold - 7 meters** - G02210.01.00
- 55 Fixed sash supporting profile**
 G01310.02.93 L=2000
 G01310.04.93 L=3000
- 56 Thermal profile**
 G01312.02.JJ L=2000
 G01312.04.JJ L=3000
- 57 External side gasket (balloon)** (G)
 G020DX.09.93 - G020SX.09.93 L1500 x H2500
 G02000.08.93 L3000 x H3000
- 58 Internal side gasket L150 m - G02004.15.93** (G)
- 59 PVC upper flexible gasket**
 G00733.01.01 L=40
 G00733.01.02 L=200
- 60 Flexible gasket for Easy point**
 G00733.02.01 L=40
 G00733.02.02 L=200
- 61 Brush gasket**
 G02002.16.00 L=1600
 G02002.25.00 L=2500
 G02002.31.00 L=3100
- 62 XC anti-derailed device** - G01611.02.00
- 63 Rod guide** - G05102.00.00
- 64 S-Line anti-derailed device** - G01611.01.00
- 65 S-Line rod guide** - G00728.00.29
- 66 Cover for fiberglass threshold - stainless steel**
 G01220.00.08 Thickness 78
 G01220.MM.08 Angled
- 67 Fasten. kit for thres. cover** - G01219.00.01
- 68 Handle**

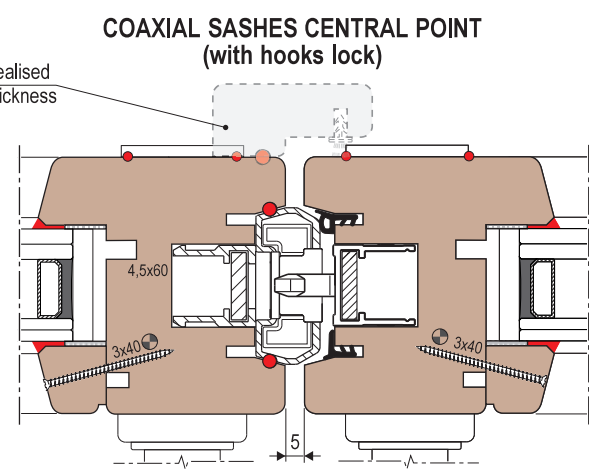
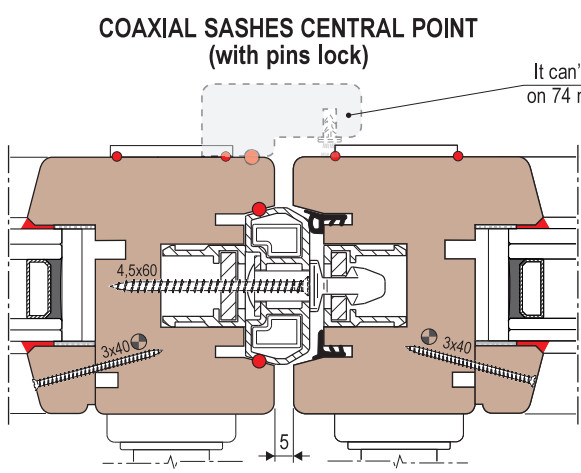
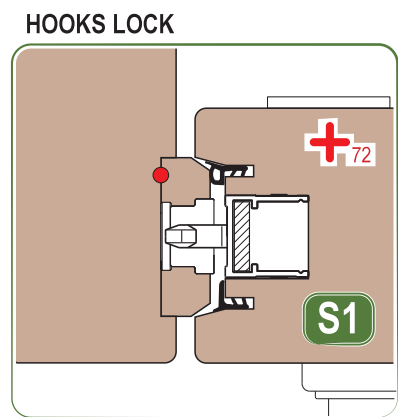
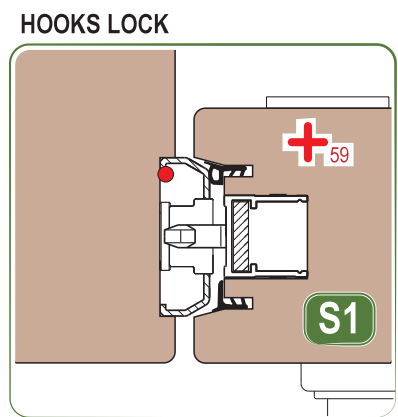
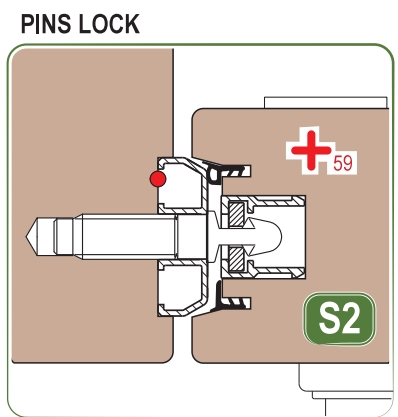
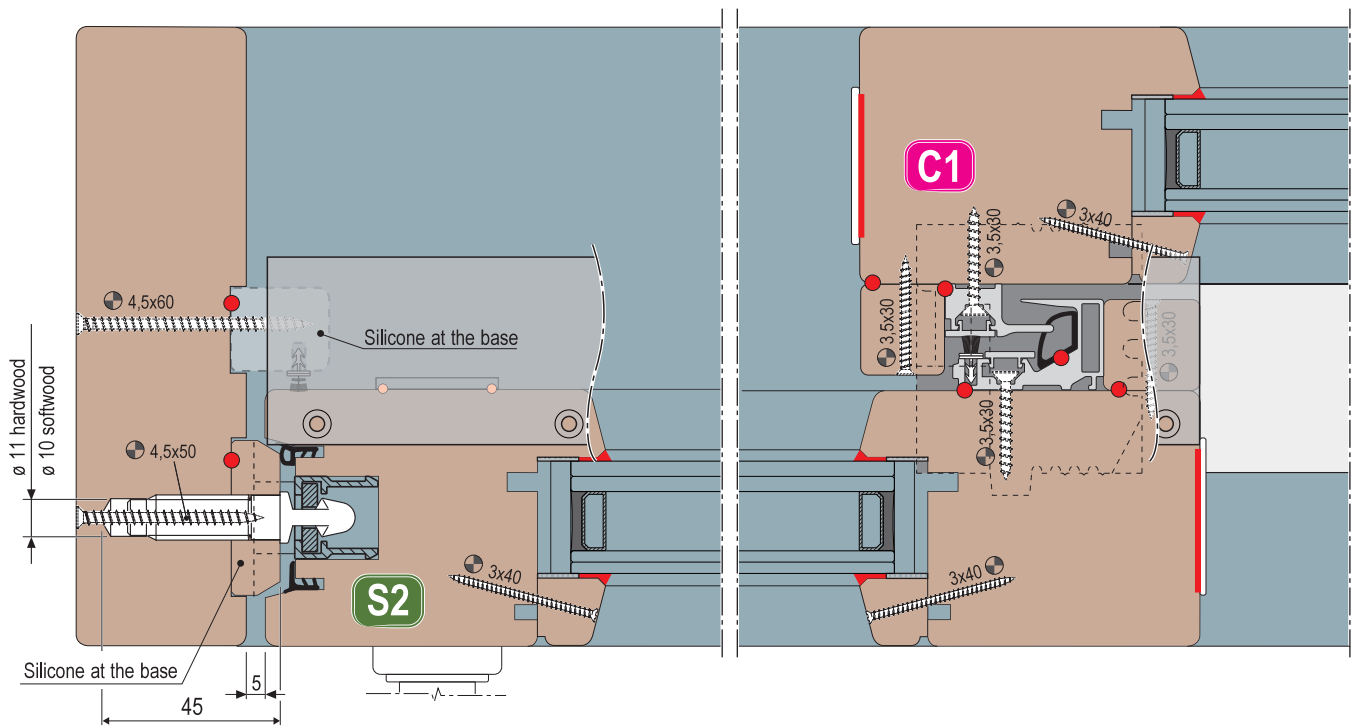


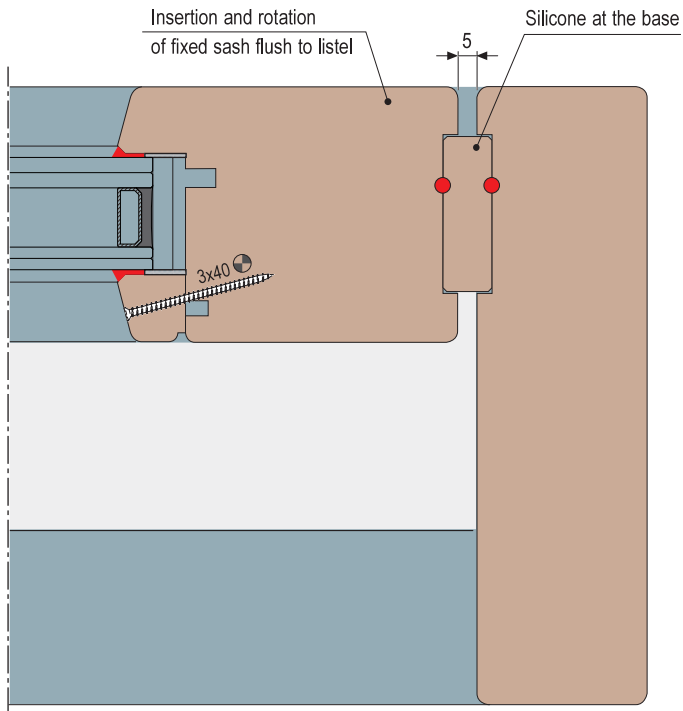


- (A) **Caps and accessories kit**
 G0020A.MM.JJ layout A
 G0020E.00.JJ layout E
- (B) **Caps kit for embedded upper guide 22x13**
 G00223.01.JJ low rail
- (C) **Caps kit for embedded upper guide 22x22 - G00232.00.JJ**
- (D) **Opening damper kit**
 G00232.13.JJ 80-200 Kg
 G00232.14.JJ 200-440 Kg
- (E) **Closing damper kit**
 G00232.11.JJ 80-200 Kg
 G00232.12.JJ 200-440 Kg
- (F) **Caps kit for universal upper guide - G00203.02.JJ**
- (G) **Gaskets kit**
 G020DX.07.93 L1500 x H2500
 G020SX.07.93 L1500 x H2500
 G02000.06.JJ L3000 x H3000
 G02000.15.93 L4000 x H4000

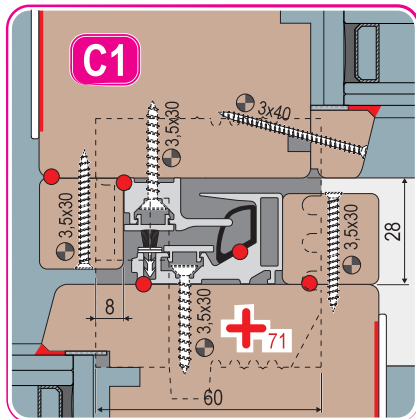
- | | |
|--|------------------------------------|
| XX = 01 Alum. silver
02 Alum. electrocolour | KK = 01 silver
93 black |
| EE = 27 backset 27,5
37 backset 37,5 | MM = DX right hand
SX left hand |
| ZZ = 86 grey RAL 7035
94 brown RAL 8019 | JJ = 86 grey RAL 7035
93 black |

Horizontal section



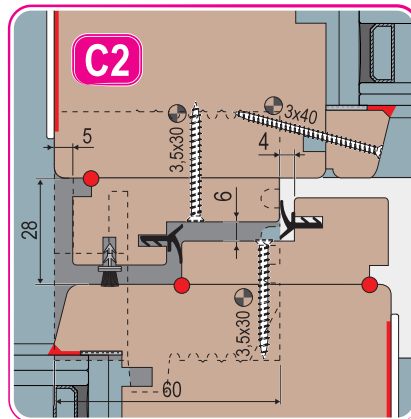


Uni-V



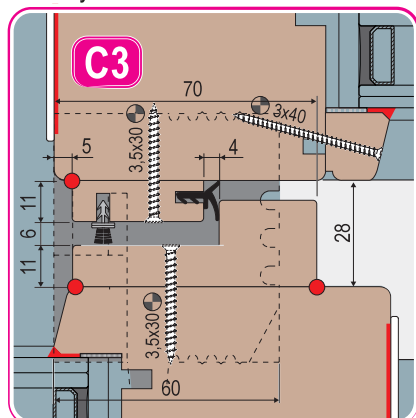
Place the pad as indicated

Base



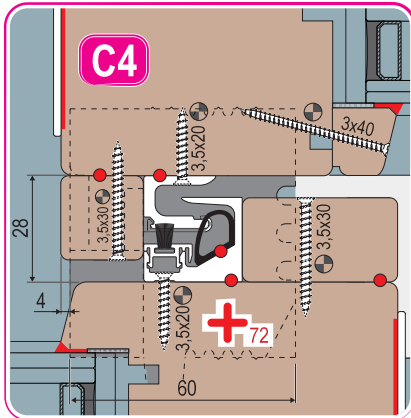
Align the pad to the sash jamb

Easy



Align the pad to the sash jamb

Uni-V Mini



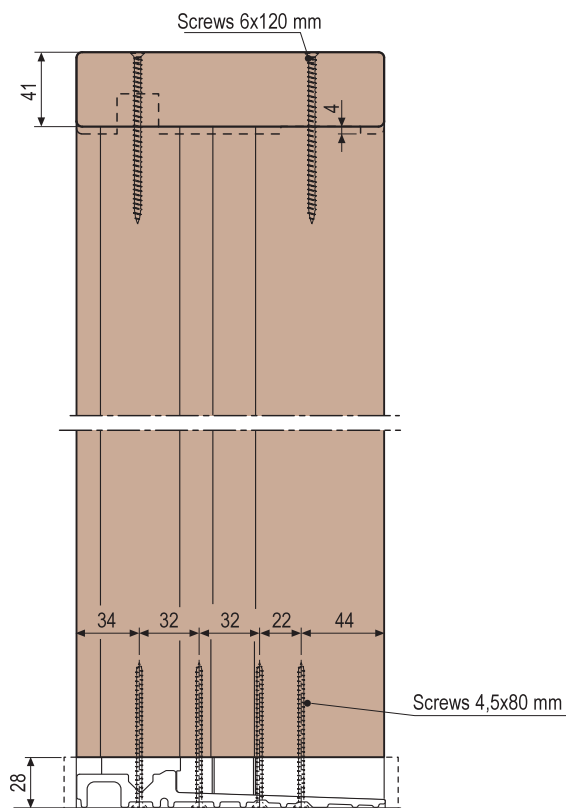
Place the pad as indicated

Calculation of jambs and listels measurement

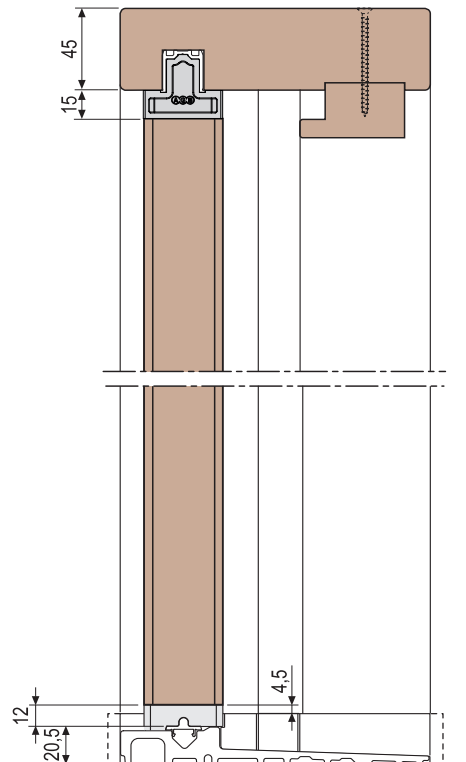


As an example, the picture represents a case with 22X22 upper guide; the use of other guides needs different accessories even if they are assembled in the same way.

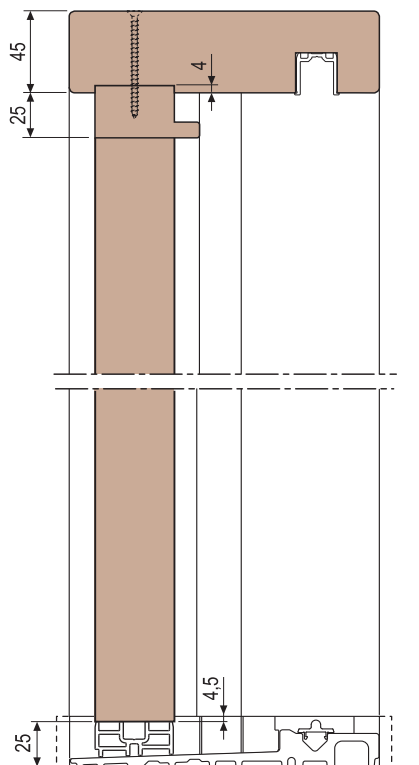
JAMBS ASSEMBLY



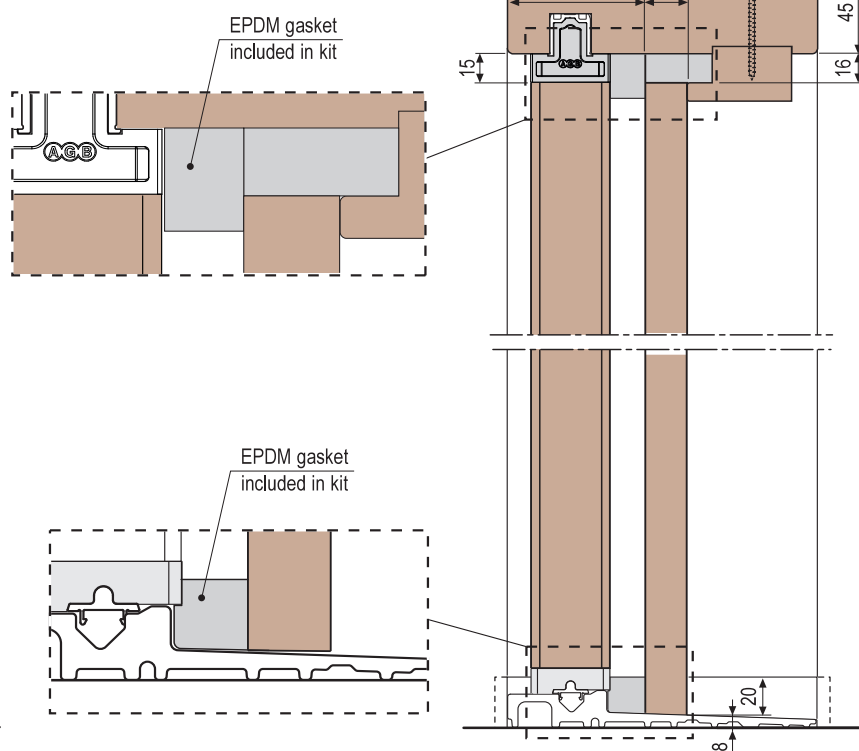
PIN HOLDER LISTEL ASSEMBLY



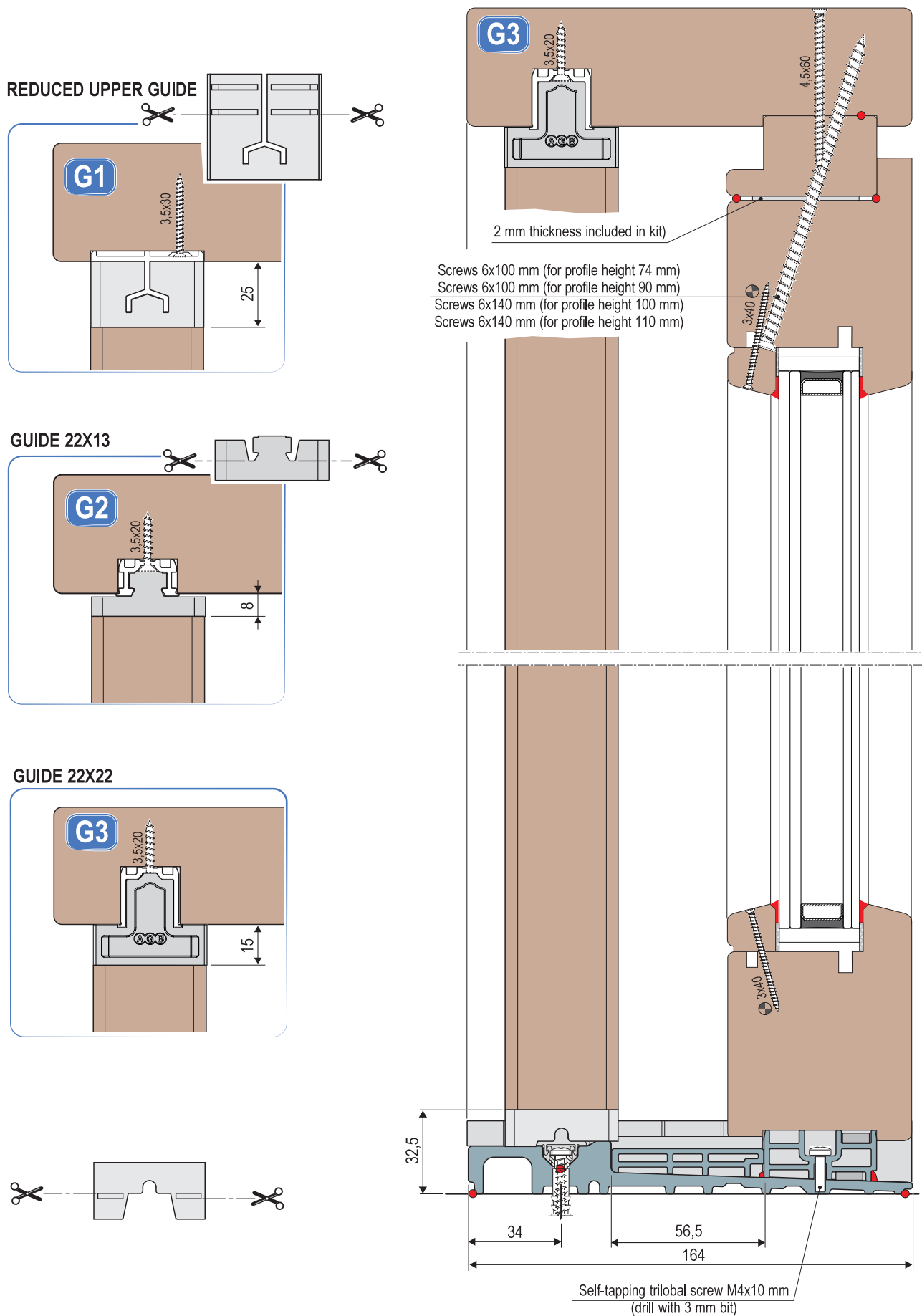
LISTEL ASSEMBLY OF FIXED SASH



BRUSH HOLDER LISTEL ASSEMBLY

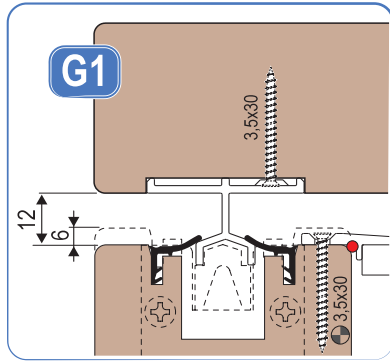


Vertical section A-A - Fixed sash

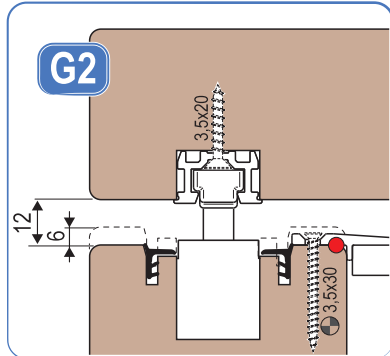


Vertical section B-B - Sliding sash

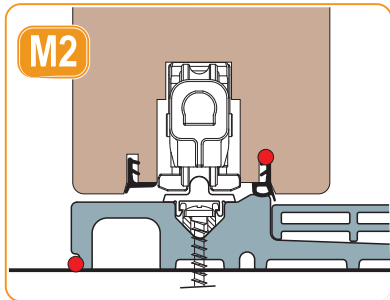
REDUCED UPPER GUIDE



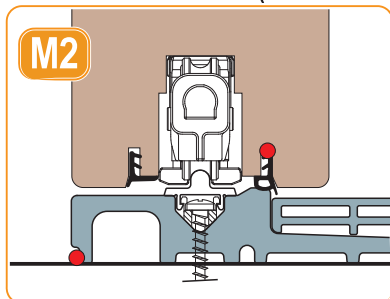
GUIDE 22X13



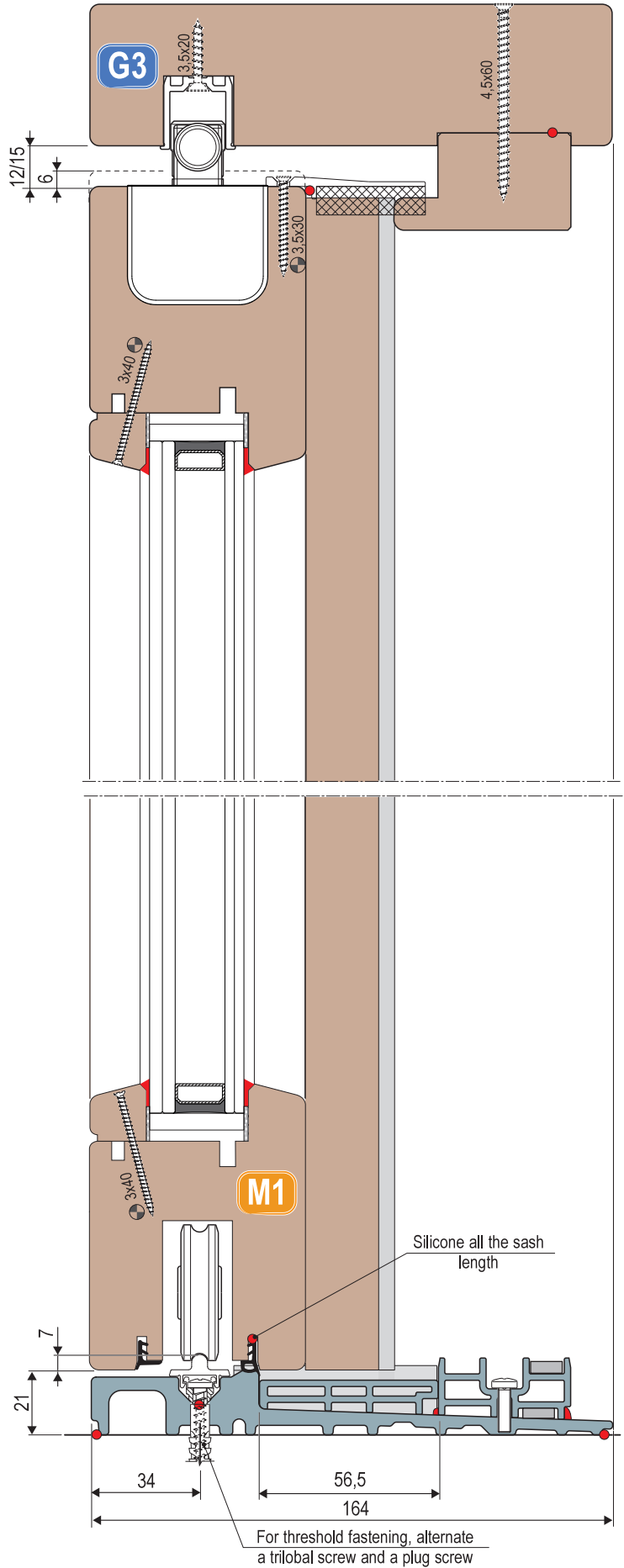
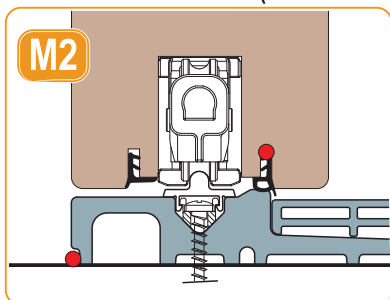
XC S-LINE CARRIAGES (SEAT 16 mm)



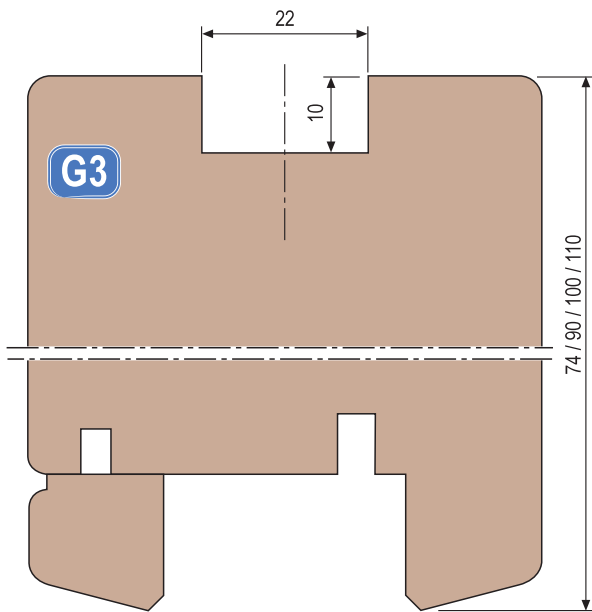
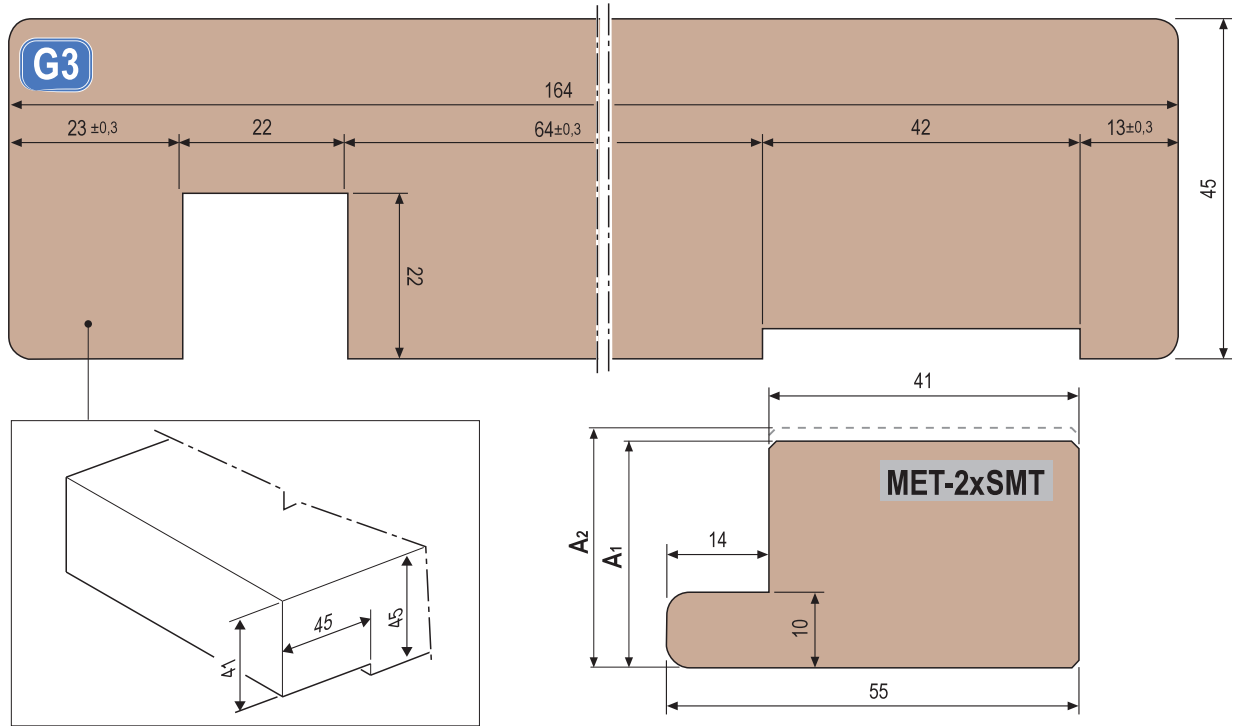
XC S-LINE CARRIAGES (SEAT 18 mm)



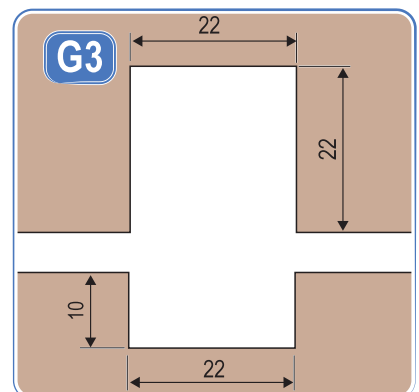
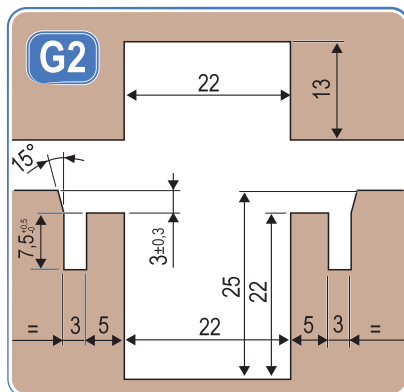
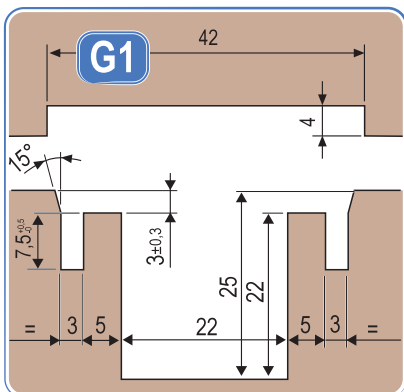
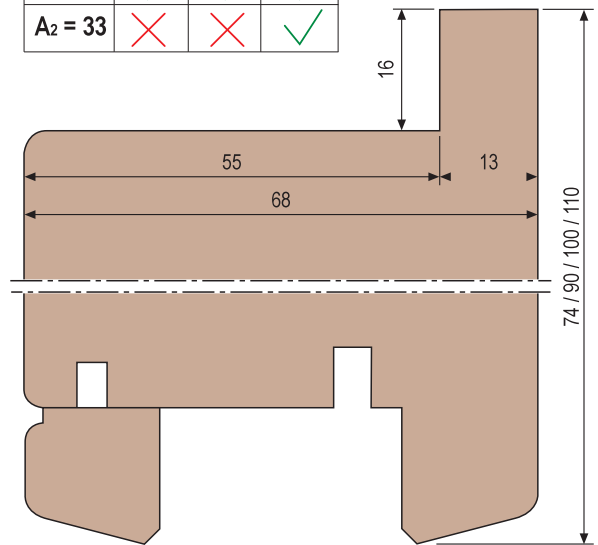
XC S-LINE CARRIAGES (SEAT 22 mm)



Millings - Vertical section, upper point



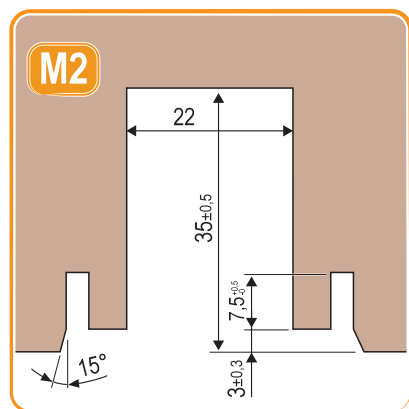
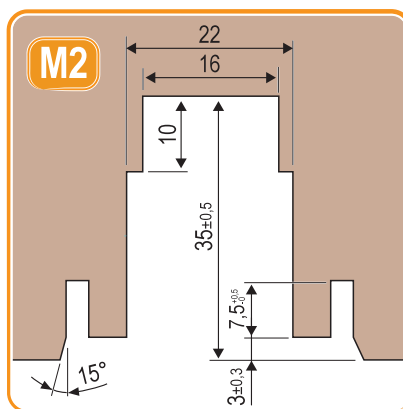
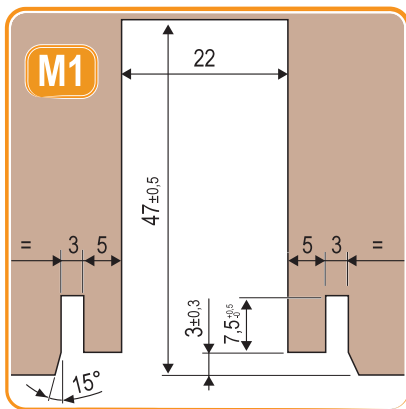
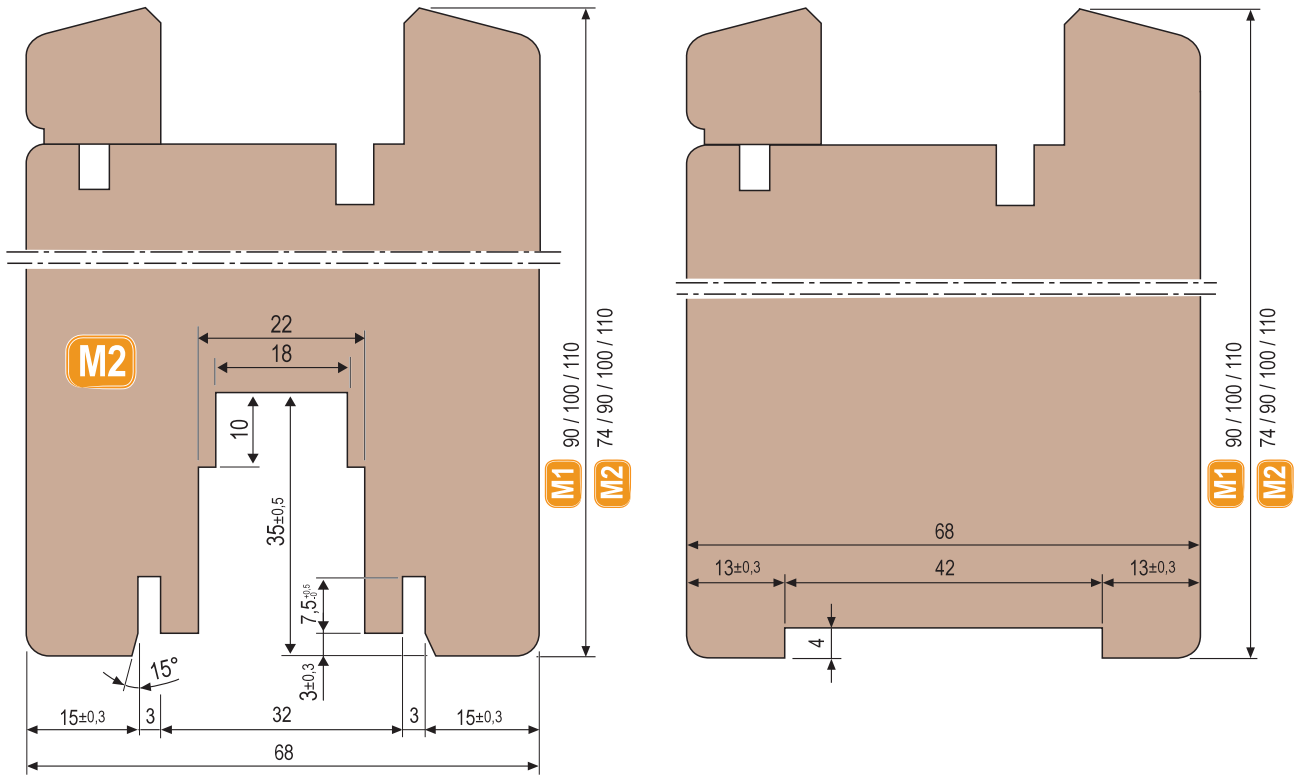
	G1	G2	G3
A ₁ = 30	✓	✓	✓
A ₂ = 33	✗	✗	✓



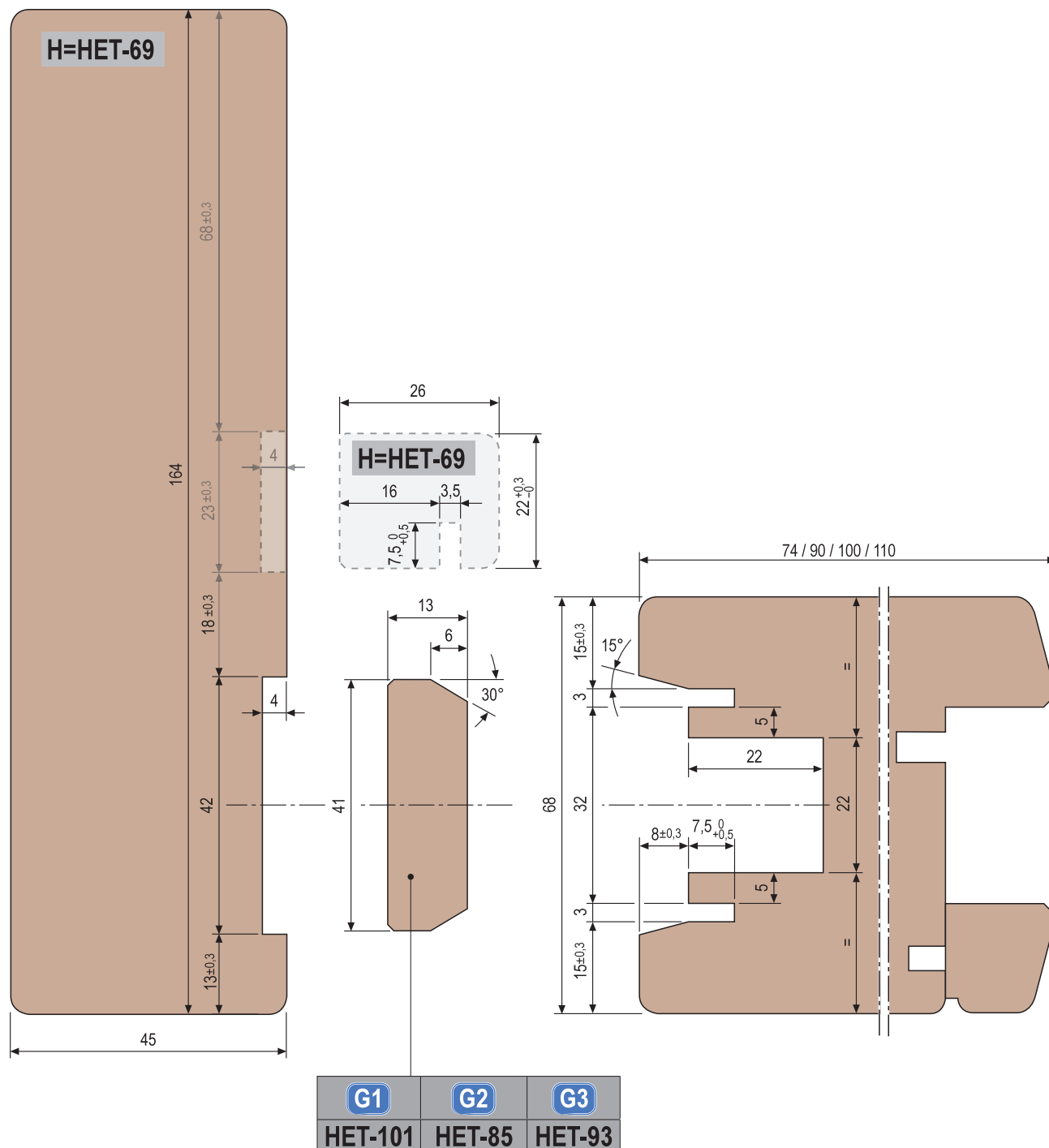
Millings - Vertical section, lower point



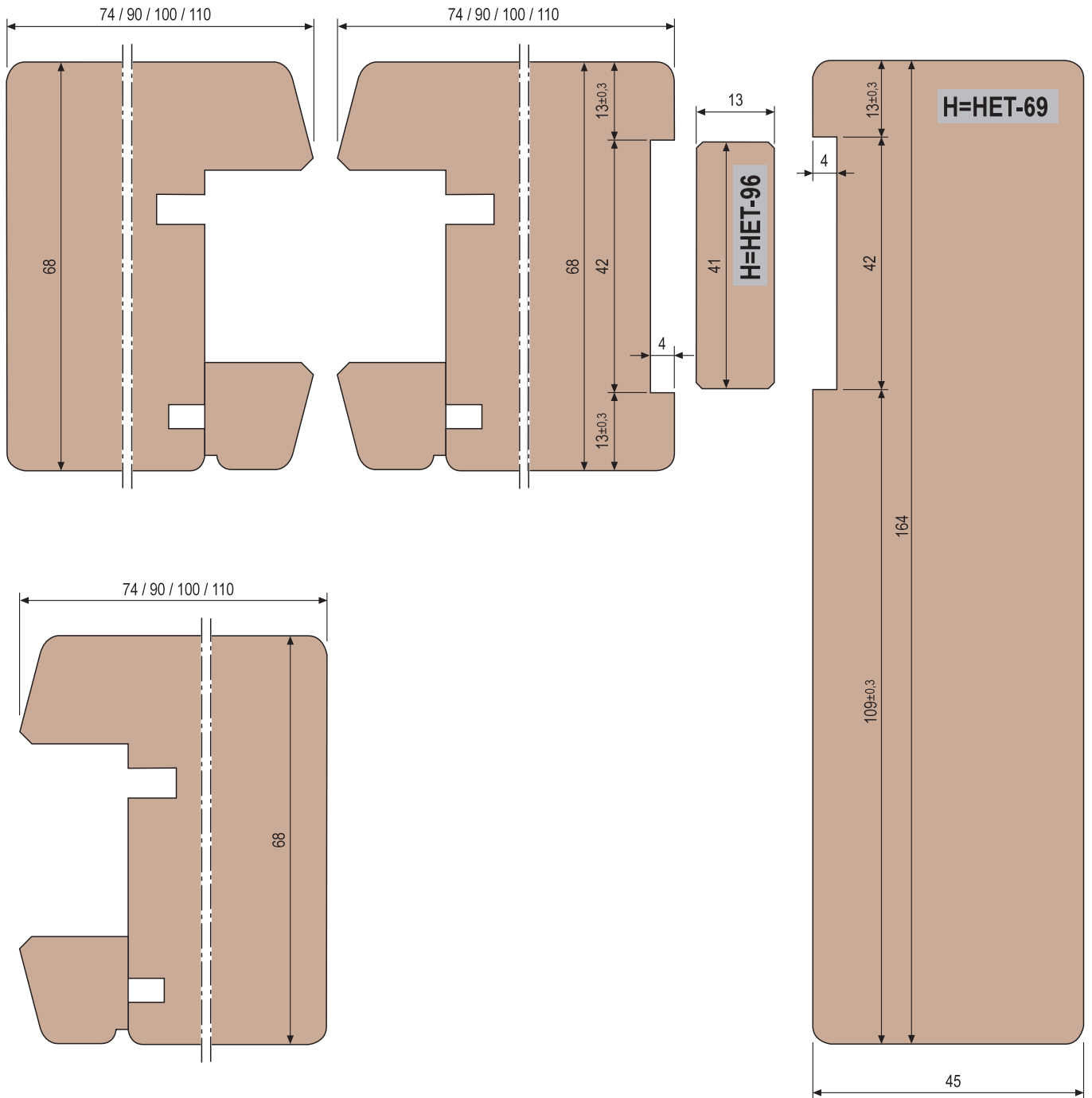
It is possible to realise a lower transom height included between 74 and 90 mm; in this case, it is necessary to use XC S-Line carriages with lower transom between 90 and 110 mm. It is possible to use both carriages.



Millings - Horizontal section for sliding sash

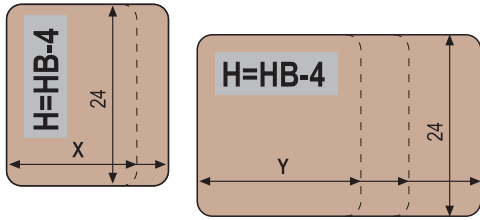


Millings - Horizontal section for fixed sash



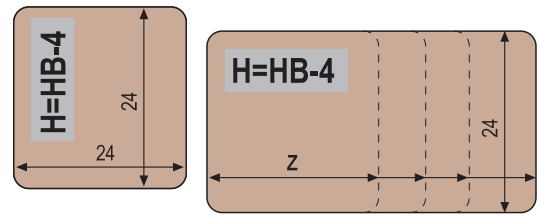
Millings - Horizontal section for central point

Uni-V listels

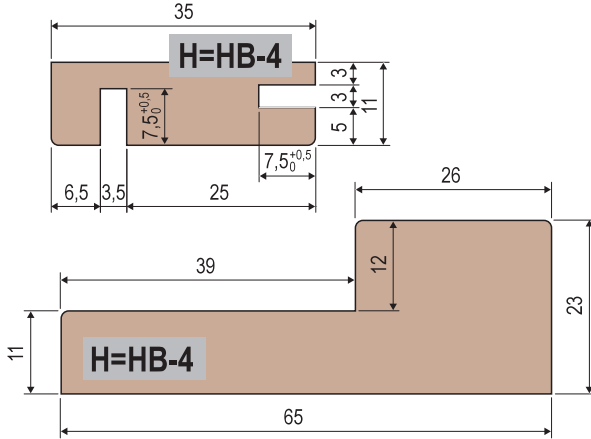


Sash section width			
74	90	100	110
X = 16	X = 22	X = 22	X = 22
Y = 16	Y = 26	Y = 36	Y = 46
Z = 24	Z = 40	Z = 50	Z = 60

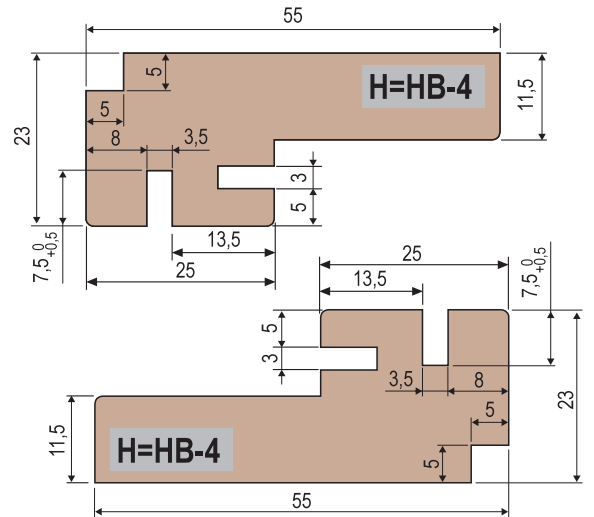
Uni-V Mini listel



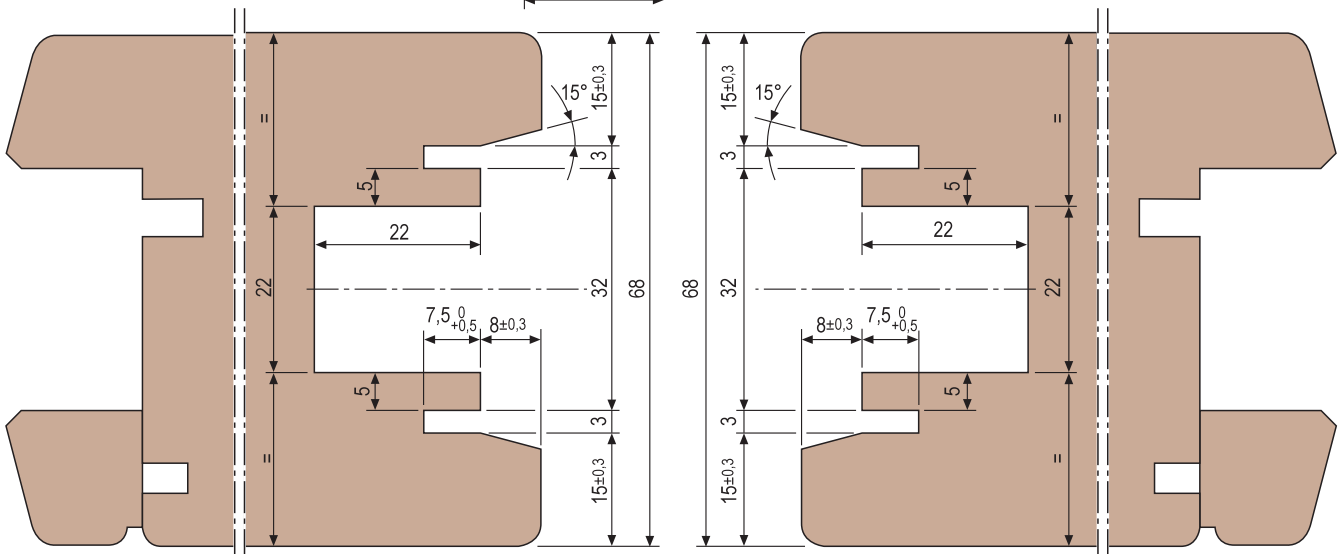
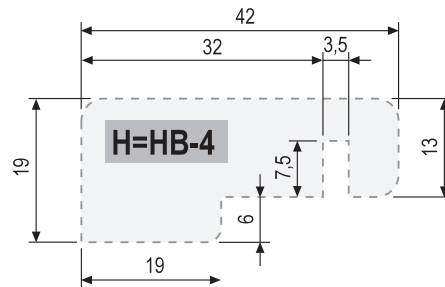
Easy listels



Basic listels



Millings - Horizontal section for central point of coaxial sashes



Formulas of components cut

		LAYOUT A			LAYOUT E		
	XC	HB-94	HB-94	HB-99	HB-94	HB-94	HB-99
	XC S-Line						
			MET-2xSMT-2	-		MET-2xSMT-2	-
			-	MET-2xSMT-2		-	MET-2xSMT-2
		MET-2xSMT-2	-	-	MET-2xSMT-2	-	-
		HET-101	HET-93	HET-85	HET-101	HET-93	HET-85
		HB-65	HB-18	HB-18	HB-65	HB-18	HB-18
		LB			(2 pieces) LB LB+4		
	XC						
	XC S-Line						
	XC	(2 pieces) 80 mm +					
	XC S-Line	(2 pieces) 80 mm +					

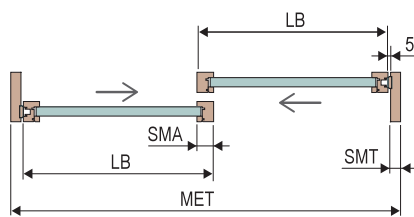
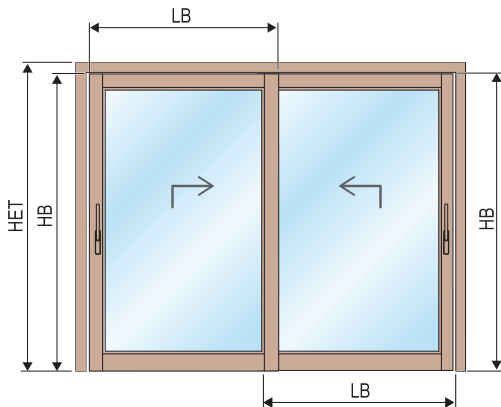
	MET
	MET-2xSMT-2
	HB-14
	HB-4
	HB-14

		LAYOUT A			
		Uni-V	Uni-V Mini	Easy	Basic
	Sash section width 74	LBF-63			
	Sash section width 90		LBF-59	LBF-55	LBF-55
	Sash section width 100	LBF-69			
	Sash section width 110				
		LAYOUT E			
		Uni-V	Uni-V Mini	Easy	Basic
	Sash section width 74	(2 pieces) LBF-63			
	Sash section width 90		(2 pieces) LBF-59	(2 pieces) LBF-55	(2 pieces) LBF-55
	Sash section width 100	(2 pieces) LBF-69			
	Sash section width 110				

LAYOUTS B & F

- Sash with one transom in the lower part with possible base.
- Vertical - lower external gasket: balloon with EPDM vulcanised edge.
- PVC upper gasket with wing.
- EPDM sponge extruded central point gasket.
- Upper locking profile in aluminium with tightness waterproof sponge.
- Tests about water, air, wind and impact realized with glass: 44.1/10/5/10/33.1 (minimum possible).
- High upper guide.
- Distance between the sashes 28 mm.
- Layout F with symmetric central point and aluminium pin holder profile and extremity caps for the locking system.

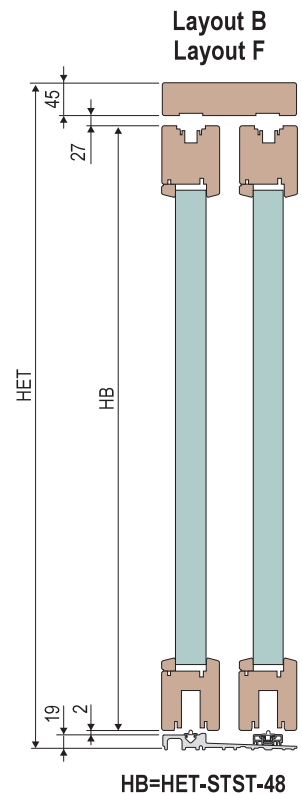
Dimensions calculation of sliding sashes



Layout B
2 sliding sashes
 $LB=[MET-2x(SMT+5)];2+SMA:2$



Layout F
4 sliding sashes
 $LB=[MET-15(2xSMT)];4+SMA:2$



The indications in this section refer to lift&slide installations with top guide. However, the layout B of lift&slide assembly can be constructed with reduced top guide. In this case, please refer to specifications in the section dedicated to layouts A-E.



This section of the manual includes only working processes and indications which distinguish B-F layouts from A-E layouts. If you can't find some details, please refer to the section dedicated to A-E layouts.

Hardware diagram with hooks lock**1 Hooks lock**

G039EE.03.XX HB=1775-2150 Handle h = 1000
 G039EE.04.XX HB=1925-2400 Handle h = 1000
 G039EE.05.XX HB=2325-2750 Handle h = 1000

2 Additional hook kit - G05008.00.00**3 Microventil. additional hook kit - G05010.00.00****4 Hooks lock for second sash**

GR39EE.03.01 HB=1775-2150 Handle h = 1000
 GR39EE.04.01 HB=1925-2400 Handle h = 1000
 GR39EE.05.01 HB=2325-2750 Handle h = 1000

5 Hooks extension 500 mm - G04600.01.01**6 Covering profile 1000 mm - G04401.02.01****7 Gas spring kit - GMG702.04.00****8 XC basic carriages kit- G04104.00.00****9 XC suppl. carriages kit - G04108.00.00****10 XC S-Line carriages kit - G04109.00.00****11 XC S-Line suppl. carriages kit - G04110.00.00****12 Carriages connecting rod**

G04601.00.01 L=1000 G04601.00.03 L=1800
 G04601.00.02 L=1400 G04601.00.04 L=2700

13 Handle fastebning plate

G05371.M5.00 hole M5
 G05371.M6.00 hole M6

14 Anti-burglar plate kit - G05004.00.00**15 Sensors**

G05006.00.86 Grey
 G05006.00.93 Black
 G05003.00.00 Clip

16 Lateral lock. prof. for hooks lock

G01359.03.XX GR3 predisposition 2 hooks
 G01359.04.XX GR4 predisposition 2 hooks
 G01359.05.XX GR5 predisposition 2 hooks
 G01359.13.XX GR3 predisposition 3 hooks
 G01359.14.XX GR4 predisposition 3 hooks
 G01359.15.XX GR5 predisposition 3 hooks
 G01359.23.XX GR3 predis. signal system
 G01359.24.XX GR4 predis. signal system
 G01359.25.XX GR5 predis. signal system

17 Extens. for lock. prof. for hooks lock

G01360.01.XX L=500

18 Coax. sashes lock. prof. for hooks lock + caps

G01373.13.XX L=2075 HB=1775-2150 with hooks strik.
 G01373.14.XX L=2325 HB=1925-2400 with hooks strik.
 G01373.15.XX L=2750 HB=2325-2750 with hooks strik.

19 Coax. sashes lock. prof. extens. for hooks, 500 mm

G01364.01.XX with hook strik.

20 Striker for lock hook - G06201.00.XX**21 Strik. for lock hook with signal syst. - G06203.00.XX****22 Comp. cap for frame jamb (A)****23 Support for cap (A)****24 Central pad (A)****25 Pad for carriages milling (A)****26 Climatech threshold fastening kit (A)****27 Rail fastening kit for sec. sash (A)****28 Rail connect. cap for sec. sash (A)****29 Shaped cap for low. rail (B)****30 Rear lower covering cap (B)****31 Shaped cap for upper guide (B)****32 Terminal cap for lock (B)****33 Rear upper covering cap (B)****34 High upper guide**

G00734.01.XX L=3000
 G00734.02.XX L=4000
 G00734.03.XX L=6000

35 Door stop

G00204.00.91 white
 G00204.00.86 grey
 G00204.00.93 black

36 Thermal pad with brushes - G00728.12.15**37 Upper thermal pad**

G01413.27.96 96 mm G01413.27.0B 120 mm

38 Uni-V central point kit

G02208.25.KK L=2500
 G02208.31.KK L=3100
 G02208.40.KK L=4000

39 Uni-V central point caps kit - G01610.MM.93**40 Uni-V Mini central point kit**

G02211.25.KK L=2500 G02211.40.KK L=4000
 G02211.31.KK L=3100

41 Uni-V Mini central point caps kit

G01623.DX.93 Destro
 G01623.SX.93 Sinistro

42 Climatech threshold kit

G02268.01.ZZ L=3000 G02268.04.ZZ L=6000
 G02268.02.ZZ L=4000 G02268.14.86 L=7000
 G02268.03.ZZ L=5000

43 Climatech threshold adapter for high threshold

G01212.01.01 L=3000 G01212.04.01 L=6000
 G01212.02.01 L=4000 G01212.14.01 L=7000
 G01212.03.01 L=5000

44 Gasket for high threshold - 7 meters - G02210.01.00**45 Second sliding sash rail**

G02217.11.86 L=1500 G02217.03.86 L=2500
 G02217.12.86 L=2000 G02217.14.86 L=3000

46 Thermal profile

G01310.02.86 L=2000
 G01310.04.86 L=3000

47 PVC upper flexible gasket

G00733.02.01 L=40
 G00733.02.02 L=200

48 Gaskets kit for sliding sash

G02000.12.JJ L1500xH2500
 G02000.13.JJ L3000xH3000
 G02000.15.JJ L4000xH4000

49 Flexible gasket for Easy point

G00733.04.01 L=40
 G00733.04.02 L=200

50 Brush gasket

G02002.16.00 L=1600
 G02002.25.00 L=2500
 G02002.31.00 L=3100

51 XC anti-derailed adapter- G01611.02.00**52 Rod guide - G05102.00.00****53 S-Line anti-derailed adapter - G01611.01.00****54 S-Line rod guide - G00728.00.29****55 Handle****(A) Caps and accessories kit**

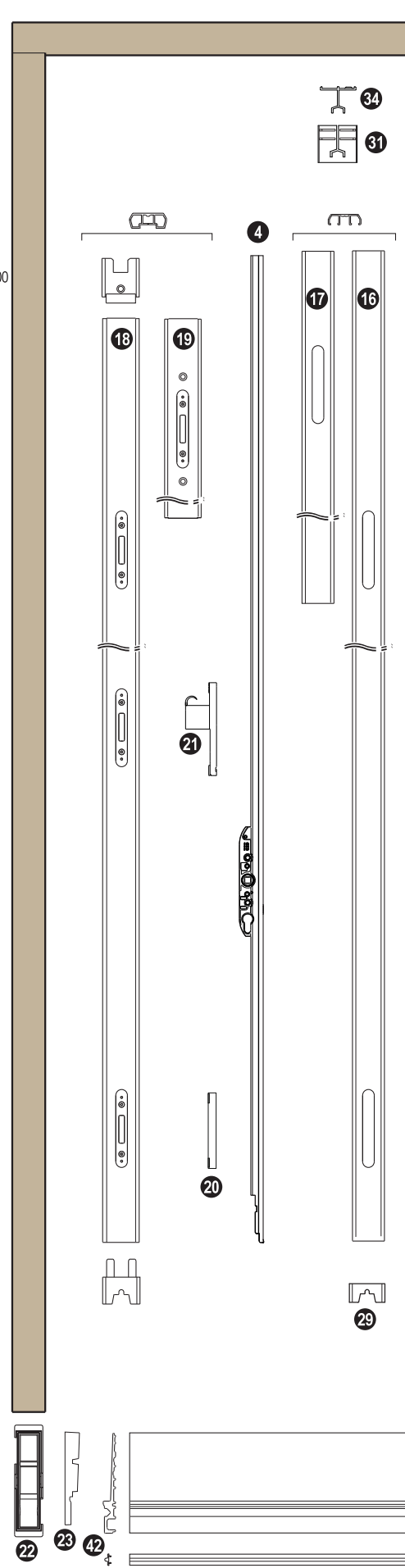
G0020B.MM.JJ
 G0020F.MM.JJ

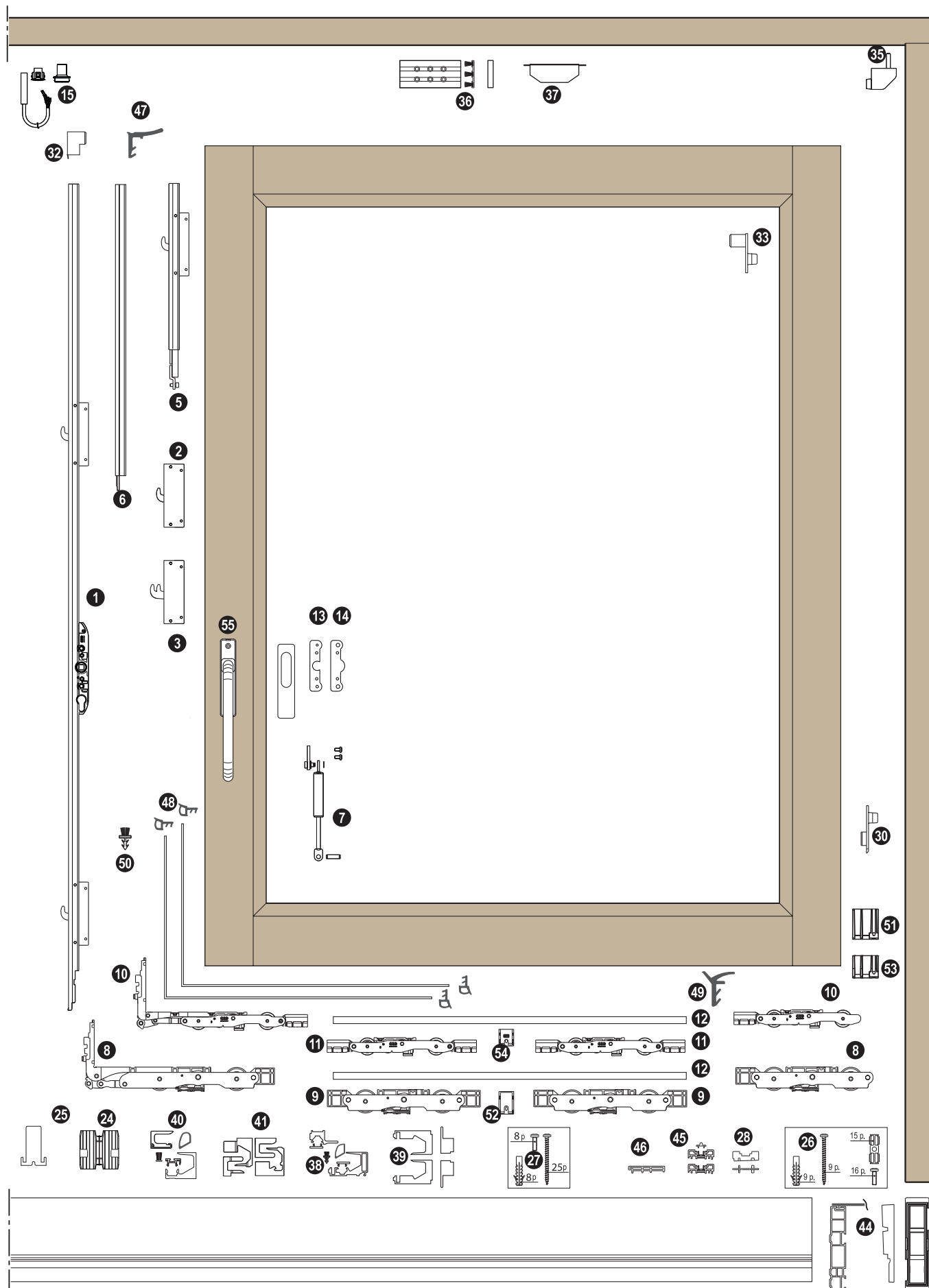
(B) Universal guide caps kit - G00203.02.JJ

XX = 01 Alum. silver KK = 01 silver
 02 Alum. electrocolour 93 black

EE = 27 backset 27,5 MM = DX right hand
 37 backset 37,5 SX left hand

ZZ = 86 grey RAL 7035 JJ = 86 grey RAL 7035
 94 brown RAL 8019 93 black





Hardware diagram with pins lock

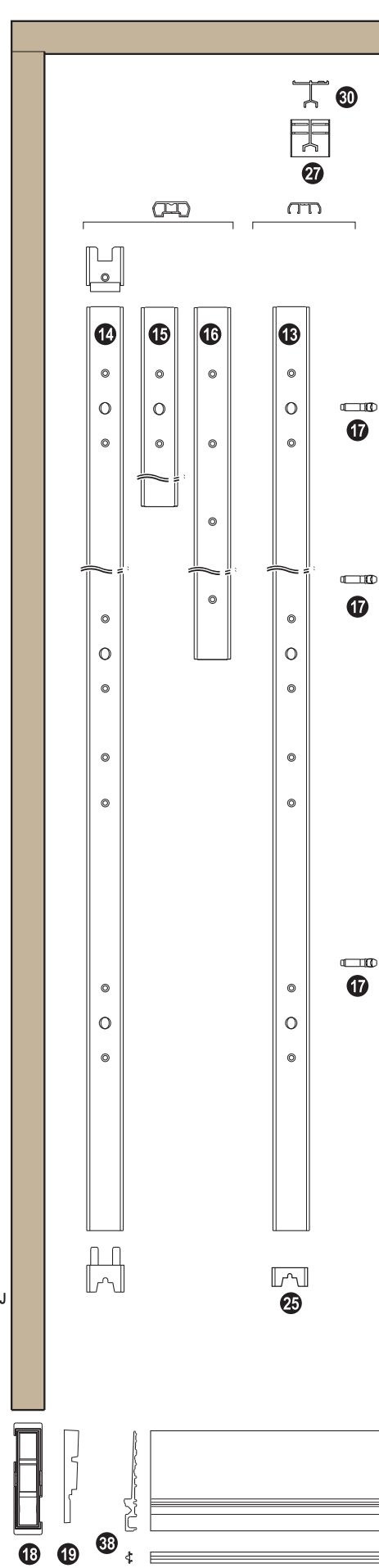
- 1 Pins lock**
G040EE.01.XX Handle h = 400 HB=800-1200
G040EE.02.XX Handle h = 400 HB=1170-1800
G040EE.03.XX Handle h = 1000 HB=1770-2150
G040EE.04.XX Handle h = 1000 HB=1920-2400
G040EE.05.XX Handle h = 1000 HB=2401-2750
- 2 Pins extension 500 mm** - G04401.01.01
- 3 Covering profile 1000 mm** - G04401.02.01
- 4 Gas spring kit** - GMG702.04.00
- 5 XC basic carriages kit** - G04104.00.00
- 6 XC suppl. carriages kit** - G04108.00.00
- 7 XC S-Line carriages kit** - G04109.00.00
- 8 XC S-Line suppl. carriages kit** - G04110.00.00
- 9 Carriages connecting rod**
G04601.00.01 L=1000 G04601.00.03 L=1800
G04601.00.02 L=1400 G04601.00.04 L=2700
- 10 Handle fastening plate**
G05371.M5.00 hole M5
G05371.M6.00 hole M6
- 11 Anti-burglar plate kit** - G05004.00.00
- 12 Sensors**
G05006.00.86 grey
G05006.00.93 black
G05003.00.00 Clip
- 13 Pin holder profile for lateral point**
G01341.00.XX L=1800 HB=800-1800
G01341.01.XX L=2900 HB=1770-2900
G01341.02.XX L=2900 HB=2401-2900
- 14 Locking profile for coaxial sashes + caps**
G01361.01.XX L=1125 HB=810-1200
G01361.02.XX L=1725 HB=1175-1800
G01361.03.XX L=2075 HB=1775-2150 with caps
G01361.04.XX L=2325 HB=1925-2400
G01361.05.XX L=2750 HB=2325-2750

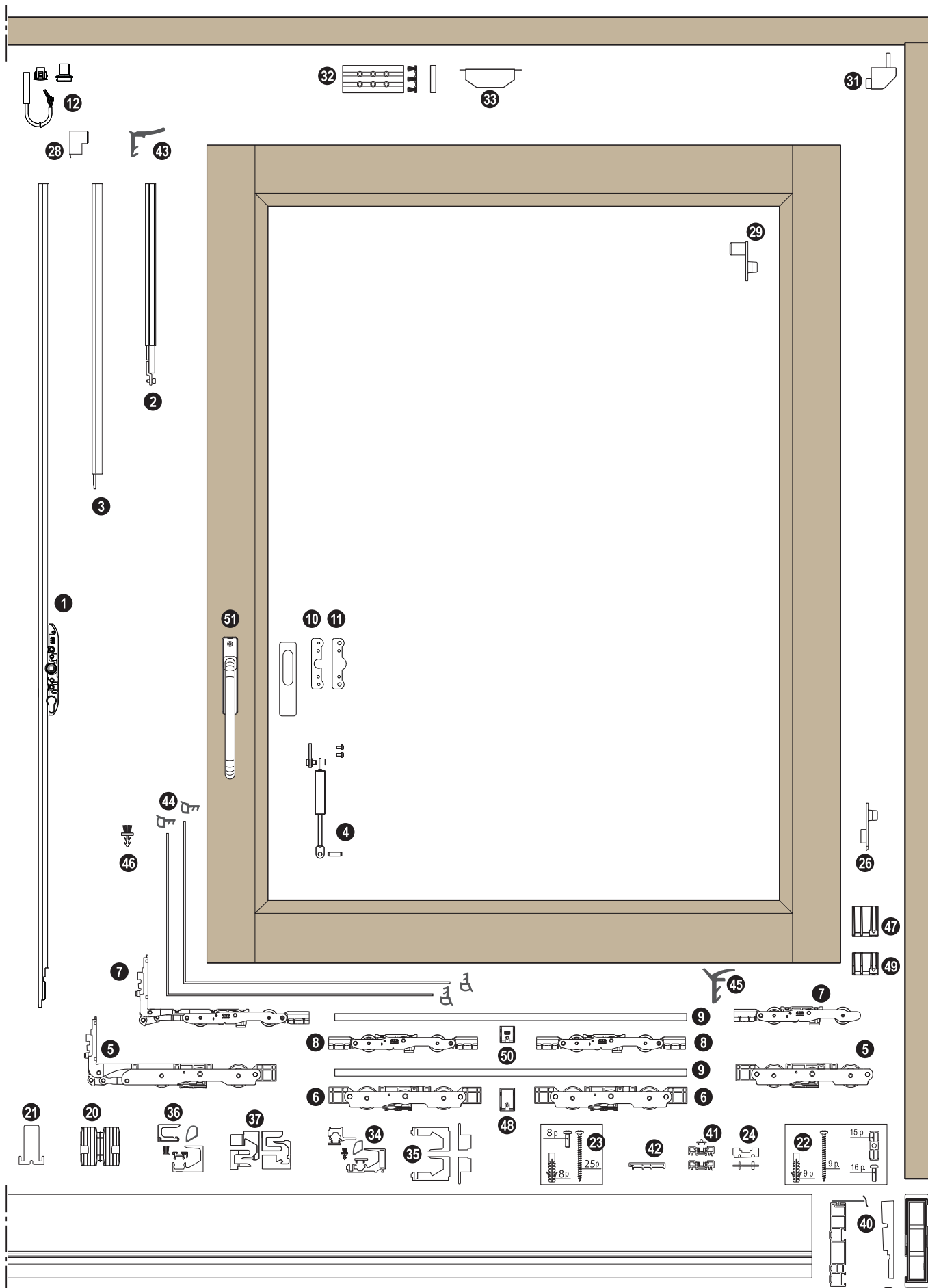
G01340.01.XX L=1125 HB=810-1200
G01340.02.XX L=1725 HB=1175-1800
G01340.03.XX L=2075 HB=1775-2150 with caps and
G01340.04.XX L=2325 HB=1925-2400 ventil. pin
G01340.05.XX L=2750 HB=2325-2750
- 15 Coax. sashes lock. prof. extens. for pins, 500 mm**
G01361.97.XX
- 16 Coax. sashes lock. prof. extens. for pins, 1000 mm**
G01757.00.XX
- 17 Pin**
G40728.00.03 for closing
G04902.01.00 for ventilation
- 18 Comp. cap for frame jamb** (A)
- 19 Support for cap** (A)
- 20 Central pad** (A)
- 21 Pad for carriages milling** (A)
- 22 Climatech threshold fastening kit** (A)
- 23 Rail fastening kit for second sash** (A)
- 24 Rail connecting cap for second sash** (A)
- 25 Shaped cap for low. rail** (B)
- 26 Rear lower covering cap** (B)
- 27 Shaped cap for upper guide** (B)
- 28 Terminal cap for lock** (B)
- 29 Rear upper covering cap** (B)
- 30 High upper guide**
G00734.01.XX L=3000
G00734.02.XX L=4000
G00734.03.XX L=6000
- 31 Door stop**
G00204.00.91 white
G00204.00.86 grey
G00204.00.93 black
- 32 Thermal pad with brushes** - G00728.12.15
- 33 Upper thermal pad**
G01413.27.96 96 mm G01413.27.0B 120 mm
- 34 Uni-V central point kit**
G02208.25.KK L=2500
G02208.31.KK L=3100
G02208.40.KK L=4000
- 35 Uni-V central point caps kit** - G01610.MM.93

- 36 Uni-V Mini central point kit**
G02211.25.KK L=2500 G02211.40.KK L=4000
G02211.31.KK L=3100
- 37 Uni-V Mini central point caps kit**
G01623.DX.93 Destro
G01623.SX.93 Sinistro
- 38 Climatech threshold kit**
G02268.01.ZZ L=3000 G02268.04.ZZ L=6000
G02268.02.ZZ L=4000 G02268.14.86 L=7000
G02268.03.ZZ L=5000
- 39 Climatech threshold adapter for high threshold**
G01212.01.01 L=3000 G01212.04.01 L=6000
G01212.02.01 L=4000 G01212.14.01 L=7000
G01212.03.01 L=5000
- 40 Gasket for high threshold - 7 meters** - G02210.01.00
- 41 Rail for second sliding sash**
G02217.11.86 L=1500 G02217.03.86 L=2500
G02217.12.86 L=2000 G02217.14.86 L=3000
- 42 Thermal profile**
G01310.02.JJ L=2000
G01310.04.JJ L=3000
- 43 PVC upper flexible gasket**
G00733.02.01 L=40
G00733.02.02 L=200
- 44 Gaskets kit for sliding sash**
G02000.12.JJ L1500xH2500
G02000.13.JJ L3000xH3000
G02000.15.JJ L4000xH4000
- 45 Flexible gasket for Easy point**
G00733.04.01 L=40
G00733.04.02 L=200
- 46 Brush gasket**
G02002.16.00 L=1600
G02002.25.00 L=2500
G02002.31.00 L=3100
- 47 XC anti-derailed adapter** - G01611.02.00
- 48 Rod guide** - G05102.00.00
- 49 S-Line anti-derailed adapter** - G01611.01.00
- 50 S-Line rod guide** - G00728.00.29
- 51 Handle**

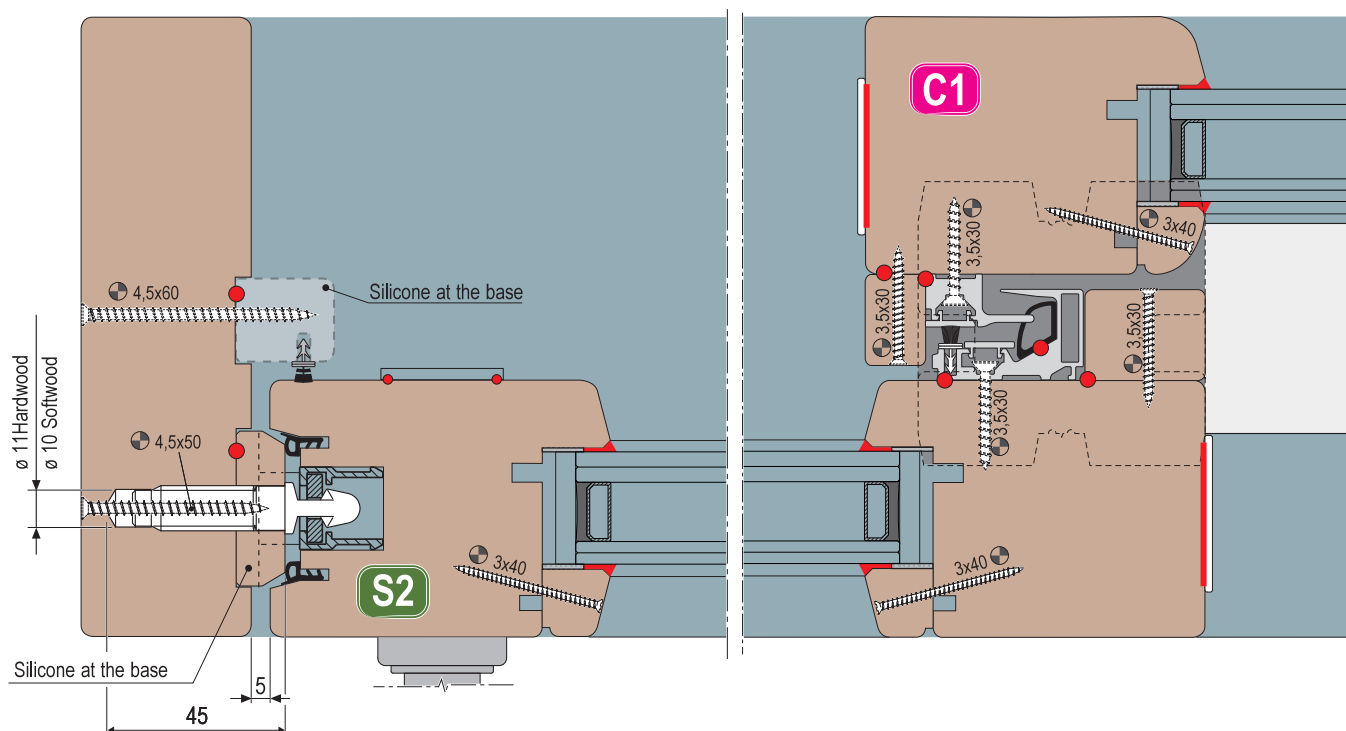
- (A) Caps and accessories kit
G0020B.MM.JJ for layout B
G0020F.MM.JJ for layout F
- (B) Caps kit for universal upper guide 22x13 - G00203.02.JJ

- XX = 01 Alum. silver KK = 01 silver
 02 Alum. electrocolour 93 black
- EE = 27 backset 27,5 MM = DX right hand
 37 backset 37,5 SX left hand
- ZZ = 86 grey RAL 7035 JJ = 86 grey RAL 7035
 94 brown RAL 8019 93 black

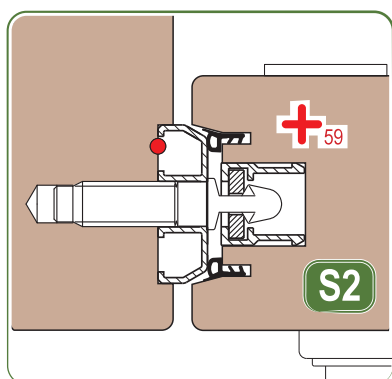




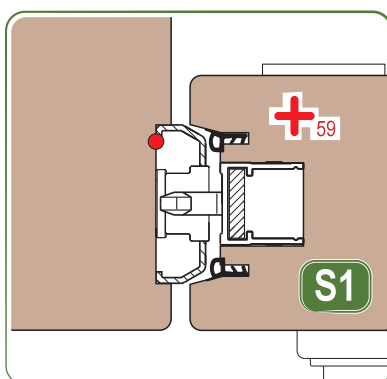
Horizontal section



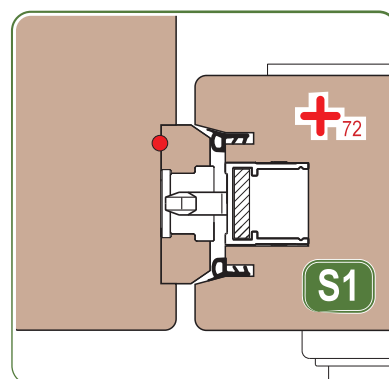
PIN LOCK



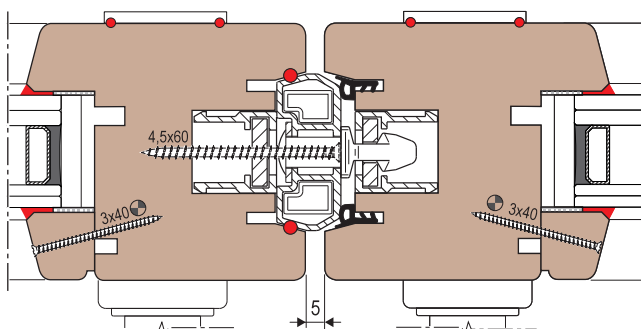
HOOKS LOCK



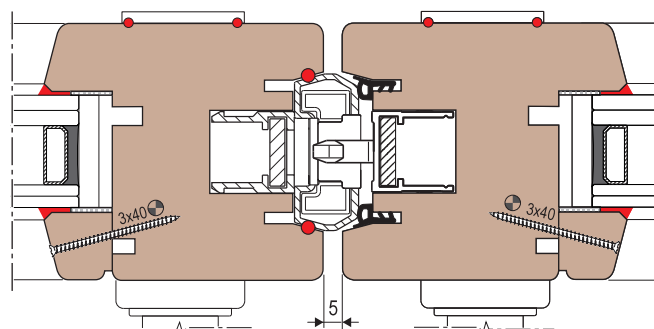
HOOKS LOCK

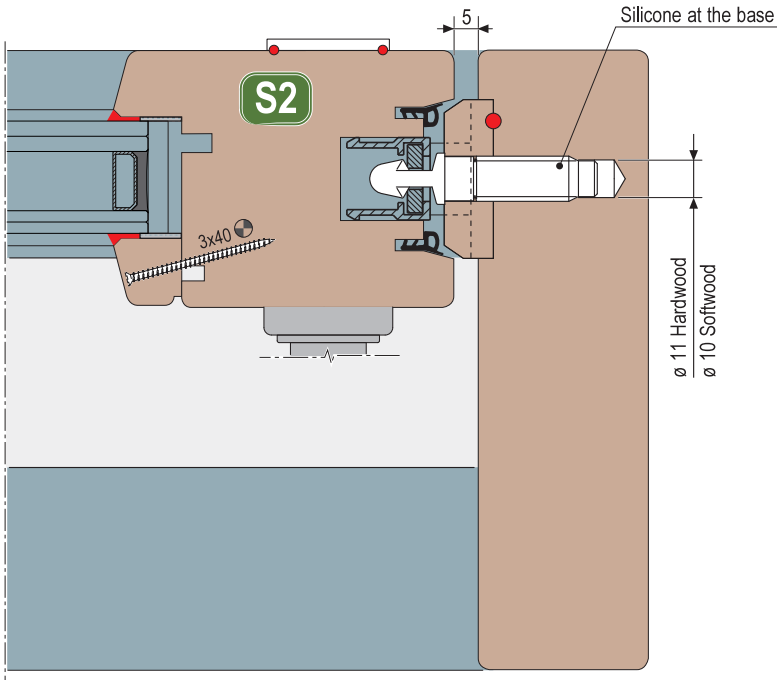


COAXIAL SASHES CENTRAL POINT
(with pins lock)

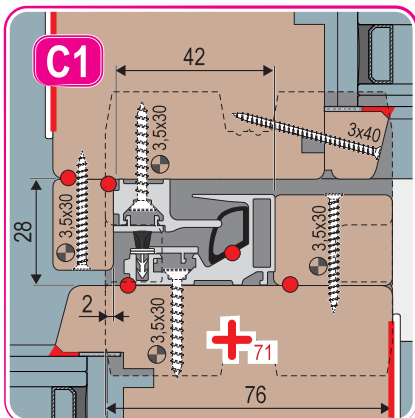


COAXIAL SASHES CENTRAL POINT
(with hooks lock)



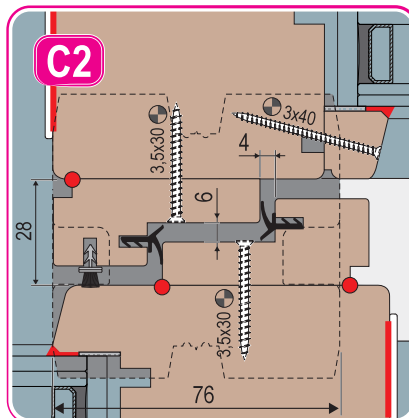


Uni-V



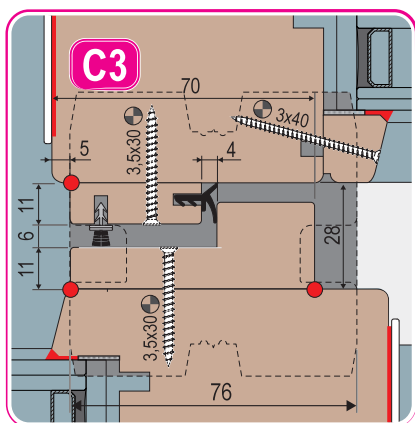
Align the pad to the listel internal side

Base



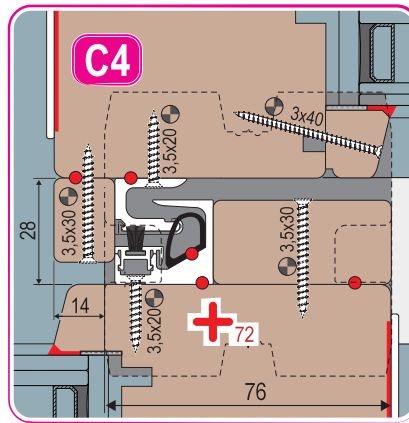
Align the pad to the sash jamb

Easy



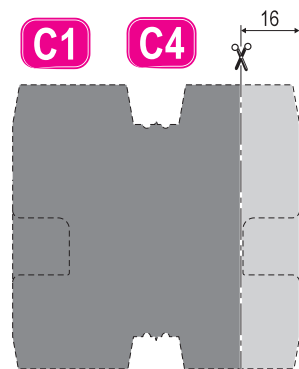
Align the pad to the sash jamb

Uni-V Mini

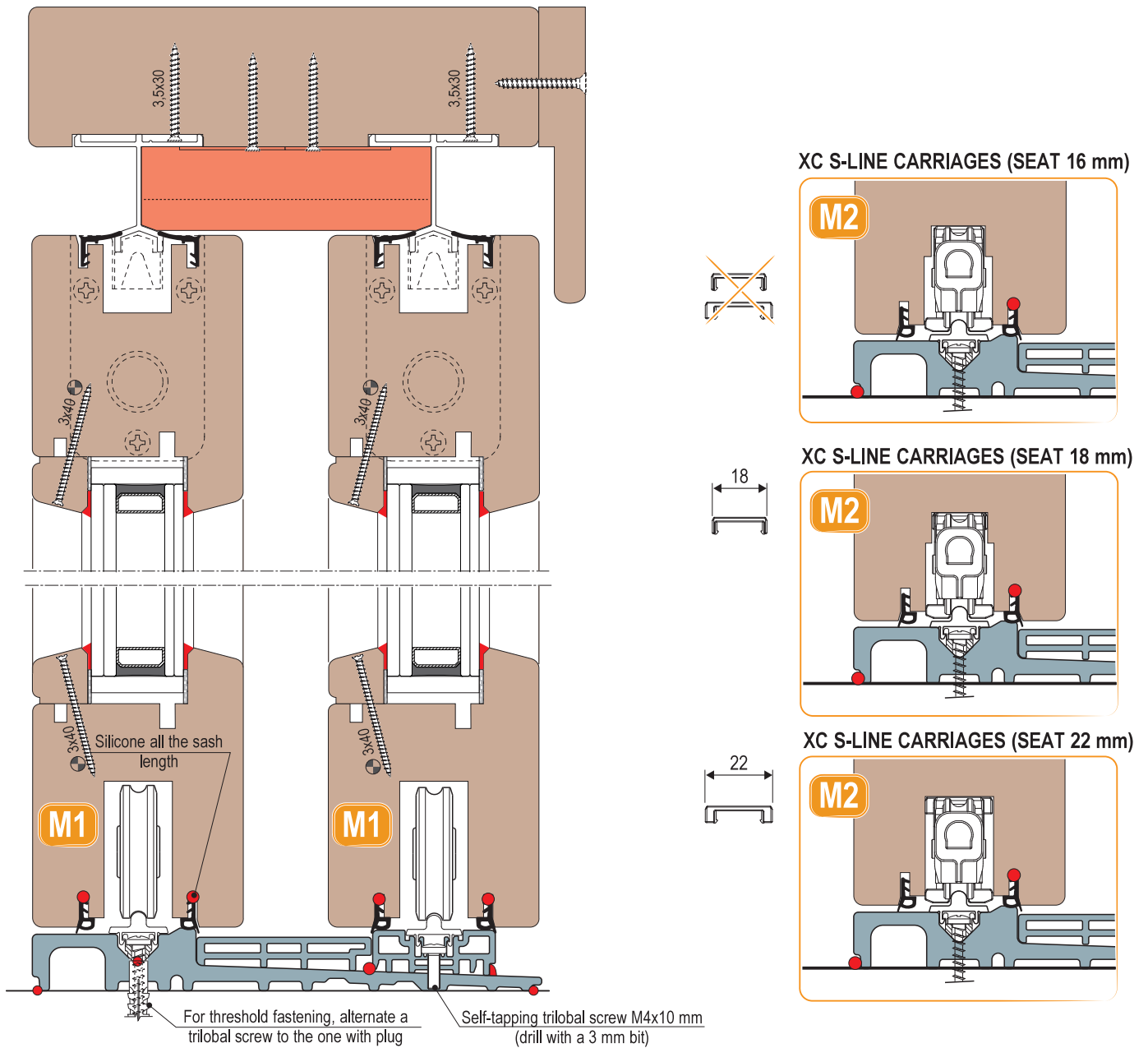


Align the pad to the sash jamb

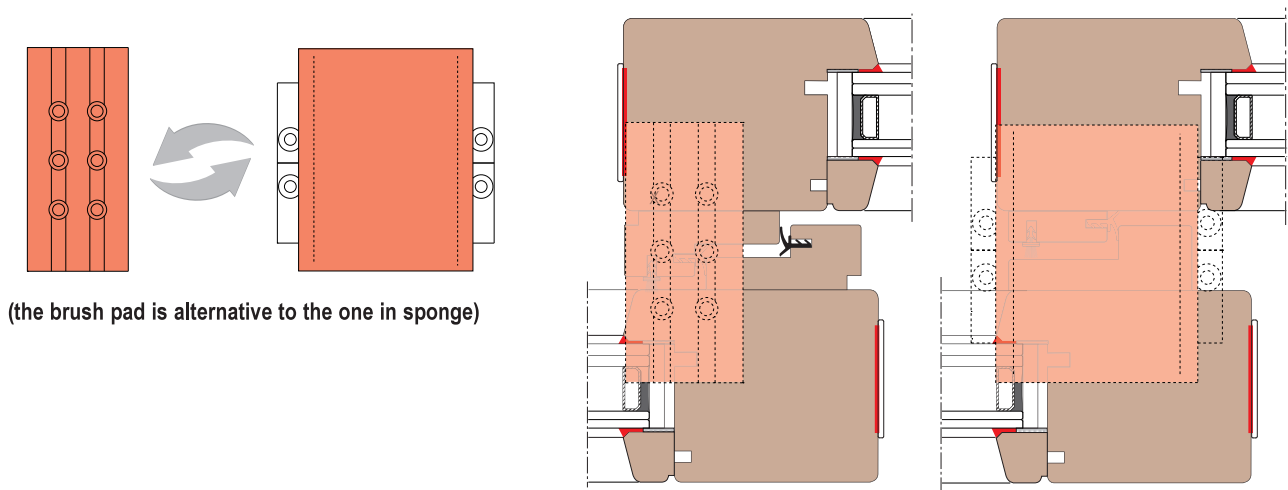
PAD CUT
(only for sash section width,
74 thickness)



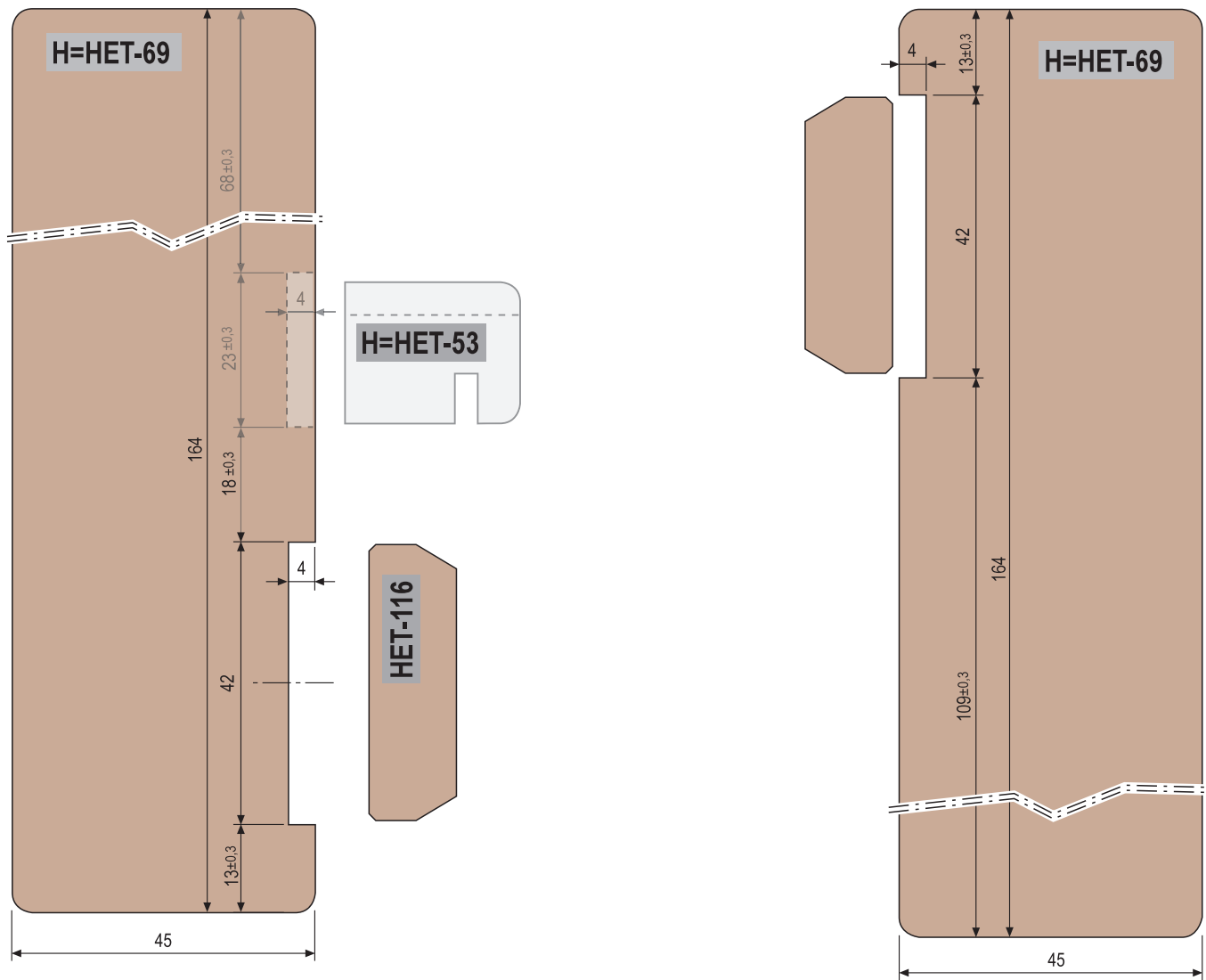
Vertical section



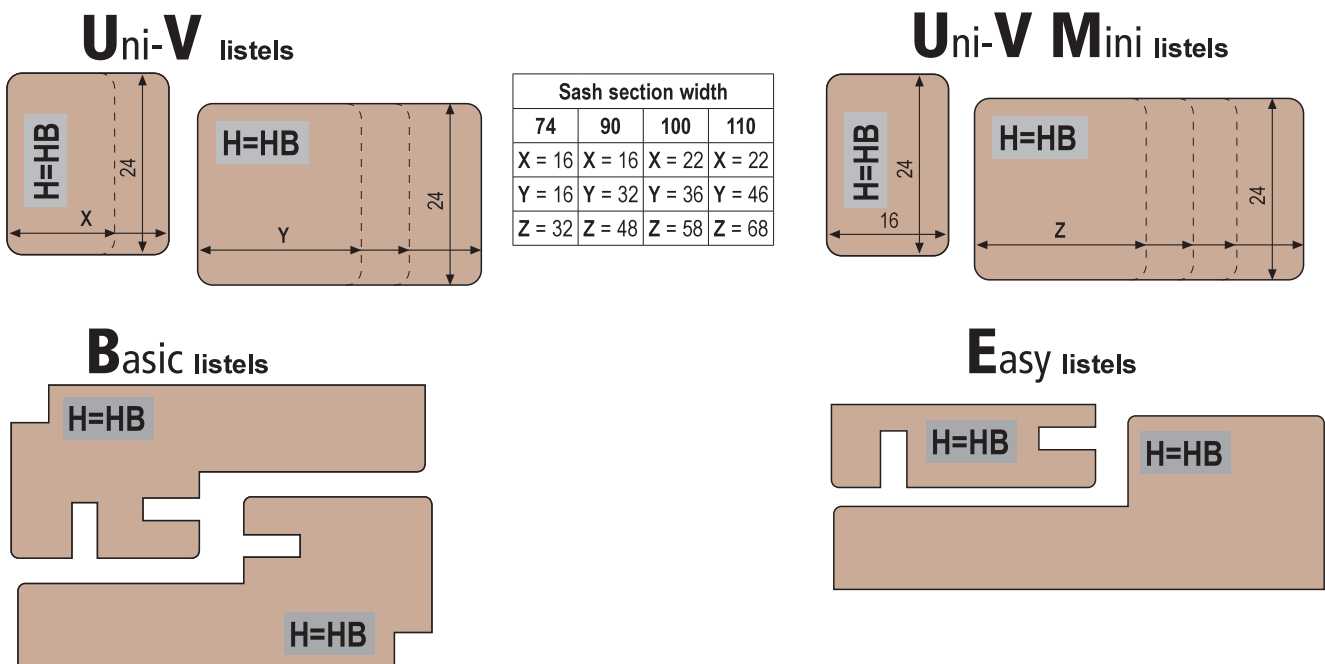
Upper pad positioning



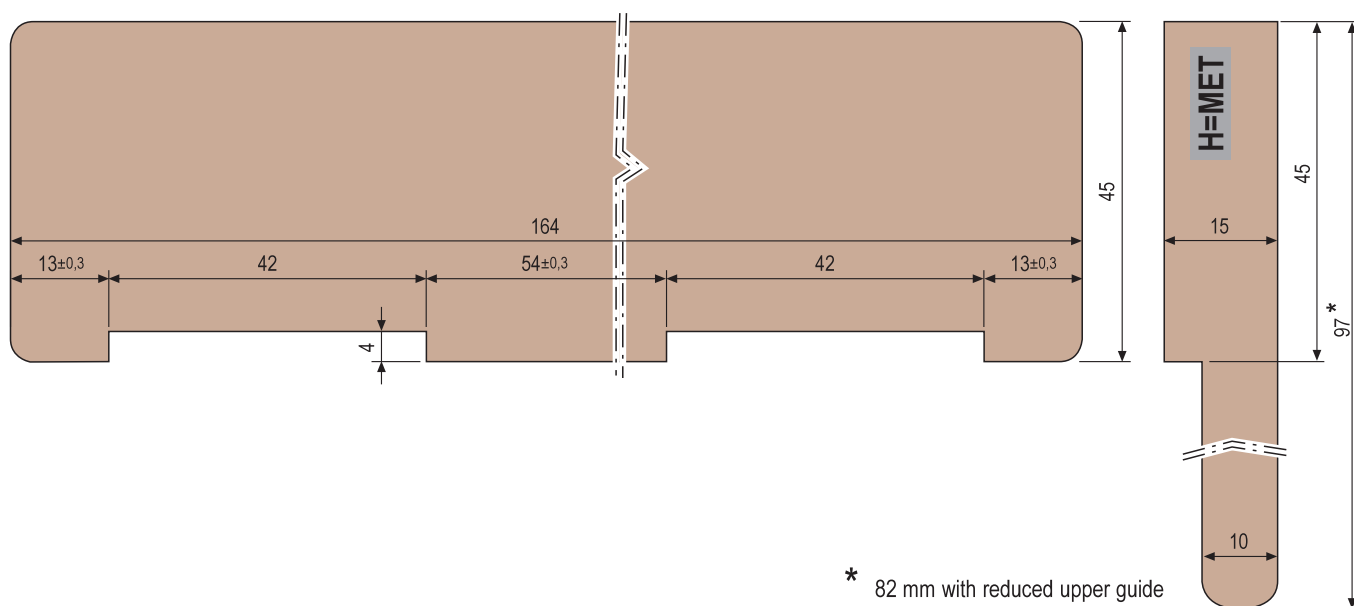
Wood millings: frame jamb horizontal section



Wood millings: central horizontal section



Wood millings: upper frame transom vertical section

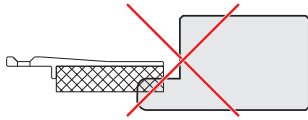


Details for layouts B & F

TOP LOCKING PROFILE



The top locking profile is not used. A top insulating pad positioned between top guides is used.



BRUSH LISTELS FOR DECOMPRESSION CHAMBER



The brush holder listel in the side point (layout B) is facultative.



COMPENSATOR CAP



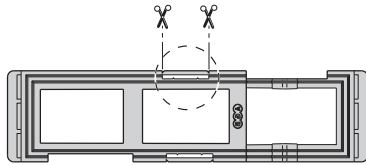
The use of embedded reduced upper guides is not allowed.



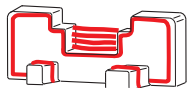
COMPENSATOR CAP



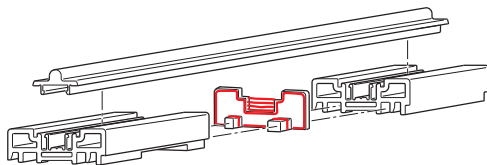
Because the use of brush listel for decompression chamber is facultative, cut only if necessary.



RAILS POSITION FOR SECOND SLIDING SASH

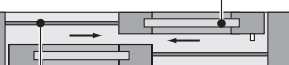
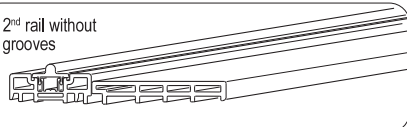


Connecting caps silicone detail for second sash rail

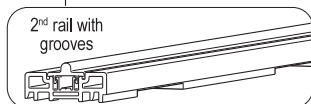


SECOND RAIL AND LOCKING PROFILE

2nd rail without grooves



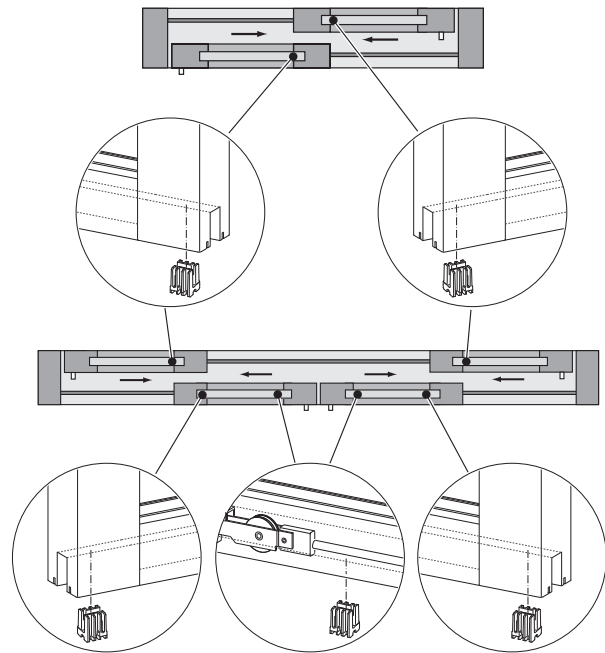
2nd rail with grooves



POSITION OF ANTI-DERAILED ADAPTERS



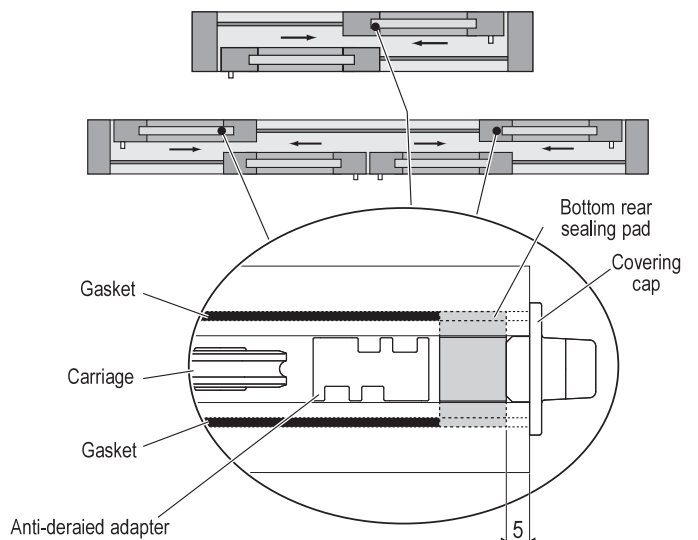
Install 2 devices on each central sash. Install 1 device on each side sash.



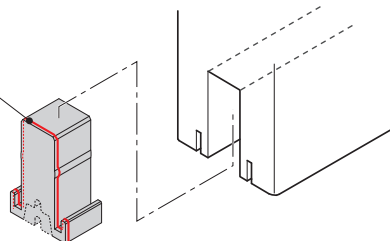
POSITION OF BOTTOM REAR SEALING PAD



Position the bottom rear pad between the cap and the anti-derailed adapter on external sashes.



Silicone beadaround perimeter



Formulas of components cut

		LAYOUT B	LAYOUT F
	XC	HB-94	HB-94
	XC S-Line		
		(2 pieces) MET-2xSMT-2	(2 pieces) MET-2xSMT-2
		HET-116	HET-116
		HB-65	HB-65
	XC		
	XC S-Line		
<p>With additional carriages</p>	XC		
	XC S-Line		

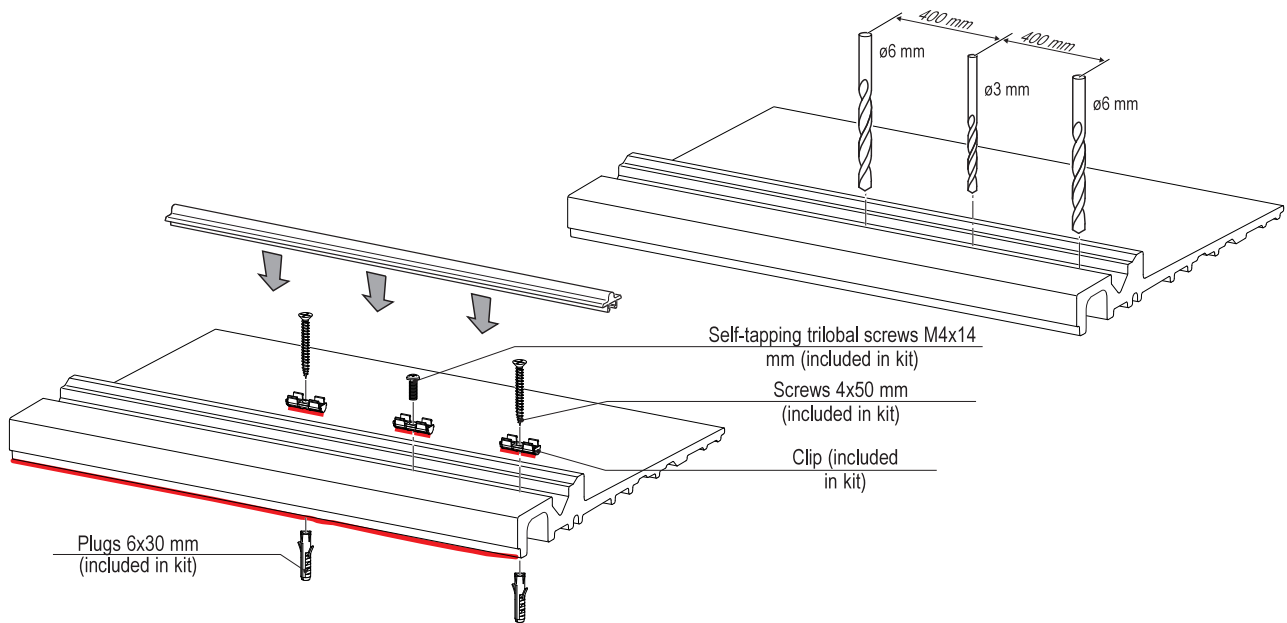
	MET
	MET-2xSMT-2
	HB-14
	HB-4
	HB-14

		LAYOUT B			
		Uni-V	Uni-V Mini	Easy	Basic
	Sash section width 74	LB-87	LB-74+5	LB-76	LB-71
	Sash section width 90				
	Sash section width 100	LB-93	LB-90+5		
Sash section width 110					

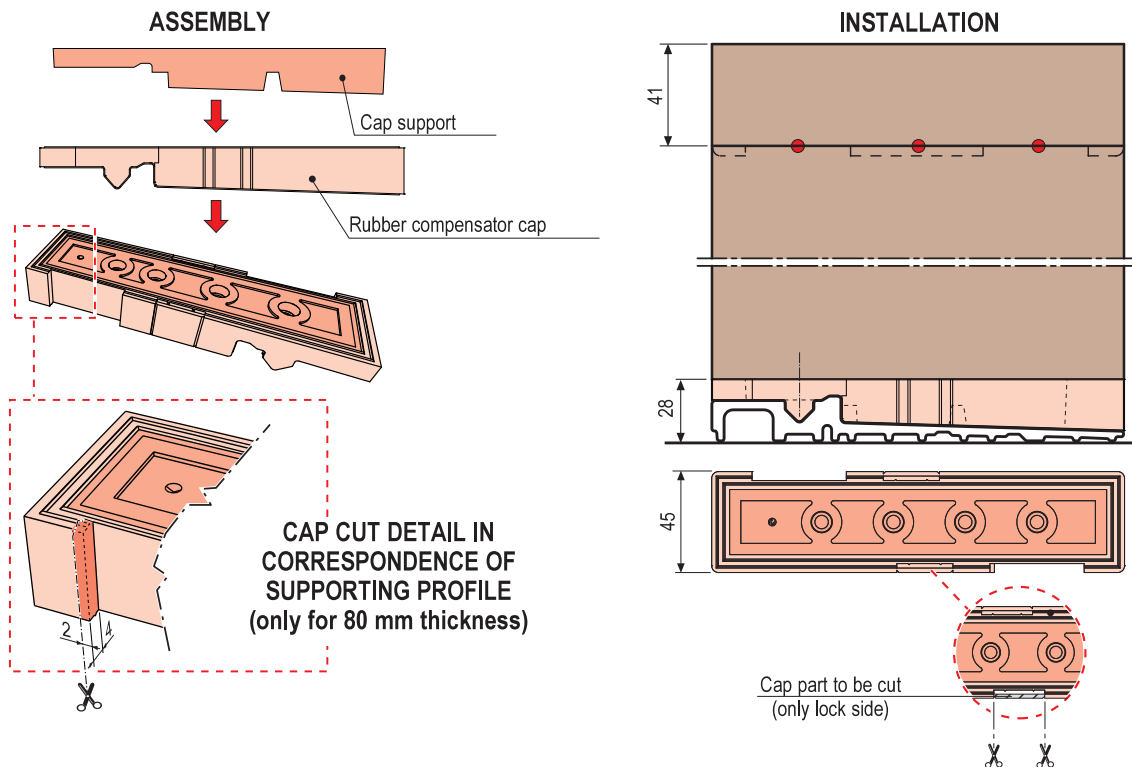
		SCHEMA F			
		Uni-V	Uni-V Mini	Easy	Basic
	Sash section width 74	(2 pieces) LB-87	(2 pieces) LB-74+5	(2 pieces) LB-76	(2 pieces) LB-71
	Sash section width 90				
	Sash section width 100	(2 pieces) LB-93	(2 pieces) LB-90+5		
Sash section width 110					

LAYOUTS A & E, LAYOUTS B & F - ASSEMBLY OPERATIONS

Threshold fastening

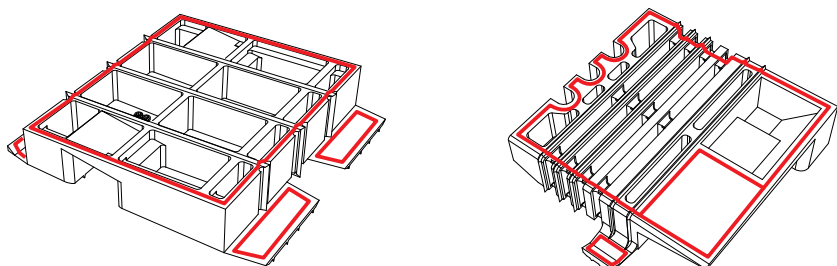


Application of caps under jambs

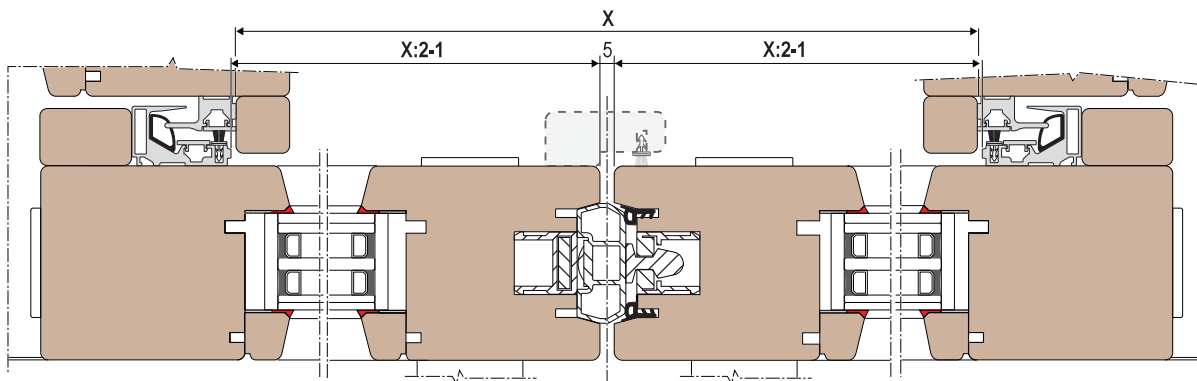


Application of pad on central jambs

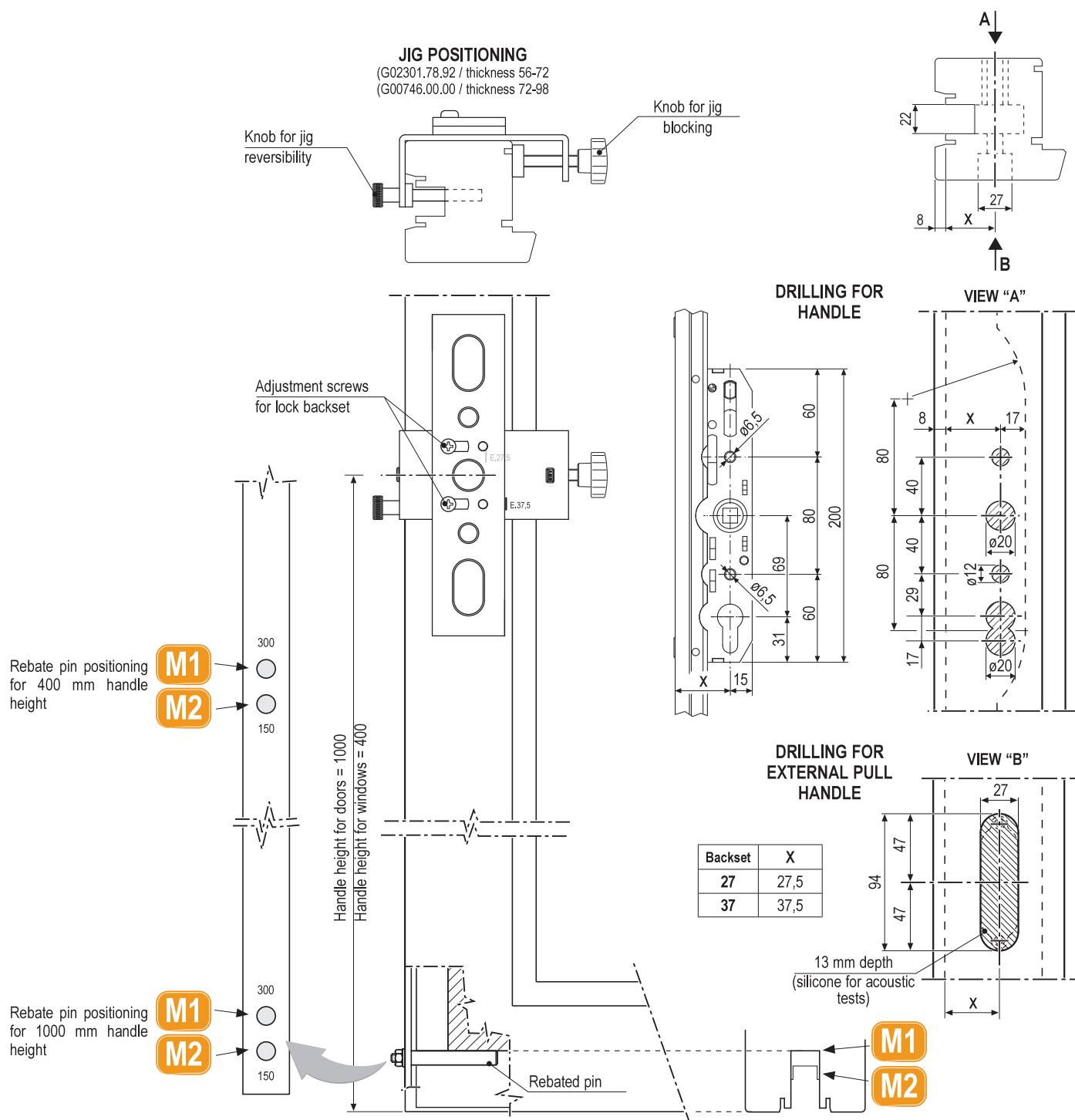
Before installing the lower pads, make a silicone beadaround perimeter as indicated.



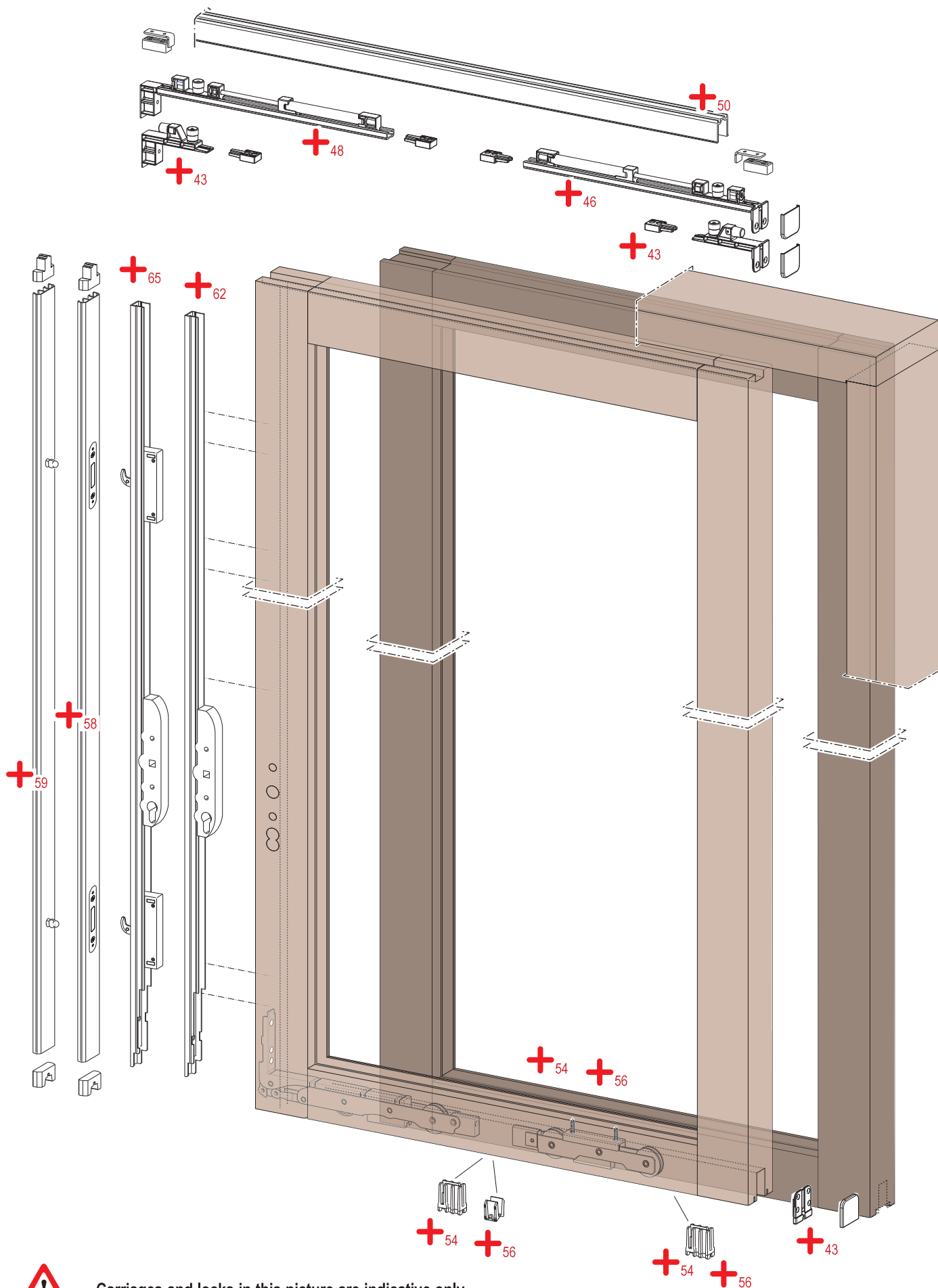
Positioning of central profile and beak on sliding sash - layouts E-F



Lock holes realisation

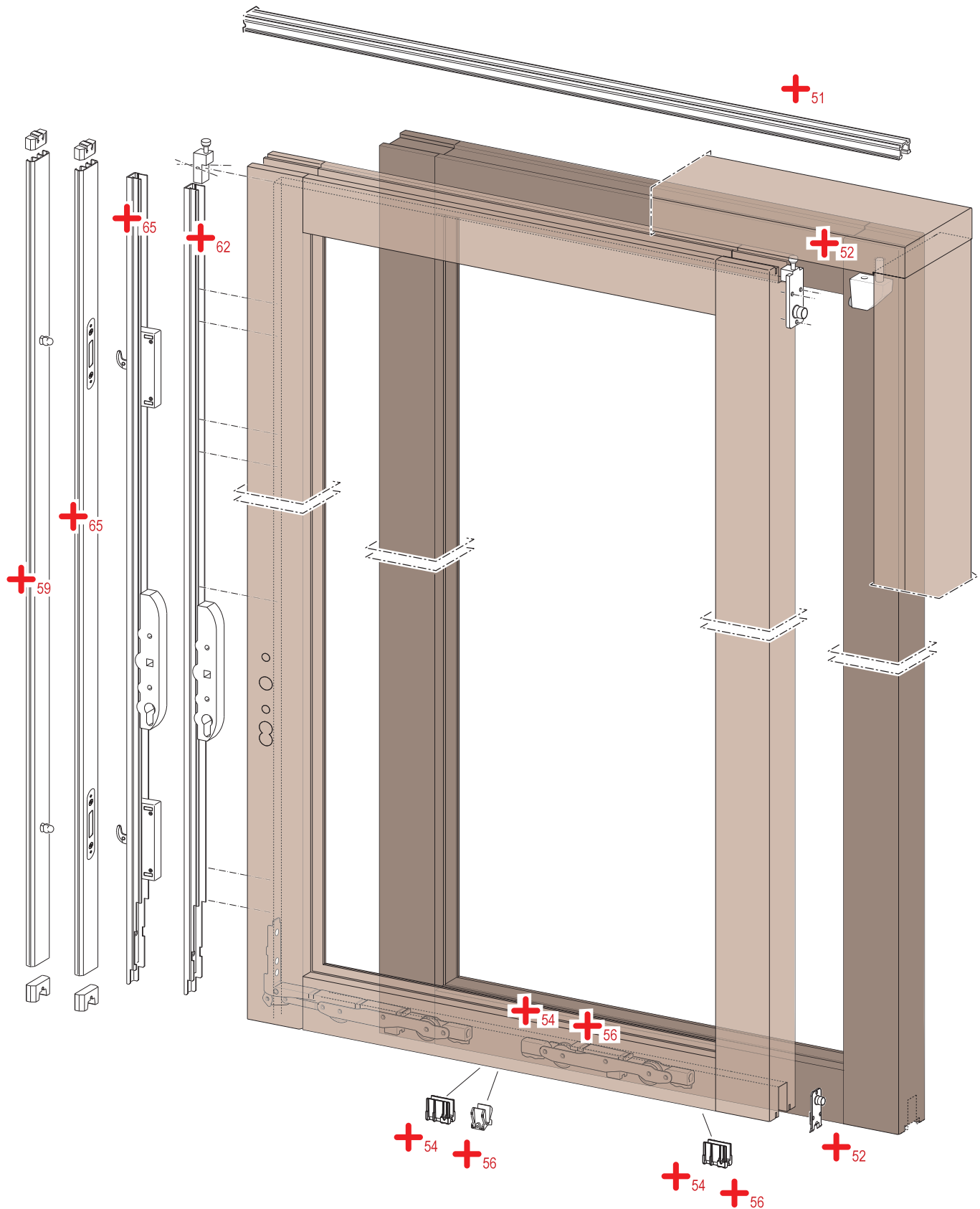


Accessories for single sash configuration with guide 22x22



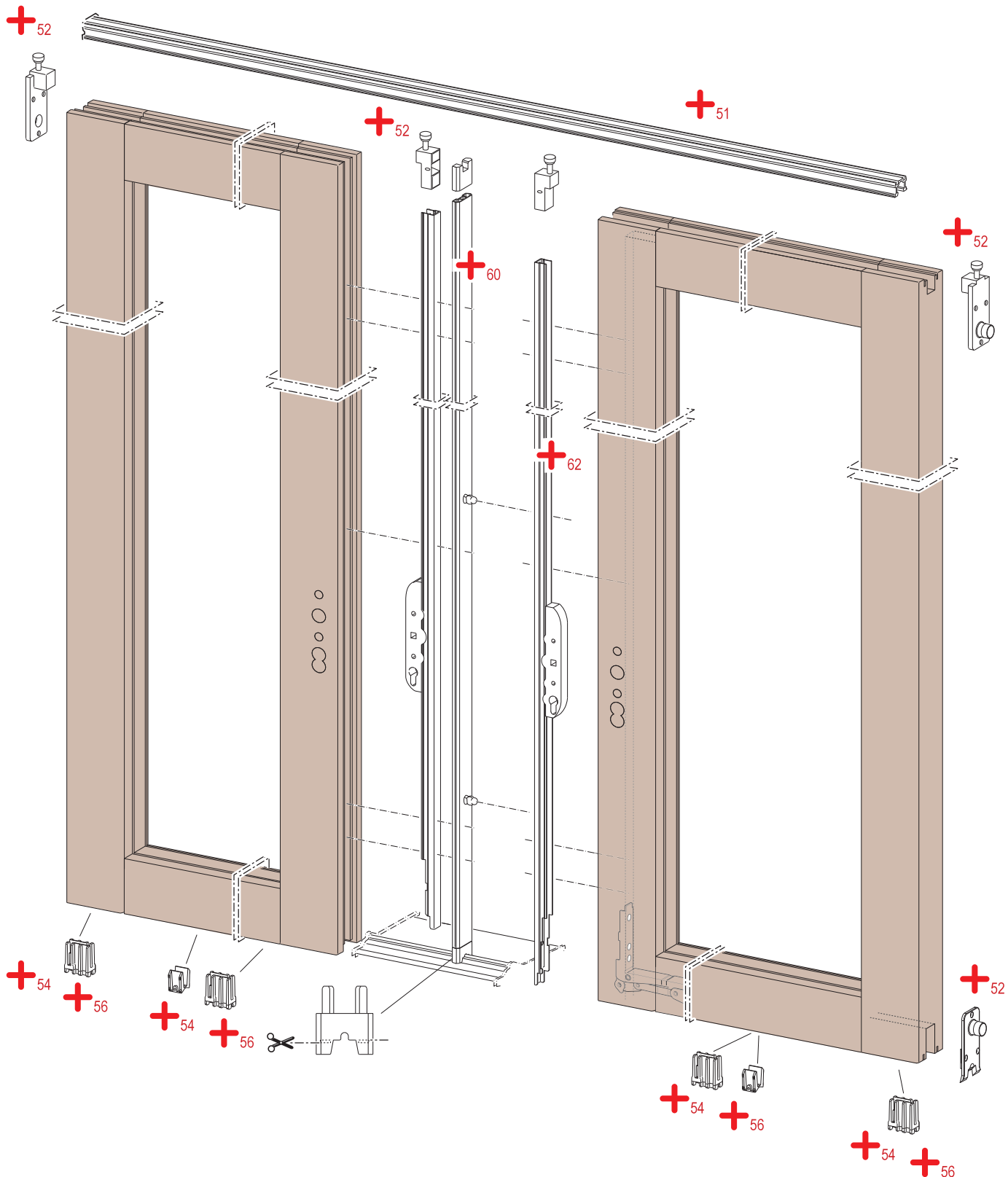
Carriages and locks in this picture are indicative only.

Accessories for single sash configuration with guide 22x13



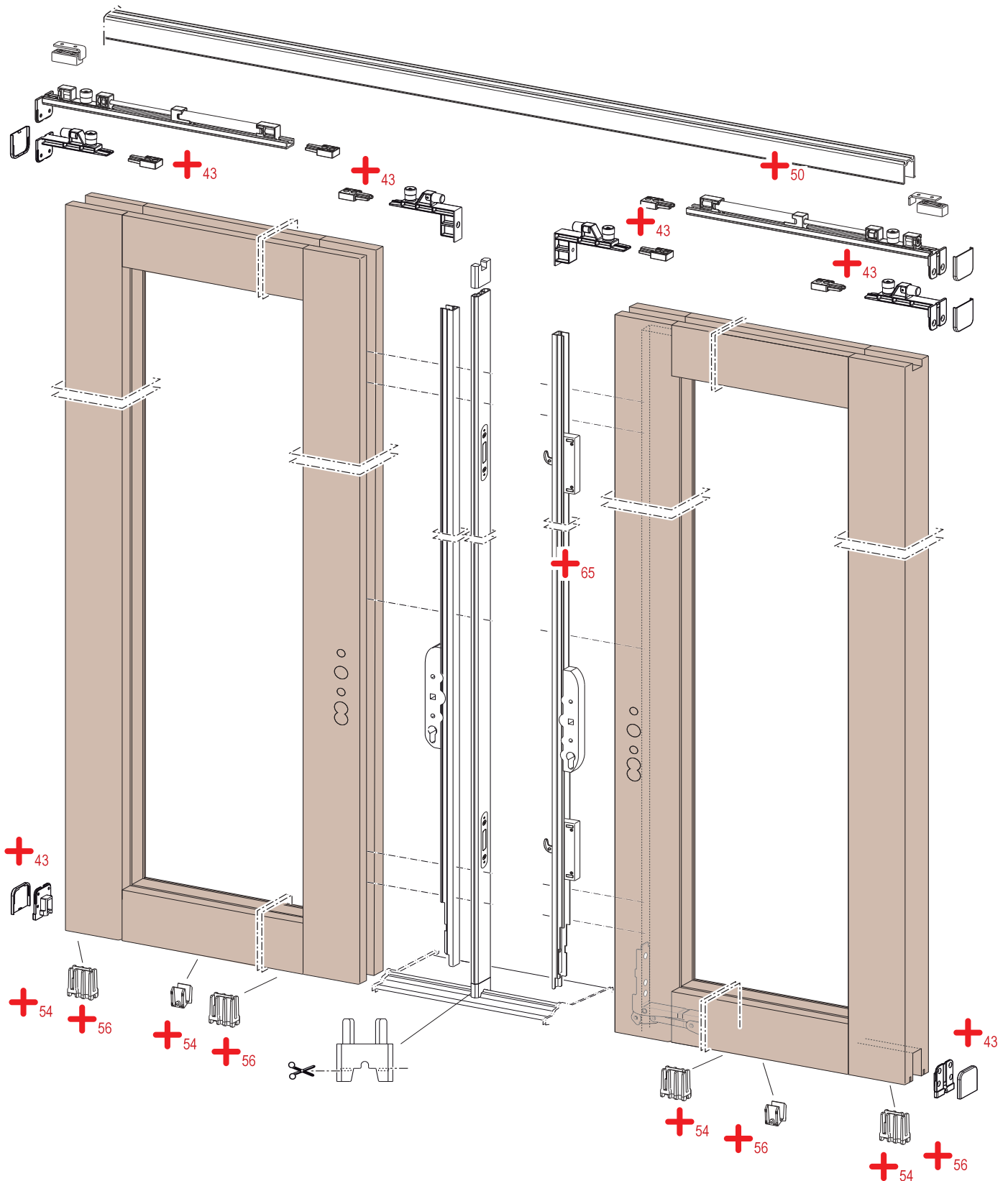
Carriages and locks in this picture are indicative only.

Accessories for coaxial sashes configuration with guide 22x13



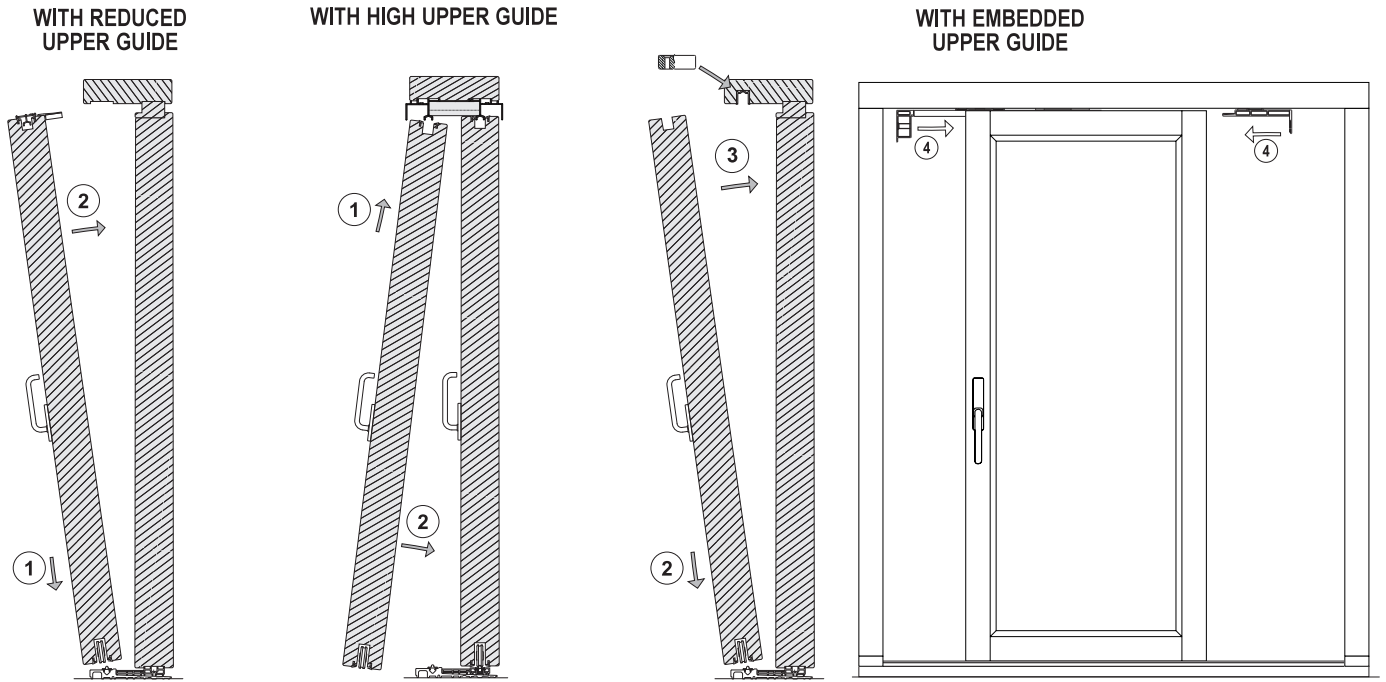
Carriages and locks in this picture are indicative only.

Accessories for coaxial sashes configuration with guide 22x22



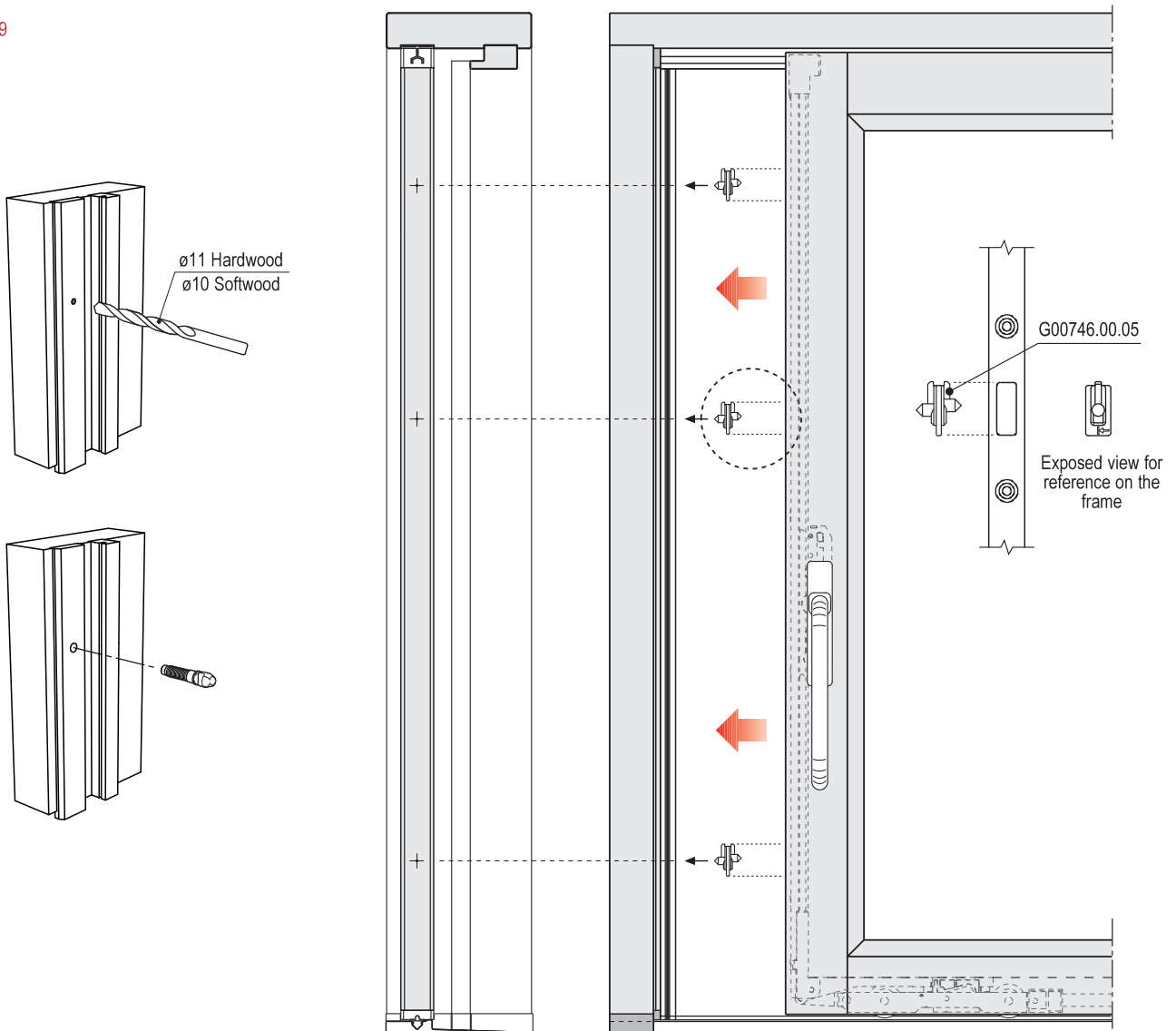
Carriages and locks in this picture are indicative only.

Sash assembly

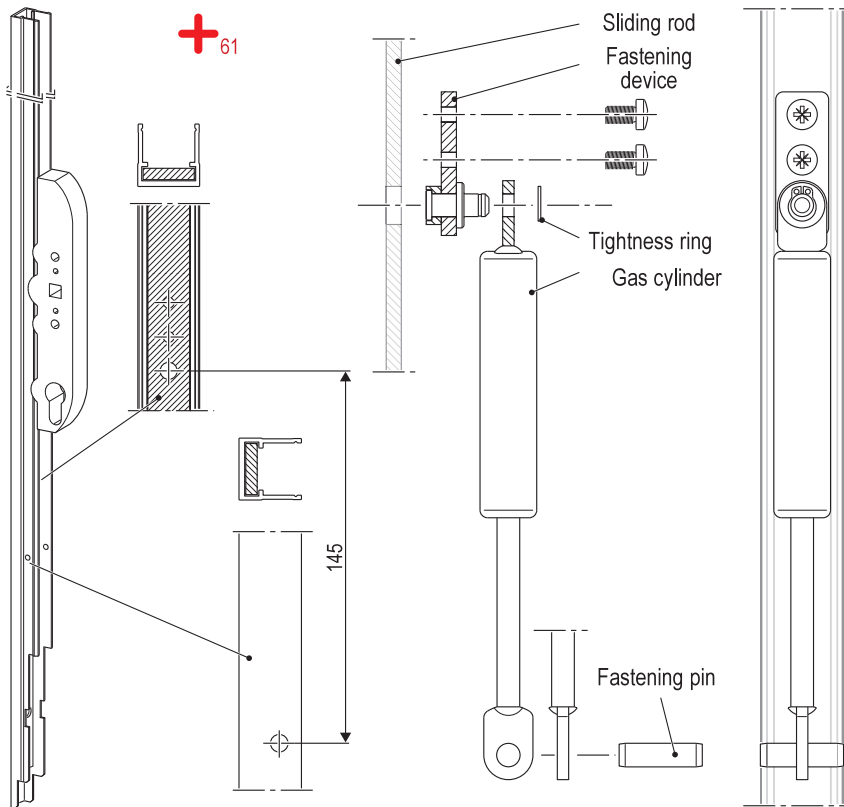


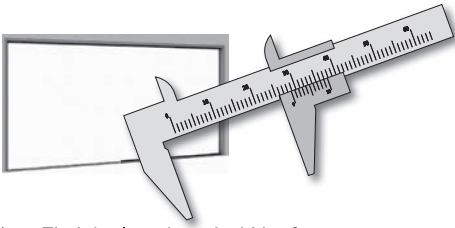
Locking pins assembly

+ 59

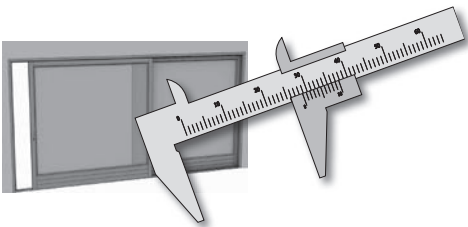


Use of gas spring kit



STEPS FOR THE PRODUCTION PROCESS CONTROL (FPC)**Frame components measurement and solutions for air-water tightness**

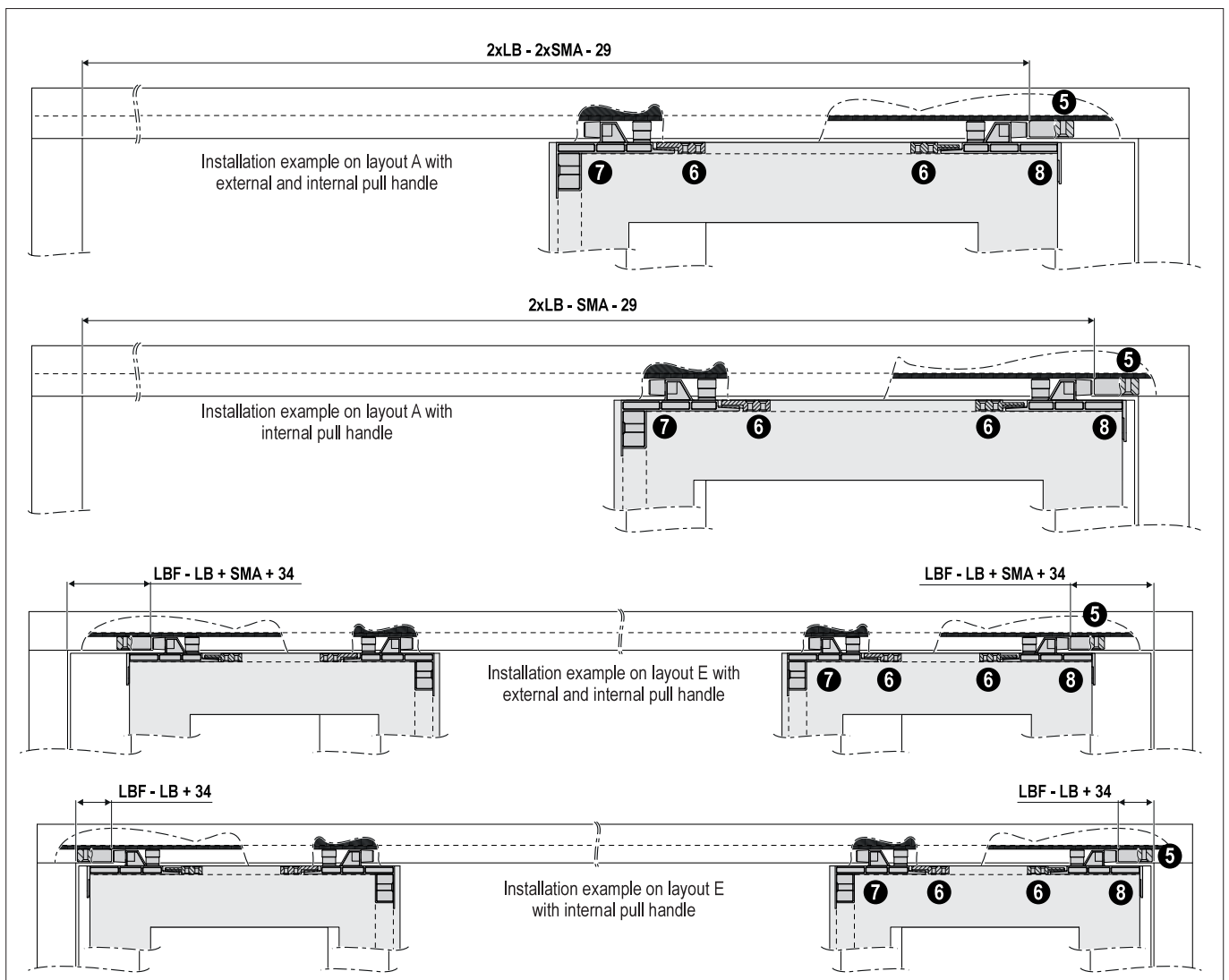
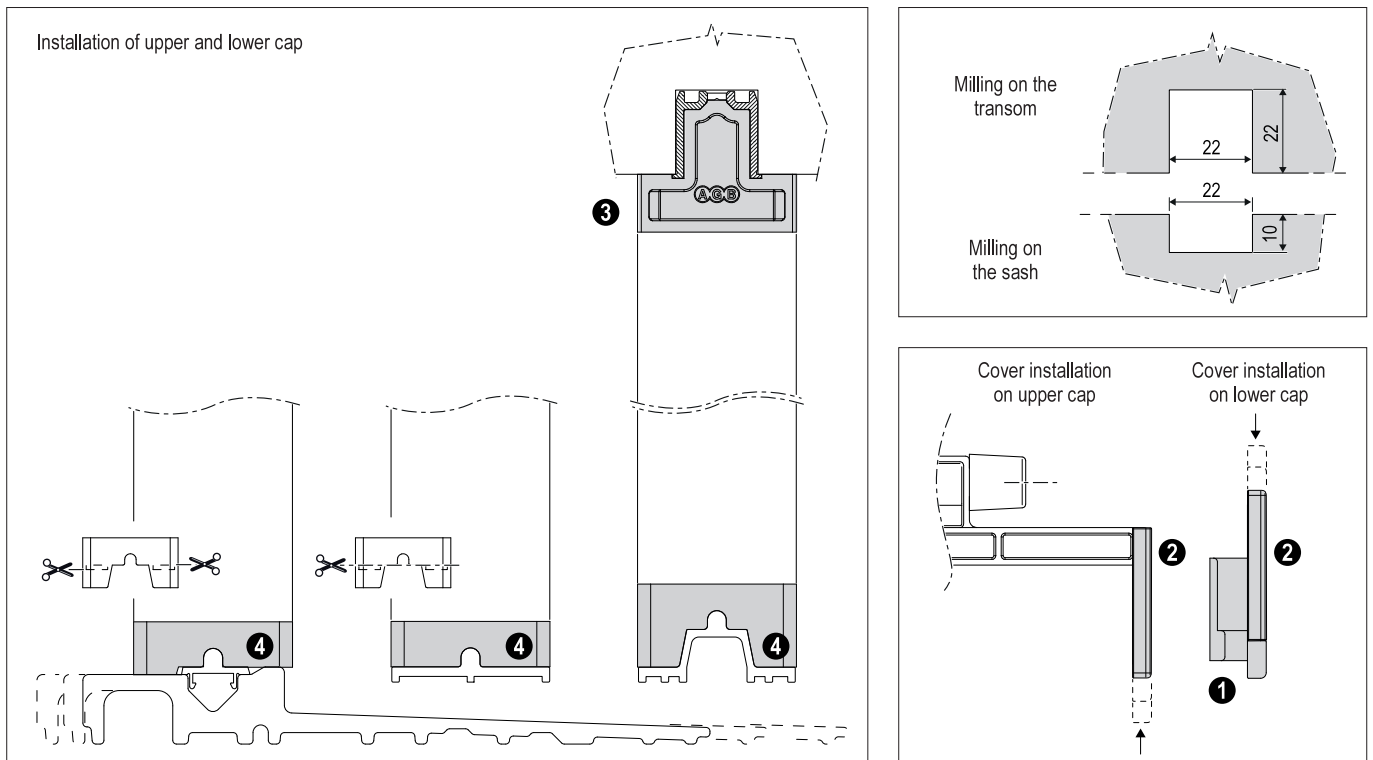
- 1 - Find the length and width of upper transom and vertical jambs.
- 2 - Check the length and depth of millings to host the aluminium upper guide and wooden listels are compliant to what indicated in this technical manual.
- 3 - Check the width and length of listels.
- 4 - Check that the length of threshold, the sliding profile and the glass holder profile corresponds to the indications of this technical manual.

**Sashes components measurement and solutions for air-water tightness**

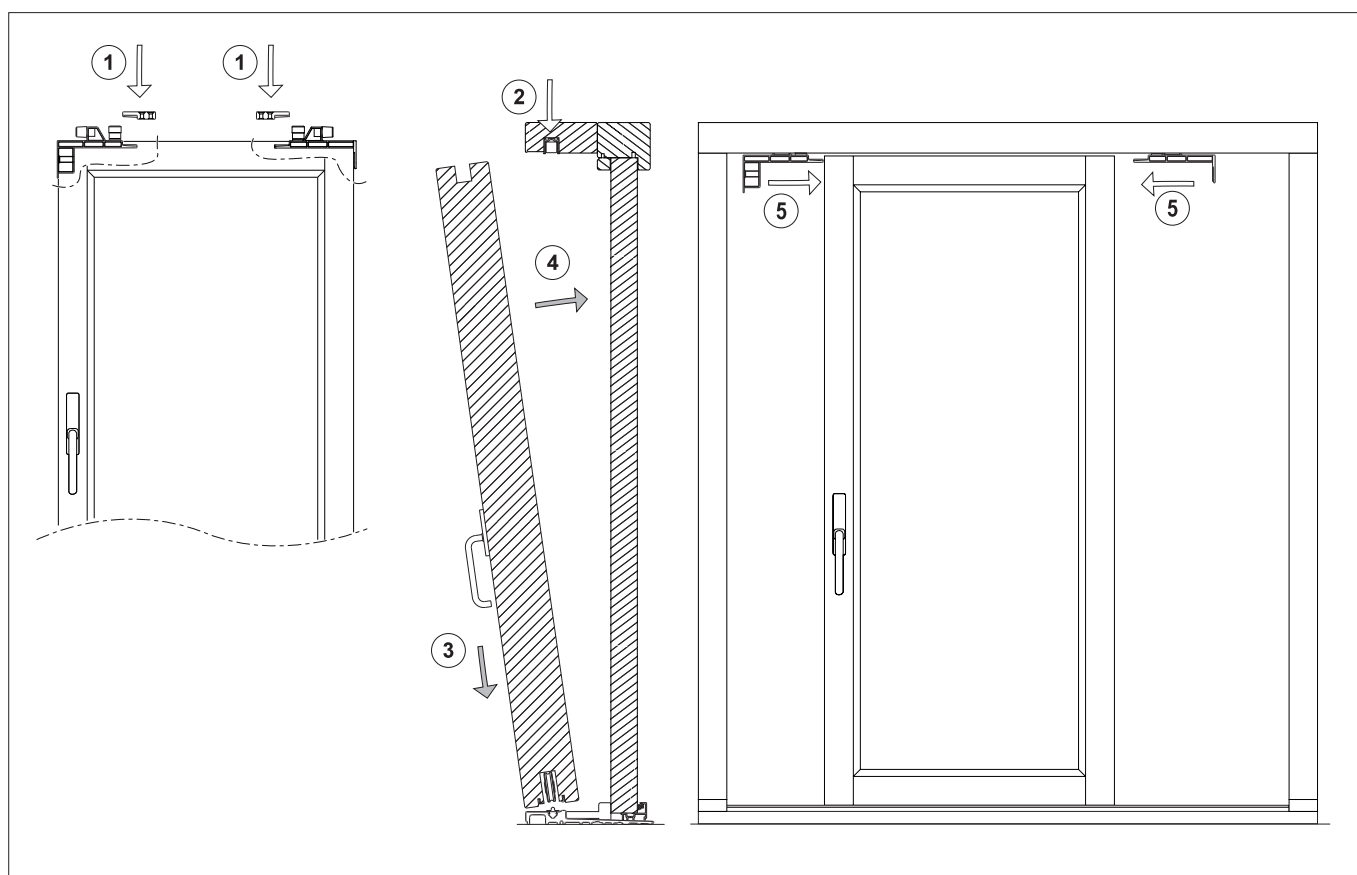
- 1 - According to the frame measurements, please calculate the sashes measurements according to the indications reported in the technical manual (LxH) and check that sash dimensions are compliant to the ones calculated before.
- 2 - Check the sashes orthogonality (square) measuring the diagonals, it is very important they are equal for the correct functioning and closing.
- 3 - Check the sash adapter is exactly the one indicated in this manual.
- 4 - Check the millings width for the carriages housing and check that they are in the middle of the sash thickness.
- 5 - Check the depth and width of millings to host the gaskets checking the status, they can't have dirt or glue/paint.
- 6 - Check the depth and position the lock milling.
- 7 - Check the coplanarity of jamb/lower transom joints, eventually level with stucco in order to keep the tightness strong.
- 8 - The double glazing glass has to be siliconed flush to the rebate, perimetrically from outside, on wooden frames and aluminium glass holder profile.
- 9 - Silicone even on internal glass holder or use specific gaskets.
- 10 - Make a silicone bead around perimeter inside the external lower gasket groove before inserting it.

TECHNICAL ATTACHMENTS

Caps kit for embedded upper guide 22x22



Caps kit for embedded upper guide 22x22

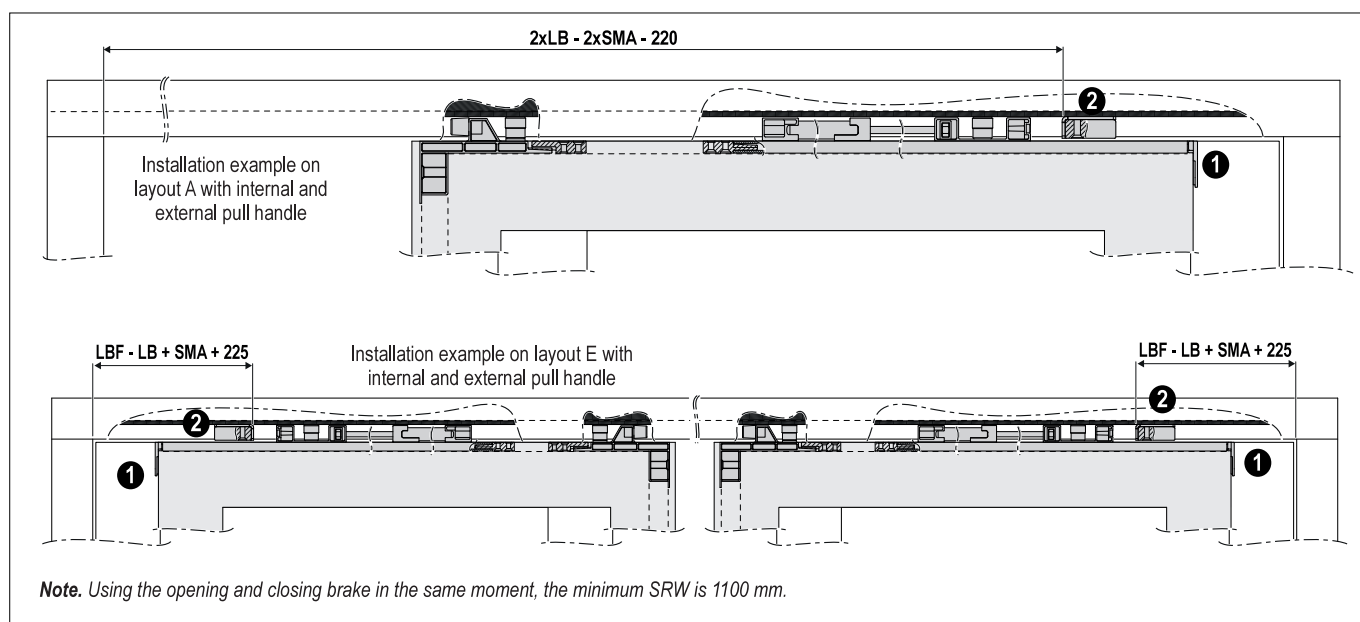
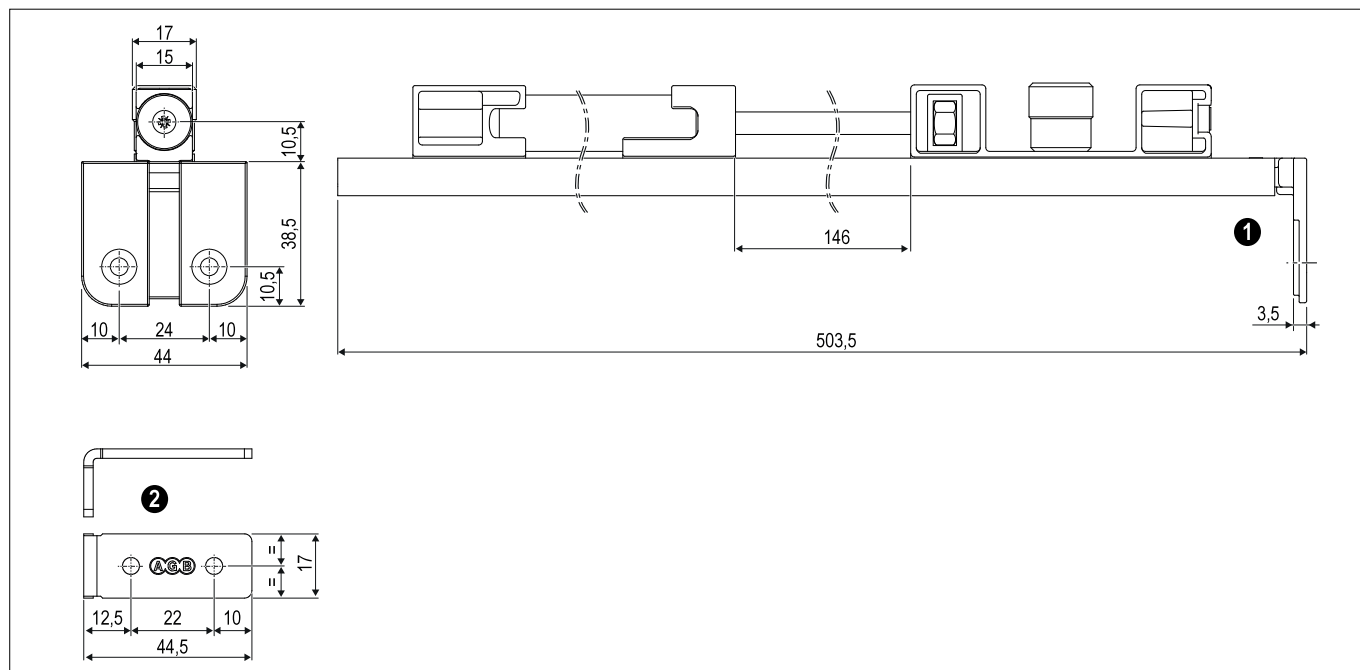


- ① Using the glider/s as a jig, fasten the hold device/s into the sliding sash, not installed yet; then, remove the caps;
- ② Place the device/s in the right position indicated in this technical documentation;
- ③ Place the sash on the rail with the carriages in opening position;
- ④ Place the sash in vertical position;
- ⑤ Fasten the gliders on the sliding sash.

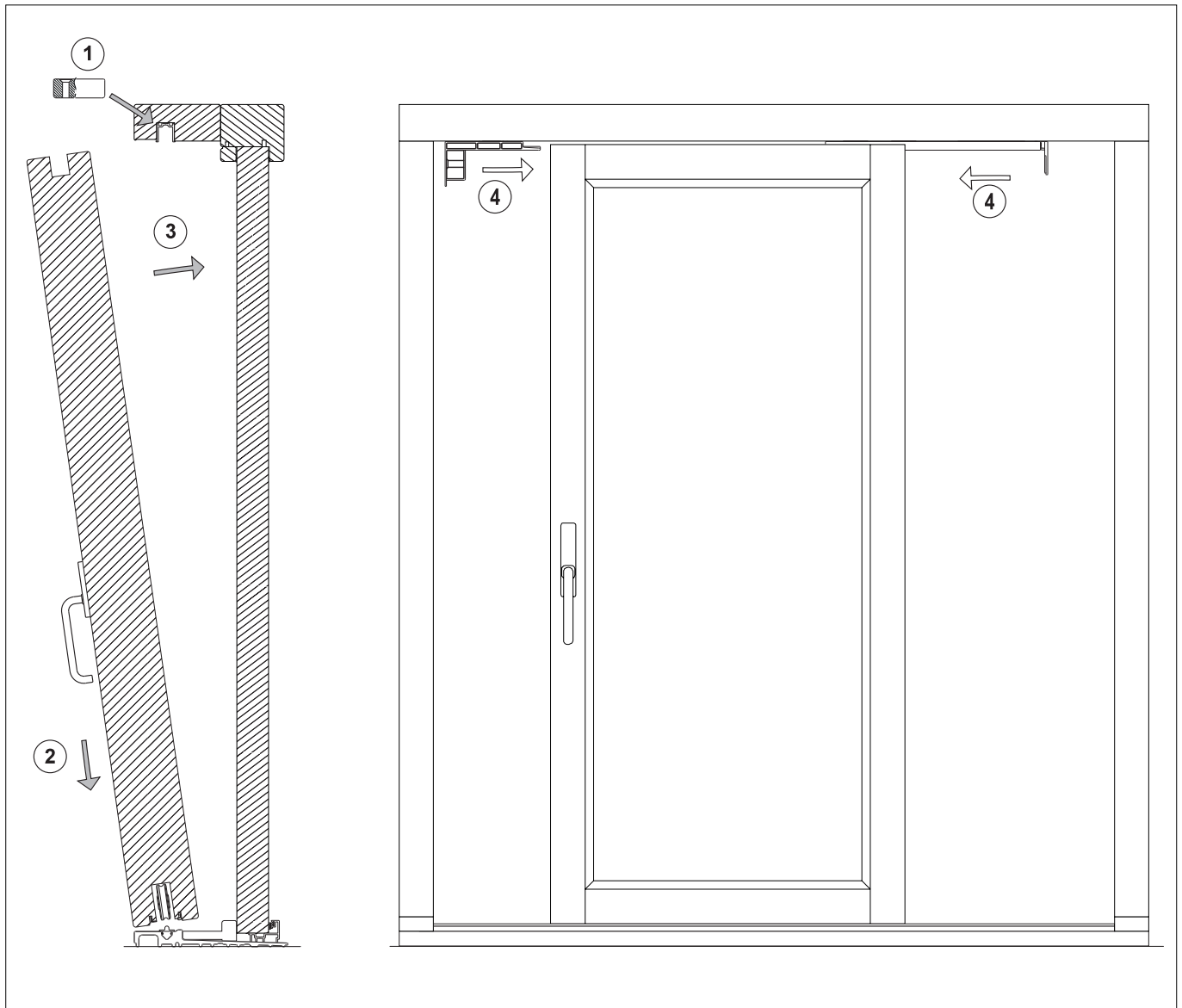
Article	Grey RAL 7035	Black
Caps kit for embedded upper guide 22x22	G00232.00,86	G00232.00,93

Damper kit with opening brake

Article	Ref.	Description	Material	Use	Fastening
Rear cap with glider as a guide	①	Sliding glider and opening brake.	Plastic material / zamak / steel	To fasten the sash in opening.	4x30 mm screws.
Magnetic contrast	②	It allows the damper activation in closing/opening.	Steel	To be applied under the contrast as a guide if you use the brake.	4x30 mm screws.



Damper kit with opening brake

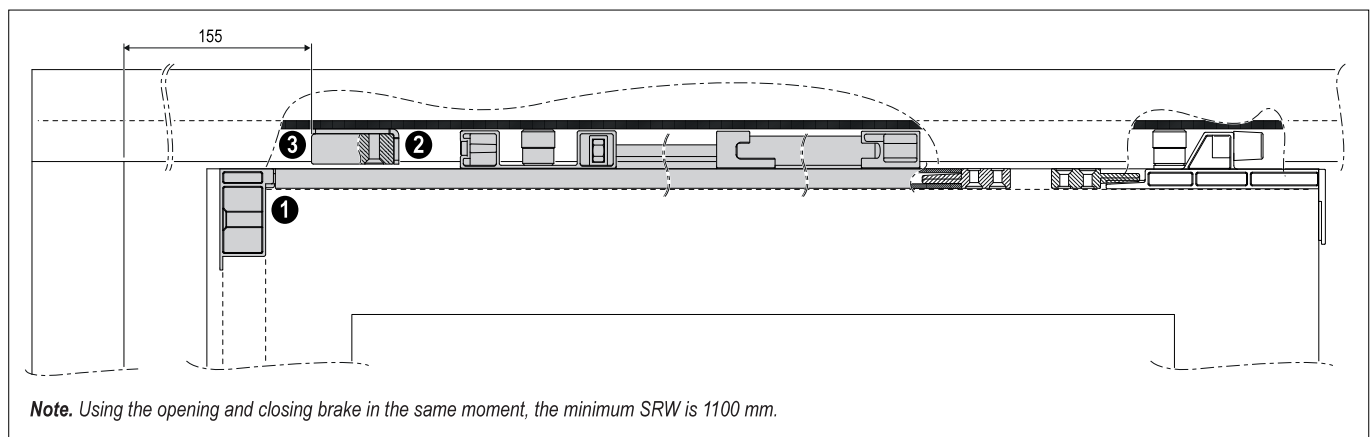
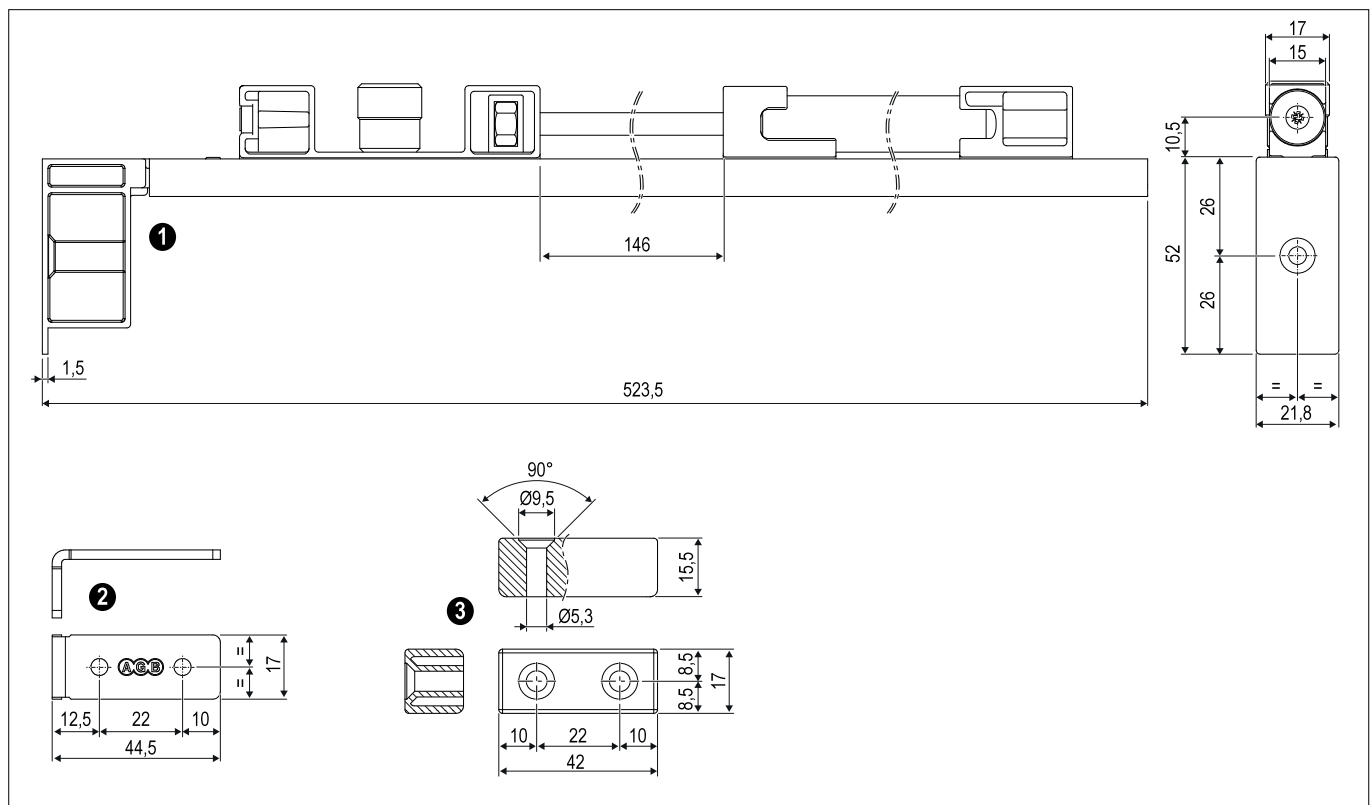


- ① Place the device/s in the right position indicated in this technical documentation;
- ② Place the sash on the rail with the carriages in opening position;
- ③ Place the sash in vertical position;
- ④ Fasten the gliders on the sliding sash.

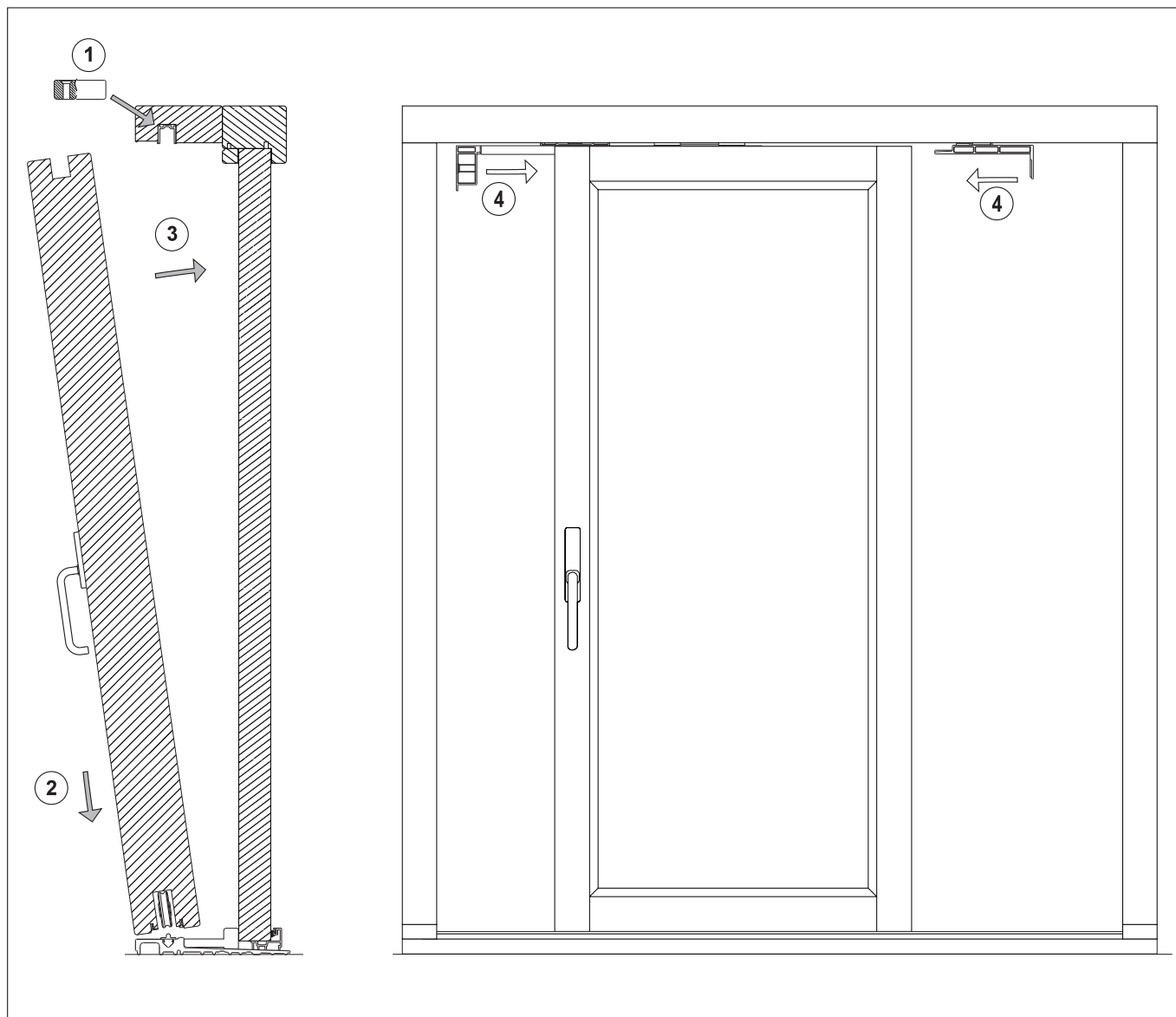
Article	Grey RAL 7035	Black
Loading capacity 80-200 kg	G00232.13.86	G00232.13.93
Loading capacity 200-440 kg	G00232.14.86	G00232.14.93

Damper kit with closing brake

Article	Ref.	Description	Material	Use	Fastening
Front cap with damper	❶	Sliding glider and closing brake.	Plastic material / zamak / steel	To stop the sash in opening.	4x30 mm screws.
Magnetic contrast	❷	It allows the damper activation in opening.	Steel	To be applied under the contrast as a guide if you use the brake.	4x45 mm screws.
Device for frame guide	❸	Rebate for the glider pad or for the damper.	Zamak	-	4x45 mm screws.



Damper kit with closing brake

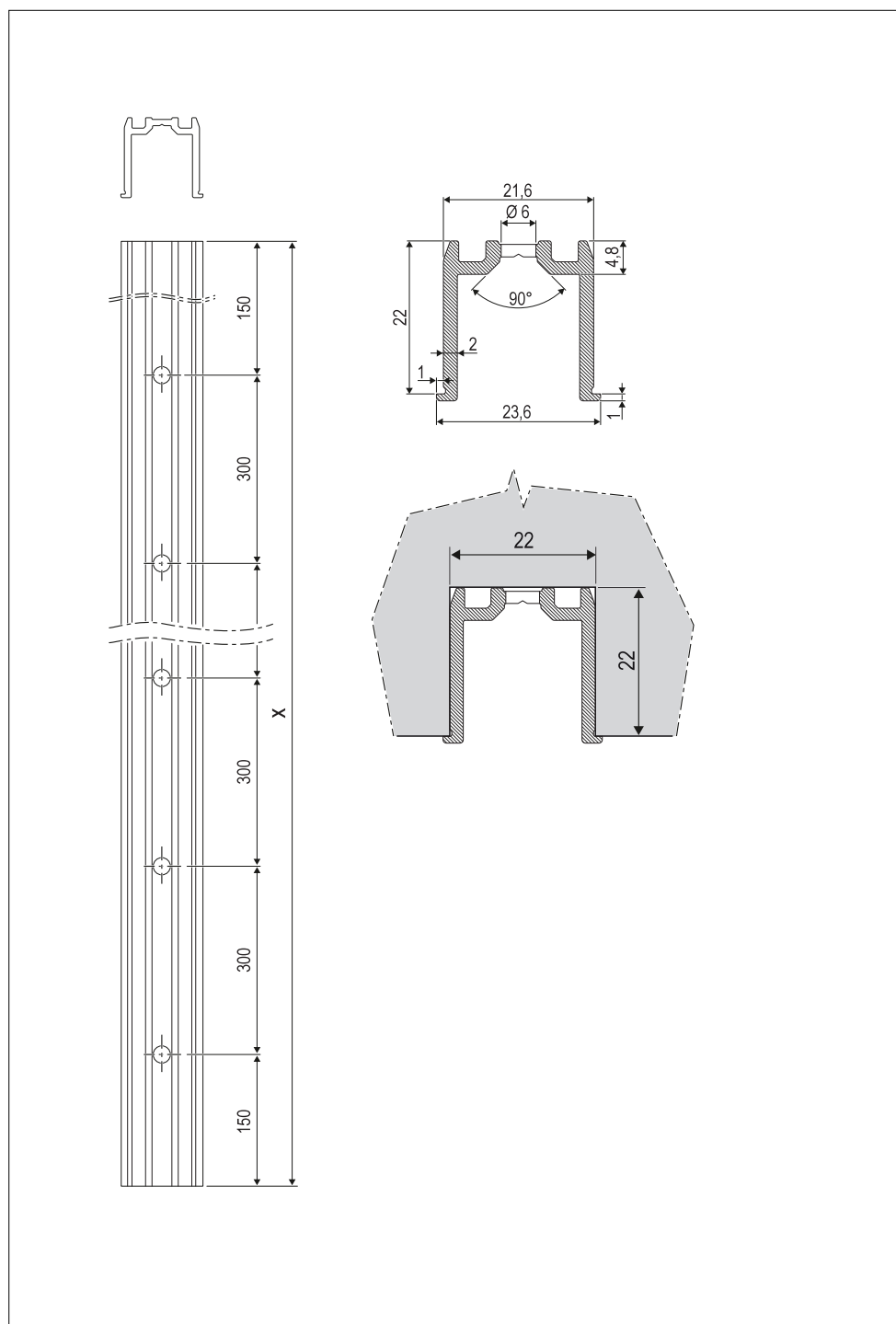


- ① Place the device/s in the right position indicated in this technical documentation;
- ② Place the sash on the rail with the carriages in opening position;
- ③ Place the sash in vertical position;
- ④ Fasten the gliders on the sliding sash.

Article	Grey RAL 7035	Black
Loading capacity 80-200 kg	G00232.11.86	G00232.11.93
Loading capacity 200-440 kg	G00232.12.86	G00232.12.93

Embedded upper guide 22x22

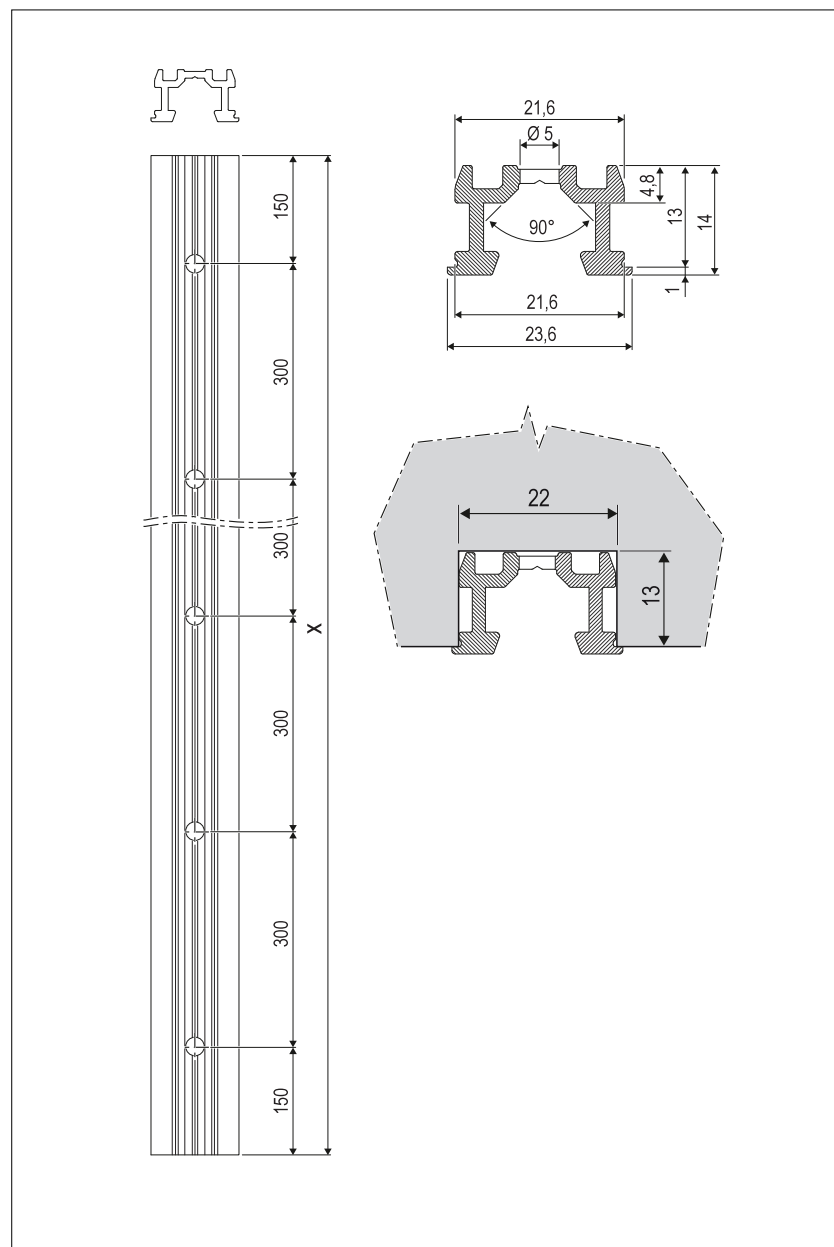
Article	Ref.	Description	Material	Use	Fastening
Embedded upper guide	1	Guide for sliding gliders of the sliding sash, compatible with AGB systems of closing/opening brake.	Aluminium	Insert in the dedicated milling of the frame upper transom.	4x25 mm screws.



Ref.	Article	Article code, in Silver	Article code, in Electrocolour	X
1	Embedded upper guide	G01002.01.01	G01002.01.02	3000
		G01002.02.01	G01002.02.02	4000
		G01002.03.01	G01002.03.02	5000
		G01002.04.01	G01002.04.02	6000
		G01002.05.01	G01002.05.02	7000

Embedded upper guide 22x13

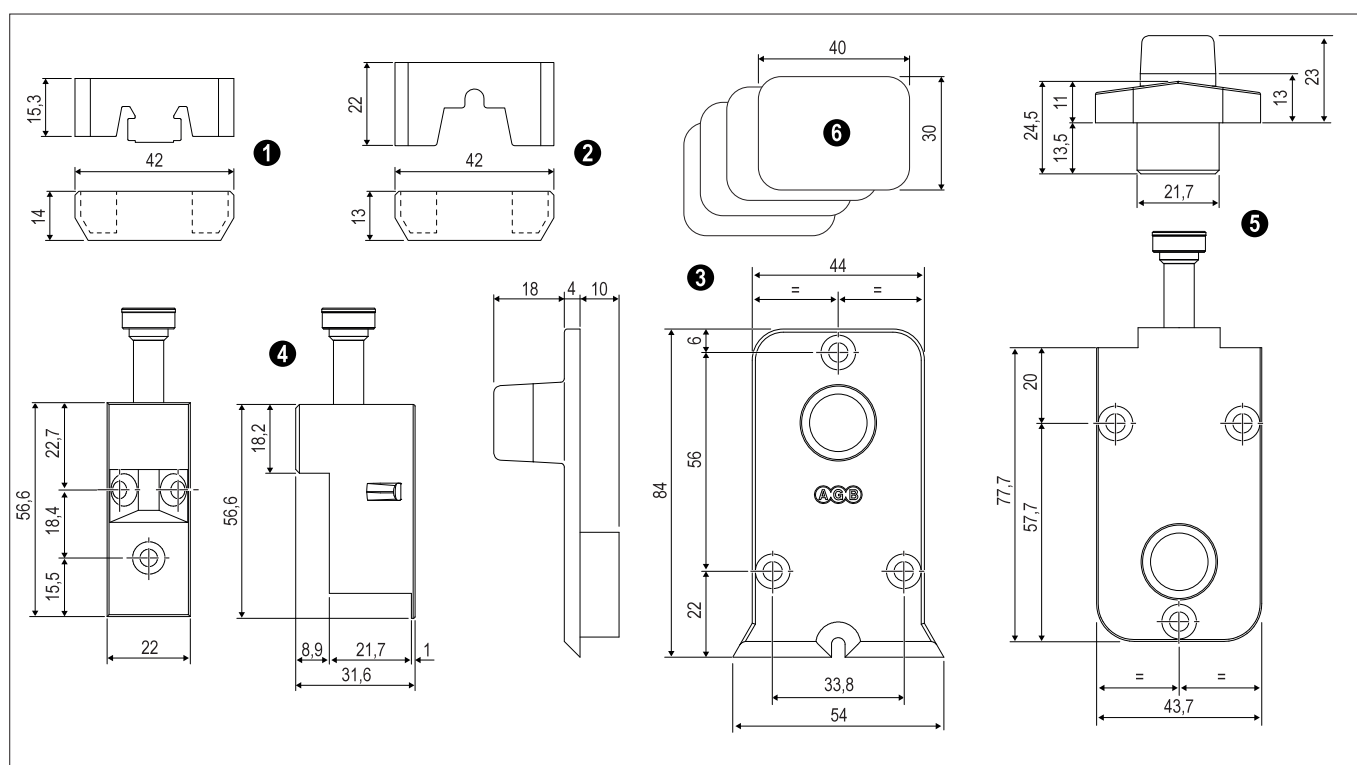
Article	Ref.	Description	Material	Use	Fastening
Embedded upper guide 22x13	❶	Guide for sliding gliders of the movable rod.	Aluminium	Insert in the dedicated milling of the frame upper transom.	4x25 mm screws.



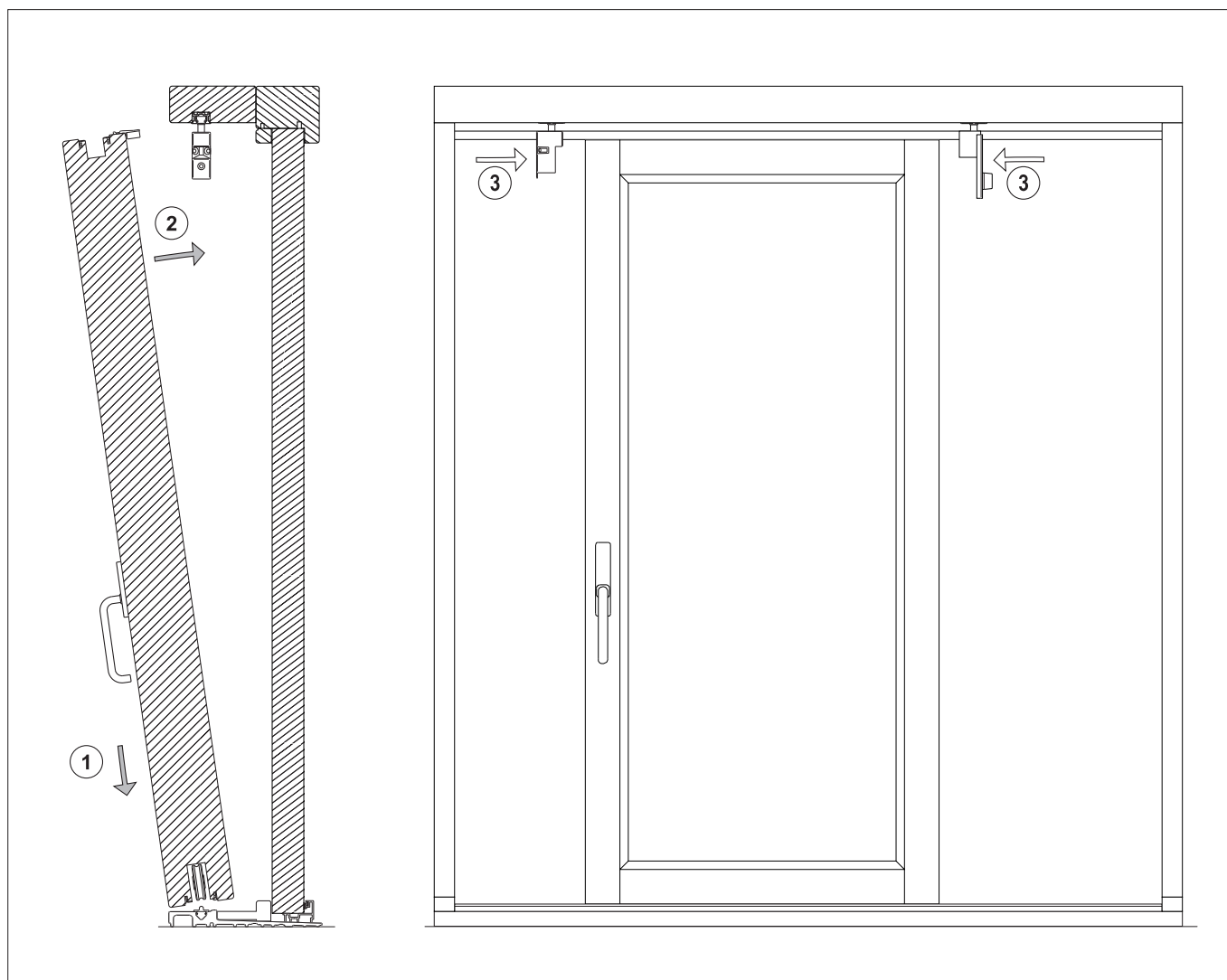
Ref.	Article	Article code, in Silver	Article code, in Electrocolour	X
❶	Embedded upper guide 22x13	G01000.01.01	G01000.01.02	3000
		G01000.02.01	G01000.02.02	4000
		G01000.03.01	G01000.03.02	5000
		G01000.04.01	G01000.04.02	6000
		G01000.14.01	G01000.14.02	7000

Caps kit for embedded upper guide 22x13 - low rail

Article	Ref.	Description	Material	Use	Fastening
Shaped cap for C track 22x13	1	Cap to be inserted between the locking profile and the guide.	Rubber	To be jointed.	To be inserted with silicone.
Shaped cap for lower rail	2	To guarantee the system tightness.	Rubber	Apply under the profile with silicone on the back.	
Rear lower covering cap	3	Cap to close the hardware groove on the lower transom, in the sash extremity.	Plastic material	-	4x30 mm screws.
Cap and glider for front upper guide	4	Glider for the sash sliding on the concealed guide; the plastic glider is used as covering cap of the upper milling.	Plastic material	Place in the slot between sash and frame.	4x30 mm screws.
Cap and glider for rear upper guide	5				
2 mm adapter for fixed sash	6	Adapter for the fixed sash fastening.	Plastic material	-	To be inserted.



Caps kit for embedded upper guide 22x13 - low rail



- ① Place the sash on the rail with the carriages in opening position;
- ② Place the sash in vertical position;
- ③ Fasten the gliders on the sliding sash.

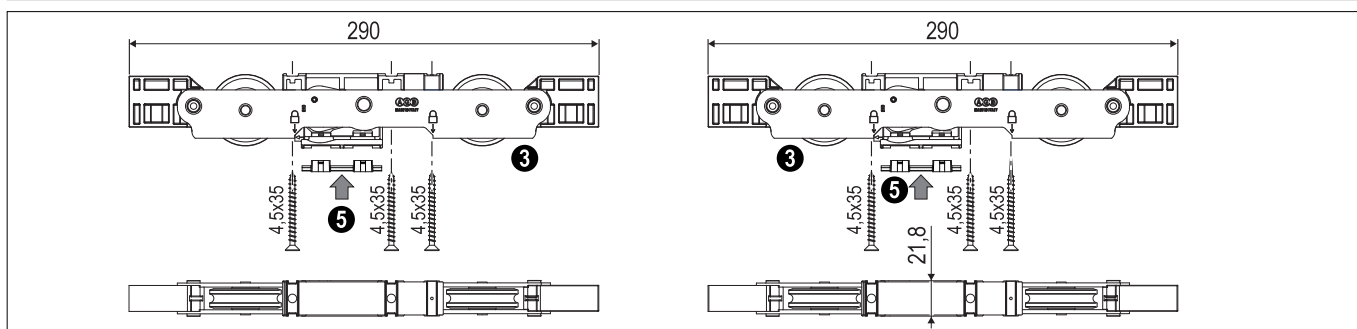
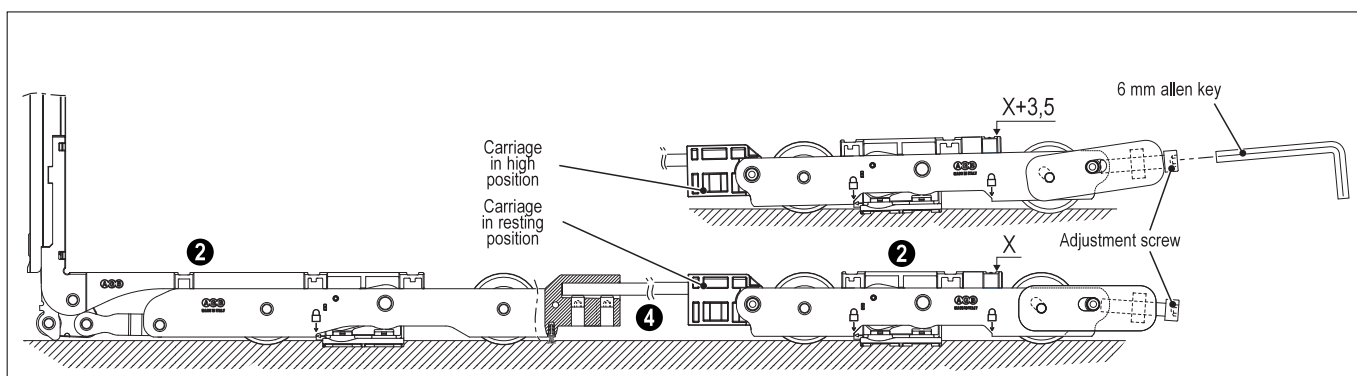
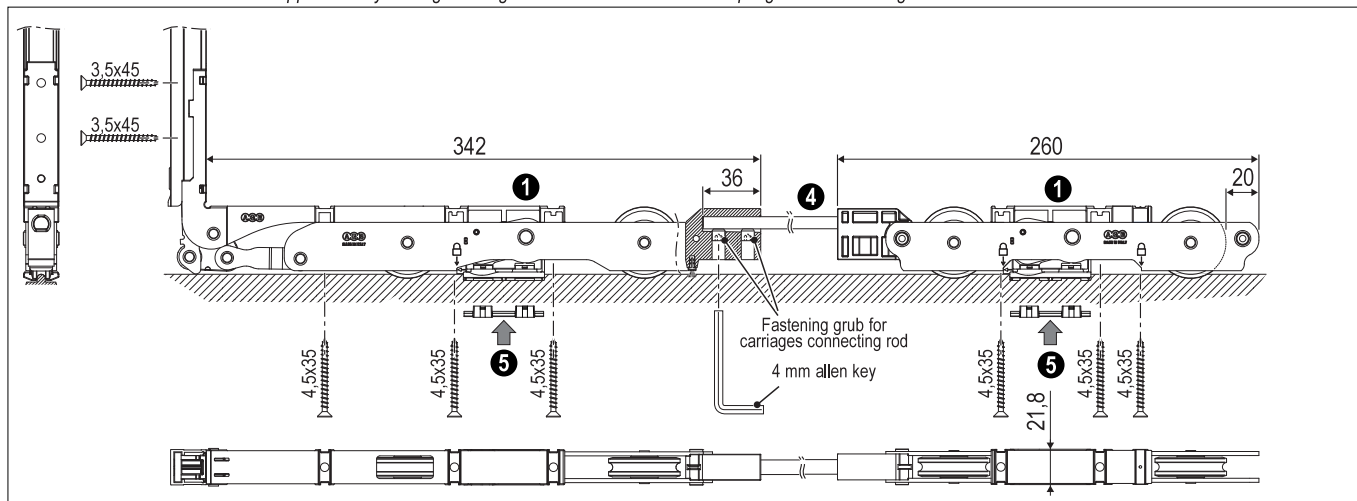
Article	Grey RAL 7038	Black
Caps kit for embedded upper guide 22x13 (Imago) - Low rail	G00223.01.86	G00223.01.93

330 kg carriages kit, 440 kg supplementary carriages kit, carriages connecting rod

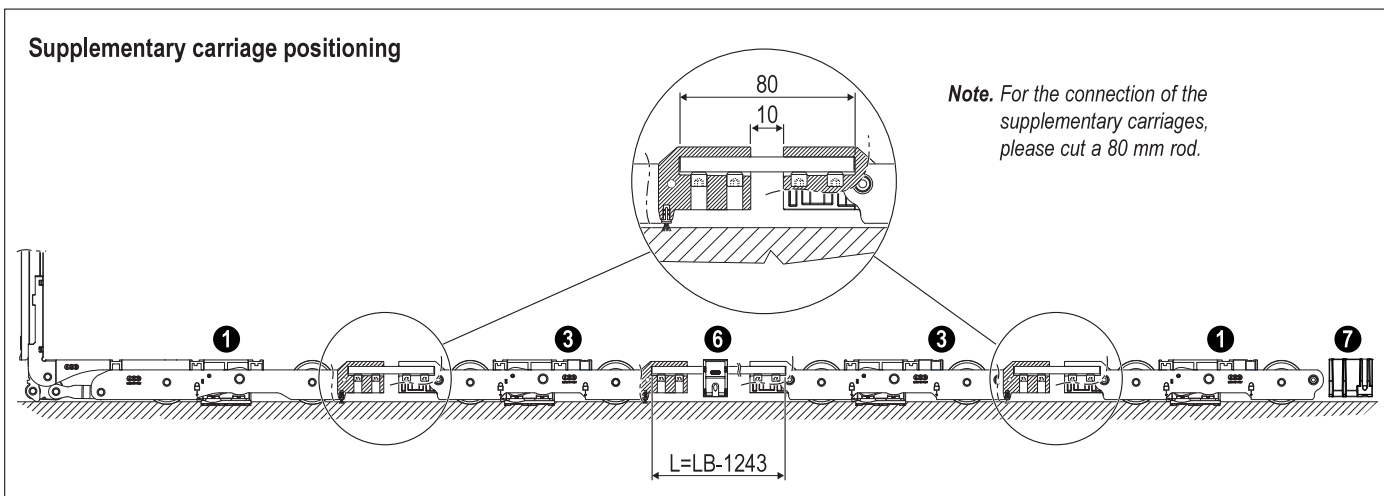
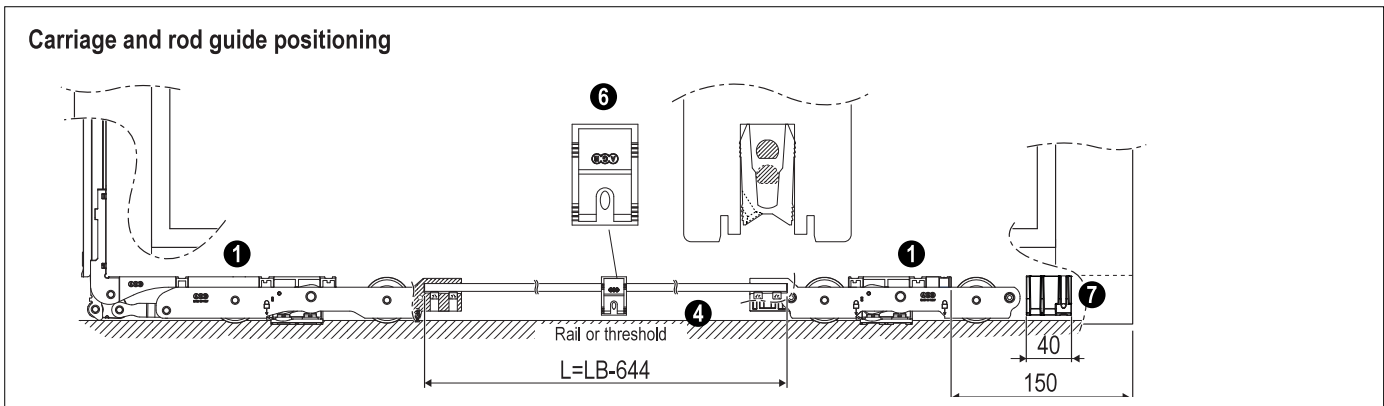
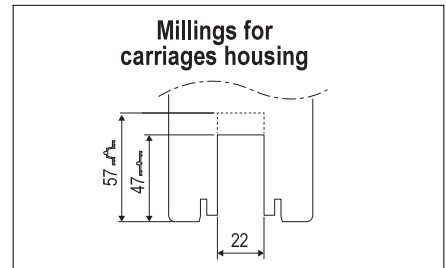
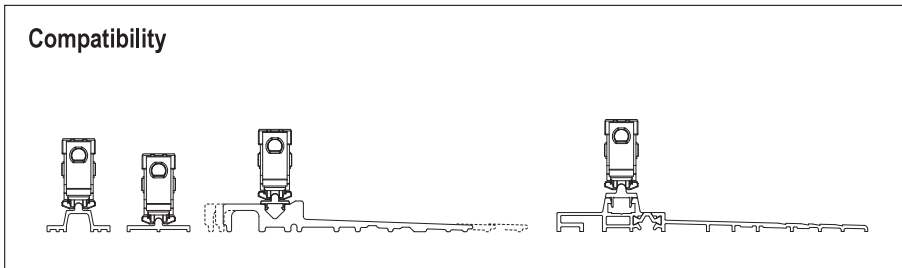
Article	Ref.	Description	Material	Use	Fastening
Carriages kit, 300 kg	1	Two carriages (front and rear, non-handed) with lift device and lever and rings. The connection between the two carriages is provided by the through cuttable rod. The hooking of the connecting rod is guaranteed by locking grubs with milled base to avoid possible loosening.	Steel	Sliding sashes of weight ≤ 330 Kg	Screws 4,5x35 mm
Carriages kit, 300 kg with adjustable rear carriage	2	Standard front carriage; rear carriage with +3,5 mm in height.			
Supplementary carriages kit	3	Two carriages with lift device. Each carriage has to be coupled to a carriage of the 330 kg kit (front and rear) through connecting rod and locking grubs.	Steel	Sliding sashes of weight ≥ 330 Kg and ≤ 440 kg	Screws 4,5x35 mm
Carriages connecting rod	4	It ensures the connection between a carriage and the other and transfers the movement of opening/closing.	Steel	Cuttable 1 piece	Grubs provided
Bumper / support	5	It allows to download the carriage weight from the sash to the snap-in rail; suitable for aluminium systems where the sash weight in closing position can't be downloaded to the gaskets.	Plastic material	1 for each carriage	Snap-in rail
Rod guide	6	Inserted into the carriage milling, it ensures the correct operation of connecting rod.	Plastic material	1 for each sliding sash	Screws 4x30 mm
Anti-derailed adapter	7	Dedicated zamak adapter that prevents the derailing movement of sliding sash carriages after forces which are orthogonal to the sliding axis (e.j. weather conditions).	Zamak	Install 2 devices on each central sash; install 1 block on each side sash	Screws 4x30 mm

Note. Level the glass in order to download the weight evenly in correspondence to the carriages.

Note. Please don't distribute the supplementary carriages along the sash but install them coupling the main carriages.



330 kg carriages kit, 440 kg supplementary carriages kit, carriages connecting rod



Application fields				
Carriages connecting rod	330 Kg		440 Kg (with supplementary carriages)	
	Min. SW	Max. SW	Min. SW	Max. SW
1000	645	1644	1245	2083
1400		2044		2483
1800		2444		2883
2700		3344		3783

Ref.	Description	Code	Length
1	Carriages kit, 330 kg	G04104.00.00	-
2	Carriages kit, 330 kg, with adjustable rear carriage	G04114.00.00	-
3	Supplementary carriages kit (440 kg)	G04108.00.00	-
4	Carriage connecting rod	G04601.00.01	1000
		G04601.00.02	1400
		G04601.00.03	1800
		G04601.00.04	2700

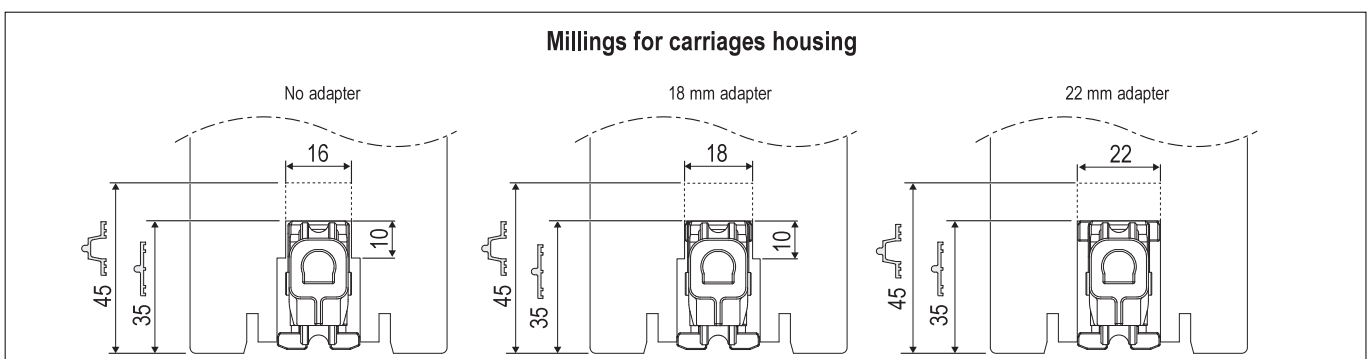
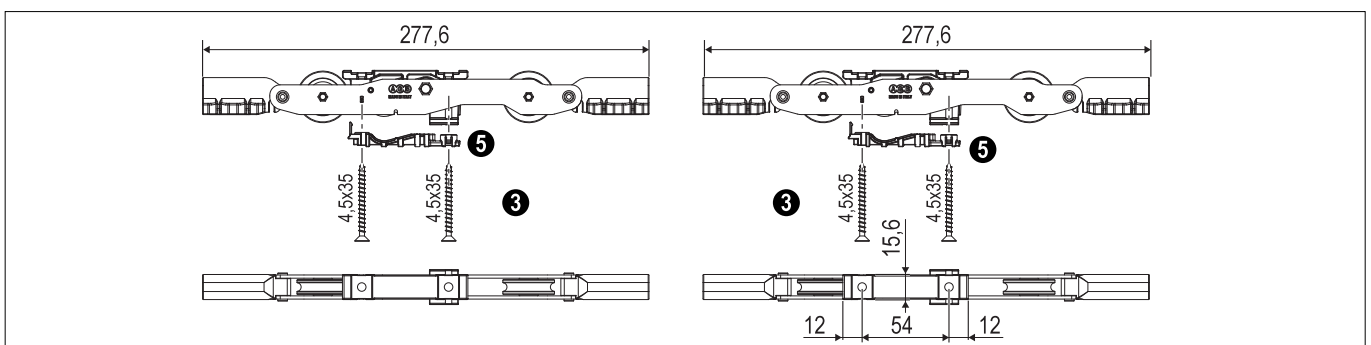
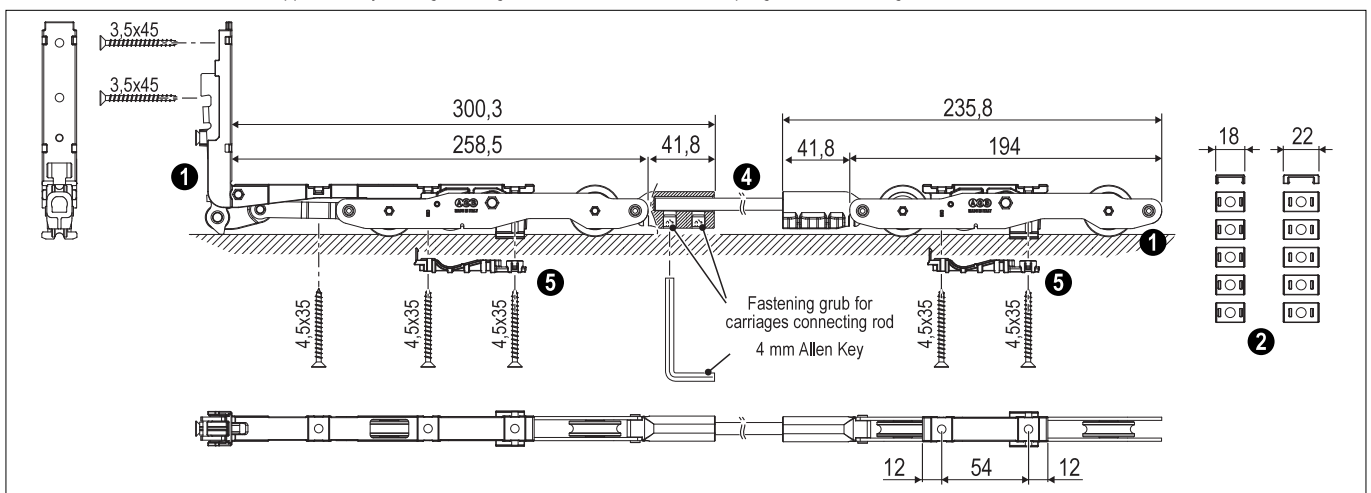
Ref.	Description	Code
5	Bumper - support	G01437.00.86
6	Rod guide	G05102.00.00
7	Anti-derailed device	G01611.02.00

250 kg XC S-Line carriages kit, 400 kg XC S-Line supplementary carriages kit, XC carriages connecting rod

Article	Ref.	Description	Material	Use	Fastening
Carriages kit, XC S-Line 250 Kg	①	Two carriages (front and rear, non-handed) with lift device and lever and rings. The connection between the two carriages is provided by the through cuttable rod. The hooking of the connecting rod is guaranteed by locking grubbs with milled base to avoid possible loosening.	Steel	Sash weight ≤ 250 Kg	Screws 4,5x35 mm
	②	The adapters allow the carriages assembly on 18 and 22 mm millings.	Plastic material	Use to install the carriages on 18 and 22 mm millings	Clip
Supplementary carriages kit XC S-Line 400 kg	③	Two carriages with lever lifting device and guides. Each carriage has to be coupled with one of the XC S-Line carriages kit (front and rear) by connecting rod and fastening grubbs.	Steel	Sash weight > 250 Kg and ≤ 400 kg	Screws 4,5x35 mm
Connecting rod	④	It ensures the connection between a carriage and the other and transfers the movement of opening/closing.	Steel	Cut 1 piece	Grubs provided
Stop / support	⑤	It allows to download the carriage weight from the sash to the snap-in rail; suitable for aluminium systems where the sash weight in closing position can't be downloaded to the gaskets.	Plastic material	1 for each carriage	Snap-in rail
Rod guide	⑥	Inserted into the carriage milling, it ensures the correct operation of connecting rod.	Plastic material	1 for each sliding sash. Do not use on 16 mm width milling.	Screws 4x30 mm
Anti-derailed adapter	⑦	Dedicated zamak device that prevents the carriages derailment of the sliding sash after orthogonal pushes on the sliding axis (for example weather agents).	Zamak	Install 2 blocks on each central sash; install 1 block on each side sash. Do not use on 16 mm width milling.	Screws 4x30 mm

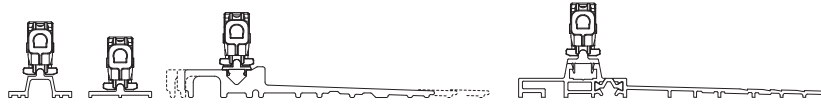
Note. Level the glass in order to download the weight evenly in correspondence to the carriages.

Note. Please don't distribute the supplementary carriages along the sash but install them coupling the main carriages.

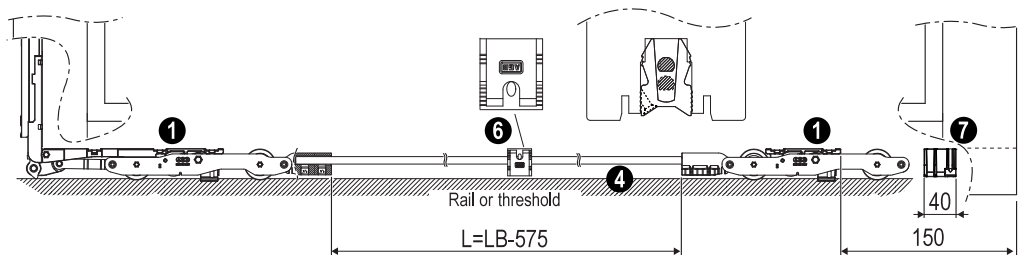


250 kg XC S-Line carriages kit, 400 kg XC S-Line supplementary carriages kit, XC carriages connecting rod

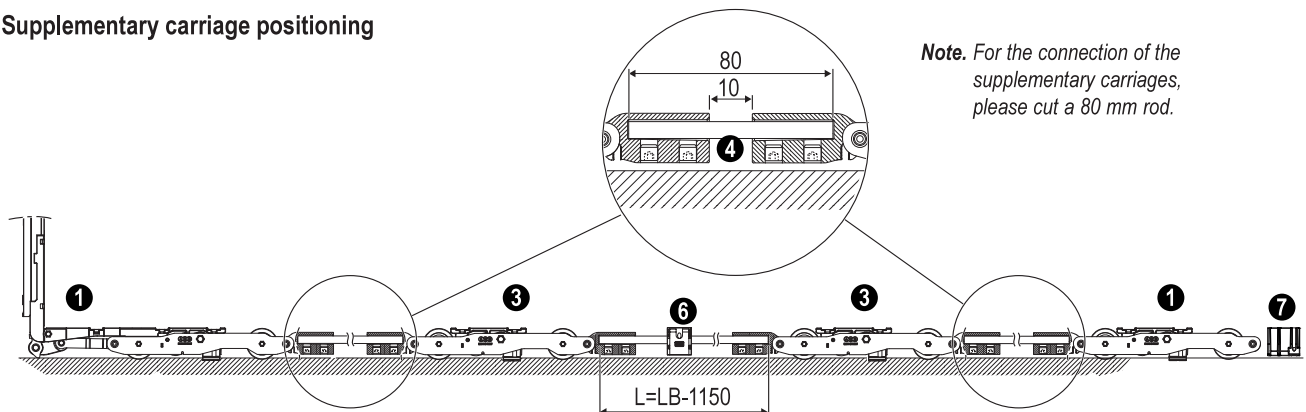
Compatibility



Carriage and rod guide positioning



Supplementary carriage positioning



Application fields

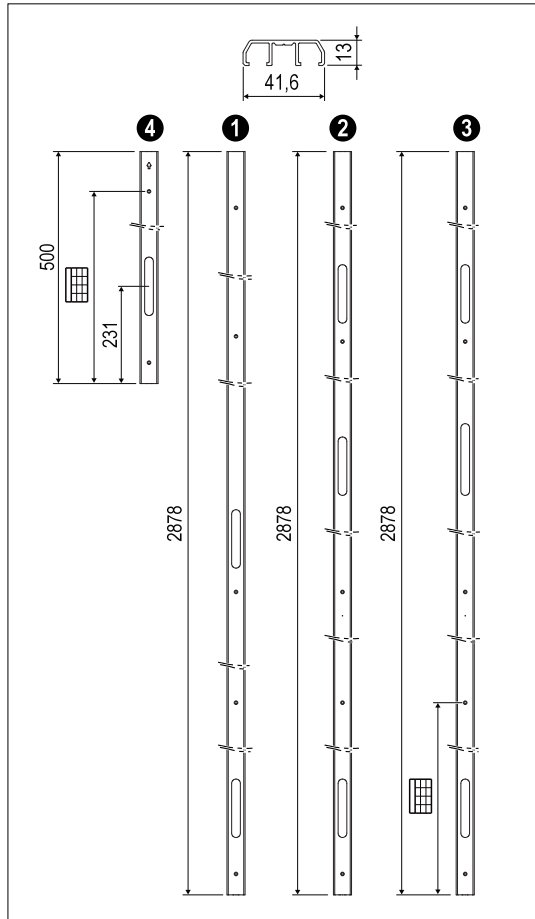
Length of connecting rod	250 Kg		400 Kg (with supplementary carriages)	
	Min. SW	Max. SW	Min. SW	Max. SW
1000	580	1575	1160	1990
1400		1975		2390
1800		2375		2790
2700		3275		3690

Ref.	Description	Code	Length
1	250 kg carriages kit	G04109.00.00	-
3	400 kg supplementary carriages kit	G04110.00.00	-
4	Carriage connecting rod	G04601.00.01	1000
		G04601.00.02	1400
		G04601.00.03	1800
		G04601.00.04	2700

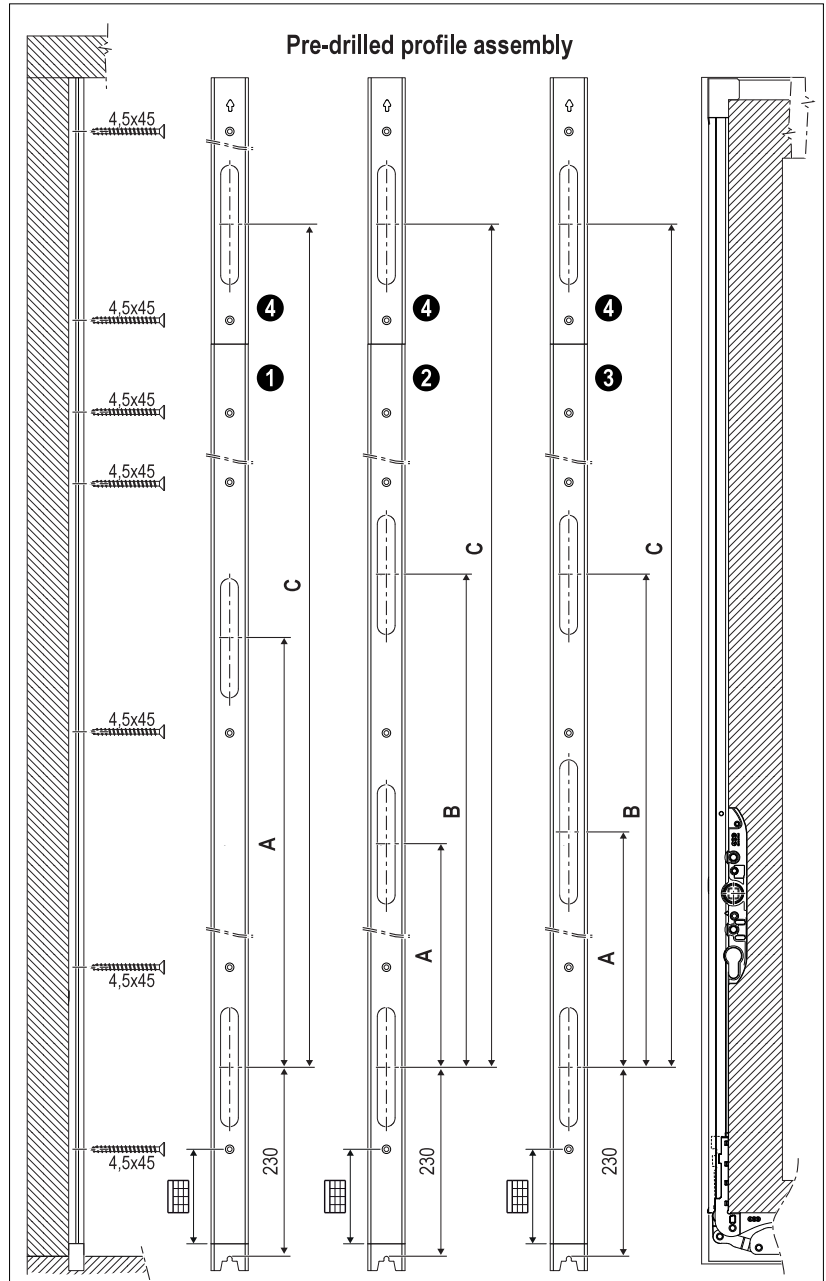
Ref.	Description	Code	Length
5	Bumper - support	G02142.00.XX	-
6	Rod guide	G05104.00.00	-
7	Anti-derailed device	G01611.01.00	-

Locking profiles for lateral point and extension

Article	Description	Material	Use	Fastening
1	Pre-drilled locking profile (2 suitable seats)	Aluminium	On lateral point of lift&slide systems, coupled to the lock	Screws 4,5x45 mm
2	Pre-drilled locking profile (3 suitable seats) Note. Not suitable for striker with signal system.			
3	Pre-drilled locking profile (3 suitable seats, the one in the middle for striker with signal system) Note. The central housing is suitable for striker with signal system.			
4	Locking profile extension Installed above the locking profile, it allows the extension of the application field and the addition of a locking point.			



	GR	Locking profile height	A	B	C (min - max)
1	3	2878	1354	-	1789,5÷2137,5
	4	2878	1504	-	1939,5÷2387,5
	5	2878	1904	-	2339,5÷2737,5
2	3	2878	970	1354	1789,5÷2137,5
	4	2878	970	1504	1939,5÷2387,5
	5	2878	970	1904	2339,5÷2737,5
3	3	2878	1042,6	1354	1789,5÷2137,5
	4	2878	1042,6	1504	1939,5÷2387,5
	5	2878	1042,6	1904	2339,5÷2737,5

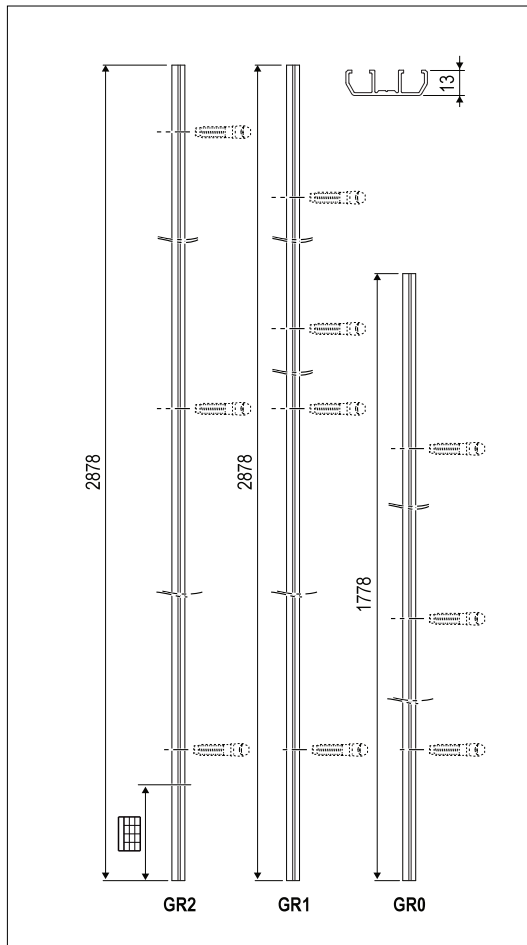


Article	GR	Article code, in Silver	Article code, in Electrocolour	Length	SH	Suitable seats for striker
1	3	G01359.03.01	G01359.03.02	2878	1770-2900	2
	4	G01359.04.01	G01359.04.02			
	5	G01359.05.01	G01359.05.02			
2	3	G01359.13.01	G01359.13.02	2878	1770-2900	3
	4	G01359.14.01	G01359.14.02			
	5	G01359.15.01	G01359.15.02			
3	3	G01359.23.01	G01359.23.02	2878	1770-2900	2+1
	4	G01359.24.01	G01359.24.02			
	5	G01359.25.01	G01359.25.02			
4	-	G01360.01.01	G01360.01.02	500	2900+500	1

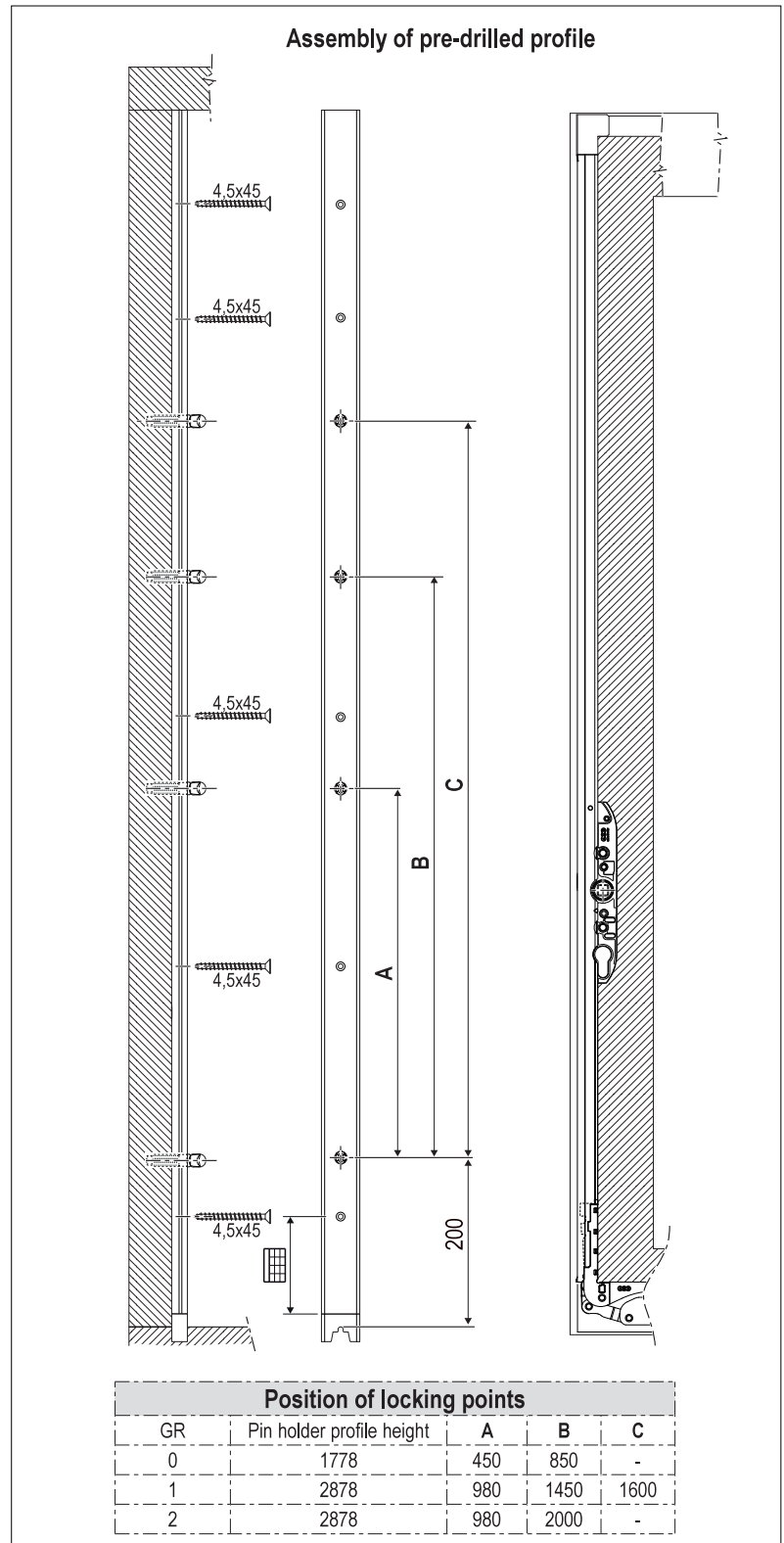
	GR	1°	2°	3°	4°	5°
1	3	48	748	1448	2148	2718
2	4	48	748	1448	2148	2718
3	5	48	748	1448	2018	2718
4	-	128	338	-	-	-

Pin holder profile for lateral point

Article	Description	Material	Use	Fastening
Pre-drilled locking profile	Pin holder profile in anodised aluminium with suitable holes for pins housing. Caps for unused holes.	Aluminium	Lateral point of Lift&Slide systems coupled to the lock.	4,5x45 mm screws



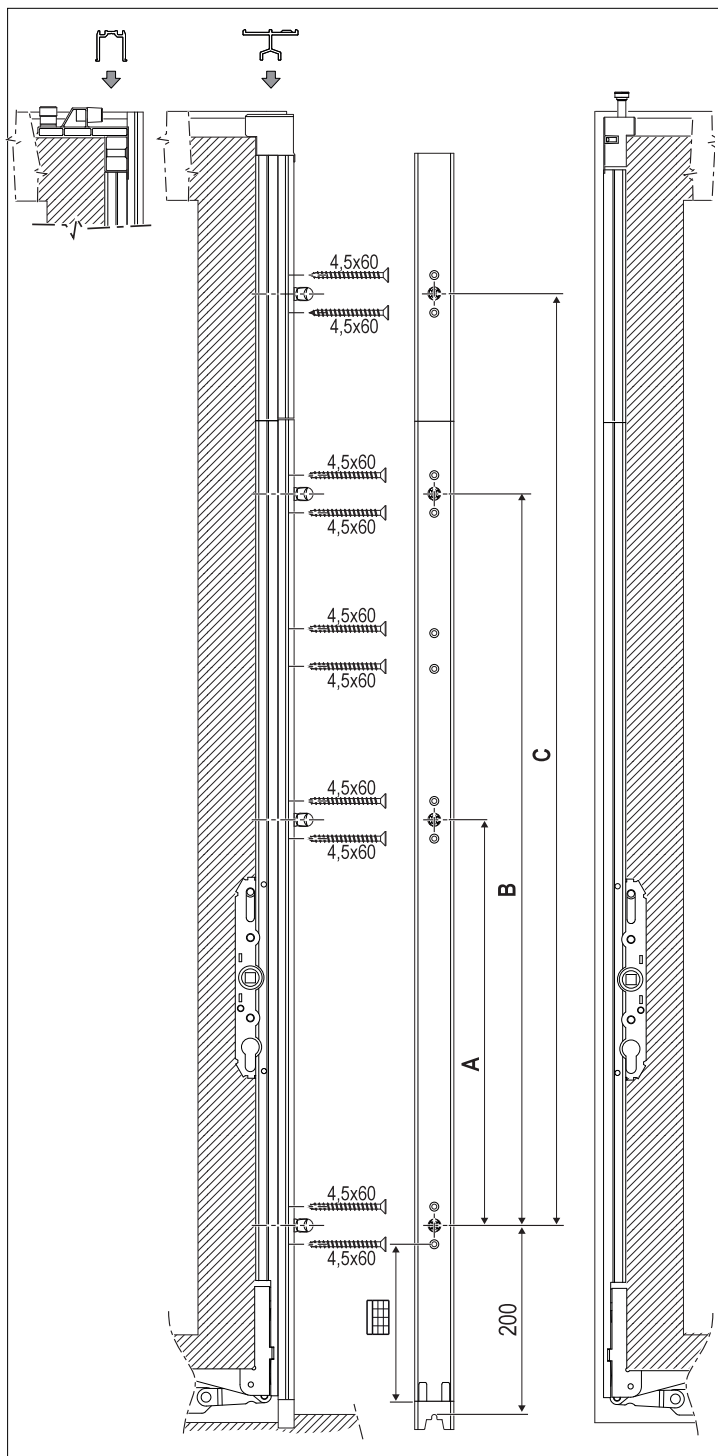
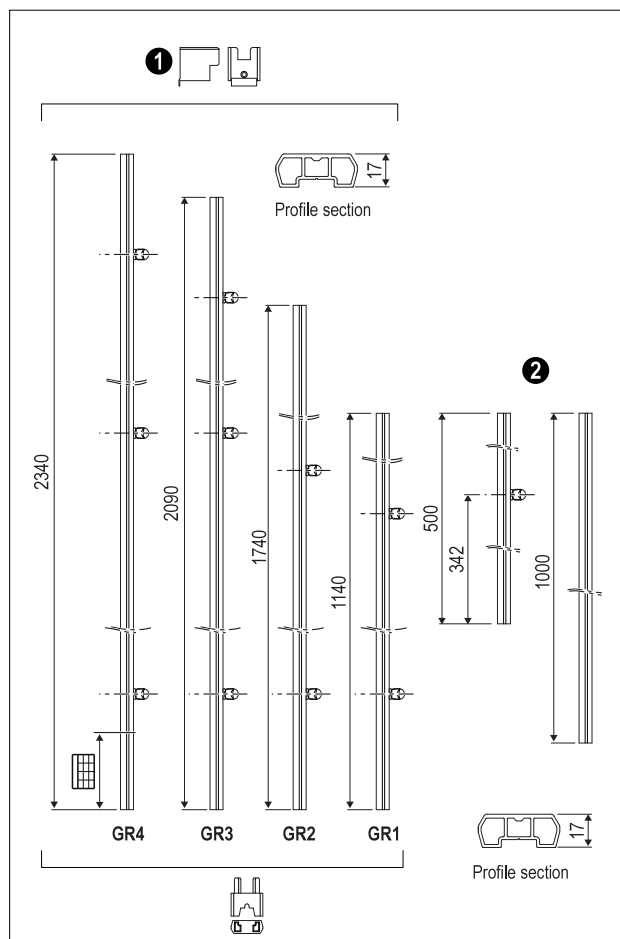
Screw holes position					
GR	1°	2°	3°	4°	5°
0	48	748	1448		
1	48	748	1448	2148	2718
2	160	730	1430	2130	2830



Article	GR	Article code, in Silver	Article code, in Electrocolour	Length	SH	
Pre-drilled locking profile	0	For lock GR1 and GR2	G01341.00.01	G01341.00.02	1778	800-1800
	1	For lock GR3 and GR4	G01341.01.01	G01341.01.02	2878	1770-2900
	2	For lock GR5	G01341.02.01	G01341.02.02	2878	1770-2900

Locking profile pins for coaxial sashes and dedicated extensions

Article	Description	Material	Use	Fastening
Locking profile kit for coaxial sashes with end caps 1	Locking profile with pre-assembled anti-burglar pins. Thanks to specific end caps (lower and upper), it ensures the perfect insulation in critic areas of systems with coaxial sashes (low side and high side of central point). It replaces the wooden clamp with a great time saving for window workings.	Profile: aluminium Pins: steel	On systems with coaxial sashes.	Screws 4,5x60 mm. The position of profile screw holes coincide exactly with lock screw holes which are free.
Locking profile extension for coaxial sashes 2	Extension for locking profile available with or without pin.			



Screw holes positioning								
GR	1°	2°	3°	4°	5°	6°	7°	8°
1	132	232	294	512	582	682		
2	132	232	294	512	982	1082		
3	132	232	832	894	1112	1212	1582	1682
4	132	232	832	894	1112	1212	1732	1832

Position of locking points				
GR	Pin holder profile height	A	B	C *
1	1140	450	-	783,5-1283,5
2	1740	850	-	1183,5-1883,5
3	2090	980	1450	1783,5-2233,5
4	2340	980	1600	1933,5-2483,5

* Achievable only with 500 mm extension

Article	GR	Article code, in Silver	Article code, in Electrocolour	SRH	Handle height	Lock height
1 Locking profile kit for coaxial sashes with end caps	1	G01757.01.01	G01757.01.02	810-1200	400/410	1124
	2	G01757.02.01	G01757.02.02	1170-1800	400/410	1724
	3	G01757.03.01	G01757.03.02	1770-2150	1000/1010	2074
	4	G01757.04.01	G01757.04.02	1920-2400	1000/1010	2324

Ref.	Article	Article code, in Silver	Article code, in Electrocolour	Length
2	Extension with pin	G01757.97.01	G01757.97.02	500
	Extension without pin	G01757.00.01	G01757.00.02	1000

Gas spring kit and sensors

Article	Ref.	Description	Use	Fastening
Gas spring kit	❶	Gas cylinder that helps the sash opening movement (lifting) and reduce the speed of the handle.	Apply in suitable holes into the movable rod and in the aluminium profile of the lock. Please use with sashes of weight ≥ 200 Kg.	Screws are provided. Note. Please assemble the gas spring with lock in opening position and lying spring.
Sensors	❷	Magnet and sensor for the control of opening.	Apply the magnet in the suitable hole of the movable rod and the sensor in the hole to realise the pin holder profile.	To joint
Magnet	❸	Magnet with clip for lock.	Apply the magnet in the dedicated hole of the movable rod.	With clip

Gas spring installation

Fasten the carriages and the connecting rod to the carriages.
Unlock the carriages and put them in opening position.
Assemble the lock (with gas spring) in opening position.

❶

❷

❸

Place the kit in specific holes under the handle

Identification of dedicated holes

Assembly order

❶

Installation of reed sensors

Find the point where the sensor and the magnet have to be installed

Please make a hole $\varnothing 12$ mm (aluminium pin holder profile)

Please make a hole $\varnothing 12$ mm (wooden pin holder profile)

❷

Reed sensor

❷

Reed sensor

❸

Magnet holder with clip

❸

Magnet holder with clip

1330

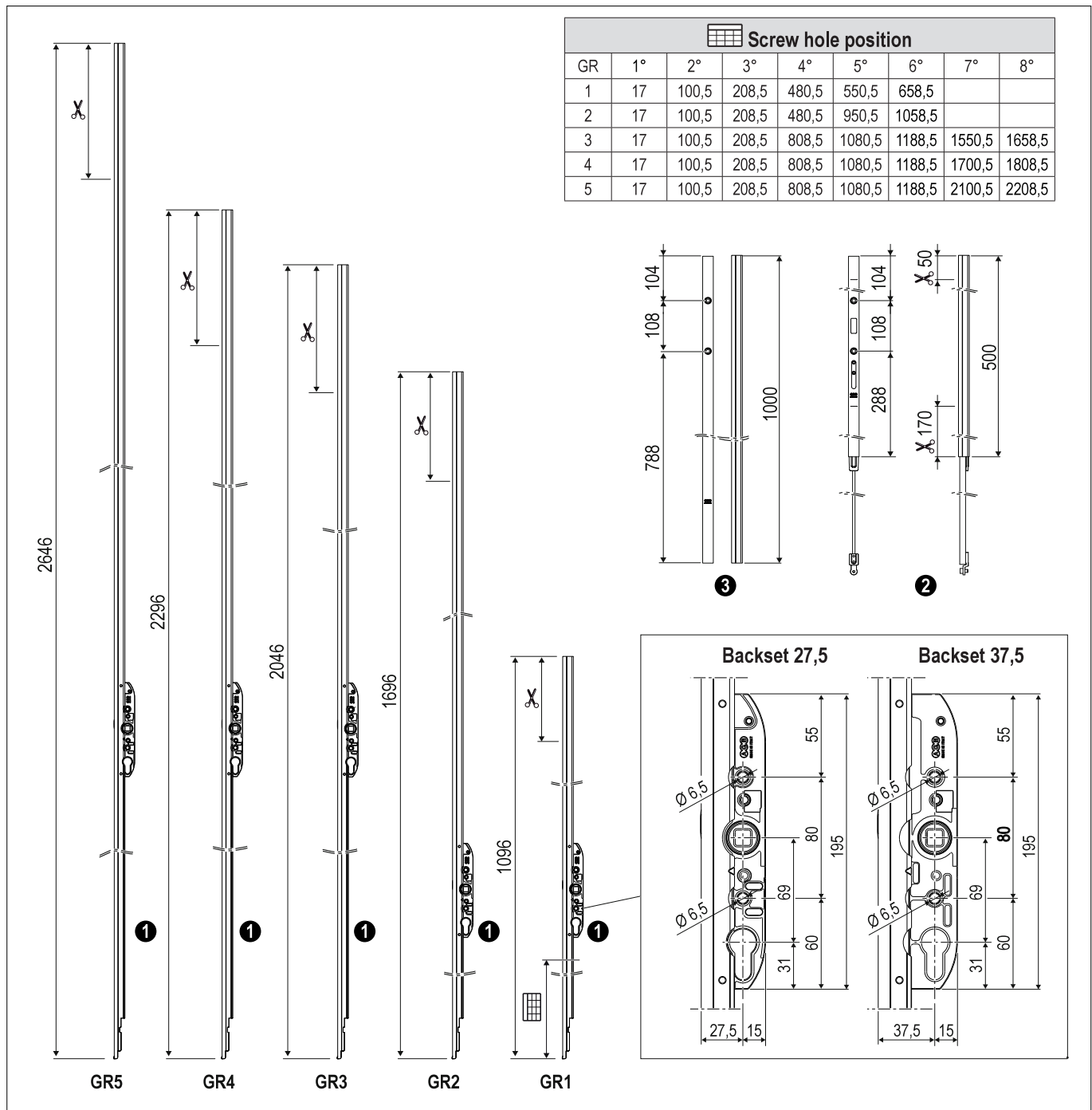
Ref.	Article	Article code
❶	Gas spring kit	GMG702.04.00

Ref.	Article	Article code	Colour
❷	Sensor + cap	G05006.00.86	Grey
		G05006.00.93	Black

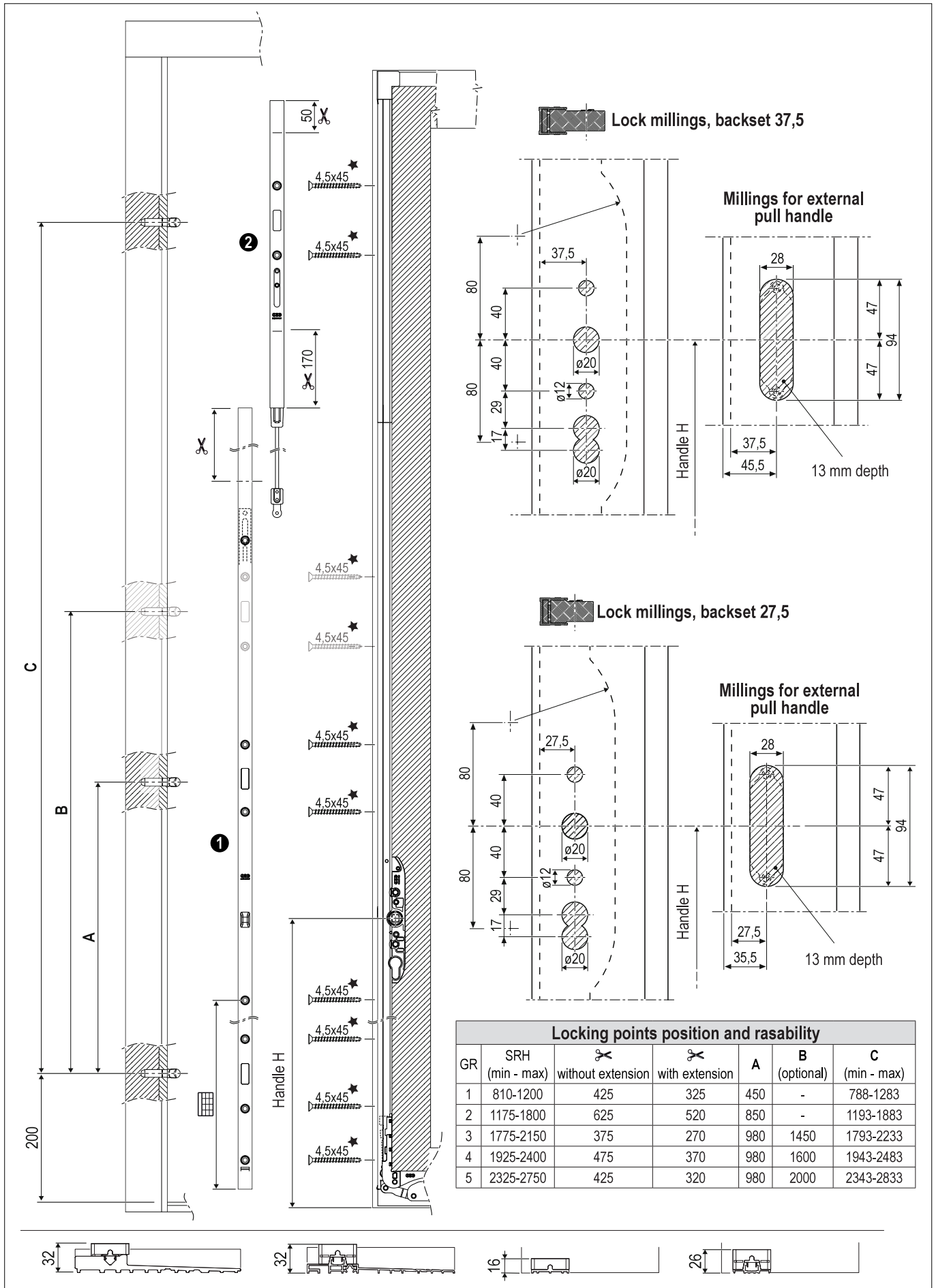
Ref.	Article	Article code
❸	Magnet on clip	G05003.00.00

440 Kg locks and specific extensions

Article	Ref.	Description	Material	Use	Fastening
Locks, 440 Kg	1	10 mm handle hub with radius corner, hole for European cylinder housing.	Forend: aluminium Rod: steel	Choose the lock according to the jamb width and the sliding sash height. Backsets available: 27,5 and 37,5 mm in 5 different heights (see the table).	4,5x45 mm screws ★ For Imago+ use 4,5x40 mm
Lock extension	2	-	Forend: aluminium Rod: steel	It gives the possibility to add a locking point.	4,5x45 mm screws ★ For Imago+ use 4,5x40 mm
Covering profile	3	-	Aluminium	It covers the milling.	4,5x45 mm screws ★ For Imago+ use 4,5x40 mm



440 Kg locks and specific extensions



440 Kg locks and specific extensions

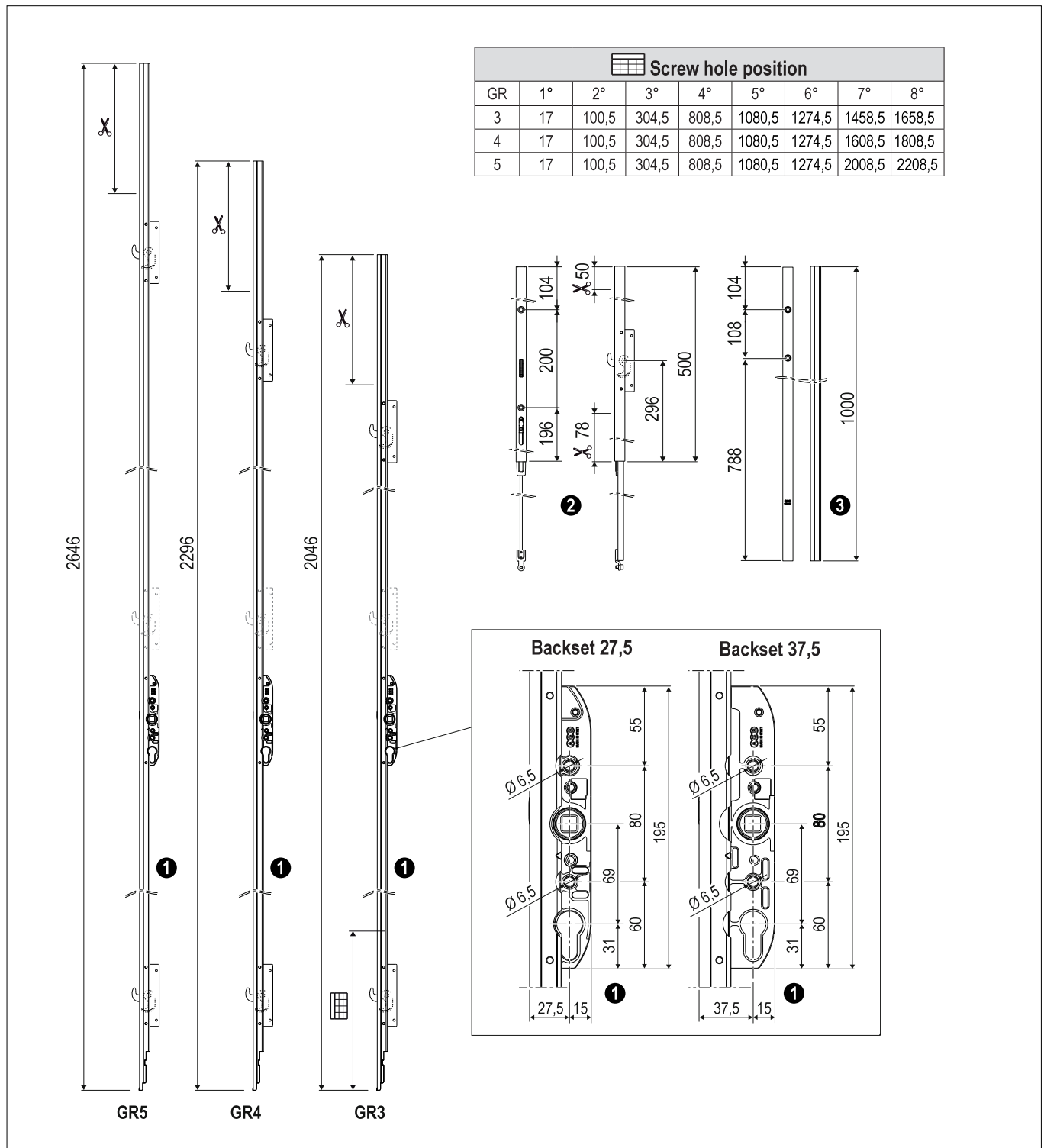
Ref.	Article	GR	Article code, in Silver	Article code, in Electrocolour	SRH ◊	Handle height	Lock height
❶	Lock 440 Kg Backset 27,5	1	G04027.01.01	G04027.01.02	810-1200	400/410	1096
		2	G04027.02.01	G04027.02.02	1175-1800	400/410	1696
		3	G04027.03.01	G04027.03.02	1775-2150	1000/1010	2046
		4	G04027.04.01	G04027.04.02	1925-2400	1000/1010	2296
		5	G04027.05.01	G04027.05.02	2325-2750	1000/1010	2646
	Lock 440 Kg Backset 37,5	1	G04037.01.01	G04037.01.02	810-1200	400/410	1096
		2	G04037.02.01	G04037.02.02	1175-1800	400/410	1696
		3	G04037.03.01	G04037.03.02	1775-2150	1000/1010	2046
		4	G04037.04.01	G04037.04.02	1925-2400	1000/1010	2296
		5	G04037.05.01	G04037.05.02	2325-2750	1000/1010	2646

◊ With upper guide 22x22 cod. G01002.XX.XX, the SRH application field will be reduced up to 10 mm.

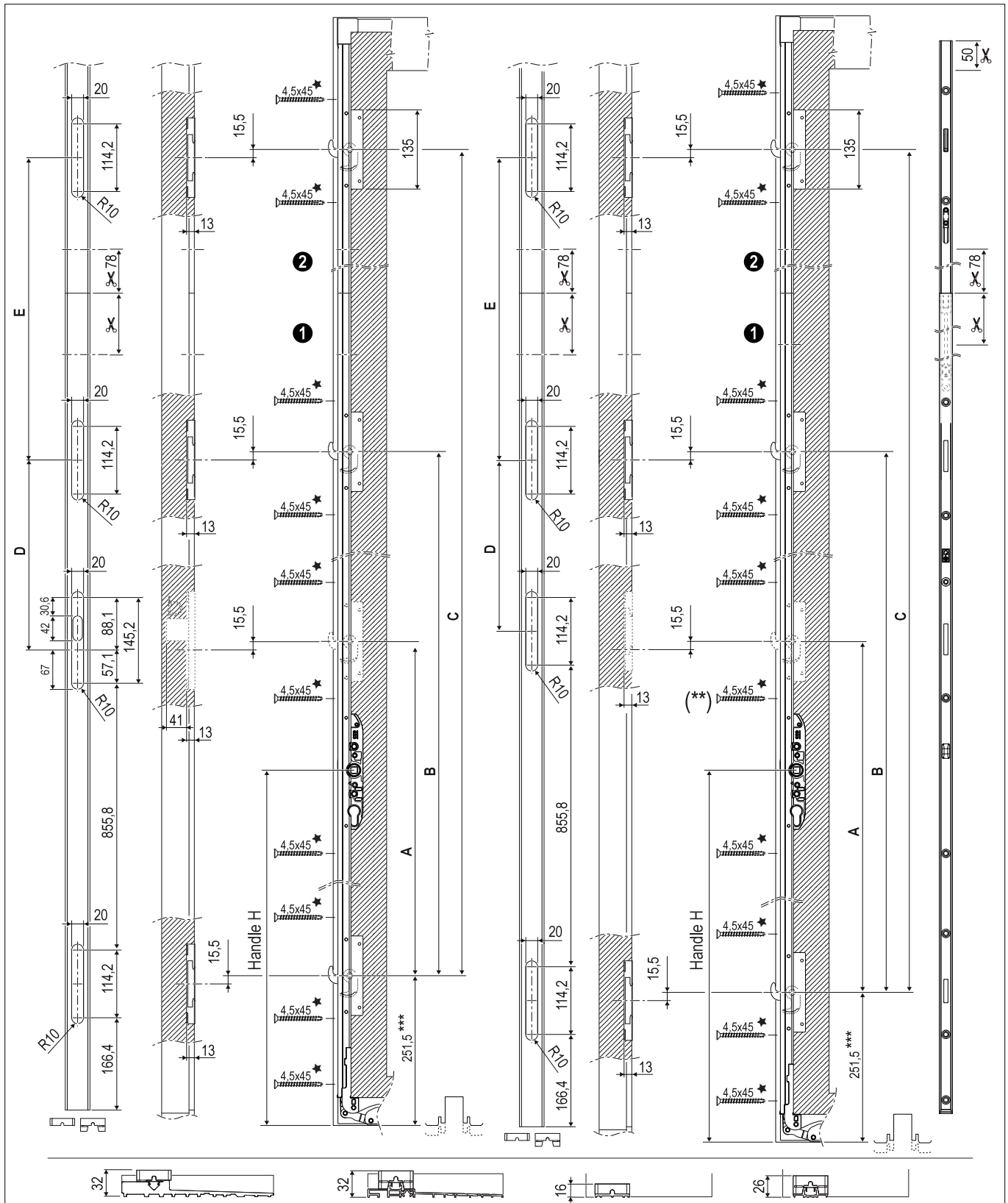
Ref.	Article	Article code, in Silver	Article code, in Electrocolour	Length
❷	Extension with locking point	G04401.01.01	G04401.01.02	500
❸	Covering profile	G04401.02.01	G04401.02.02	1000

440 Kg hook locks and specific extensions

Article	Ref.	Description	Material	Use	Fastening
Locks, 440 Kg	1	10 mm handle hub with radius corner, hole for European cylinder housing.	Forend: aluminium Rod: steel Hooks: steel	Choose the lock according to the jamb width and the sliding sash height. Backsets available: 27,5 and 37,5 mm in 3 different heights (see the table).	4,5x45 mm screws ★ For Imago+ use 4,5x40 mm
Lock extension	2	-	Forend: aluminium Rod: steel Hooks: steel	It gives the possibility to add a locking point.	4,5x45 mm screws ★ For Imago+ use 4,5x40 mm
Covering profile	3	-	Aluminium	It covers the milling.	4,5x45 mm screws ★ For Imago+ use 4,5x40 mm



440 Kg hook locks and specific extensions



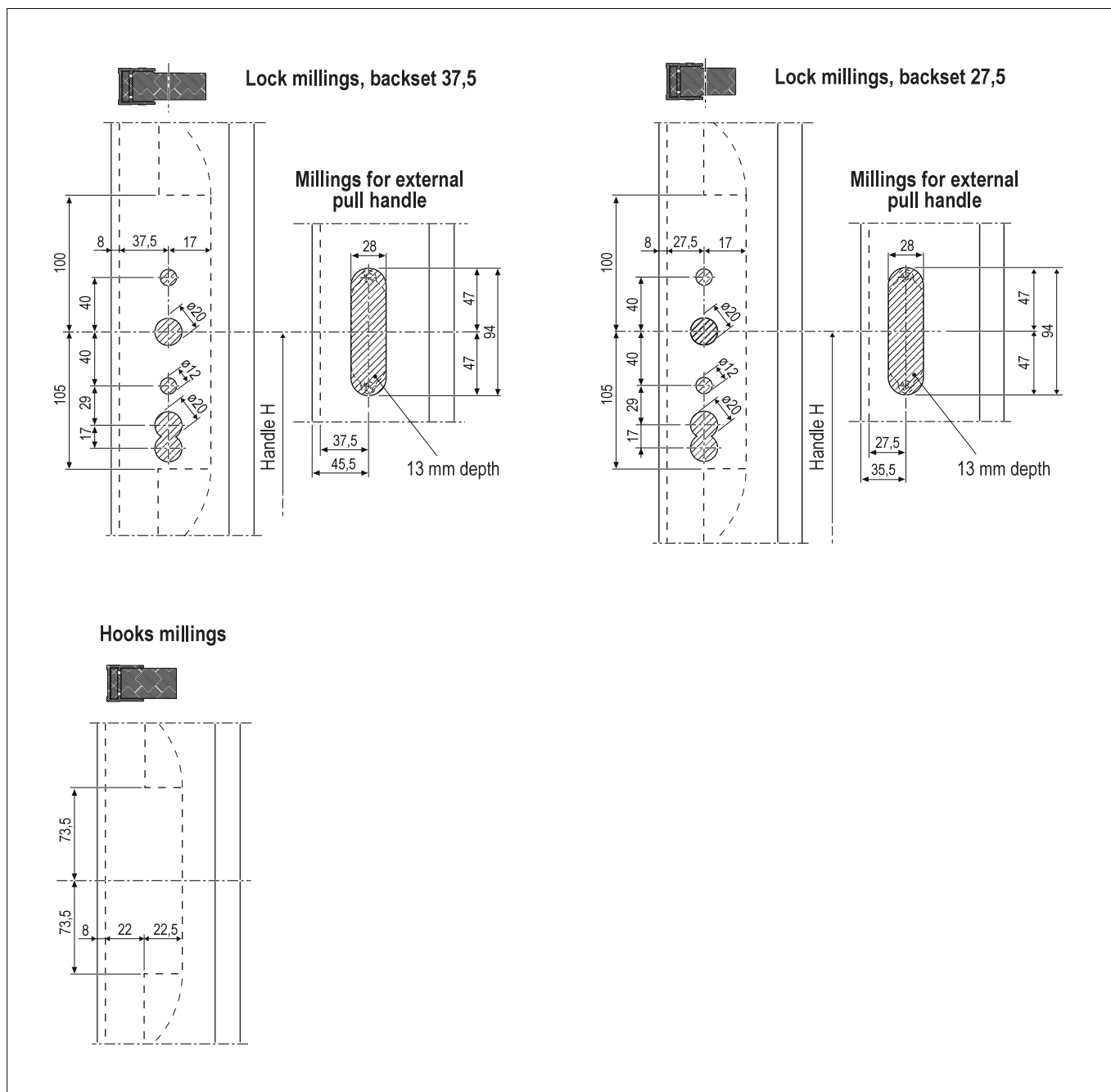
Locking points position and rasability									
	GR	SRH (min - max)	✂		A (optional)	B	C (min - max)	D	E*
			without extension	with extension					
Without signal system	3	1775-2150	375	270	970	1354	1789,5+2137,5	384	C - B
	4	1925-2400	475	370	970	1504	1939,5+2387,5	534	C - B
	5	2325-2750	425	320	970	1904	2339,5+2737,5	934	C - B
With signal system	3	1775-2150	375	270	970	1354	1789,5+2137,5	384	C - B
	4	1925-2400	475	370	970	1504	1939,5+2387,5	534	C - B
	5	2325-2750	425	320	970	1904	2339,5+2737,5	934	C - B

* For rasability check instructions Z90322.14.81

** In case of optional hook use, pre-drill for the screw.

*** In case of a high rail use, the distance is 10 mm higher.

440 Kg hook locks and specific extensions



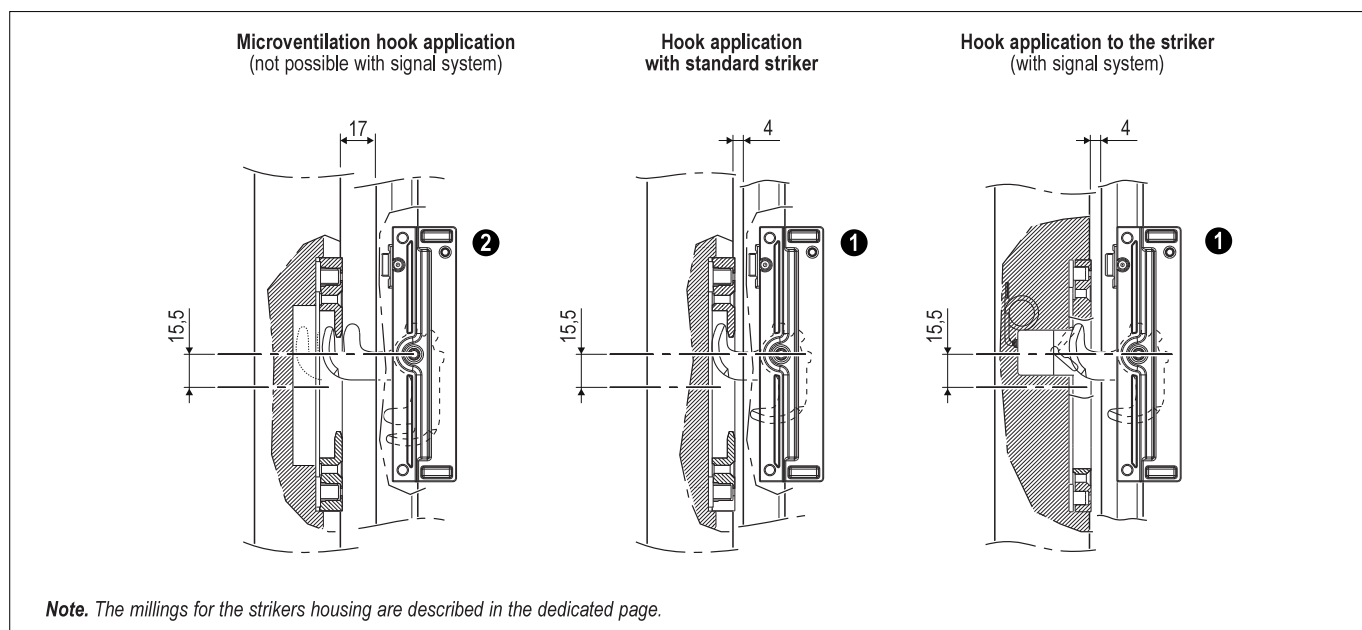
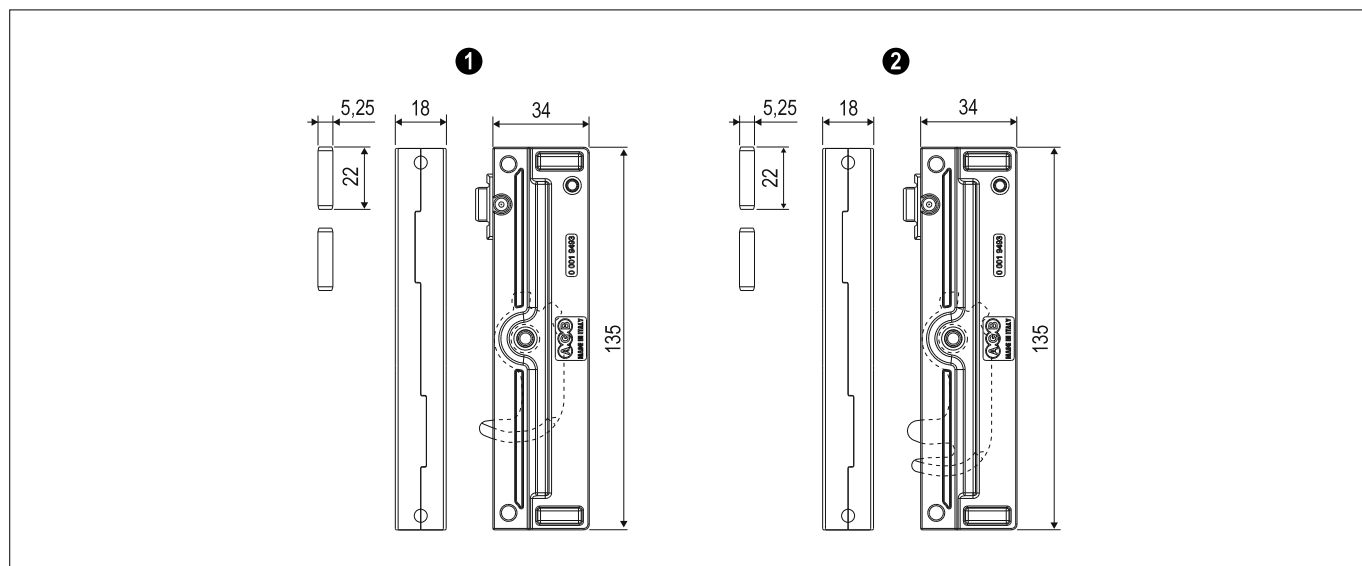
Ref.	Article	GR	Article code, in Silver	Article code, in Electrocolour	SRH \diamond	Handle height	Lock height
1	Lock 440 Kg Backset 27,5	3	G03927.03.01	G03927.03.02	1775-2150	1000/1010	2046
		4	G03927.04.01	G03927.04.02	1925-2400	1000/1010	2296
		5	G03927.05.01	G03927.05.02	2325-2750	1000/1010	2646
	Lock 440 Kg Backset 37,5	3	G03937.03.01	G03937.03.02	1775-2150	1000/1010	2046
		4	G03937.04.01	G03937.04.02	1925-2400	1000/1010	2296
		5	G03937.05.01	G03937.05.02	2325-2750	1000/1010	2646

\diamond With upper guide 22x22 cod. G01002.XX.XX, the SRH application field will be reduced up to 10 mm.

Ref.	Article	Article code, in Silver	Article code, in Electrocolour	Length
2	Extension with locking point	G04600.01.01	G04600.01.02	500
3	Covering profile	G04401.02.01	G04401.02.02	1000

Hooks

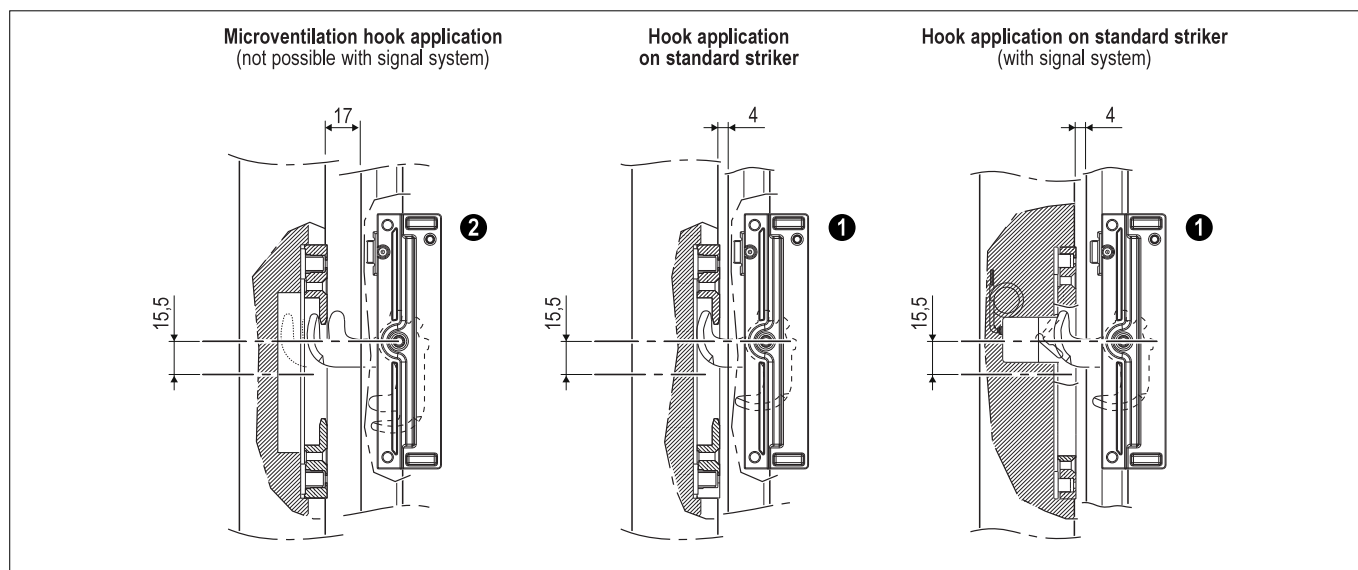
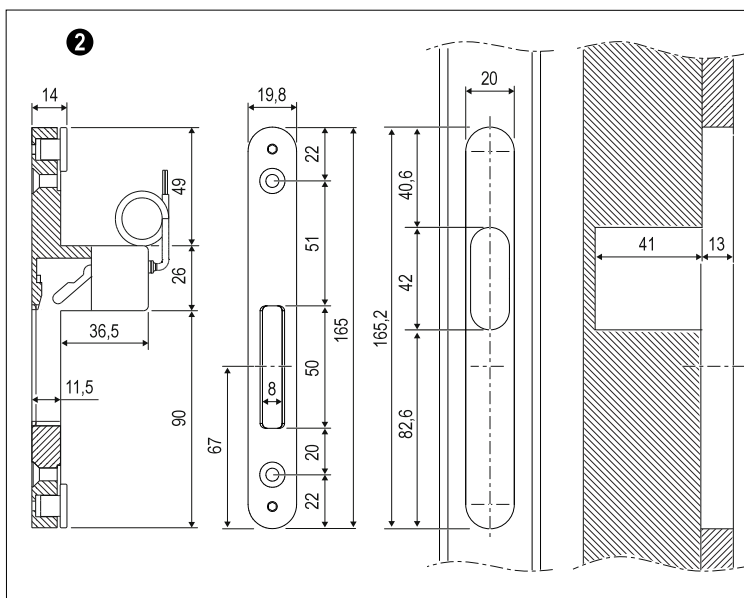
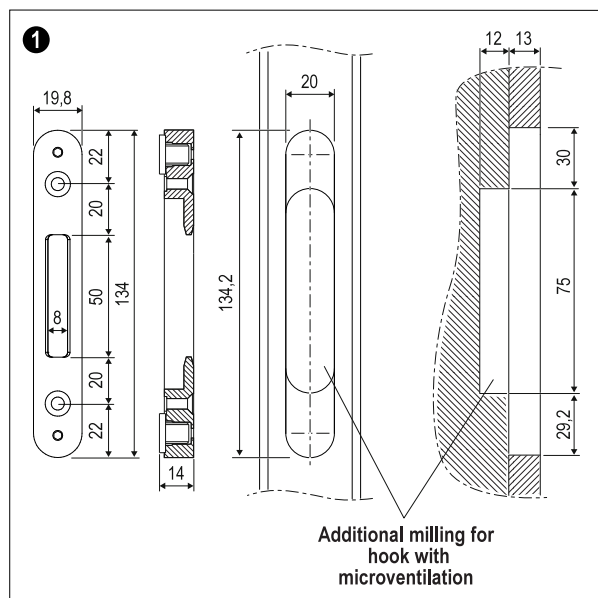
Article	Ref.	Description	Material	Use	Fastening
Additional hook	1	Element with steel hook that can be placed to the lock in the defined position.	Steel and zamak	To add a locking point to the lock	Using the elastic plug supplied, on suitable holes to the lock
Additional hook with microventilation position	2	Element with steel microventilation hook that can be placed to the lock in the defined position.		It ensures the microventilation allowing to pull close the sash to the frame and blocking it in that position	



Ref.	Description	Article
1	Additional hook	G05008.00.00
2	Additional hook with microventilation position	G05010.00.00

Strikers

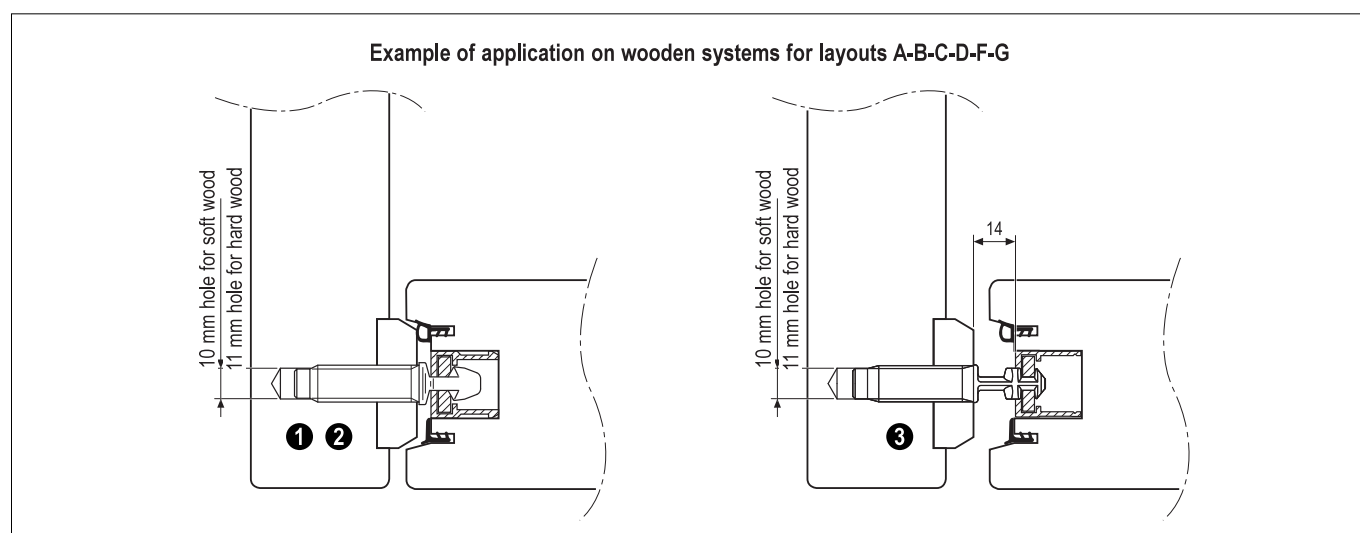
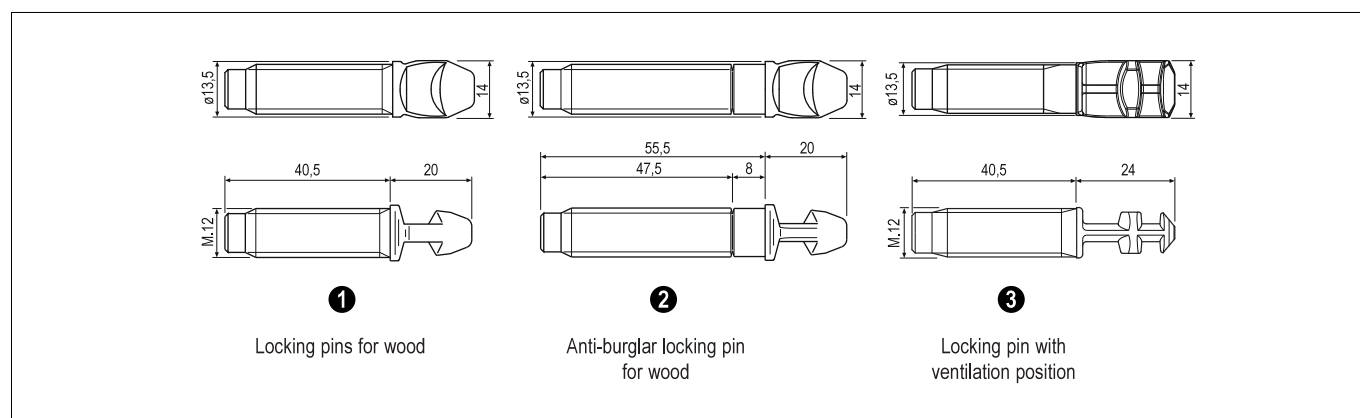
Article	Ref.	Description	Material	Use	Fastening
Striker for hook	❶	Adjustable locking point	Zamak	-	Screws 4,5x45 mm
Striker for hook with signal system	❷	Adjustable locking point with control device of hook position	Zamak	Connected to a control device, it allows to find the hook position. Note. It can't be applied to coaxial sashes profile. Note. It isn't compatible with microventilation hook.	Screws 4,5x45 mm



Ref.	Description	Article	
❶	Striker for hook	G06201.00.01	G06201.00.02
❷	Striker for hook with signal system	G06203.00.01	G06203.00.02

Locking pins

Article	Ref.	Description	Material	Use	Fastening
Locking pins	1	Steel threaded pins.	Steel	Fastened to the jamb of the frame, they block the sliding sashes. They are available for wood or PVC and aluminium.	<p>ø10 mm pre-hole for soft wood. ø11 mm pre-hole for hard wood.</p> <p>Fasten the pin using the suitable hook G00746.00.06.</p> <p>Attention: don't use the hammer as it will compromise the pin tightness.</p> <p>Note. To determine the placement of locking pin, please use the jig art. G00746.00.05 (see the chapter "Jigs").</p>
Anti-burglar locking pins	2	Steel threaded pins.			
Pin with ventilation position	3	Threaded pin with double locking position. It allows to close the sash to the frame with a split for ventilation.			



Ref.	Description	Article
1	Wood	G40728.00.03 *
2	Anti-burglar for wood	G40728.00.33 *
3	Ventilation for PVC / Aluminium-wood / Wood	G04902.01.00 *

* **Note.** Not included in the standard kit (to be ordered separately).

Uni-V central point kit

Description

Universal central point kit for all the AGB sliding systems.

Use

The use of Uni-V central point offers many advantages:

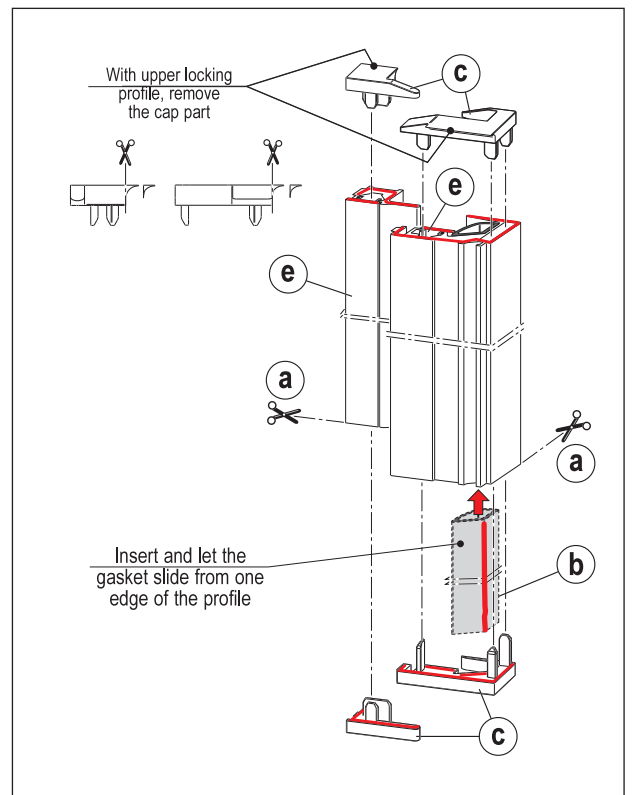
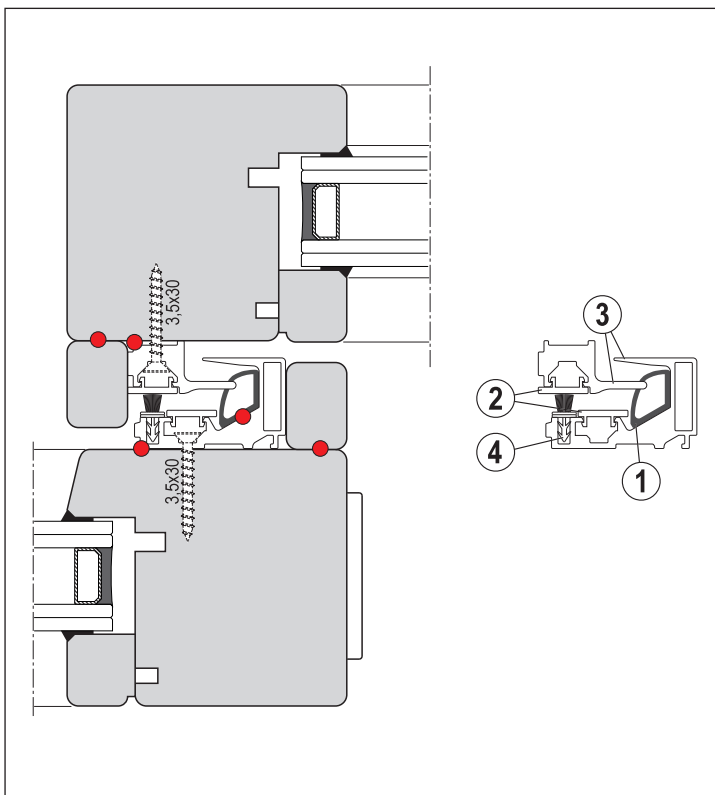
- it binds the sashes in closing position;
- keeps the production fast because it doesn't need gasket holder profiles;
- helps the system tightness thanks to the increased gasket;
- helps the sash sliding thanks to wide working tolerances which are able to compensate the natural deformation of wood.

Fastening

- a) Cut the components (follow the technical manual indications for each sliding system);
- b) insert the gasket;
- c) insert the terminal caps;
- d) fasten the profiles to sashes using screws $\varnothing 3,5 \times 35$;
- e) insert the screws covering profiles and the brush;
- f) silicone and cut following the indications of the specific technical manual for each sliding system.

Materials

- 1) EPDM gasket,
- 2) Covering profiles of screws in PVC,
- 3) Extruded aluminium profiles,
- 4) Polypropylene brush.



Ref.	Article	Article code	Finish	Length
1	Uni-V point profile	G02208.25.01	Silver	2500 mm
		G02208.25.93	Black	2500 mm
		G02208.31.01	Silver	3100 mm
		G02208.31.93	Black	3100 mm
		G02208.40.01	Silver	4000 mm
		G02208.40.93	Black	4000 mm

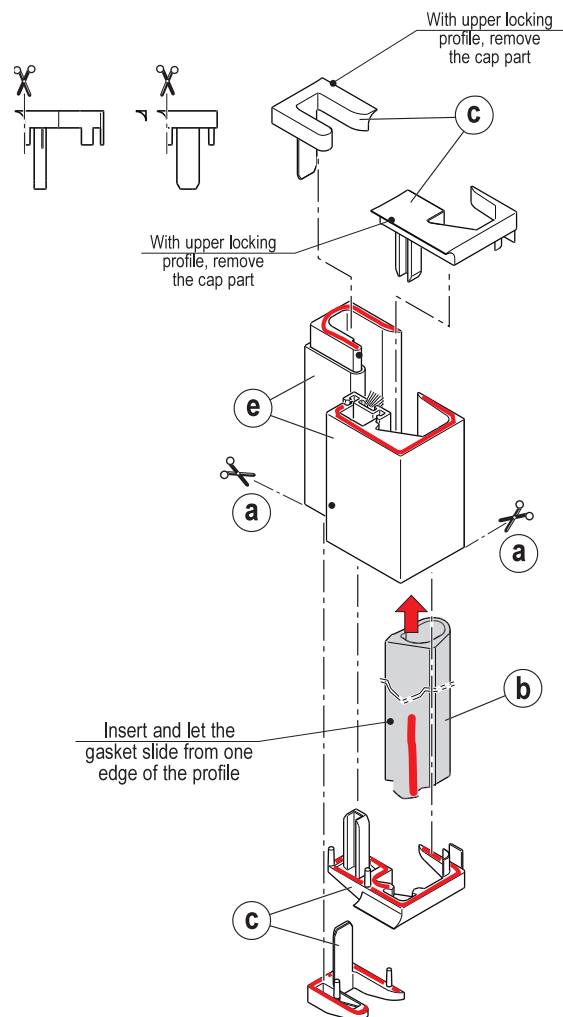
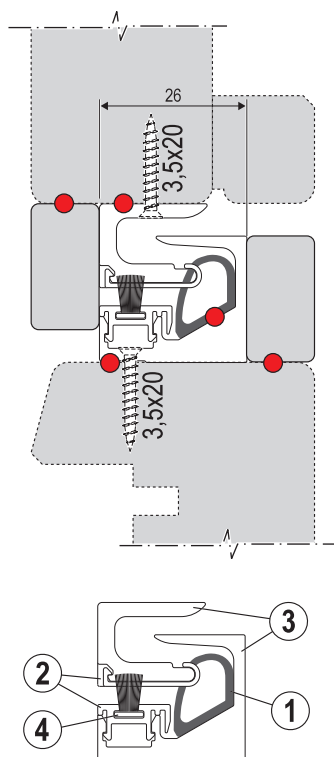
Ref.	Article	Article code	
2	Caps kit	G01610.DX.93	Right
		G01610.SX.93	Left

Central point kit Uni-V mini

Article	Ref.	Description	Use	Fastening
Uni-V Mini profile	1	Standard central point designed for the application in all the AGB lift&slide systems.	The use of Uni-V Mini central point has many advantages: - it binds the sashes in closing position; - it helps the lift&slide production because it does not require gasket profiles for rebate - it helps the system tightness thanks to the increased gasket - it helps the sashes sliding thanks to great working tolerances which are able to compensate the natural deformations of wood.	a) cut the components (follow the indications of the technical manual according to the lift&slide type to be designed), b) insert the gasket, c) insert the terminal caps, d) fasten the profiles to sashes using screws $\varnothing 3,5 \times 35$, e) insert the covering profiles of screws and the brush, f) silicone and cut following the indications of the dedicated technical manual which concerns the lift&slide type to be designed.
Caps kit	2			

Materials

- 1) EPDM gasket
- 2) PVC screws covering profiles
- 3) Extruded aluminium profiles
- 4) Polypropylene brush



Ref.	Article	Article code	Length
1	Uni-V Mini point profile	G02211.25.01	2500 mm
		G02211.25.93	2500 mm
		G02211.31.01	3100 mm
		G02211.31.93	3100 mm
		G02211.40.01	4000 mm
		G02211.40.93	4000 mm

Ref.	Article	Article code	
2	Caps kit	G01623.DX.93	Right
		G01623.SX.93	Left

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