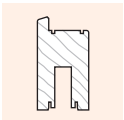
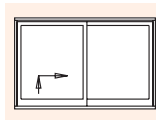


HS-PORTAL 250

Lift and Slide fittings for timber doors
with top guide rail KH0130-01



... with the decisive advantages:

- bogies are an integral part of the gear
- one piece cut to length sealing rail B
- thermally insulated support rail
- clip on running rail
- smooth operation

Size range Scheme A

Sash width	(mm)	720 to 3335
Sash height (sliding sash)	(mm)	1175 to 2675
Outerframe width	(mm)	1470 to 6700
Outerframe height	(mm)	1325 to 2825
Sash weight	(kg)	max. 250
Backset	(mm)	37,5
Sash thickness	(mm)	56, 66 or 68
Sash clearance	(mm)	10 ¹⁾ or 28 (eg. 30 only if FHD 66)
Handle position (window: FH 1175 -1775)	(mm)	410
Handle position (door: FH 1775 -2675)	(mm)	1010

1) only for sash thicknesses 66 and 68 mm

The recommendations for profile section, timber quality and design contained in DIN 68 121 are applicable to the SIEGENIA-HS-PORTAL 250 fittings.

Profile sections must be as specified on the following SIEGENIA drawings:

<i>HSde1007</i>	HS-PORTAL 250 with guide rail KH0130-01 sash thickness 68 mm bzw.
<i>HSde1019</i>	HS-PORTAL 250 with guide rail KH0130-01 sash thickness 66 mm
<i>HSde1008</i>	HS-PORTAL 250 with guide rail KH0130-01 sash thickness 56 mm

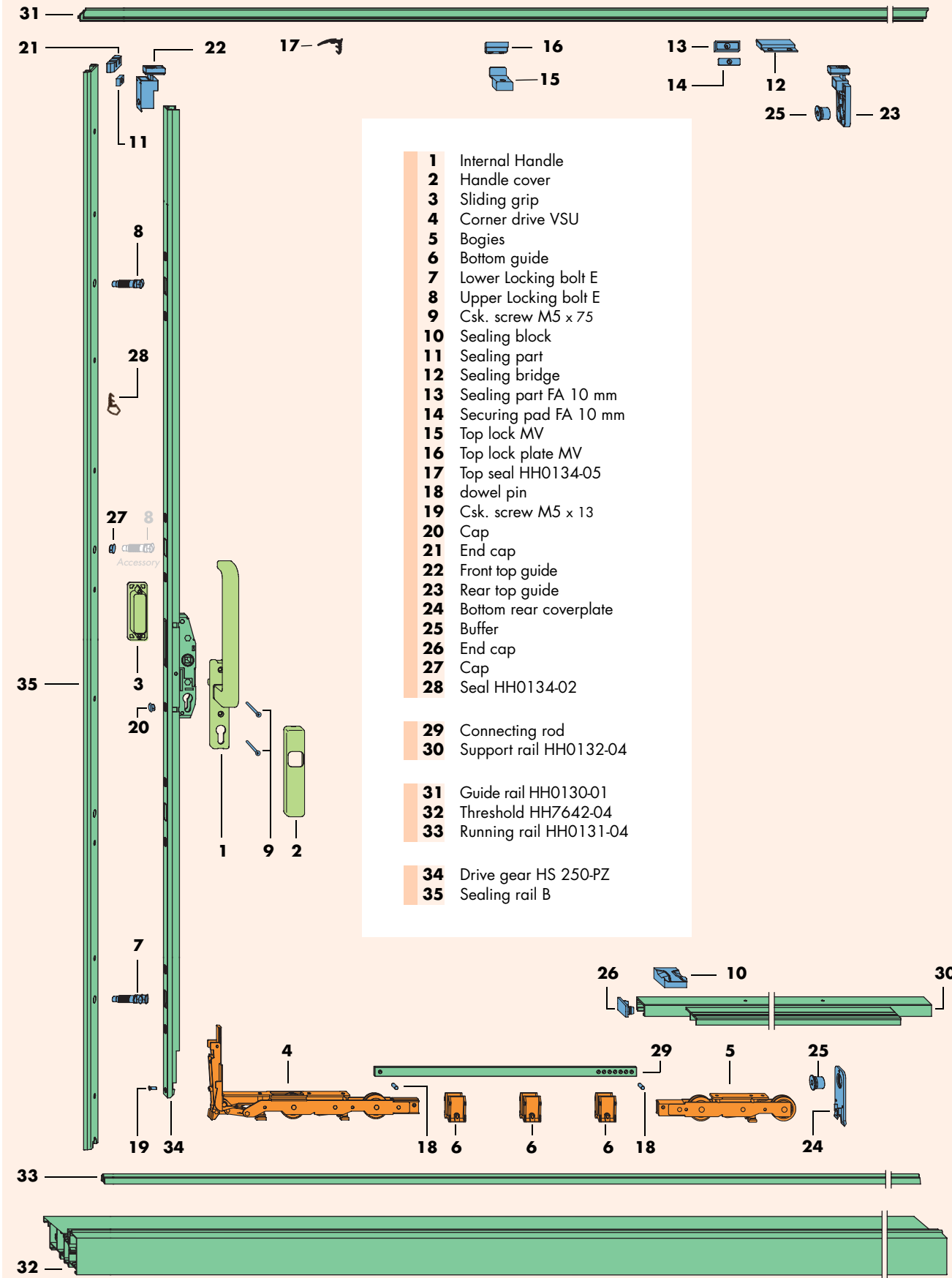
Contents

Size range scheme A	page 1	Vertical section, top	page 11
Fittings layout	page 2	Horiz. section (I)	page 12
Parts list (I)	page 3	Horiz. section (II)	page 13
Parts list (II)	page 4	Outerframe: fitting of parts (I)	page 14
Jigs	page 5	Outerframe: fitting of parts (II)	page 15
Scheme options and accessories (I)	page 6	Vertical section, bottom	page 16
Accessories (II)	page 7	Preparation of the sash (I)	page 17
Accessories (III)	page 8	Preparation of the sash (II)	page 18
Rail B in timber	page 9	Sash: fitting of parts	page 19
Important notes and abbreviations	page 10	Installation of the sliding sashes	page 20

Installation Instruction

HSgb1006

HS-PORTAL 250 Fittings Layout



- 1** Internal Handle
- 2** Handle cover
- 3** Sliding grip
- 4** Corner drive VSU
- 5** Bogies
- 6** Bottom guide
- 7** Lower Locking bolt E
- 8** Upper Locking bolt E
- 9** Csk. screw M5 x 75
- 10** Sealing block
- 11** Sealing part
- 12** Sealing bridge
- 13** Sealing part FA 10 mm
- 14** Securing pad FA 10 mm
- 15** Top lock MV
- 16** Top lock plate MV
- 17** Top seal HH0134-05
- 18** dowel pin
- 19** Csk. screw M5 x 13
- 20** Cap
- 21** End cap
- 22** Front top guide
- 23** Rear top guide
- 24** Bottom rear coverplate
- 25** Buffer
- 26** End cap
- 27** Cap
- 28** Seal HH0134-02
- 29** Connecting rod
- 30** Support rail HH0132-04
- 31** Guide rail HH0130-01
- 32** Threshold HH7642-04
- 33** Running rail HH0131-04
- 34** Drive gear HS 250-PZ
- 35** Sealing rail B

HS-PORTAL 250 Parts list

Pos.	Qty.	Description	EAN 40 12453					
			white	black	brown			
always required	1	Internal handle carton <i>consists of:</i>	<i>see handle options on the bottom of page 4</i>					
	1	Internal handle HS						
	2	Handle cover						
	3	Sliding grip short						
	1	Basic carton HS 250-H <i>consists of:</i>	235331					
	4	Corner drive VSU HS		843581				
	5	Bogie HS		843772				
	6	Btm. guide		821435				
	1	Additional carton HS-H KH0130-01 <i>consists of:</i>	236536	236543	236550			
	7	Lower Locking bolt E		848395				
	8	Upper Locking bolt E		848388				
	9	Csk. screw M5 x 75 Sash thickness 68 mm		823095				
	10	Sealing block		844984				
	11	Sealing part top HSK		838037				
	12	Sealing bridge FA 28 mm		821343				
	13	Sealing part FA 10 mm		821329				
	14	Securing pad FA 10 mm		841600				
	15	Top lock MV		821497				
	16	Top lock plate MV		821503				
	17	Top seal HH0134-05 Länge 3,4 m		236666				
		1	Bag of small bits HS/HSK-250:					
	18	2	Scroll pin 6 x 16		823132			
	19	1	Csk. screw M5 x 13		800850			
	20	1	Cap grey		819708			
		1	Cap brown		819869			
		1	Bag. HS-H KH0130-01:					
	21	1	End cap, top	844991	845004	845332		
	22	1	Front top guide	832875	832882	as black		
23	1	Rear top guide	832899	832905	832912			
24	1	Bottom rear coverplate	843154	843161	843147			
25	2	Buffer	843116	843123	845295			
26	1	End cap	843277	843284	as black			
27	3	Cap for sealing rail B (35)	843567	843574	as black			
28	1	Seal HH0134-02	112977					
height dependant FB	29	Connecting rod	Size	Length (in mm)	FB (in mm)			
			150	898	720 bis 1500	828403		
			200	1398	1501 bis 2000	828410		
			250	1898	2001 bis 2500	828427		
			335	2748	2501 bis 3350	828434		
	30	Supporting rail HH0132-04	150	1580	720 bis 1500	842966	1)	
			200	2080	1501 bis 2000	843000		842973
			250	2580	2001 bis 2500	843048		843017
			285	2930	2501 bis 2850	843062		843055
			335	3430	2851 bis 3350	843086		843079

1) Use a black Supporting rail HH0132-04 .

HS-PORTAL 250 Parts List

Pos.	Qty.	Description	EAN 40 12453						
			EV 1 silver	C 34 dark brown	C 33 brown				
width dependant RAB	31	Guide rail KH0130-01 for FHD 56 mm and 68 mm	Size	Length (in mm)	RAB (in mm)				
			300	2900	1470 bis 3000	130865	130872	155202	
			350	3400	3001 bis 3500	130889	130896	155219	
			400	3900	3501 bis 4000	130902	130919	155226	
			450	4400	4001 bis 4500	130926	130933	155233	
			500	4900	4501 bis 5000	130940	130957	155240	
	570	5700	5001 bis 5700	130964	130971	155257			
	670	6600	5701 bis 6700	130988	130995	155264			
	1	Bag. Threshold HH7642-04	Size	Length (in mm)	RAB (in mm)				
			300		1470 bis 3000	235126	235140	235133	
			350		3001 bis 3500	235157	235171	235164	
			400		3501 bis 4000	235188	235201	235195	
450				4001 bis 4500	235218	235232	235225		
500				4501 bis 5000	235249	235263	235256		
570		5001 bis 5700	235270	235294	235287				
670		5701 bis 6700	235300	235324	235317				
32	1	Threshold HH7642-04	300	3000	843291	843314	843307		
			350	3500	843321	843345	843338		
			400	4000	843352	843376	843369		
			450	4500	843383	843406	843390		
			500	5000	843413	843437	843420		
			570	5700	843444	843468	843451		
670	6700	843475	843499	843482					
33	1	Running rail HH0131-04	300	3005	842751	842775	842768		
			350	3505	842782	842805	842799		
			400	4005	842812	842836	842829		
			450	4505	842843	842867	842850		
			500	5005	842874	842898	842881		
			570	5705	842904	842928	842911		
670	6705	842935	842959	842942					
height dependant FH	34	1	Drive gear HS 250-PZ	Size	FH (in mm)	Handle pos.(in mm)			
				170	1190 to 1790	410	834343	834350	1)
				200	1791 to 2090	1010	834367	834374	
				230	2091 to 2390	1010	834381	834398	
				260	2391 to 2690	1010	834404	834411	
35	1	Sealing rail B	Size	FH (in mm)		white ²⁾	black		
			230	1190 to 2390		843512	843529	3)	
			260	2390 to 2690		843536	843543		

1) Use EV 1 or C 34 Drive gear HS 250-PZ.

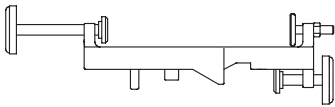
2) or use black.

3) Use black Sealing rail B .
Alternative: Use timber rail B (see page 9).

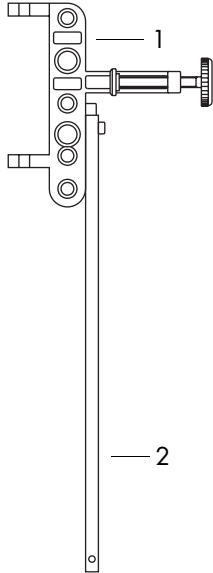
Handle options

Pos.	Qty.	Description	EAN 40 12453					
			EV 1 silver	EV 2 new silver	EV 4 brown anodised	white	C 34 dark brown	C 33 brown
		Internal handle carton consists of:	235379	235393	235461	235409	235416	235386
1	1	Internal handle HS	843598	843611	843628	843635	843642	843604
2	1	Handle cover	843710	843734	843741	843758	843765	843727
3	1	Sliding grip short	843659	843673	843680	843697	843703	843666

HS-PORTAL 250 Jigs



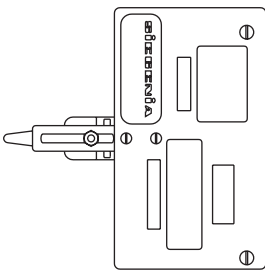
Description		Tool	EAN 4012453
Jig EB 633-1/04	for frame corner connection HH 7642-04	Drill: Ø 6,5 mm	155059



Drill jig EB 633-3	for handle preparation consists of:		
1 drilling jig EB 633-3	for handle holes	Drill: Ø 12 mm Ø 18 mm	141397
1 positioning rod	for EB 633-3		141366



Jig	for locking bolts	Drill: Ø 10 mm	155066
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Milling template	for sliding grip and centre lock	Cutter: Ø 20 mm cutter guide: Ø 27 mm Drill: Ø 7 mm	141373
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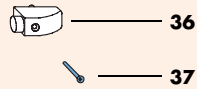
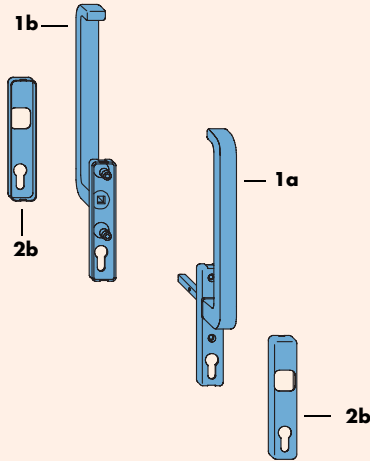
When using the timber rail B,
install the sealing rail B (35) at the same time:



Centre punch	for positioning the locking bolts, in the timer rail B		141519
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HS-PORTAL 250 *Scheme options and accessories*

Internal and external locking handle HS-PZ



DIN left

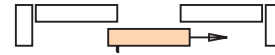
or

DIN right

Scheme A



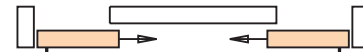
Scheme G



Scheme C



Scheme K

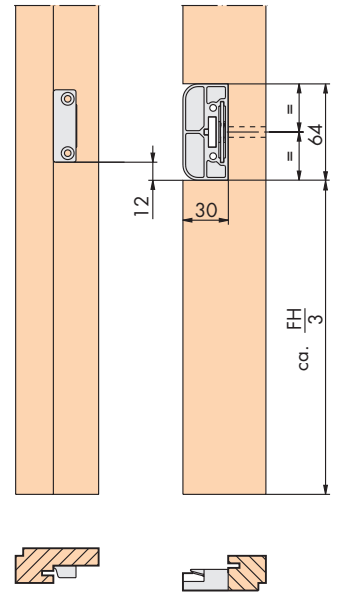
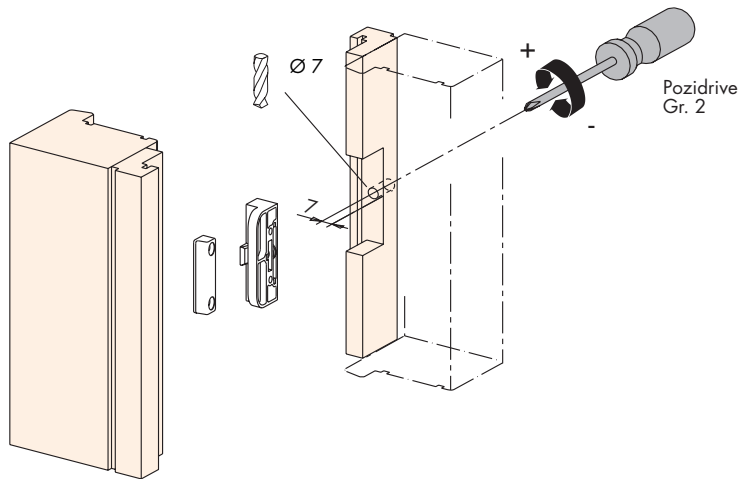
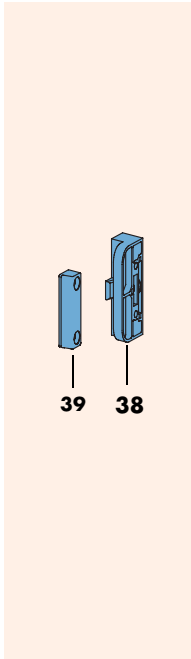


For a style of door using internal and external locking handles the parts listed on pages 3 and 4 are required. Please replace the internal handle carton (1, 2 und 3) with one of the following cartons .

Pos.	Qty.	Description	EAN 40 12453					
			EV 1 silver	EV 2 newsilver	EV 4 brown anodised	white	C 34 dark brown	C 33 brown
	1	Handle Carton HS-PZ <i>consists of:</i>	235843	235867	-	235874	235881	235850
		internal and external locking						
	1a	Internal handle HS PZ	845349	845363		845370	845387	845356
	1b	External handle HS PZ	845394	845417		845424	845431	845400
	2b	Handle cover PZ	845448	845462		845486	845493	845455
	1	Bag. Buffer	821237	831922		821237	831922	827901
	36	Buffer						
	37	Wood screw 4,5 x 70						

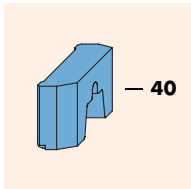
HS-PORTAL 250 Accessories (II)

Adjustable centre lock



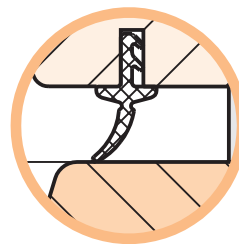
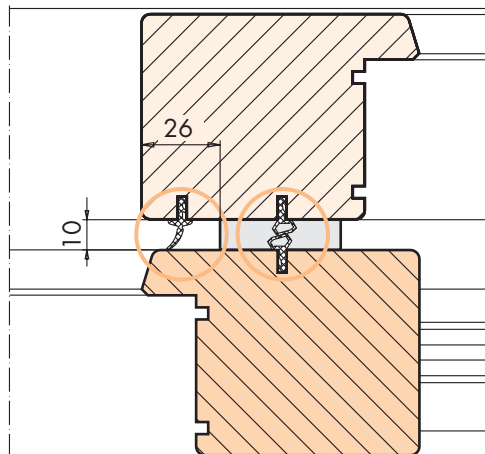
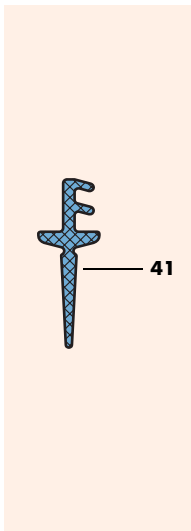
It is possible to fit more than one centre lock.

Btm. Endcap

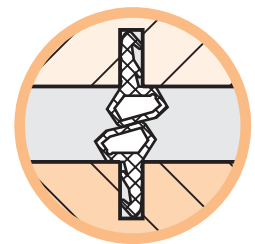


when using the timber rail B butt up against the sealing rail B (31).

Seal HH0134-04 for 10 mm sash clearance (only for sash thicknesses of 66 and 68 mm)



Seal HH0134-04

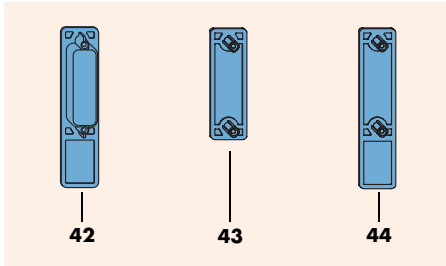


Please note installation of the standard seal HH0134-02.

	Pos.	Qty.	Description	EAN 40 12453		
				white	black	dark brown
Accessories		1	Bag. Centre lock consists of:			
	38	1	Lock		824047	
	39	1	Lockplate		821473	
	40	1	Btm. Endcap		821480	
	41	1	Sash seal HH0134-04 for 10 mm sash clearance length 2,7 m length 50 m	-	821381	845509
					127100	
					127148	

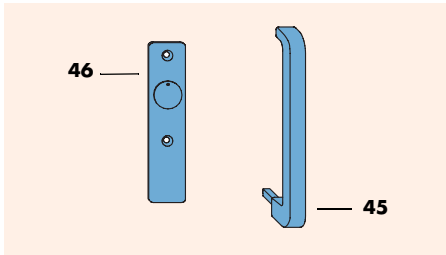
HS-PORTAL 250 Accessories (III)

Long Sliding grip, Escutcheon plates

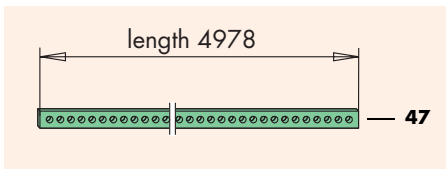


The parts shown here may be used instead of the short sliding grip handle (3, see page 2) .

Removeable handle

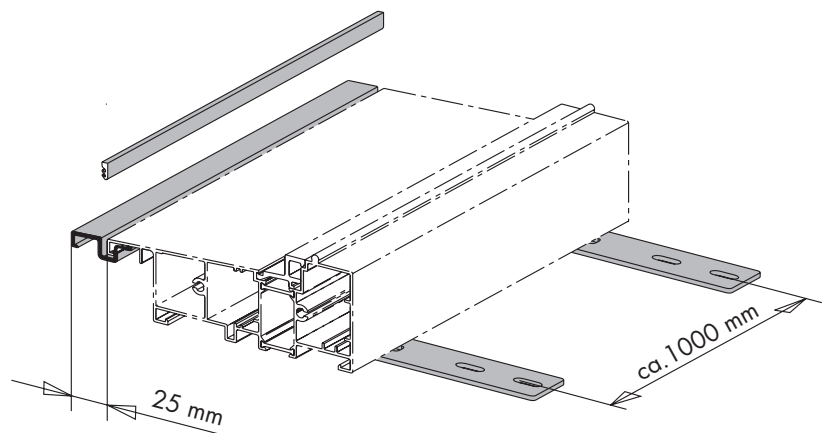
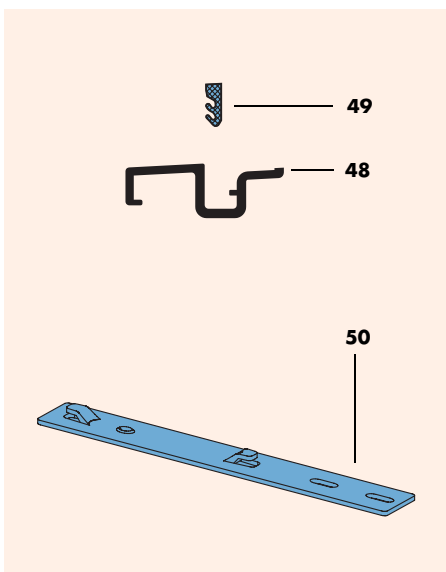


Connecting rod Gr. 500



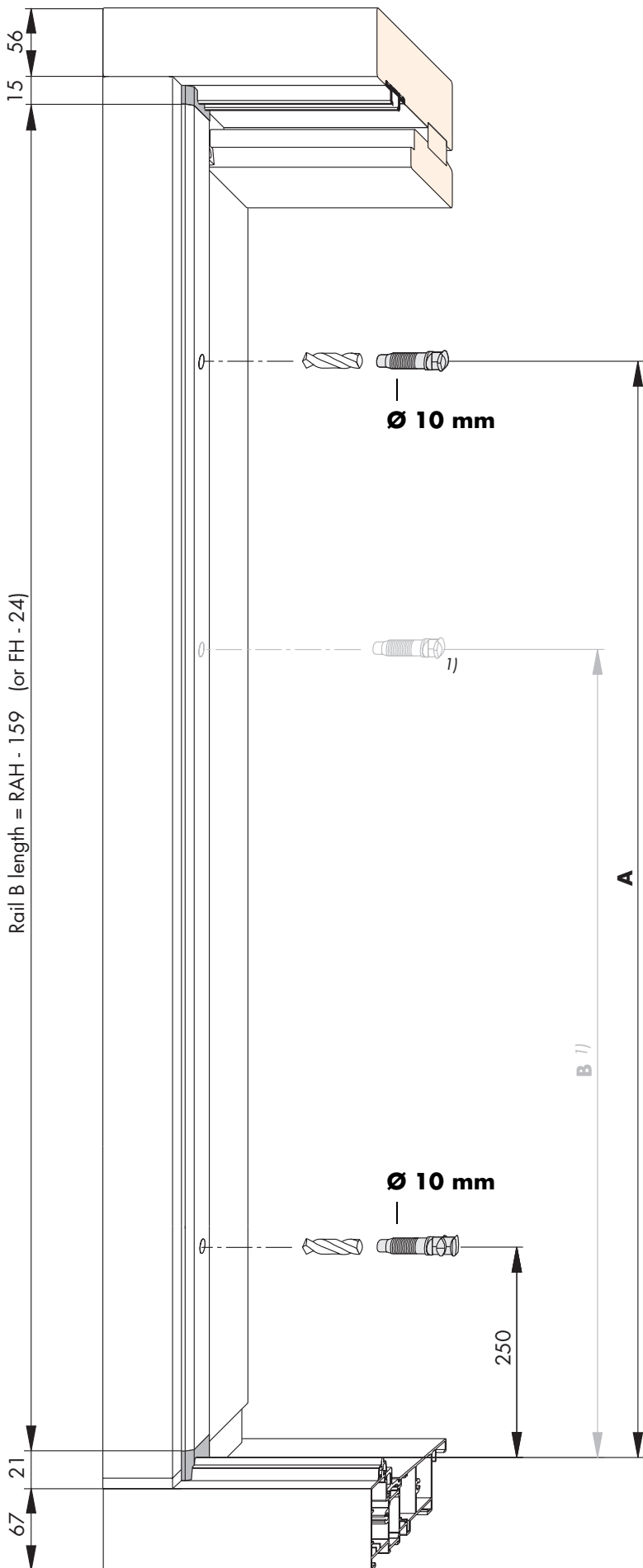
Connecting rod Gr. 500 is available from stock in 4978 mm lengths.

Extension rail HH7646 and fixing cleats



Pos.	Qty.	Description	EAN 40 12453							
			EV 1 silver	EV 2 newsilver	EV 4 brown anodised	white	C 34 dark brown	C 33 brown		
Accessories	42	1	long sliding grip	845578	845592	845608	845615	845622	845585	
	43	1	Short escutcheon	845639	845653	845660	845677	845684	845646	
	44	1	Long escutcheon	845691	845714	845721	845738	845745	845707	
	45	1	Removeable handle	-	827703	-	-	-	-	
	46	1	Internal escutcheon	845752	845776	-	845783	845790	845769	
	47	1	Connecting rod	Gr. 500 Length 4978		828441				
	48	1	Extension rail HH7646	Gr. 500		128329	-	-	128336	-
				Gr. 670		128343	-	-	128350	136829
	49	1	Seal HH7633	length as required		633.7633.5.008.A0				
	50	1/lfdm	Fixing cleat	844977						

HS-PORTAL 250 Timber rail B

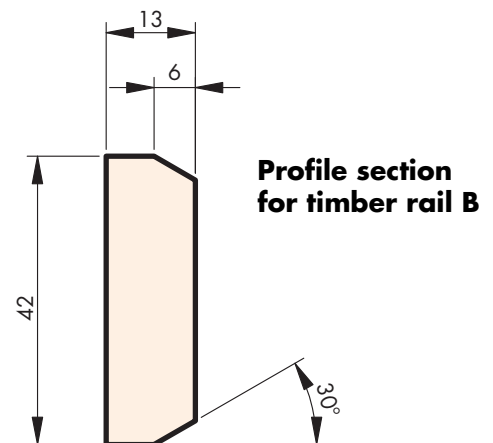


A Fitting the timber rail B

- Cut rail B to length.
- Position rail B with btm. endcap (40) and screw on.
- Fit top endcap (21).

B Fixing the locking bolts (7 and 8).

- Mark positions for locking bolts (7 and 8) with ctr. punch (see page 5).
- Drill locking bolt holes (7 and 8) using Ø 10 mm drill. If hardwood use Ø 11 mm rough drill.
- Screw on the locking bolts (7 and 8) using the proper jig (see page 5 and page 12).



Drive gear	Dim. A	Dim. B ¹⁾
Size 170	1000	600
Size 200	1600	1200
Size 230	1900	1200
Size 260	2200	1200

1) If desired an additional top locking bolt (8) can be fitted as a centre lock point.

In this case, the locking point hole on the drive gear HS 250PZ (34) must be opened up.

Important notes

- The recommendations for profile section, timber quality and design contained in DIN 68 121 (Timber profiles for windows and doors) is applicable to the SIEGENIA- HS-PORTAL 250 fittings.
- The **Profile cross-section** must correspond to the specifications on the following drawings:
 - HSde 1007* HS-PORTAL 250 with guide rail KH0130-01 sash thickness 68 mm bzw.
 - HSde 1008* HS-PORTAL 250 with guide rail KH0130-01 sash thickness 56 mm
 - HSde 1019* HS-PORTAL 250 with guide rail KH0130-01 sash thickness 66 mm
- The steel hardware components described in these instructions have been zinc plated and yellow chromated to DIN 50 961. They must not be installed for use in aggressive, corrosion promoting air conditions, or on wood containing aggressive additives.
- Use **only** SIEGENIA-fittings with SIEGENIA fittings, otherwise we can accept no liability in respect of damages or defects arising where the assembly incorporates other hardware.
- Assemble the hardware components correctly as described in pages 11 to 20.
- Surface treatment of timber elements must be performed prior to attachment of the hardware. Post treatment could adversely affect the function of fittings. In this case we can accept no liability.
- Please follow the standard techniques for glazing and wedging of glass sealed units within the sash and frame.
- Keep the running rail HH0131-04 free from dirt and debris. Avoid direct contact of the fittings with water.
- Affix a clearly visible copy of the operating sticker to one of the lift and sliding sashes (DIN left or DIN right). The sticker can be found in the basic carton „HS 250-H“.

Liability exclusion

We accept no liability in respect of any damages or malfunctions caused by the hardware or the lift and sliding doors fitted with them, as a result of incorrect and inappropriate specifications, failure to follow these instructions, wilful damage or negligence or misuse or alteration or repair, or of exertion of excessive force to the hardware by the user or customer.

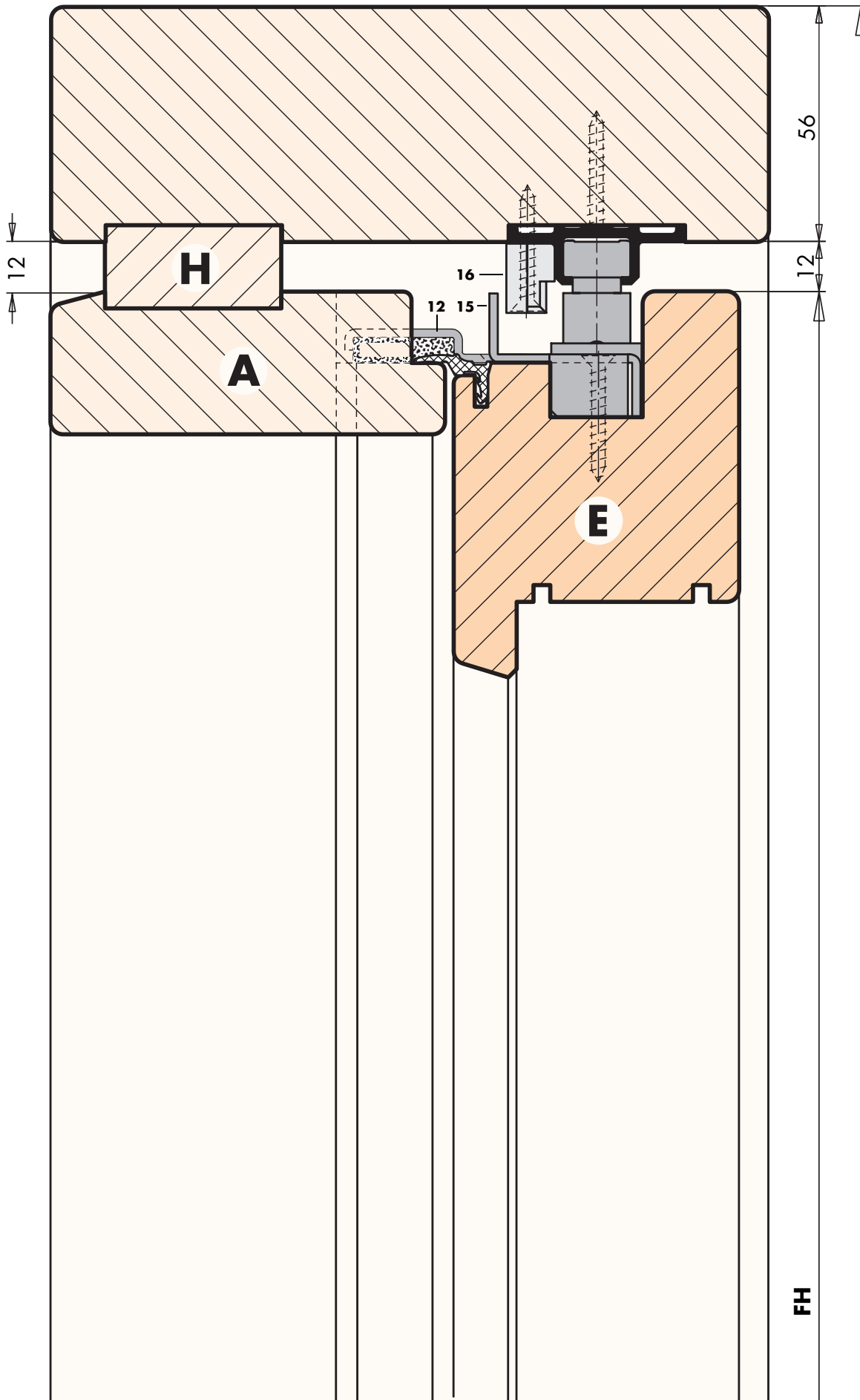
Abbreviations

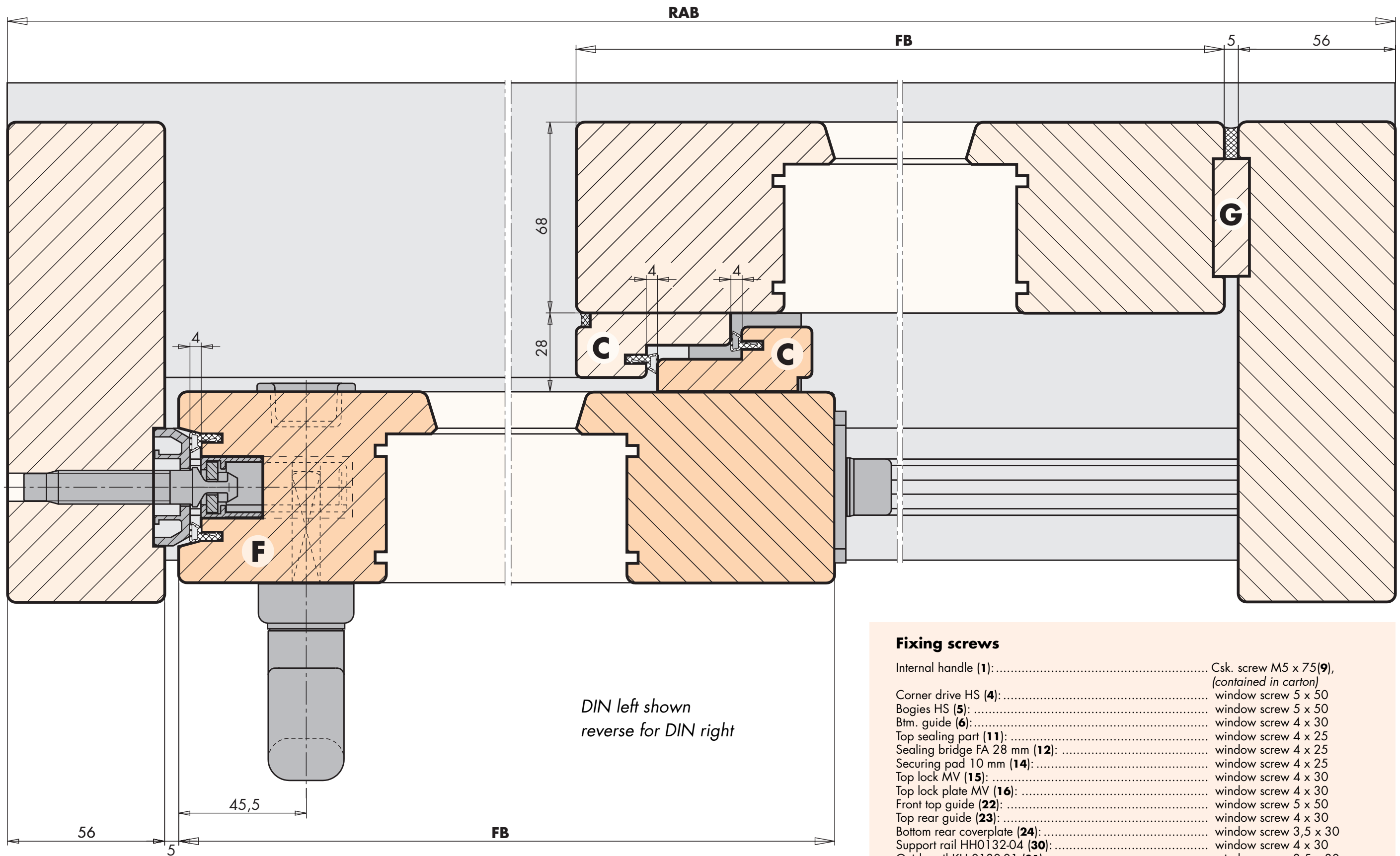
The following abbreviations are used in this document:

Btl.	Bag	FHD	Sash thickness	PZ	Profile cylinder
EB	Drill jig	HH	Lift and slide -Timber	RAB	Frame width
FA	Sash clearance	KH	Lift-Tilt-and slide-Timber	RAH	Frame height
FB	sash width	MV	Centre lock	VSU	Locking side btm.
FH	Sash height	OKFF	Finished floor level		

HS-PORTAL 250 Vertical cross section, top

Note: Drawings on pages 11 - 13 and 16 are **not** to scale.





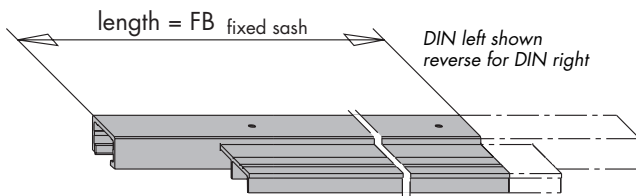
Fixing screws

Internal handle (1):	Csk. screw M5 x 75(9), (contained in carton)
Corner drive HS (4):	window screw 5 x 50
Bogies HS (5):	window screw 5 x 50
Btm. guide (6):	window screw 4 x 30
Top sealing part (11):	window screw 4 x 25
Sealing bridge FA 28 mm (12):	window screw 4 x 25
Securing pad 10 mm (14):	window screw 4 x 25
Top lock MV (15):	window screw 4 x 30
Top lock plate MV (16):	window screw 4 x 30
Front top guide (22):	window screw 5 x 50
Top rear guide (23):	window screw 4 x 30
Bottom rear coverplate (24):	window screw 3,5 x 30
Support rail HH0132-04 (30):	window screw 4 x 30
Guide rail KH 0130-01 (31):	window screw 3,5 x 30
Drive gear HS 250-PZ (34):	window screw 5 x 50
Sealing rail B (35):	window screw 4 x 30

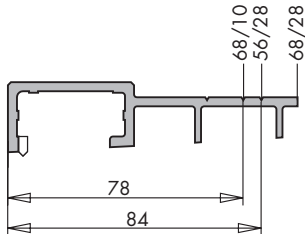
Galvanised and bichromated window screws for timber windows (not in product range).

Sash thickness 68 mm / Sash clearance 28 mm

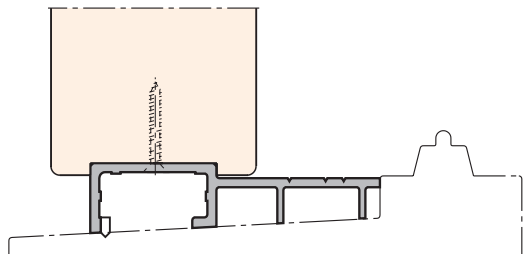
HS-PORTAL 250 Frame : Assembly of components (I)



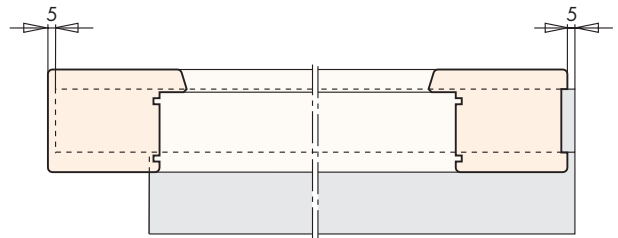
diag 1



diag 2



diag 3



diag 4

Assembly sequence

A Fixing the support rail HH0132-04 (30) to the fixed sash.

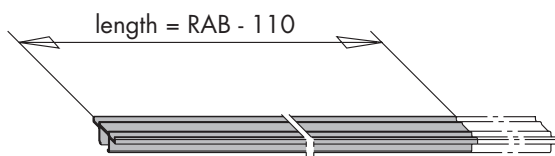
- Cut the support rail HH0132-04 (30) to length according to the sliding direction DIN left or DIN right (diag. 1).
- Dependant on sash thickness/sash clearance 56/28 or 68/10 the support rail must be cut to width along the corresponding notch (diag. 2).
- Screw on the support rail HH0132-04 (30) (diag. 3 and 4).

B Installing the fixed sash in the frame (without diag.).

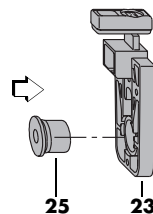
- Fit the sash into the frame with strips „G“ and „H“ (see page 11 - 13 and page 16).
- Press the endcap (26) into the support rail HH0132-04 (30) and seal.

C Installing the guide rail KH0130-01 (31).

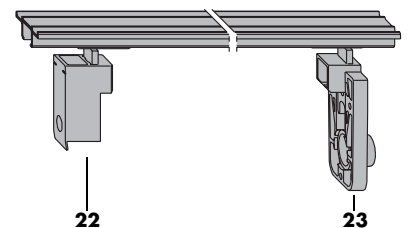
- Cut the guide rail KH0130-01 (31) to length (diag 5).
- Press the buffer (25) into the top rear guide (23) (diag. 6).
- Insert top front (22) and top rear guides (23) (diag. 7) into the guide rail KH0 130-01 (31) (see page 11) and screw on.



diag 5

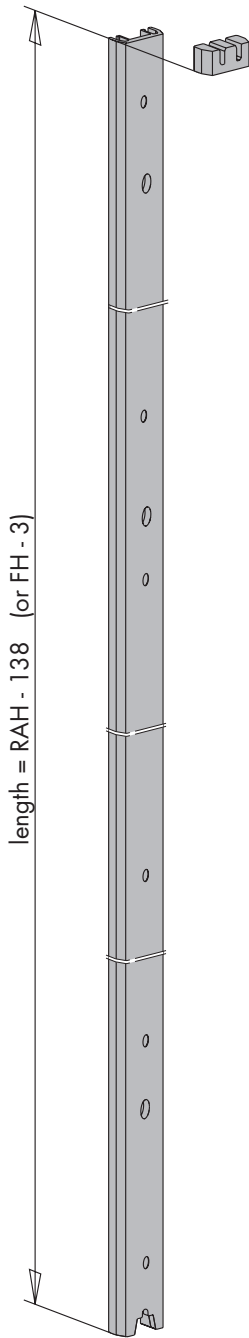


diag 6



diag 7

HS-PORTAL 250 Frame : Assembly of components (II)



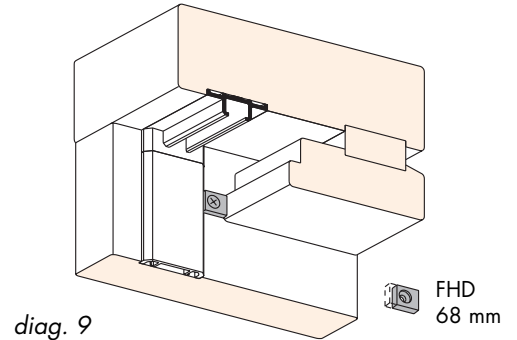
diag. 8

D Fitting the sealing rail B (35).

- Cut sealing rail B (35) to length (diag. 8).
- Position sealing rail B (35) (see page 12) and screw on.
- Insert top end cap (21) (diag. 8).

E Fitting the top seal part (11).

- Screw on the seal part (11) with the correct orientation according to sash thickness 68mm (diag. 9) or 56 mm (diag. 10).

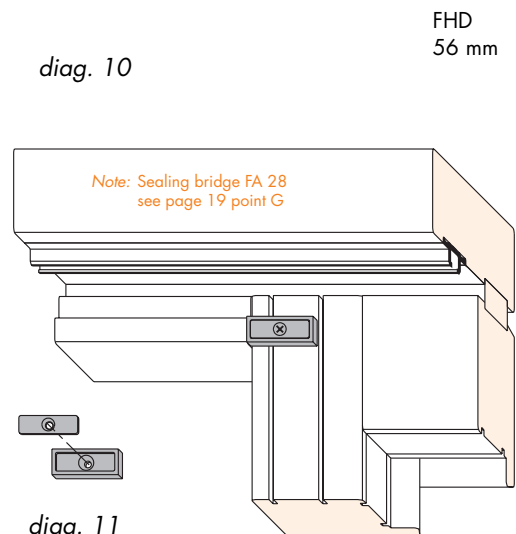


diag. 9

FHD
68 mm

F Fitting the sealing part FA 10 mm (13).

- For 10 mm sash clearance, position sealing part FA 10 mm (13), with securing pad FA 10 mm (14) and fix in place (diag. 11).

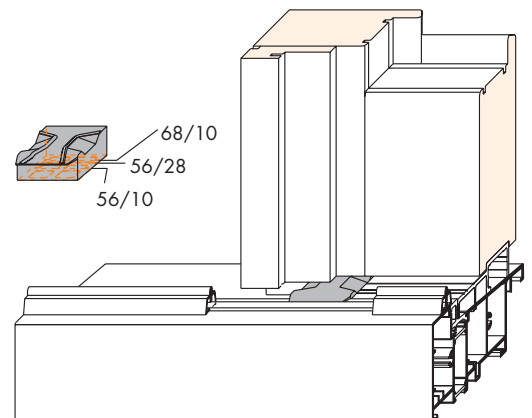


diag. 10

FHD
56 mm

G Fitting the sealing block (10).

- According to sash thickness/sash clearance 56/10, 56/28 or 68/10 cut the sealing block (10) along the corresponding line (diag. 12).
- Position the sealing block (10) and seal or glue on.



diag. 12

