

Item	Description	Order no.	Qty. per pattern				
			A	C	D	G	K
1	Front bogie	left right 6-32545-00	1	2	1	2	
2	Rear bogie	left right 6-29561-00	1	2	1	2	
3	Control part	6-33329-00	1	2	1	2	
4	Fixing pin	only for pattern D 9-39897-00	--	--	1	--	
5	Front stay	AX9 left right 6-32204-09	1	--	1	2	
		AX13 left right 6-32204-13					
		AX9 left right 6-34983-09					
5A	Front stay Pattern C, active sash	AX13 left right 6-34983-13	--	1	--	--	
		AX9 left right 6-32535-09					
5B	Front stay Pattern C, passive sash	AX13 left right 6-32535-13	--	1	--	--	
		AX9 left right 6-32537-09					
6	Rear stay	AX13 left right 6-32537-13	1	2	1	2	
		AX9 left right 6-32537-13					
7	Stay cover	9-35573-00	2	4	2	4	
8	Stay-arm slide block	6-22755-00	2	4	2	4	
9	Front corner-drive	6-32539-00	1	--	1	2	
9A	Front corner-drive Pattern C active	6-34992-00	--	1	--	--	
9B	Front corner-drive Pattern C passive	6-32543-00	--	1	--	--	
10	Rear corner-drive	6-32550-00	1	2	1	2	
12	DIRIGENT geared turn handle	lh or rh 6-24542-00	1	2	1	2	
13	Sleeve nut	9-30705-00	2	4	2	4	
14	Countersunk screw DIN 965 - M5 x 20	9-13133-20	2	4	2	4	
15	Coupling	AX9 14-20 AX13 15-21.5 AX13 21.5-28 Optional part 9-30111-00 9-31015-00 9-40291-00	1	2	1	2	
		AX9 14-20 AX13 15-21.5 AX13 21.5-28 Optional part 9-30111-00 9-31015-00 9-40291-00					
		AX9 14-20 AX13 15-21.5 AX13 21.5-28 Optional part 9-30111-00 9-31015-00 9-40291-00					
16	Fillister head screw DIN 7985 - M5 x 6	9-13290-06	2	4	2	4	
17	End cap (for item 27)	left right 9-38543-00	1	2	1	2	
17A	Cover cap (for item 17)	9-26687-00	2	4	2	4	
17B	Countersunk-head tapping screw 3,5 x 38	9-13151-38	2	4	2	4	
18	Spring-loaded buffer	6-29565-00	1	2	1	2	
19	Bracket	9-38522-00	1	2	1	2	
20	Vertical extension	SRH Length LC-MA Handle height 820-995 465 - 440 996-1120 590 1 440 1121-1370 840 1 500 1371-1620 1090 1 600 1621-1870 1340 2 600 1871-2120 1590 2 980 2121-2370 1840 2 980 1621-1870 1340 2 980 6-32304-01 6-32304-02 6-32304-03 6-32304-04 6-32304-05 6-32304-06 6-32304-07 6-32304-55	2	3	2	4	
		SRH Length LC-MA 720-890 730 0 891-1100 480 1 1101-1350 730 1 1351-1600 980 2 6-32307-02 6-32307-01 6-32307-02 6-32307-03					
		SRH Length 720-850 600 851-1100 850 1101-1350 1100 1351-1600 1350 9-25476-06 9-25476-09 9-25476-11 9-25476-14 6-24764-00					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
26	Support	from SRW 1101 6-24764-00	1	2	1	2	
27	Bottom cover rail P 1608	SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16	1	2	1	2	
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
		SRH Length LC-MA 720-850 785 851-1100 1035 1101-1350 1285 1351-1600 1535 9-38804-08 9-38804-11 9-38804-13 9-38804-16					
28	Roller track P 1300	9-31483-99	1				
29	Guide track P 1225	9-30140-99	1				
30	Cover rail P 1480	9-34521-99	1				
31	End cap (for item 29)	9-34523-00	2				
32	Standard striker	Refer to: Table of strikers and engaging strikers					
34	Engaging Striker	Refer to: Table of strikers and engaging strikers					
52	Mishandling device	K-17060-00-9	1	2	1	2	
53	Steel Sec striker	Refer to: Table of strikers and engaging strikers					
54	Steel Sec striker	Refer to: Table of strikers and engaging strikers					
57	Clearance packer	Refer to: Table of strikers and engaging strikers					
58	Sash centering device	9-43223-00	1	2	1	2	
65	ZK lever-operated gear	SRH Length LC-MA Handle height 1371-1620 1090 1 495 1621-1870 1340 1 703	--	1	--	--	
		SRH Length LC-MA Handle height 1371-1620 1090 1 495 1621-1870 1340 1 703					
		SRH Length LC-MA Handle height 1371-1620 1090 1 495 1621-1870 1340 1 703					
69	ZK lever	6-25020-00	--	1	--	--	
77	Standard striker pattern C	9-13246-70	--	2	--	--	
77A	Countersunk screw M4 x 10	Refer to: Table of strikers and engaging strikers					
78	Zamak Sec striker pattern C	Refer to: Table of strikers and engaging strikers					

Accessories														
Item	Description							Order no.	Qty. per pattern					
									A	C	D	G	K	
35	DIRIGENT geared turn handle, lockable							lh or rh	6-26058-00	1	2	1	2	
36	DIRIGENT interior/exterior handle set with PC hole Height of exterior handle: 15 mm								6-25164-00	1	2	1	2	
37	DIRIGENT interior/exterior handle set with PC hole Height of exterior handle: 30 mm							6-24624-00	1	2	1	2		
38	DIRIGENT interior turn handle with PC hole							with lugs	6-24622-00	1	2	1	2	
39	Exterior cover rosette							without lugs	6-24623-00					
40	Countersunk screw M6							9-13274-00	2	4	2	4		
	ST	up to 60	61-65	66-70	71-75	76-80	81-85						86-90	
	M6 x	65	70	75	80	85	90						95	
41	Lockable drive-gear backset 40 (same lengths as item 20) With the use of a lockable drive-gear, only one extension item 20 is required. SRH min. = 850.							6-32335-99	1	1	1	2		
	Optionally used: Lockable drive-gear backset 30							6-32343-99						
41A	Lockable drive-gear backset 30						SRH		6-33574-04	--	1	--	--	
							1371-1620							6-33574-55
							1621-1870							
	Lockable drive-gear backset 40						1371-1620		6-33575-04					
							1621-1870							6-33575-55
							1371-1620							
Lockable drive-gear backset 50						1621-1870		6-33576-55						
43	Horizontal extension				SRW		Length	LC-MA	6-32307-12	2	4	2	4	
					720-889		270	1						
44	T&S buffer for P 1225							6-30388-00	1	2	1	2		
45	Gear extension							L = 250 mm	6-24737-00	2	4	2	4	
								L = 500 mm (1 Locking cam)	6-32993-00					
45A	Rebate shoot bolt extension				SRH		Length		6-25059-00	--	1	--	--	
					1871-2370		500							
					SRH	Length	LC-MA	Handle height						
66	ZH lever-operated gear				1371-1620		1090	1	495	6-33017-04	--	1	--	--
					1621-1870		1340	1	703	6-33017-55				
68	Protective cap for lever							9-34300-00	--	1	--	--	--	

Strikers and engaging strikers																								
Item	Description	Order no.	SRW	SRH	Basic security Qty. per pattern				Enhanced basic security Qty. per pattern				RC 2				SRH	C						
																		With dummy mullion profile (Qty. per pattern)						
					A	D	G	K	A	D	G	K	A	D	G	K		Basic security	Enhanced basic security	RC 2				
32	Standard striker	Acc. to profile	720-890	820-995	6				1				2				1371-1620	10	5	2				
				996-1620	5				3				6				1621-1870	13	8					
				1621-2370	7				5				10				1871-2370	16	11					
				820-995	5				3				6				1371-1620	14	9					
			891-1350	996-1620	7				5				10				1621-1870	17	12	For anti-jemmy device on rear corner-drive				
				1621-2370	9				7				14				1871-2370	20	15					
				820-995	7				5				10				1371-1620	18	13					
			1351-1600	996-1620	9				7				14				1621-1870	21	16					
				1621-2370	11				9				18				1871-2370	24	19					
53	Steel Sec striker					2				4				8				--		--	--	5	10	--
54	Steel Sec striker		720-890	820-995									4		8	1371-1620				13				
				996-1620									6		12	1621-1870				16				
				1621-2370									8		16	1871-2370				19				
				820-995									6		12	1371-1620				17				
			891-1350	996-1620	--	--				--	--	--	8	16	1621-1870	--	--		20					
				1621-2370									10		20	1871-2370				23				
				820-995									8		16	1371-1620				21				
			1351-1600	996-1620									10		20	1621-1870				24				
				1621-2370									12		24	1871-2370				27				
34	Engaging Striker		--		3				6				3				3		6	6				
57	Clearance packer	9-43219-00			2				4				4				4		8	--				
77	Standard striker Pattern C	9-31960-00			Optional part				Optional part				Standard				1371-1620				--			
																	1621-1870	--	--	--				
																	1871-2370							
77A	Countersunk screw M4 x 10	9-13281-10			--												1371-1620				--			
78	Zamak Sec striker Pattern C	9-39189-00			--												1621-1870	--	--	--				
																	1871-2370							



Holes and cutouts according to specified dimensions, preferably by means of appropriate jigs. Peripheral clearance: 12 mm.

Hardware installation on sash

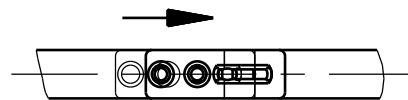
All hardware components are installed in the tilt position.

1. Install corner-drives (items 9 + 10) at bottom and stay arms (items 5 + 6) at top and put them in the tilt (= installation) position.



2. Crop vertical extensions (item 20) or lockable drive-gear (item 41 or 41A), and horizontal extensions (item 21), insert in corner-drives and stays and fasten with screws.
(Correct installation position predefined by arresting pin. Centre of locking cam must be aligned with marking notches).
Note: When cropping the horizontal extensions size 01, ensure that the long toothed section is flush with the gear.

3. Slide connecting plates over centre pieces/gear until stop and fasten with screws.



4. Install coupling (item 15).
5. Fix geared turn handle (item 12); ensure that the connector engages in the coupling.
Alternatively: install geared turn handle (item 35).
6. Install front and rear bogie, fasten support (item 19) at centre of sash.
7. Crop rod 08 (item 25), insert it in the rear bogie and fasten screw tightly, then insert the rod in the front bogie.
8. Put bogies in their closed position and firmly tighten screw on front bogie.
Tightening torque: 10-12 Nm.

Hardware installation on frame

9. Put strikers and engaging strikers in place. Use positioning jigs as shown in drawing.
10. Crop guide track P 1225 (item 29) and cover rail P 1480 (item 30) and install them. Install the guide track, insert stay-arm slide blocks (item 8) and end caps (item 31).
11. Crop and install roller track P 1300 (item 28).
12. Push control part (item 3) onto roller track and tighten screws using an Allen key size 4. Tightening torque: 10-12 Nm.
Use drilling jig 6-30447 for elements without mullion (pattern D).



Installing the sliding sash

13. Put the hardware in the tilt position (handle is horizontal).
14. Place the sash at an angle on the roller track. Insert stay-arm pins fully into gliders and tighten with Allen key size 4. See sheet 3. Pull on stay-arm firmly to ensure it is securely locked.

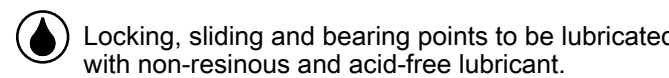
Checking the sash position

15. Sash not in parallel with frame in horizontal direction:
Loosen clamping screws for connecting rod on front bogie, align sash in parallel, firmly retighten screws.
16. Sash not in parallel with frame in vertical direction:
Pull out slide lock on front and rear bogie to access the vertical adjustment screws. Align sash vertically using a 4 mm Allen key, push slide locks back again.
17. Shift control part on roller track to obtain an equal rebate clearance on both sides, if necessary. Make sure to tighten the locking screw again.
18. Install sash centering device (item 58) centrally. If necessary, align by sliding to left or right.
19. Install spring-loaded buffer (item 18) onto roller track according to the opening width desired, then tighten with 4 mm Allen key.
20. Clip cover rail P 1480 (item 30) onto guide track P 1225 (item 29).
21. Crop cover rail P 1608 (item 27) and clip between bogies.
22. Insert cover caps (item 17) from above until they snap in.
23. Roller track P 1300 (item 28) must be supported with a batten and screwed to the frame over its entire length.

The specified fastening screws are a recommendation based on our experience.

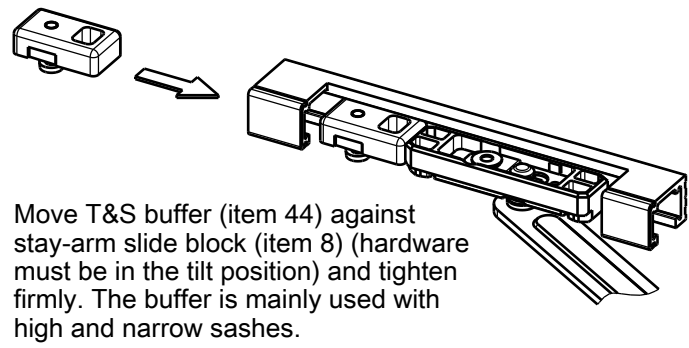
The responsibility for the appropriate fastening of hardware components lies with the window and balcony-door fabricator.

Hardware components depicted in factory condition.

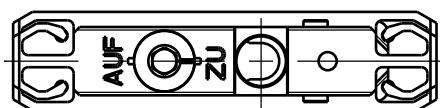
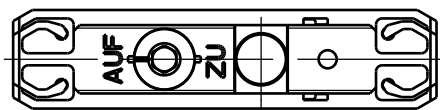


Hardware overview

Description							
Tilt&Slide hardware GU-968/150 mZ Neutral aluminium profile, Axis 9/13 mm, 16 mm hardware groove --							
	Release No.	Level	Released		Scale	Modification	Size
	--						
	Mod No.	Var.	--	--	%	2	1
	G33924	Drawn	18.08.2017	KI			
Replacement for --					Drawing No.		Sheet
					0-47745-BU-0-EN		2/7

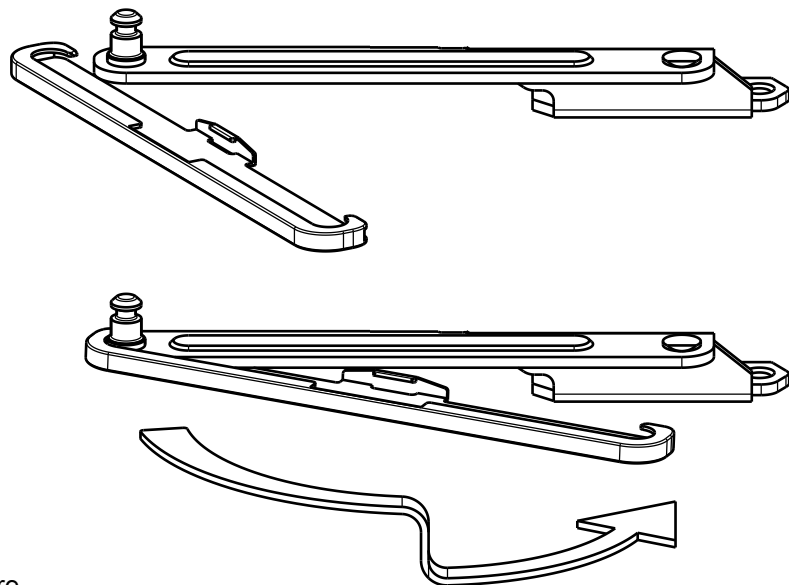


Lock stay-arm pin with Allen key size 4.
See installation instructions point 14.



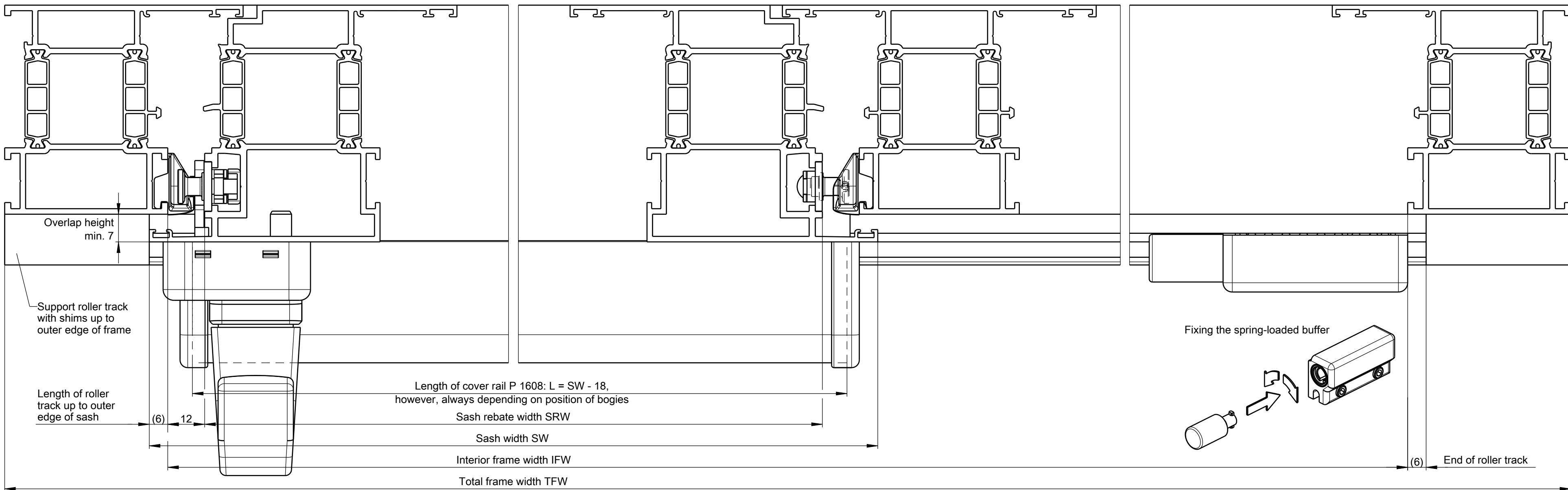
Attention
Pull on stay-arm firmly to ensure it is securely locked.

Installing the stay-arm cover

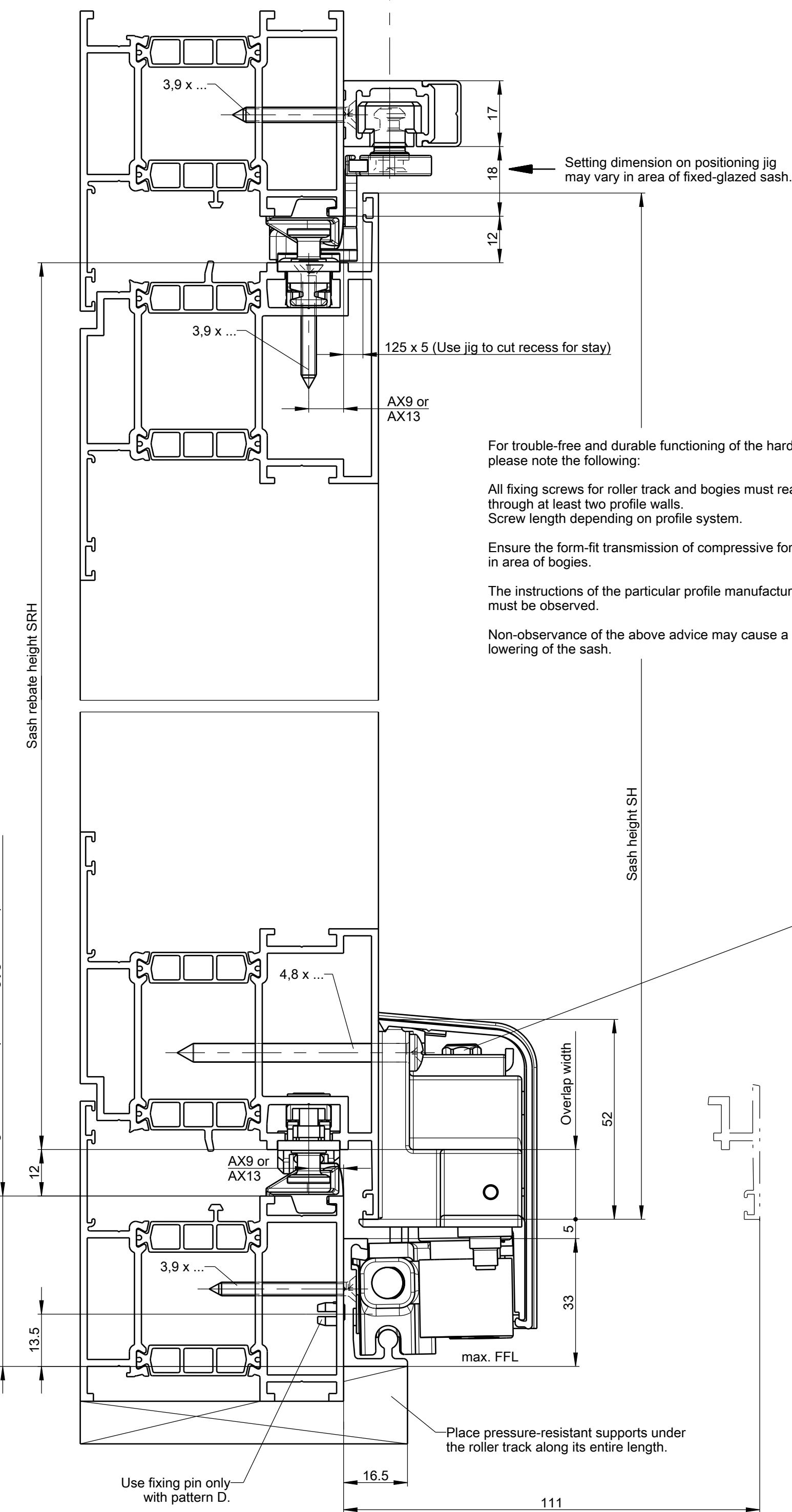


Pattern A

1 sliding sash, 1 fixed glazing



1:1



For trouble-free and durable functioning of the hardware, please note the following:

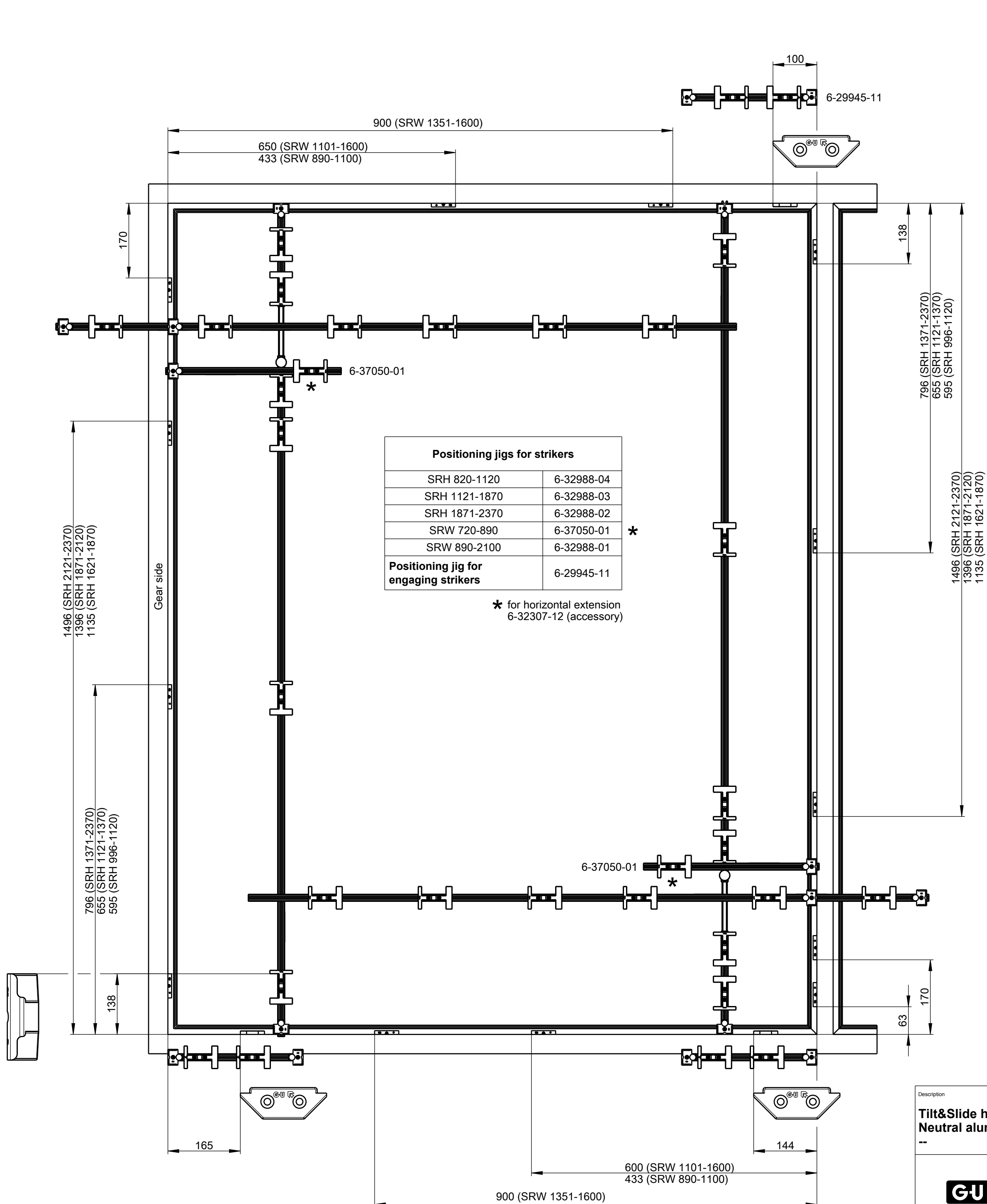
All fixing screws for roller track and bogies must reach through at least two profile walls.
Screw length depending on profile system.

Ensure the form-fit transmission of compressive forces in area of bogies.

The instructions of the particular profile manufacturers must be observed.

Non-observance of the above advice may cause a lowering of the sash.

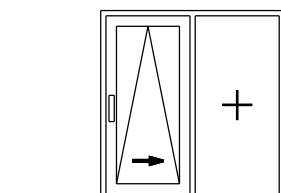
Vertical adjustment on bogie
See sheet 2, point 16



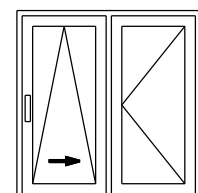
Positioning jigs for strikers	
SRH 820-1120	6-32988-04
SRH 1121-1870	6-32988-03
SRH 1871-2370	6-32988-02
SRW 720-890	6-37050-01
SRW 890-2100	6-32988-01
Positioning jig for engaging strikers	6-29945-11

* for horizontal extension
6-32307-12 (accessory)

Pattern A / Sectional views



1 Sliding sash, 1 fixed glazings



1 sliding sash, 1 Turn-Only sash
with fixed mullion profile
Installation of Turn-Only hardware
Drawing 0-44324 Basic security
Drawing 0-44908 RC

Description
Tilt&Slide hardware GU-968/150 mZ
Neutral aluminium profiles, Axis 9/13 mm, 16 mm hardware groove

Release No.	Level	Released	Scale	Modification	Size
---	---	---	---	---	1
Mod. No. G33924	Ver.	18.08.2017	%		
Draft		KJ			
Replacement for ---					Sheet
					0-47745-BU-0-EN

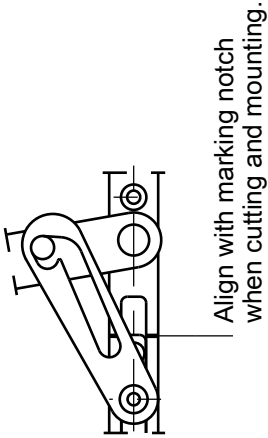
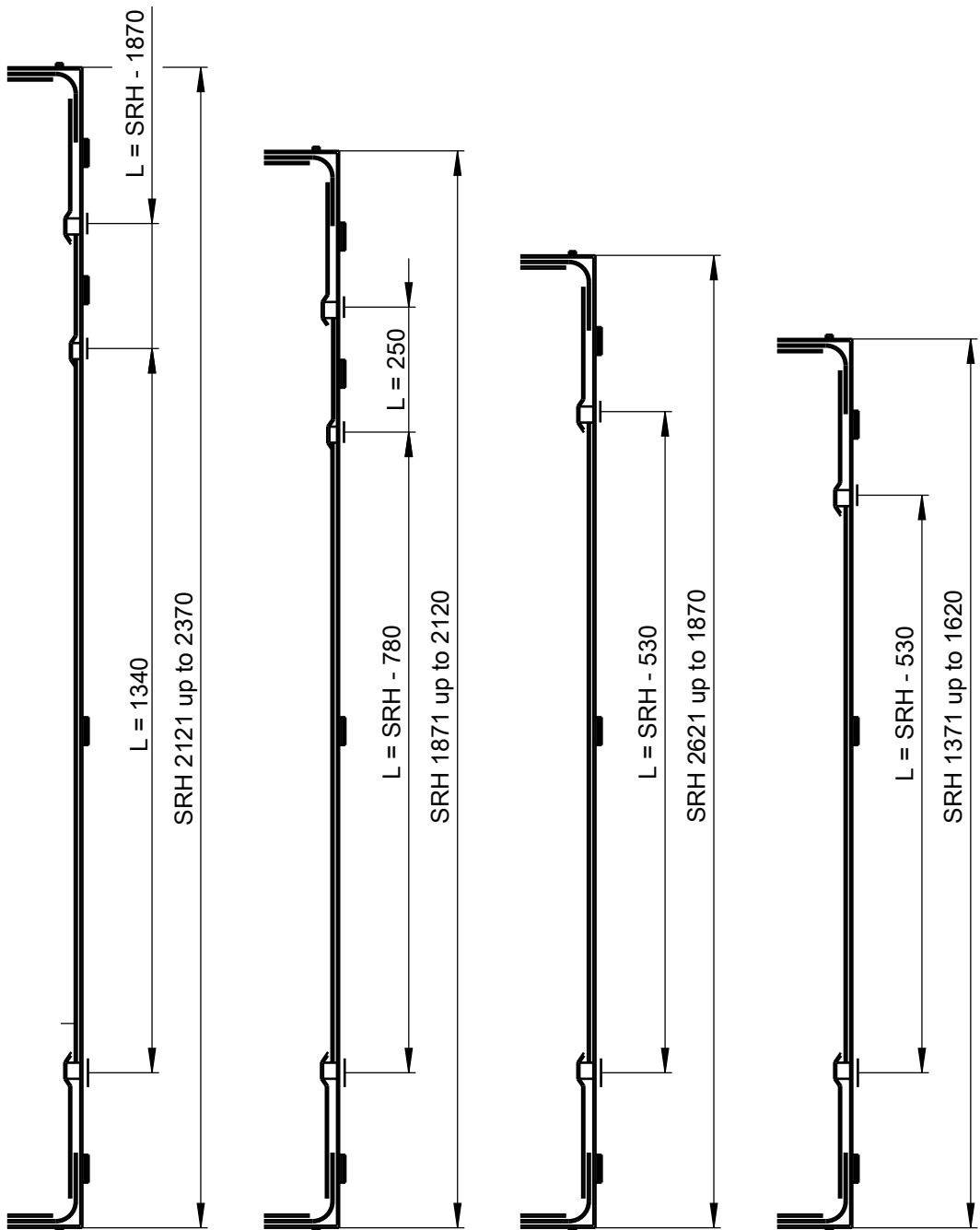
Installation instructions

Holes and cutouts according to specified dimensions, preferably by means of appropriate jigs.

Hardware installation on sash

All hardware components are installed in the tilt position.

1. Install corner-drives (item 9A + 9B) and stays (item 5A + 5B) and put them in the tilt position (= installation position).
2. Crop extensions (item 45 + 45A), insert in stays and fasten with screws. For cropping dimensions see depictions below.
3. Install vertical extensions (item 20) or lockable drive-gear (item 41 or 41A). Crop ZK or ZH lever-operated gear (item 65, resp. item 66) and horizontal extensions (item 21), insert in corner-drive and fasten with screws. For cropping dimensions see depictions below. Correct mounting position predefined by arresting pin. In the case of ZH lever-operated gear (item 66), align with marking notch (see depiction below).



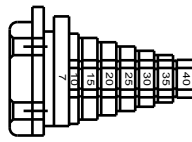
4. Mount strikers (item 77 or 78) with countersunk screws M4 x 10 or Spax 4 x 40 (or similar, as on corner-drive).

Version with dummy-mullion profile

5. Install the prepared dummy mullion profile.
6. In the case of ZK lever-operated gear (item 65), the conical connectors must be cropped to the distance between the profiles (= Dim. X).

Calculation example:

Distance between profiles Dim. X = 28 mm, rounded down to the next five = 25 mm, crop conical connectors between the numbers 25 and 30.

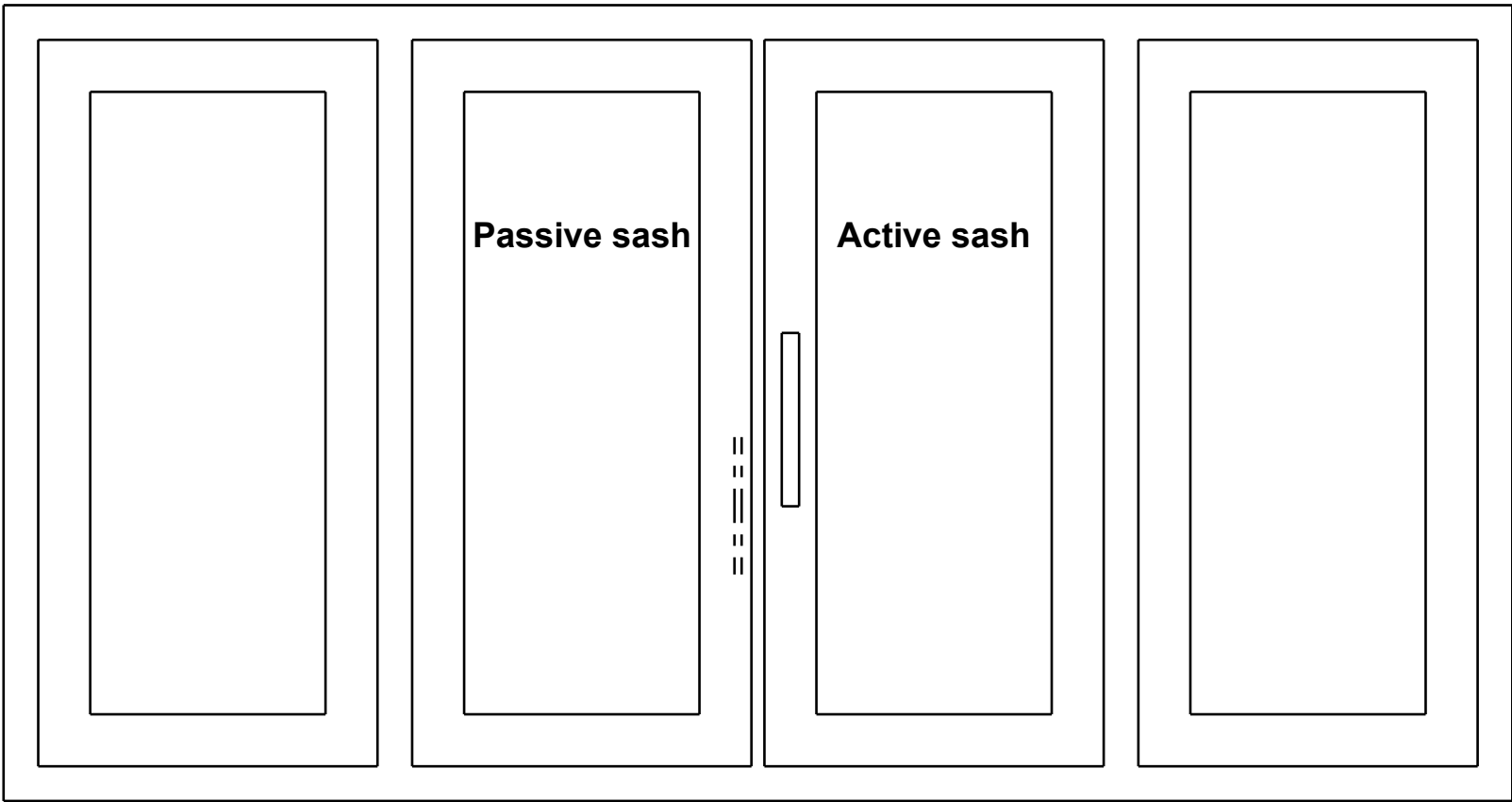
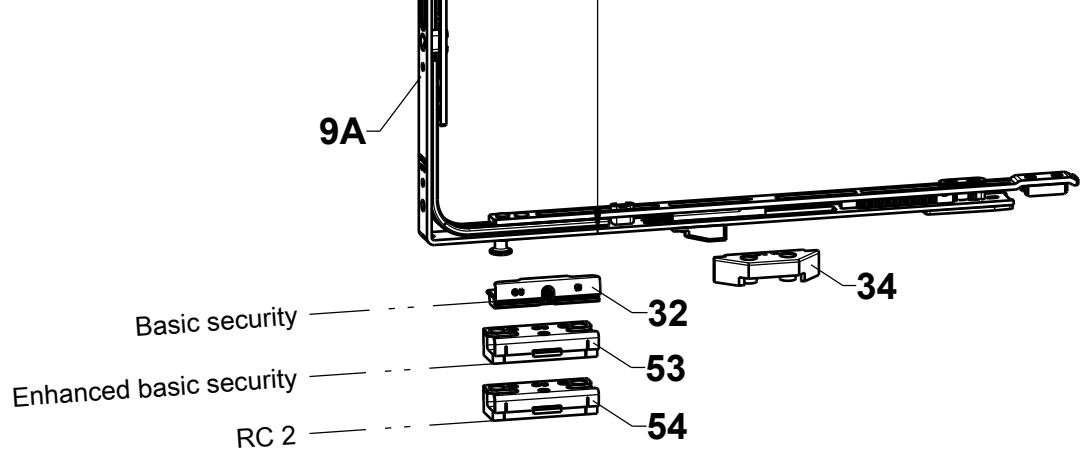
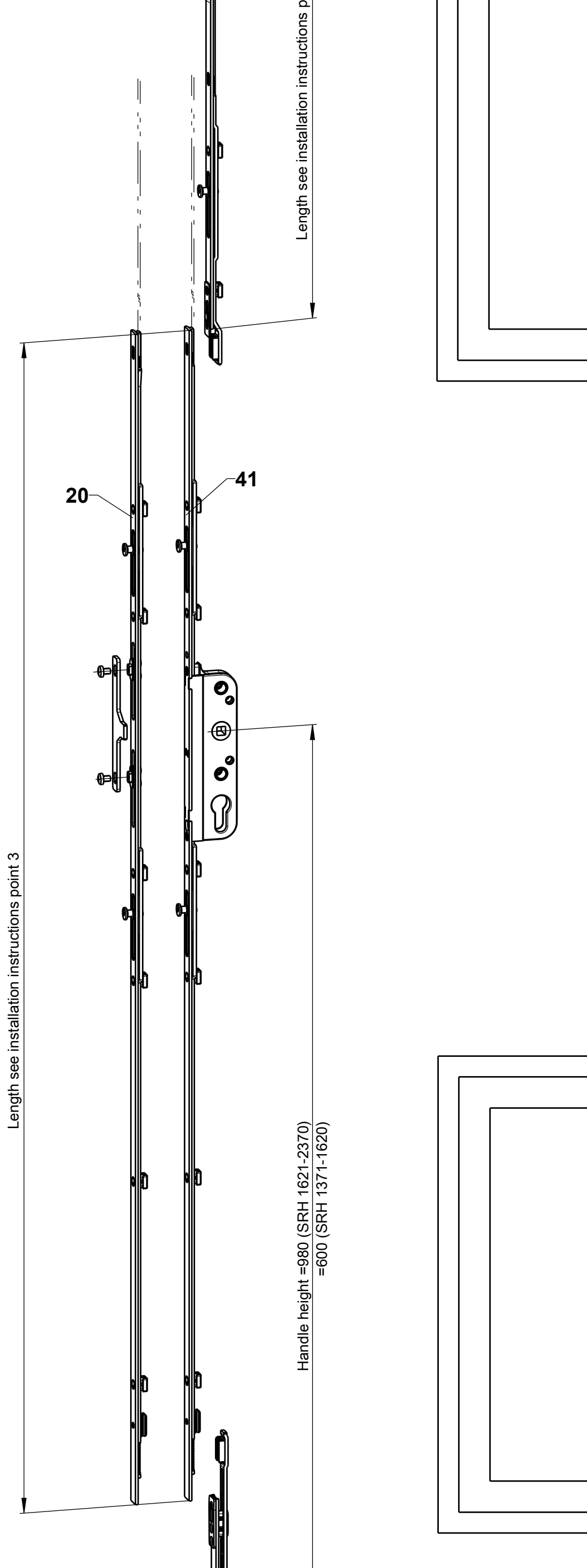
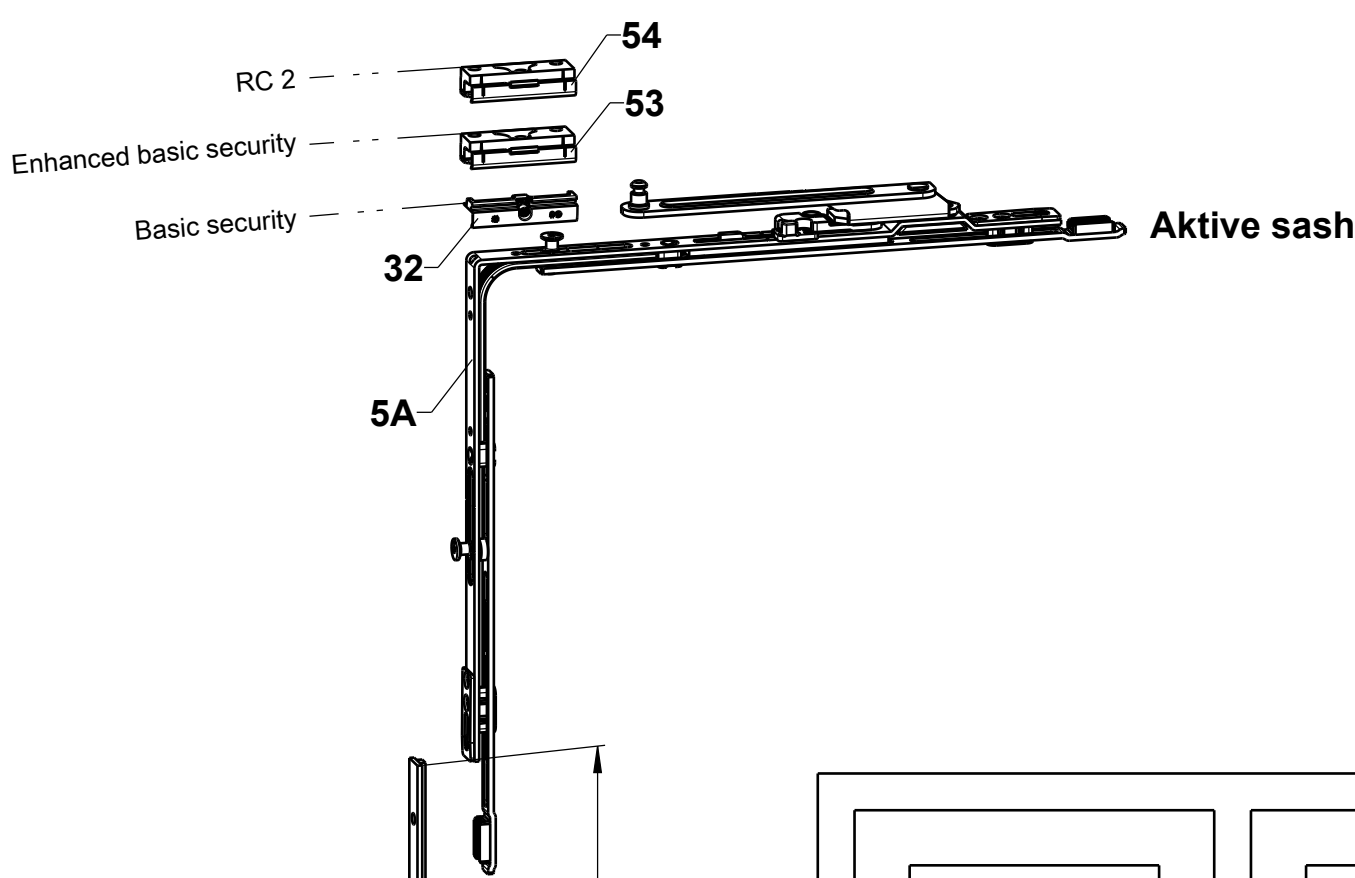
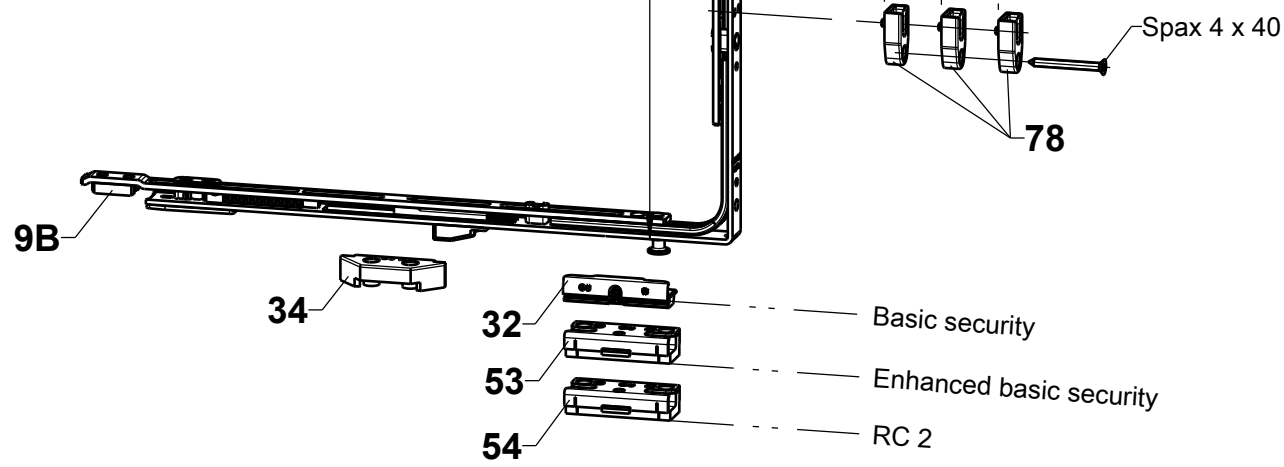
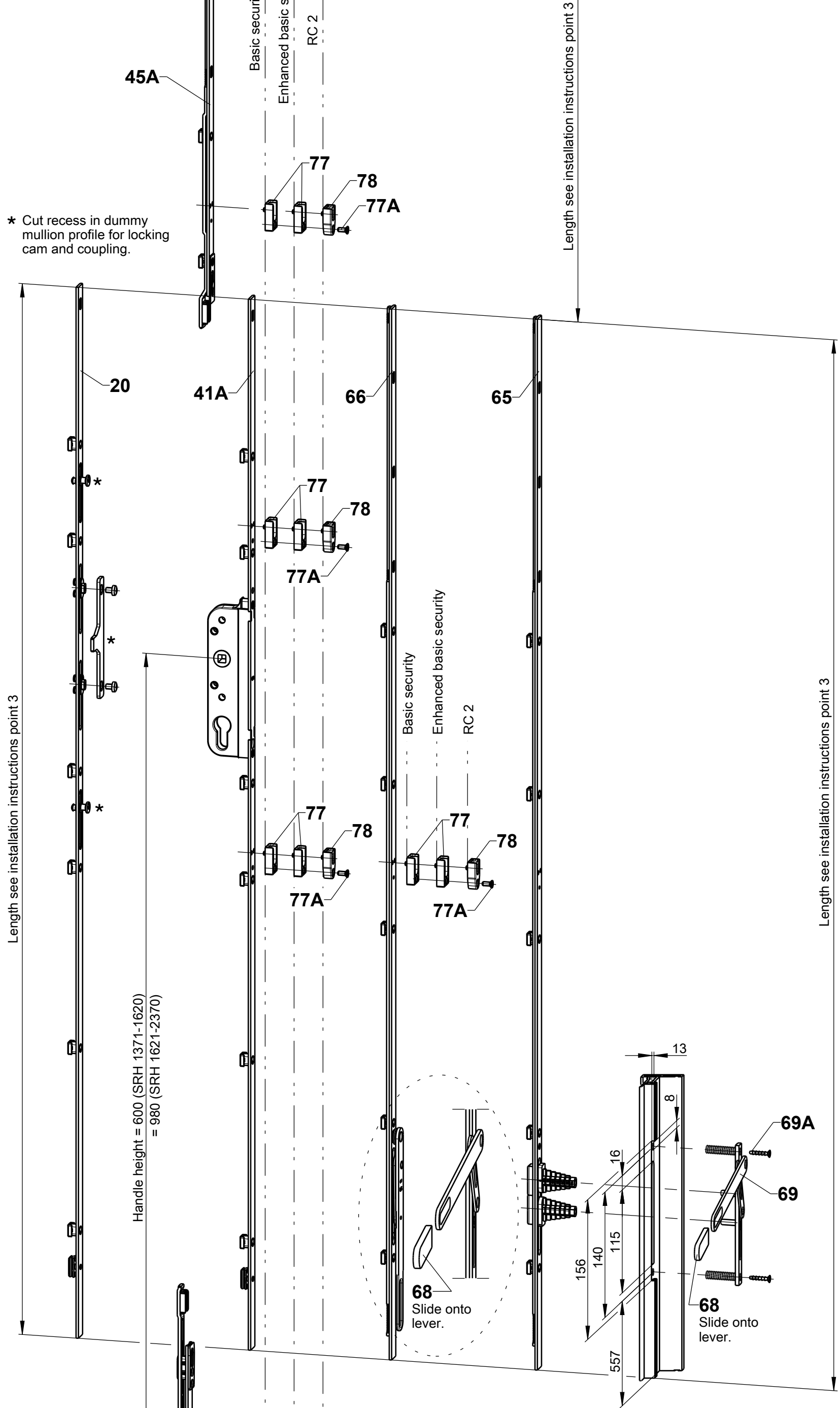
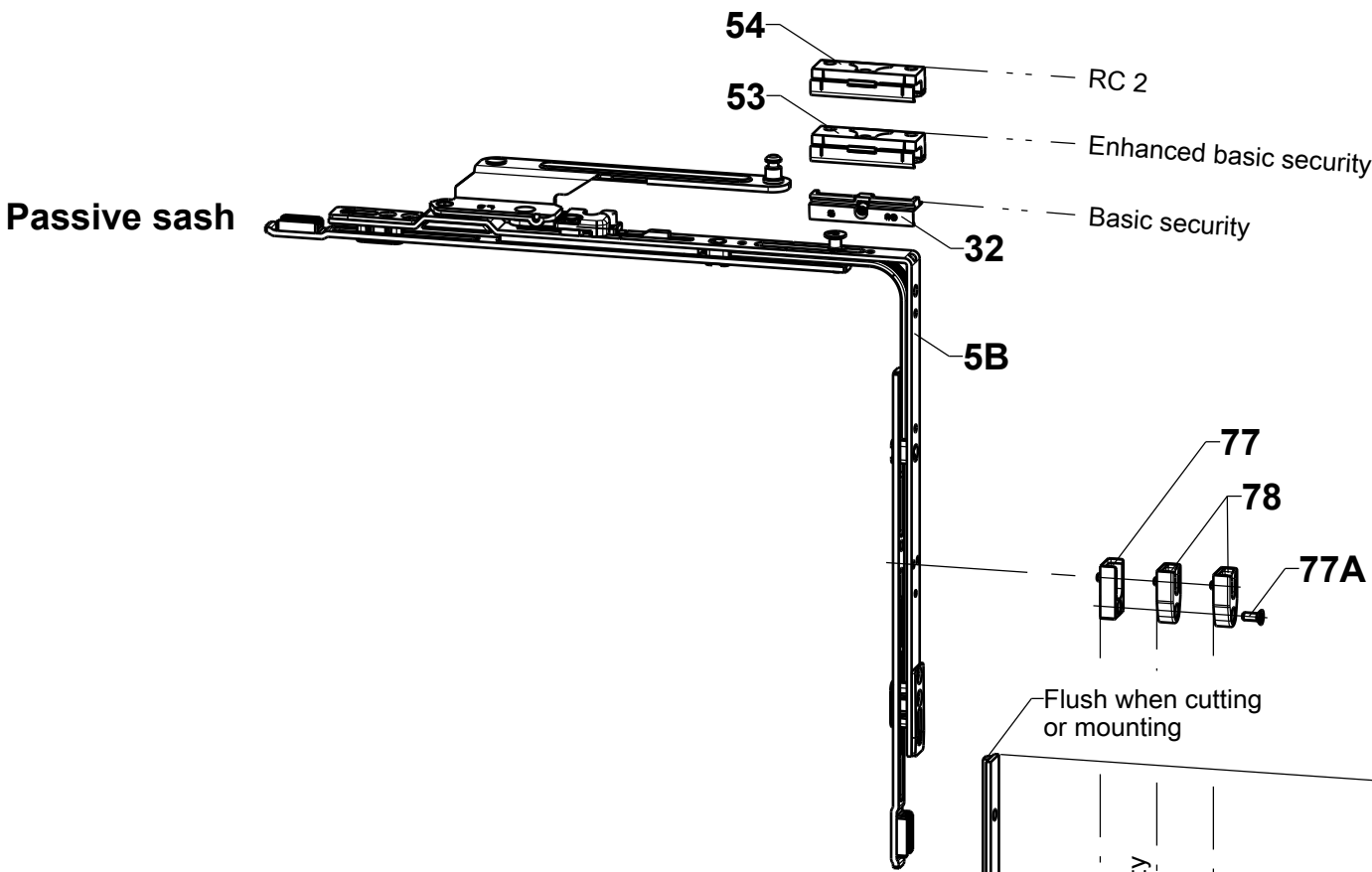


7. Crop and install ZK lever-operated gear (item 65). Handle is horizontal.
8. Fix strikers to dummy mullion with screws.

The specified fastening screws are a recommendation based on our experience.

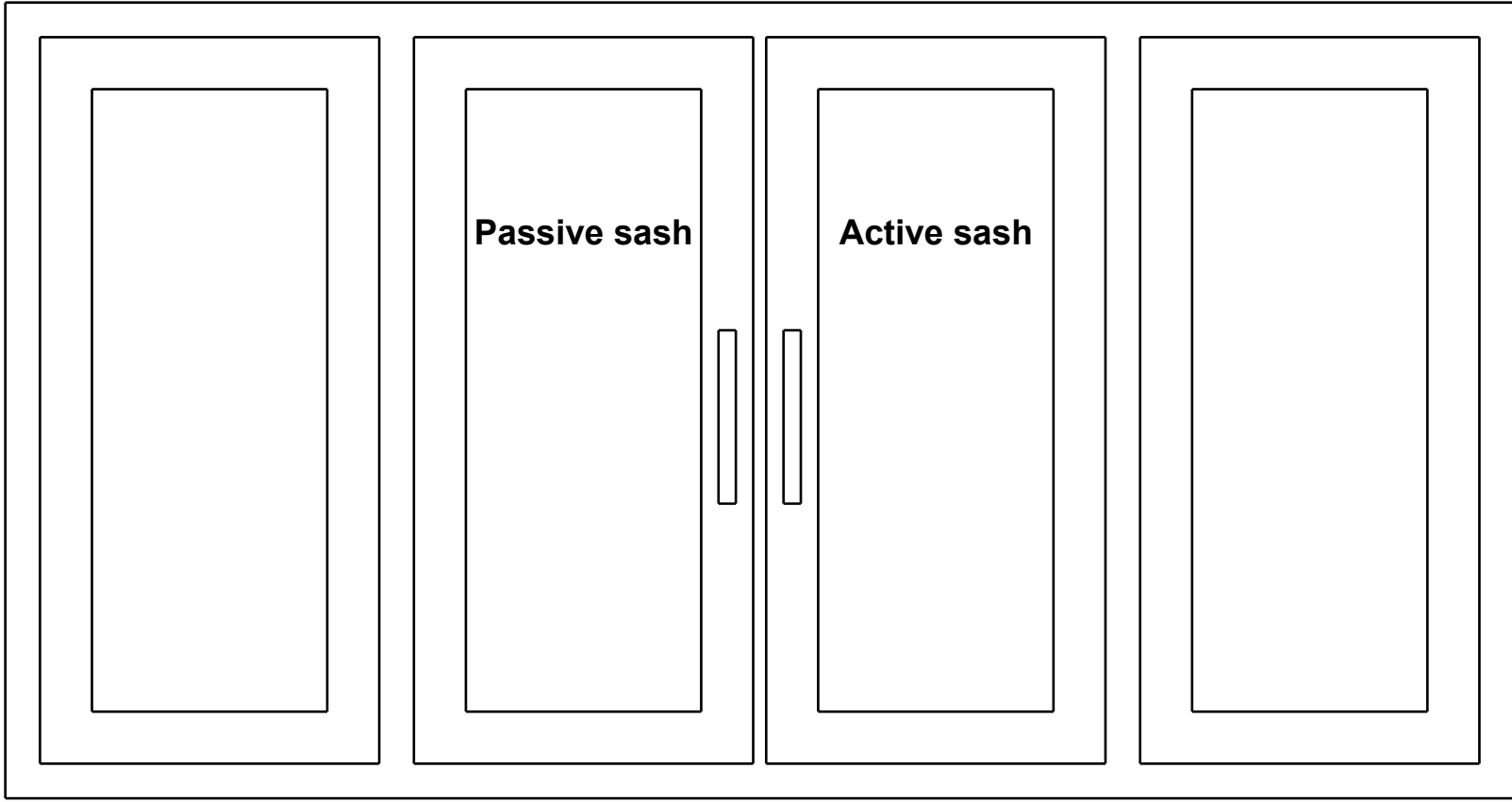
The responsibility for the appropriate fastening of hardware components lies with the window and balcony-door fabricator.

Hardware components depicted in factory condition.



Sash with lever-operated gear
Drawing shows RH installation
LH installation laterally reversed

Active sash
Drawing shows LH installation
RH installation laterally reversed



Right sash to be opened first and closed last.

Pattern C / Hardware overview

Description

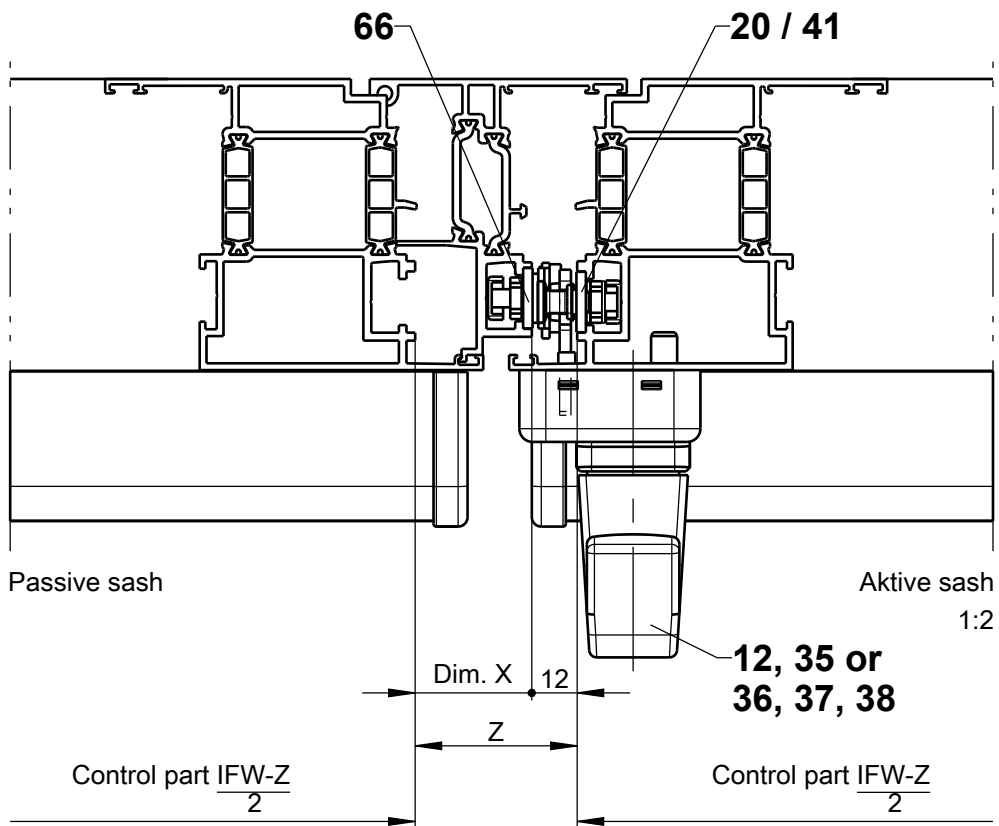
Tilt&Slide hardware GU-968/150 mZ

Neutral aluminium profiles, Axis 9/13 mm, 16 mm hardware groove

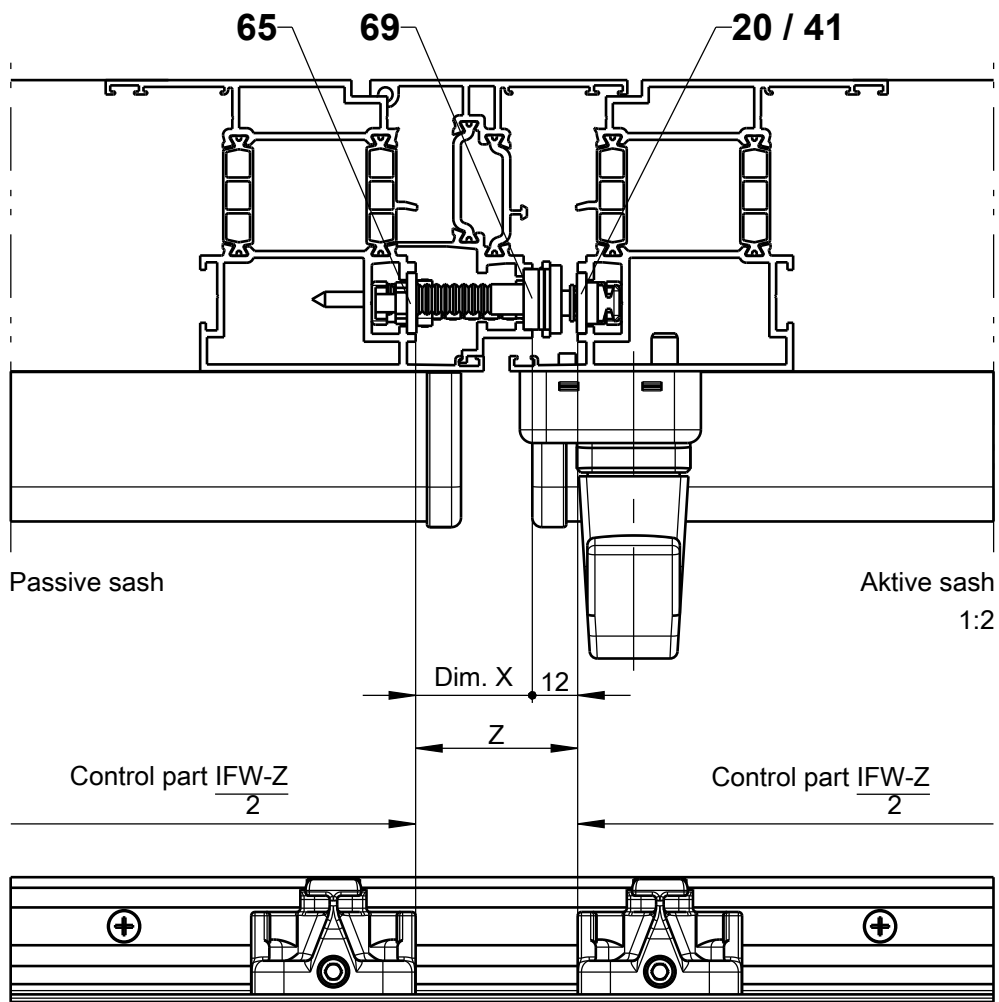
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	Release No. --	Level	Released		Scale	Modification	Size
	Mod No. G33924	Ver	--	--	%	2	1
		Draft	18.08.2017	KJ		Drawing No.	Sheet
	Replacement for --					0-47745-BU-0-EN	4/7

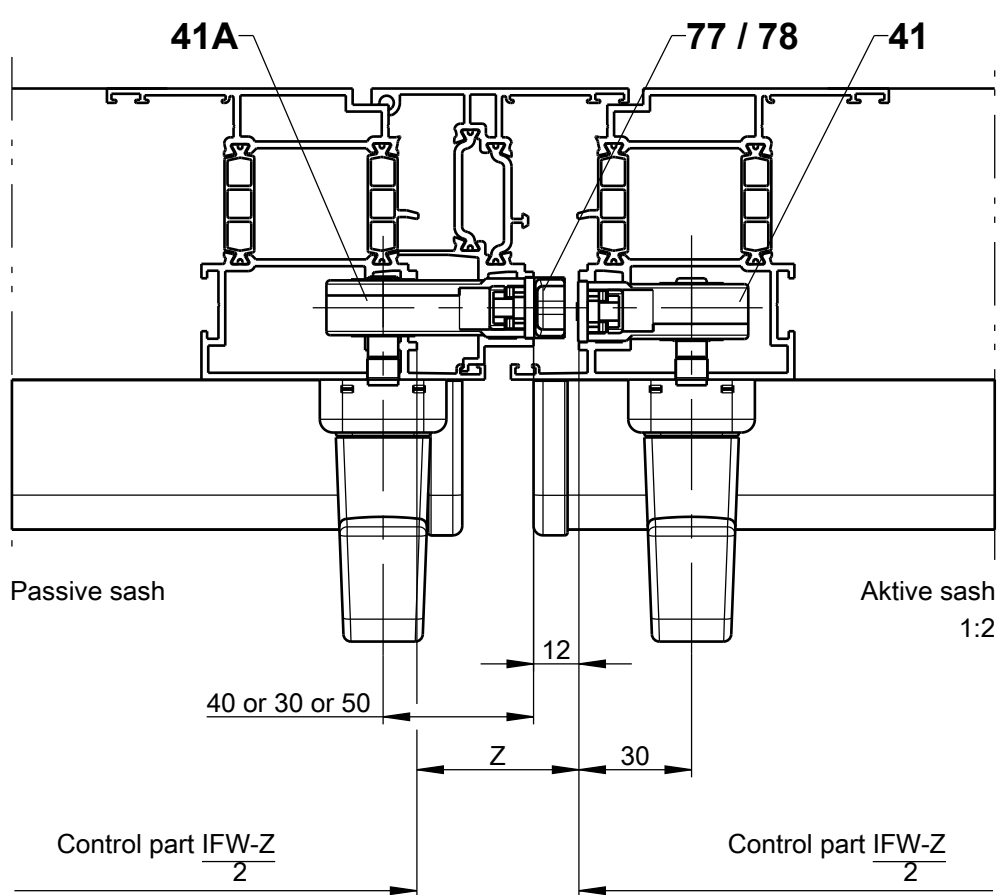
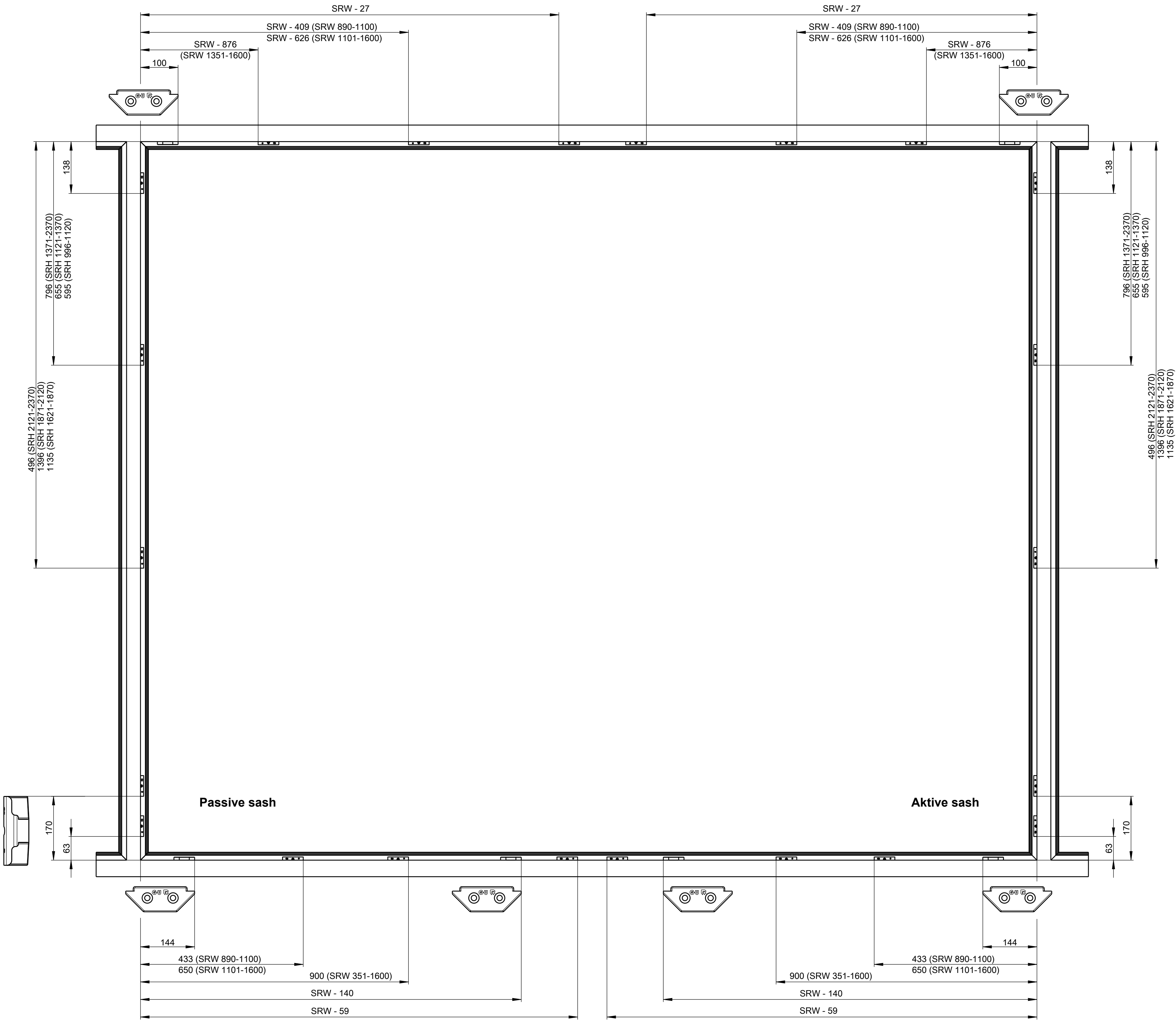
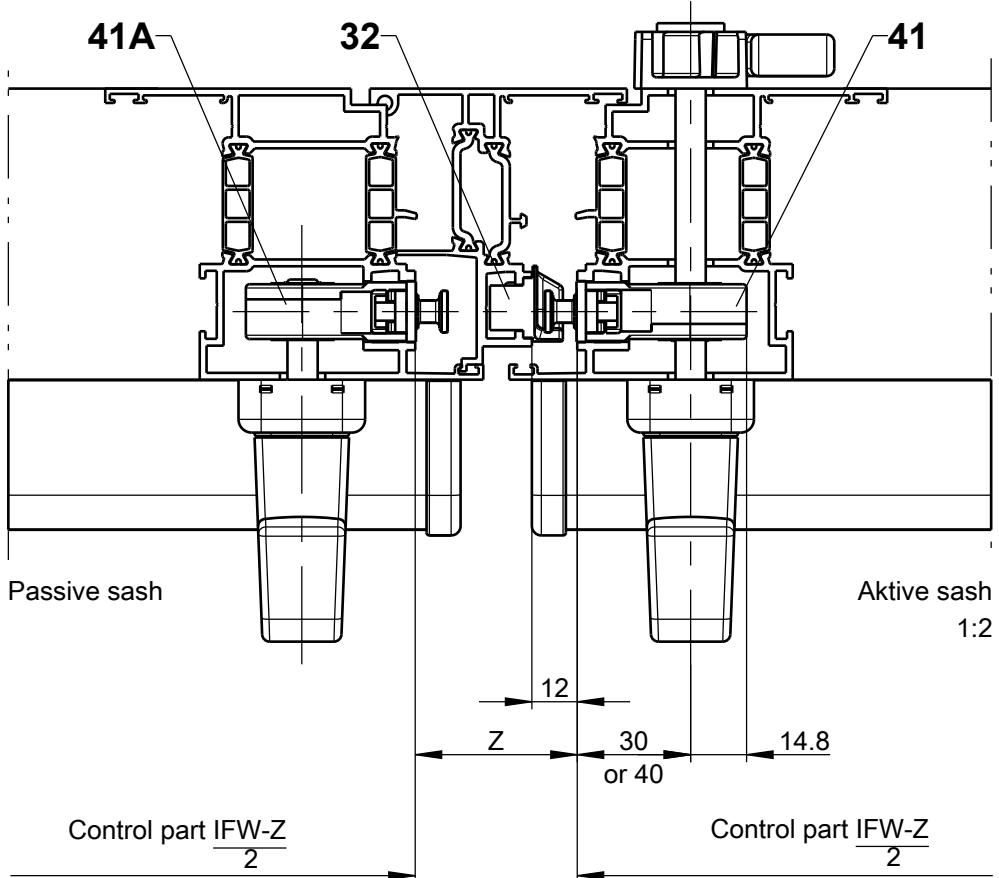
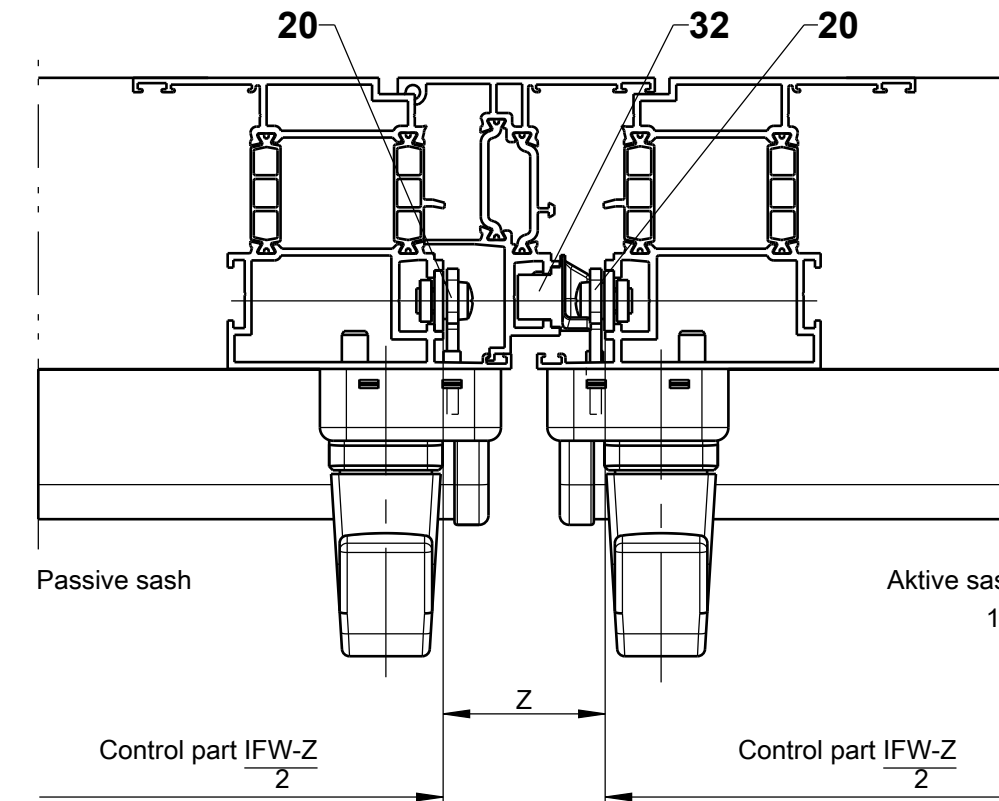
Passive sash with ZH lever-operated gear



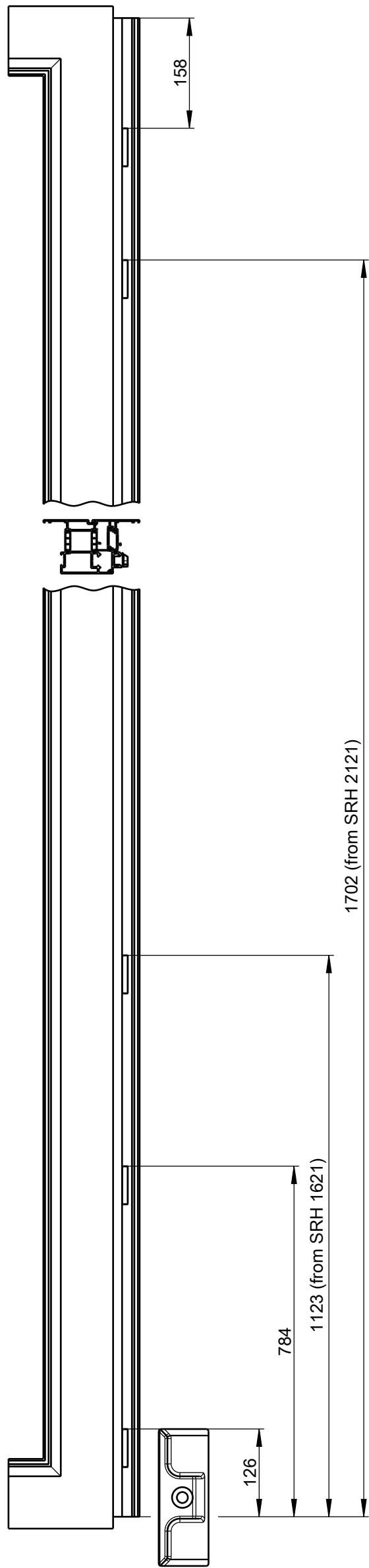
Window with dummy mullion profile and with ZK lever-operated gear



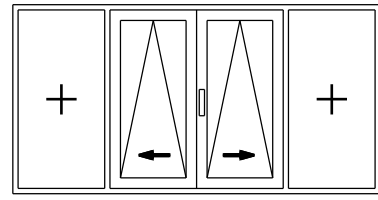
Both sashes with turn handle



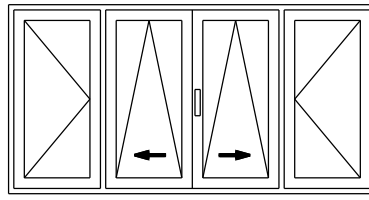
Passive sash with dummy mullion profile



Pattern C / Sectional views



2 sliding sashes, 2 fixed glazings



2 sliding sashes, 2 Turn-Only sashes with dummy mullion profile

Description

Tilt&Slide hardware GU-968/150 mZ

Neutral aluminium profiles, Axis 9/13 mm, 16 mm hardware groove

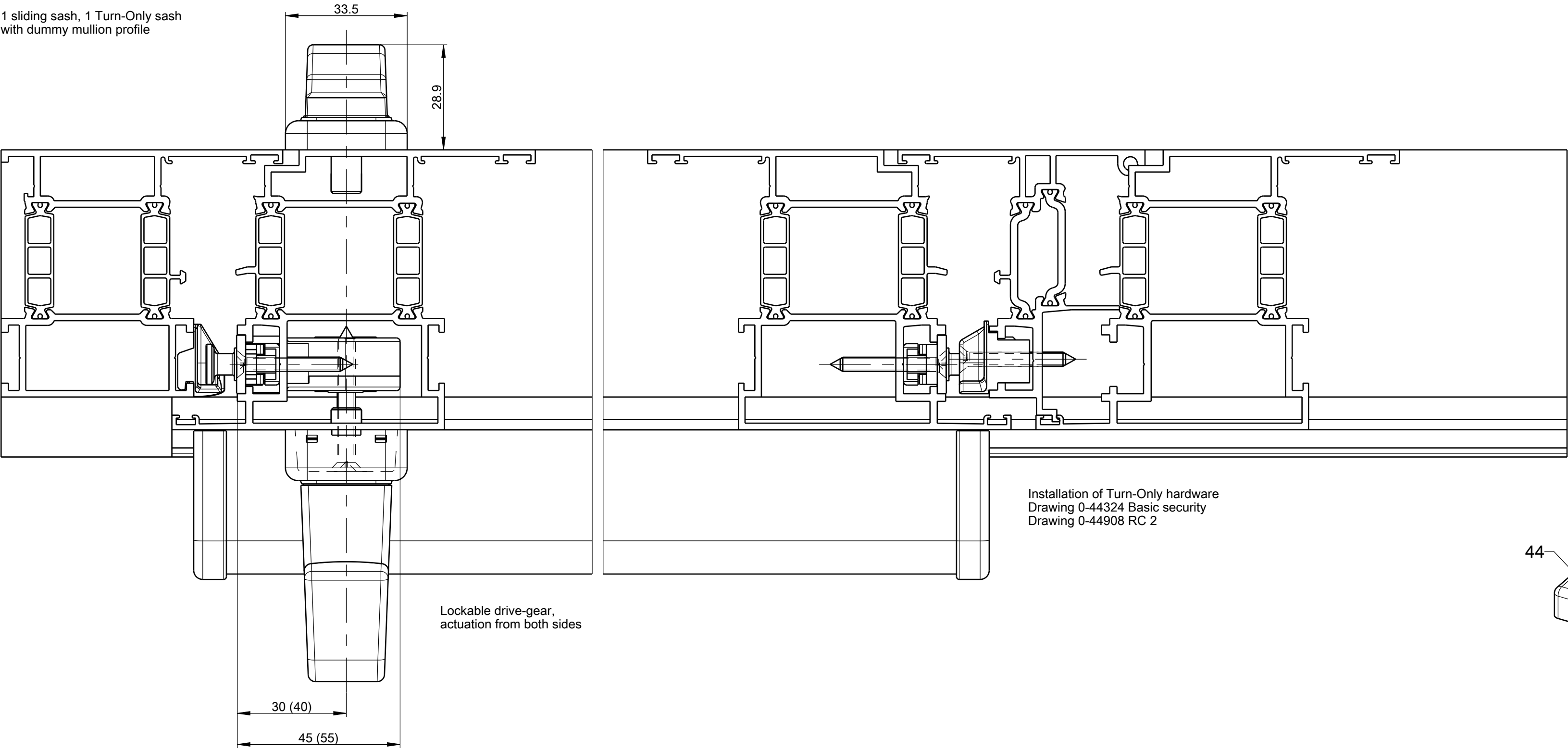
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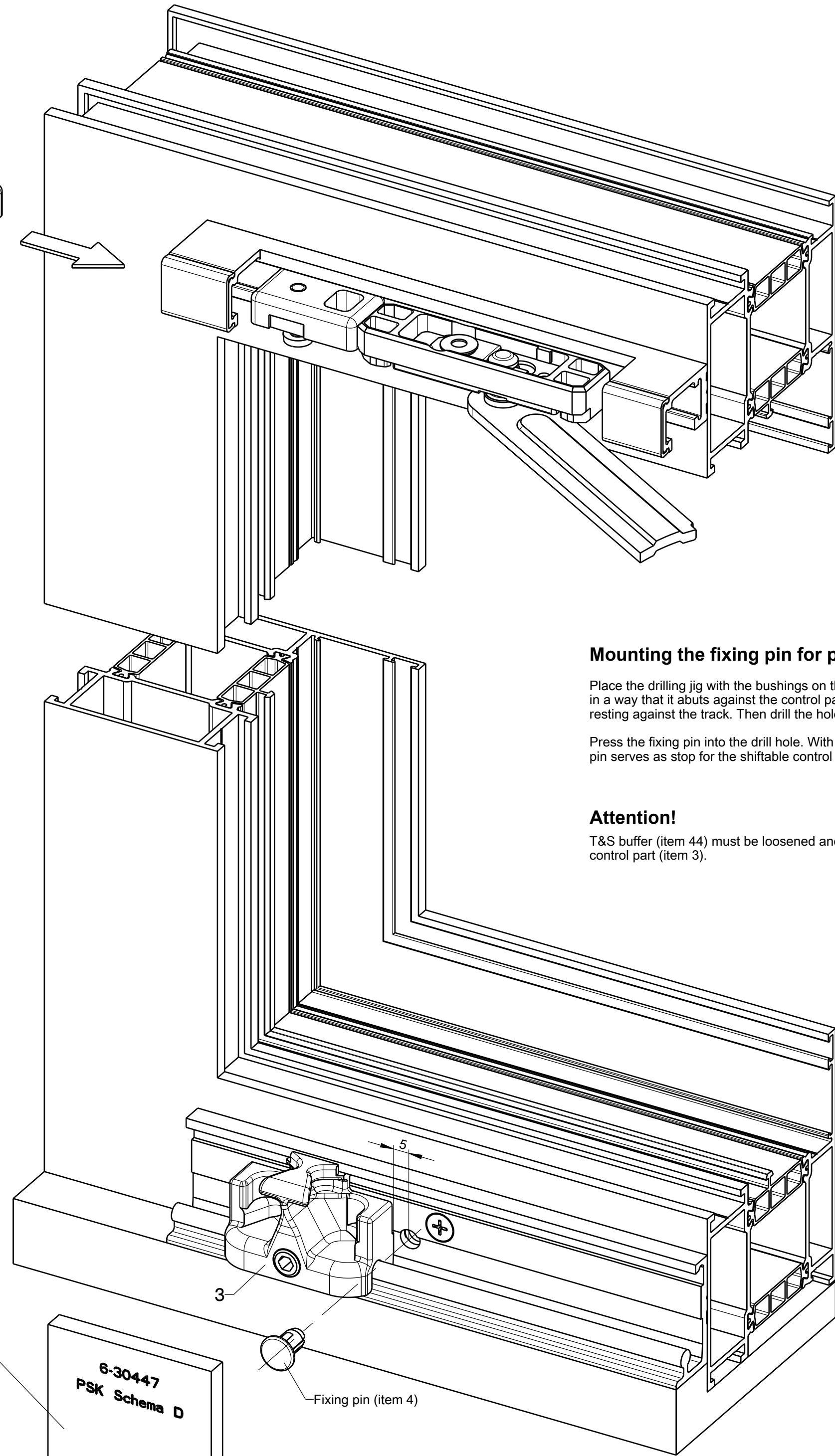
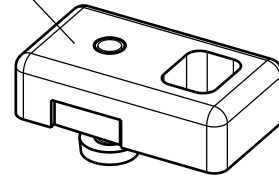
Release No.	Level	Released		Scale	Modification	Size
--						
Mod. No.	Ver.	--	--	%	2	Sheet
G33924	Draft	18.08.2017	KI			
Replacement for --				Drawing No.		5/7
				0-47745-BU-0-EN		

Pattern D

1 sliding sash, 1 Turn-Only sash
with dummy mullion profile



44



Mounting the fixing pin for pattern D

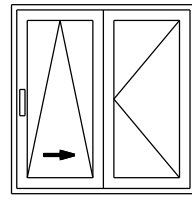
Place the drilling jig with the bushings on the roller track in a way that it abuts against the control part with the pins resting against the track. Then drill the hole (left or right).

Press the fixing pin into the drill hole. With pattern D, the pin serves as stop for the shiftable control part.

Attention!

T&S buffer (item 44) must be loosened and shifted like the control part (item 3).

Pattern D / Sectional views



1 sliding sash, 1 Turn-Only sash
with dummy mullion profile

Description					
Tilt&Slide hardware GU-968/150 mZ					
Neutral aluminium profiles, Axis 9/13 mm, 16 mm hardware groove					

GU	Release No.	Level	Released		Scale
	Mod. No.	Ver.	---	---	%
	G33924	Draft	18.08.2017	KJ	2
	Replacement for ---				
Drawing No.					Sheet
0-47745-BU-0-EN					6/7

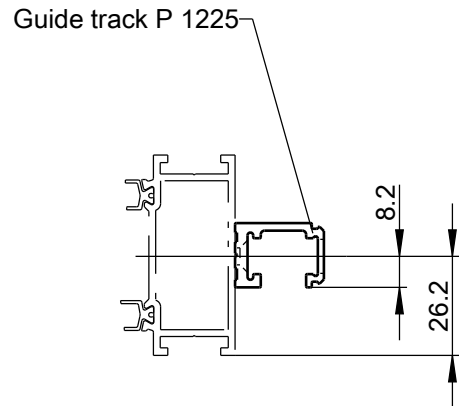
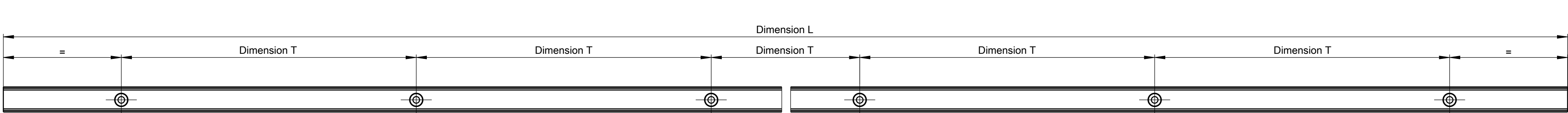
EN

FR

ES

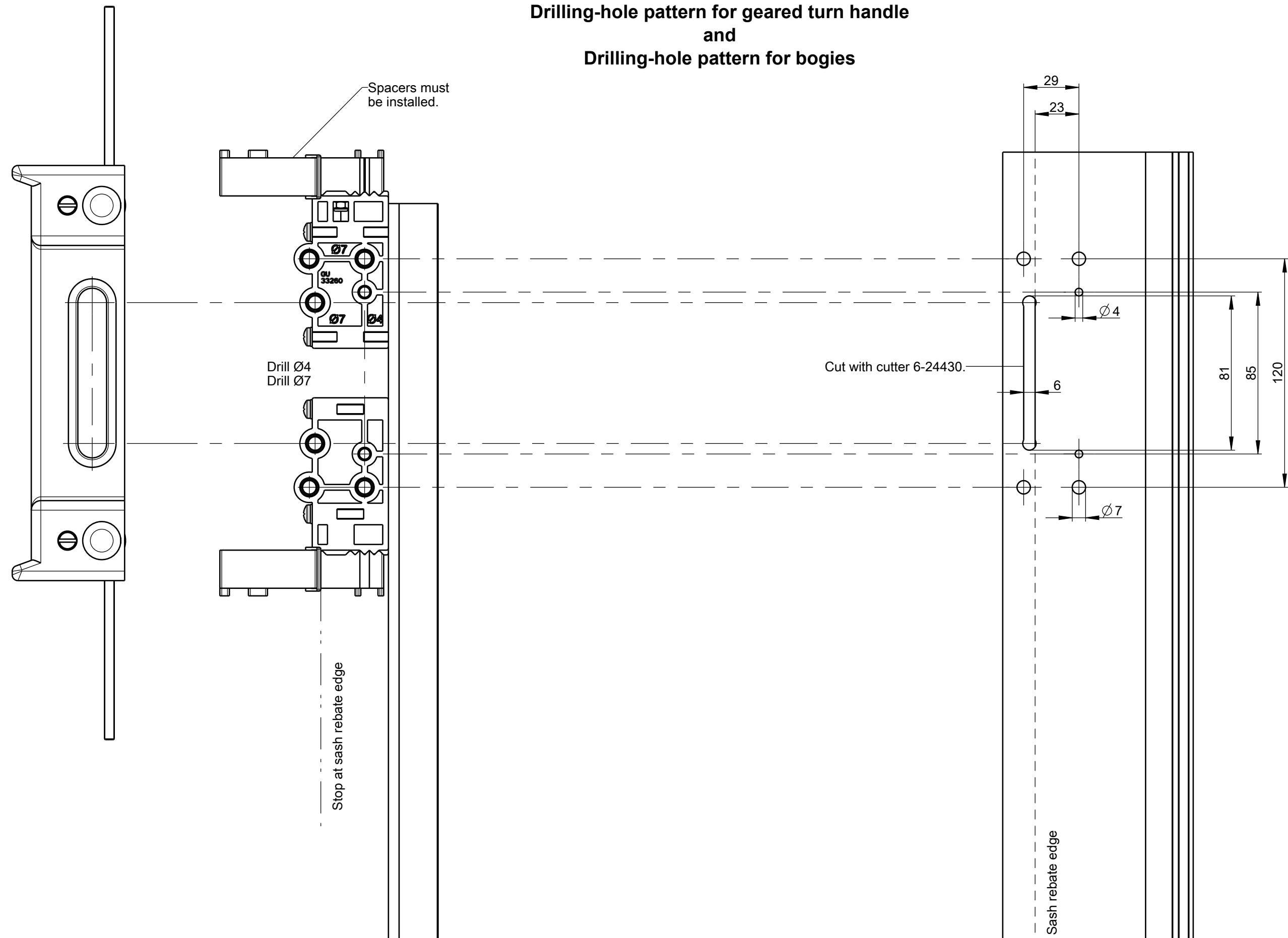
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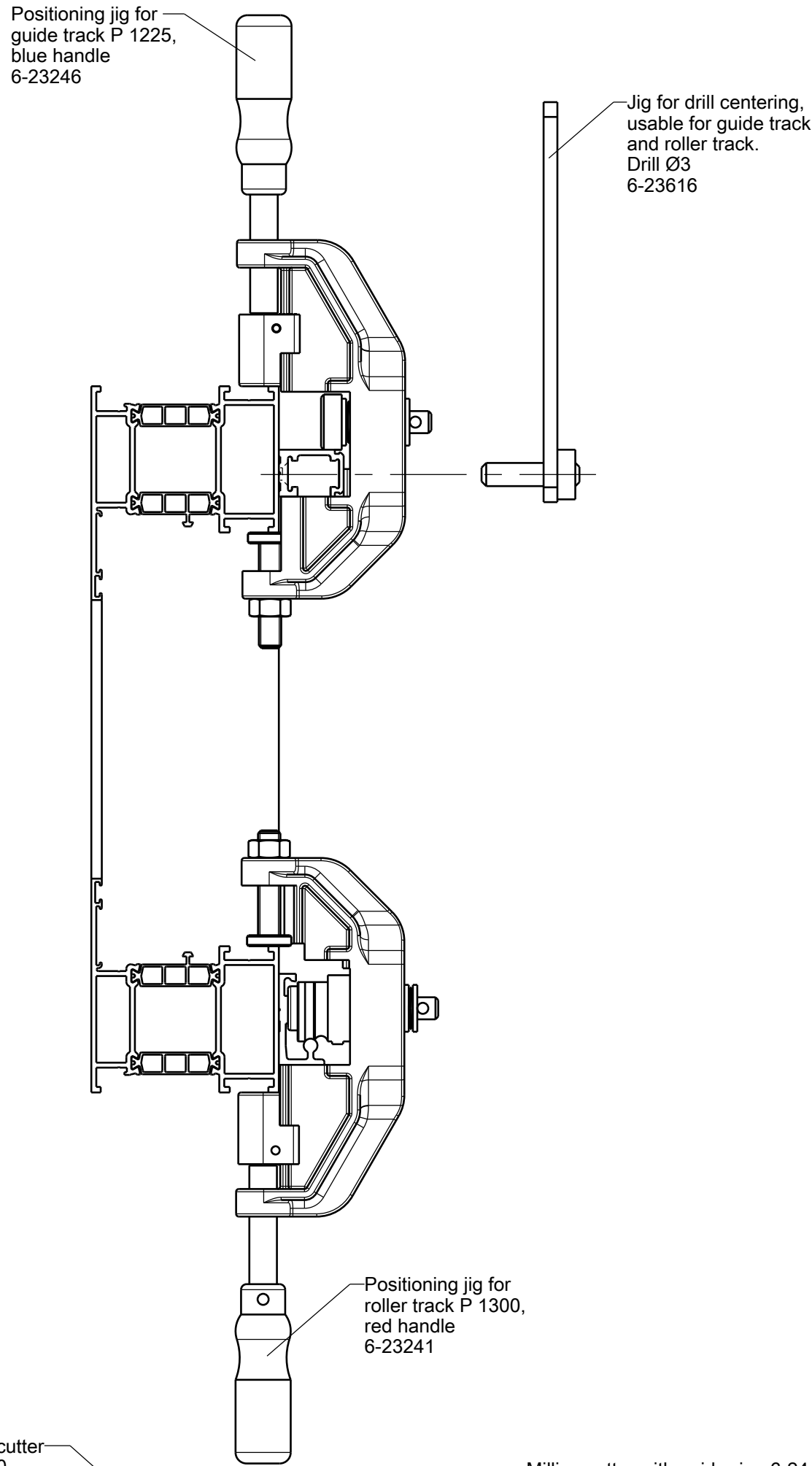
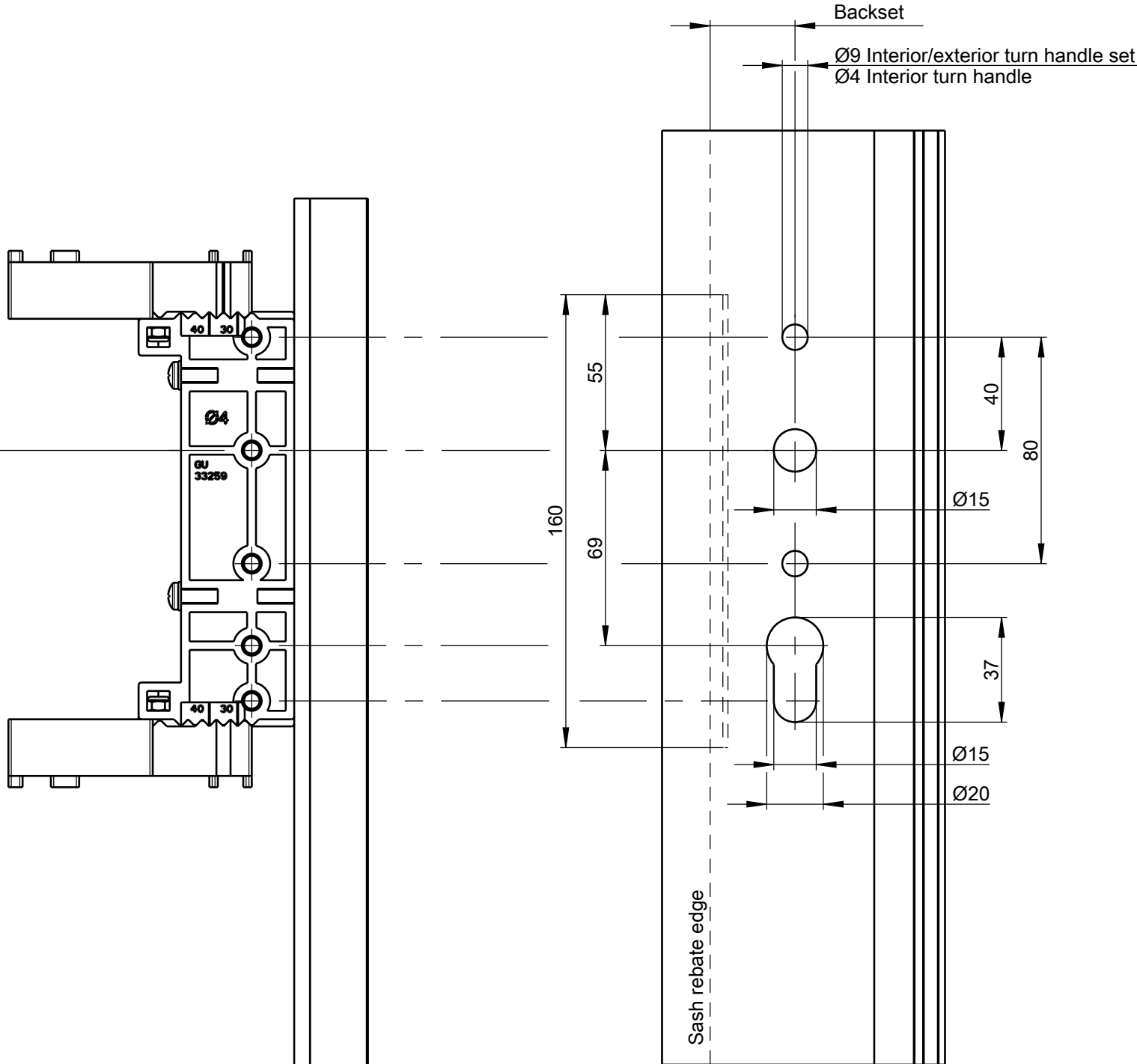


Size	SRW	Dim. L	Number of screw holes	Dimension T (hole distance)	Application
20	720-850	1960	10	200	Guide track P 1225
25	851-1100	2460	13		
30	1101-1350	2960	15		
35	1351-1600	3460	18		Roller track P 1300
67	Stock length	6700	34		

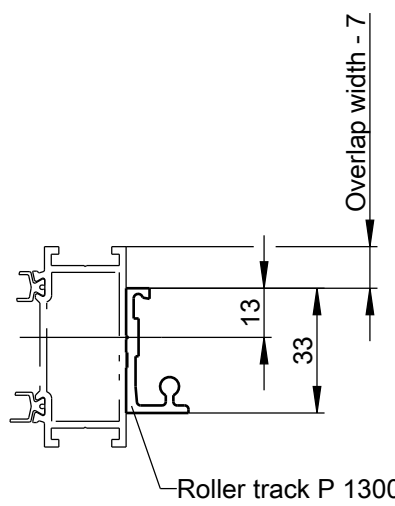
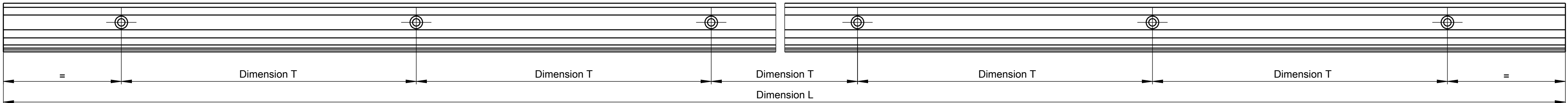
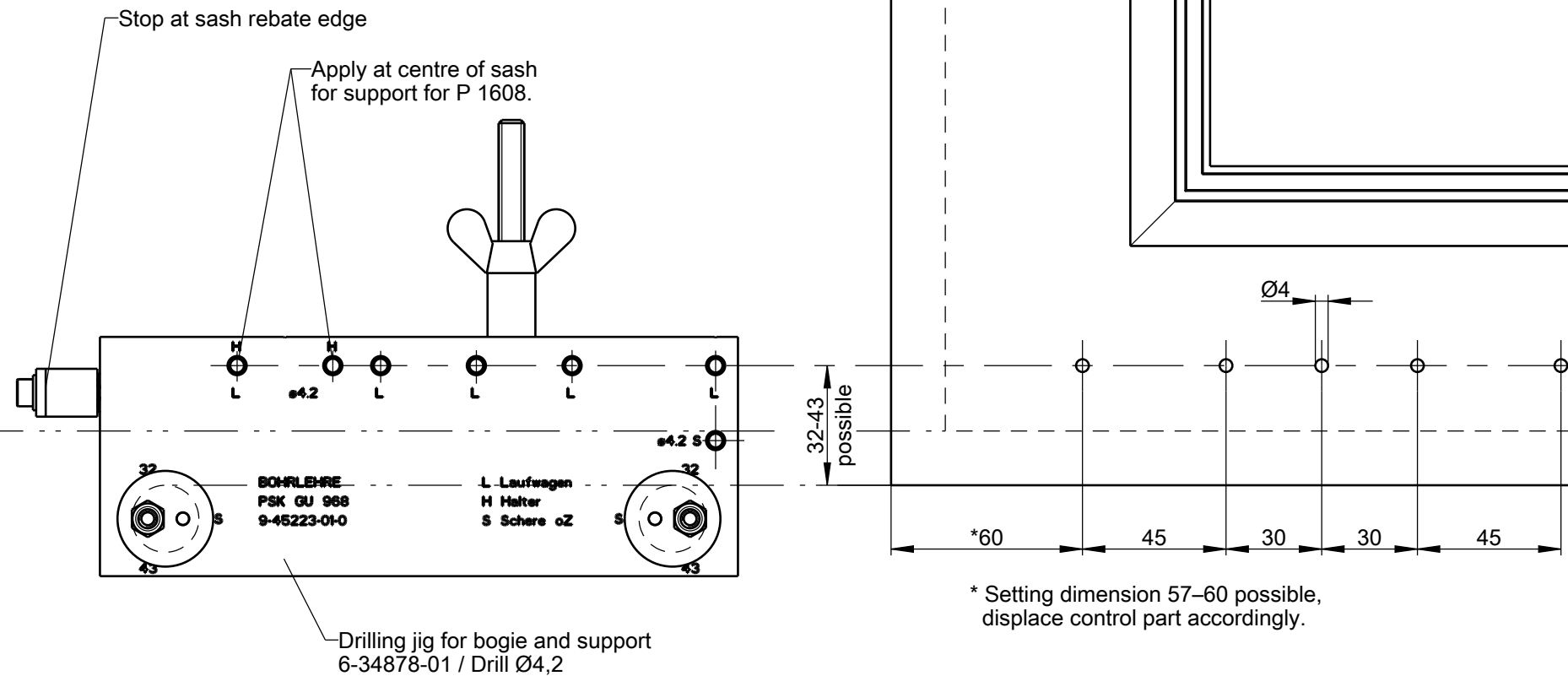
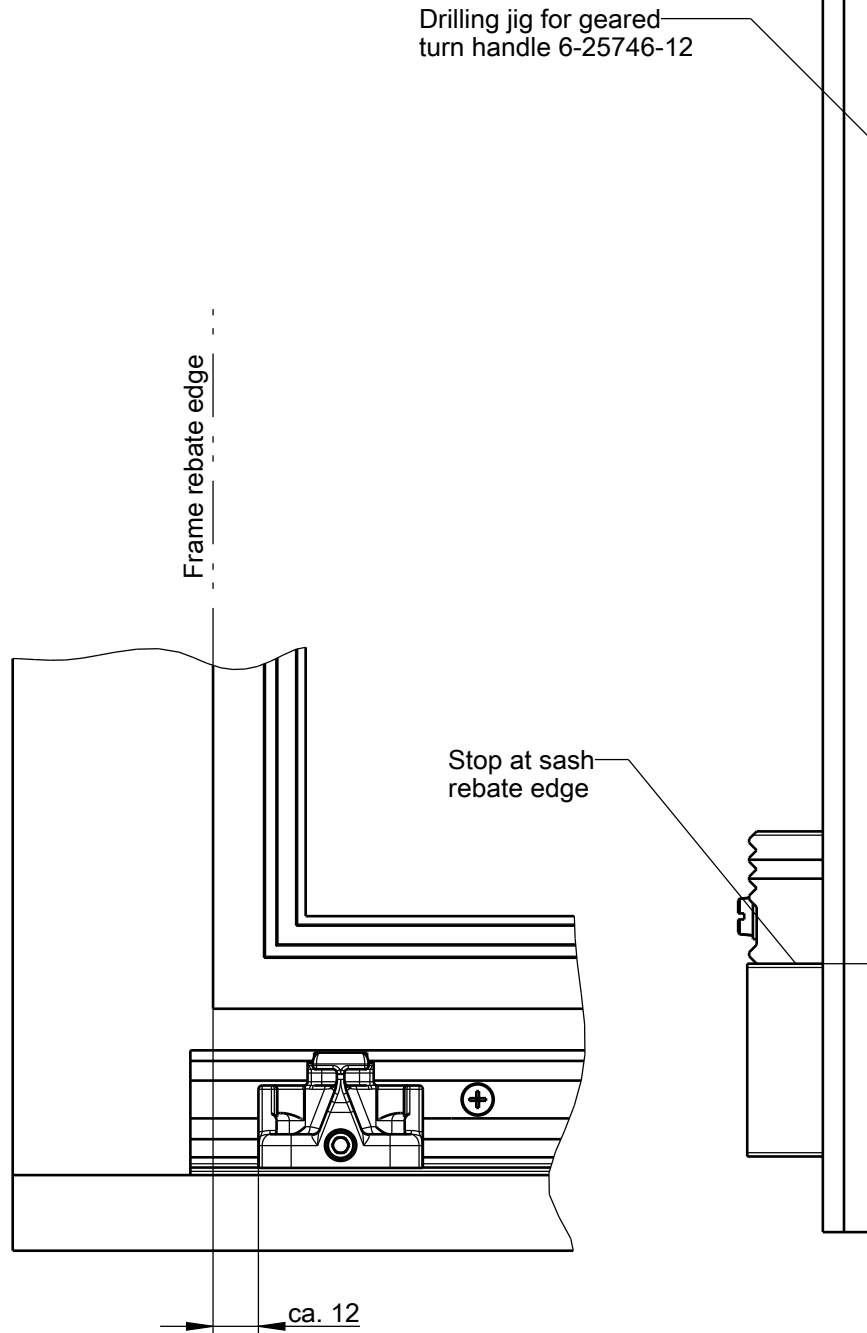
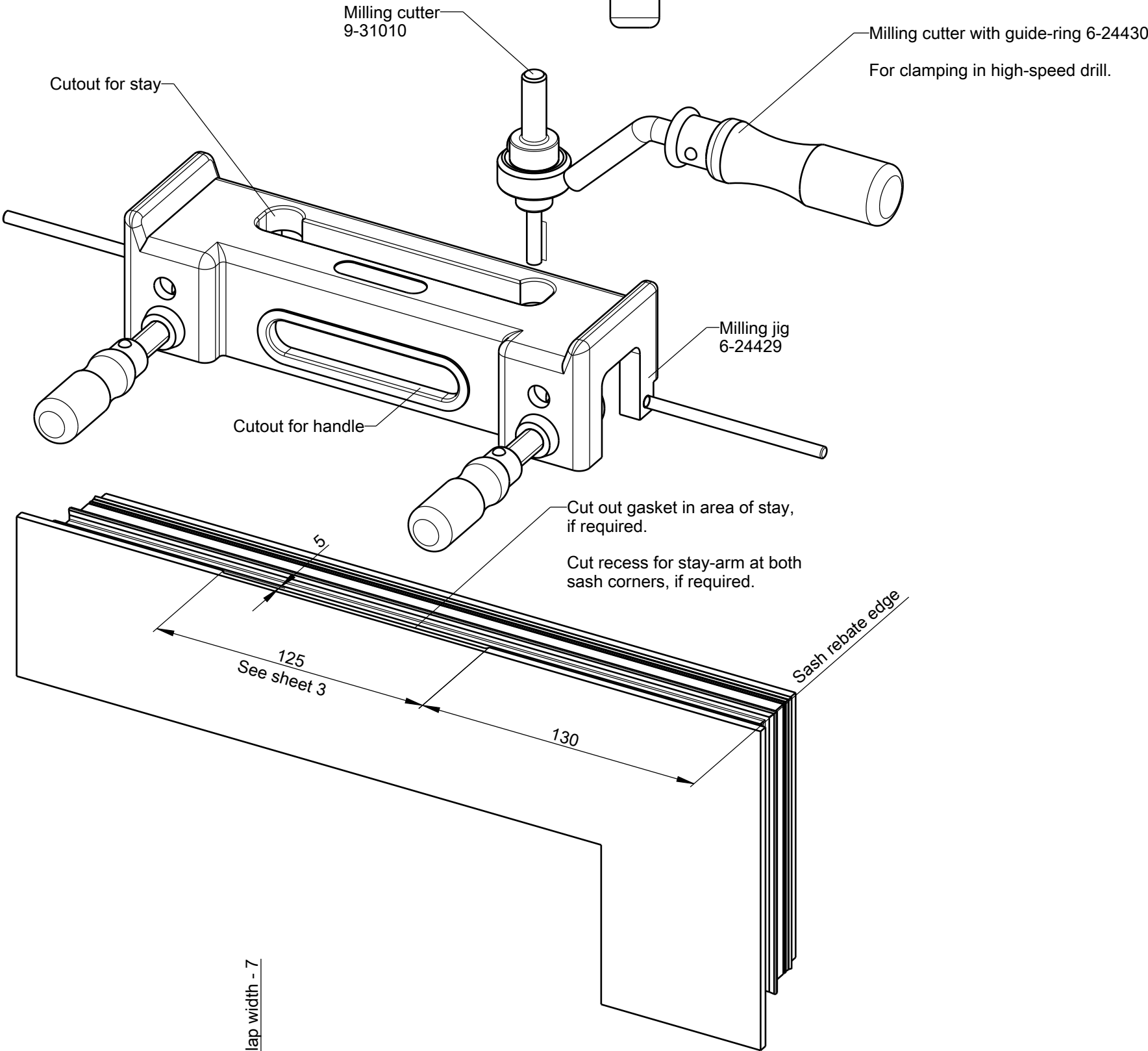
Drilling-hole pattern for geared turn handle
and
Drilling-hole pattern for bogies



Hole pattern for lockable gear



Positioning jig for roller track P 1300, red handle 6-23241



Drilling and milling jigs

Description					
Tilt&Slide hardware GU-968/150 mZ Neutral aluminium profiles, Axis 9/13 mm, 16 mm hardware groove					
--					
Release No. Ver.	Level	Released	Scale	Modification	Size
GU G33924	---	18.08.2017	2	---	1
Replacement for --				Drawing No.	Sheet
				0-47745-BU-0-EN	7/7