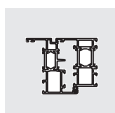
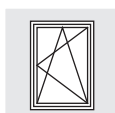


ALU 5100-DK

Assembly instructions



BD3,5

Single-sash square turn and tilt

Aluminium Eurogroove 15/20

Chamber dimension 21

Versions A0004/A0006/A0022

Hinge clearance (BD) 3.5 - 5.0

Mishandling device on the gear (FBS-G)

Vertical tilt point (KPS)

Size range

		Windows	Patio doors
Sash width	(mm)	375 – 1600	375 – 1300
Sash height	(mm)	550 – 2000	2000 – 2400
Sash weight	(kg)	max. 80/100	max. 80/100

The following application diagrams apply:

- max. 80 kg
- max. 100 kg

document no.: H58.AWDLS002EN
document no.: H58.AWDLS003EN

The following documents are required:

- Profile recommendation ALU20
- ALU Maintenance instructions
- ALU Service instructions
- ALU Operating instructions

document no.: H45.ALUS001EN
document no.: H49.ALUS001EN
document no.: H47.ALUS001EN
document no.: H47.ALUS002EN

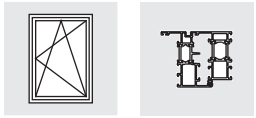
Please observe:

Guidelines/notes on the product and on liability (VHBH directive as well as the further applicable documents)!

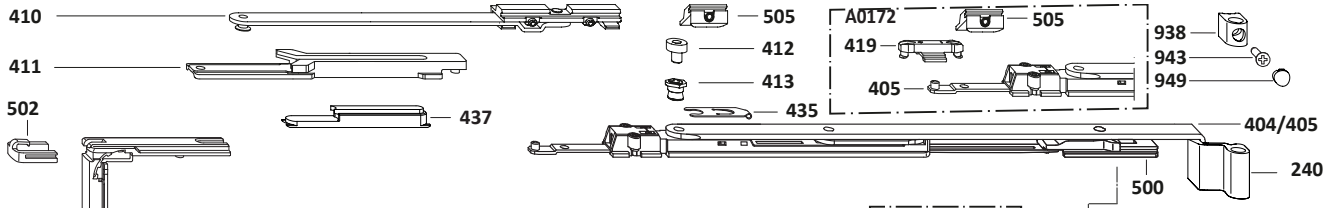
Specifications from the profile manufacturers or system owners for windows and patio doors!



All documentations see SIEGENIA download-portal!

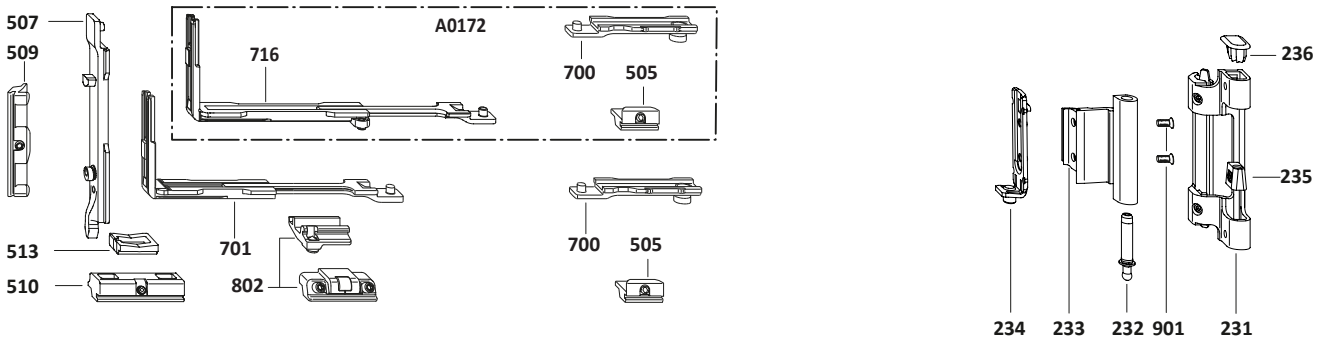
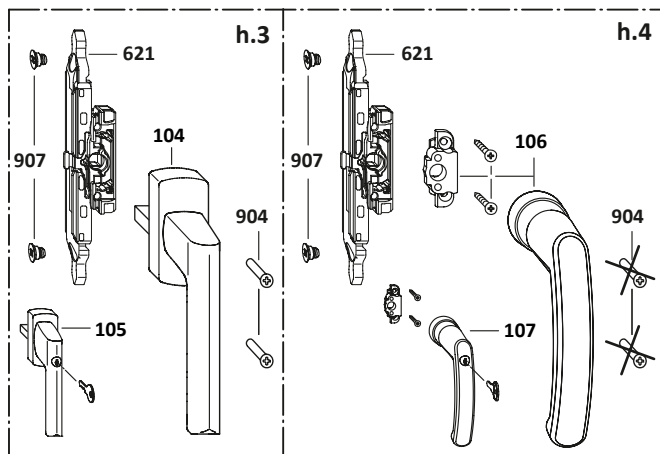
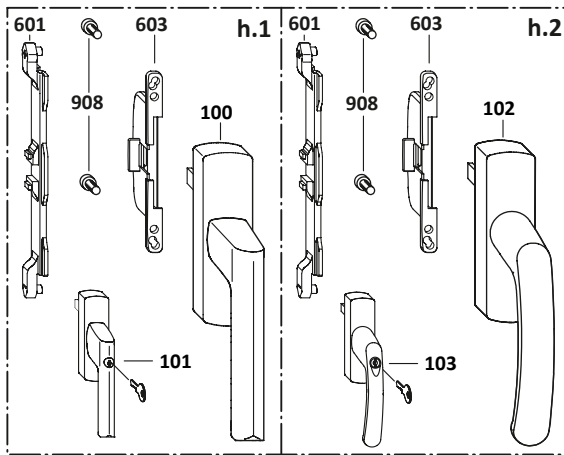


3



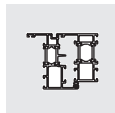
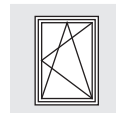
Torque and tooling information

Items	Nm (± 0.25)	
231, 238, 240, 404, 405, 901	⬡ 2.5	2.5
410, 505, 509, 510, 716, 802	⬡ 1.5	2.5
908	⬡ 2.5	4
412	⬡ 4	4
904, 907	⊗ 2.7	PZ2
106, 107, 943	⊕ 2.5	PH2





	Item	Pieces	Material description	Material number	P/U	Material number	P/U					
h.1	100	1	ALU Si-line handle	See ALU handle overview in the SIEGENIA download-portal								
	101		ALU Si-line lockable handle					Only use in combination with coupling set				
h.2	102		ALU Globe handle					Only use in combination with gear set				
	103		ALU GLOBE lockable handle									
h.3	104		TITAN handle					Only use in combination with gear set	□ 7 mm x 25, cam Ø 10 Only use in combination with gear set			
	105		TITAN lockable handle									
h.4	106		ALU Globe RR handle					See ALU Globe RR handle in the SIEGENIA download-portal				
	107		ALU Globe RR lockable handle									
	1		Hinge side ALU5100 (only for BD ≥ 3.5 mm ≤ 5 mm)					Silver	MMBS0430-52501_	1	MMBS0430-52502_	10
								RAL 9016	MMBS0430-50401_	1	MMBS0430-50402_	10
		RAL 9005		MMBS0430-52301_	1	MMBS0430-52302_	10					
		EV 1		MMBS0430-52401_	1	MMBS0430-52402_	10					
		Mill finish		-	-	MMBS0430-50002_	10					
	231	1	Bottom hinge									
	232	1	Bottom hinge pin									
	233	1	Corner hinge									
	234	1	Clamping piece E									
	235	1	Adjusting piece SV ALU 5100									
	236	1	Bottom hinge cover cap									
	237	1	Hinge pin 80 kg									
	238	1	Top hinge									
	239	1	Washer									
240	1	Stay hinge										
901	2	Countersunk screw M5 x 8.5										
	0...1	Accessories set ALU 5100 > 80 kg	Silver	MZBS0140-52501_	1	MZBS0140-52502_	10					
			RAL 9016	MZBS0140-50401_	1	MZBS0140-50402_	10					
			RAL 9005	MZBS0140-52301_	1	MZBS0140-52302_	10					
			EV 1	MZBS0140-52401_	1	MZBS0140-52402_	10					
			Mill finish	-	-	MZBS0140-50005_	50					
	938	1	Bearing 100 kg									
	939	1	Hinge pin 100 kg									
	943	1	Countersunk screw M5 x 13									
	949	1	Bearing cover cap	Variant „raw“ not included in P/U. Order separately according to colour range.								
	949	0...1	Bearing cover cap	SI-silver	-	-	MKBS0010-02506_	100				
RAL 9016 (bright colours)				-	-	MKBS0010-00406_	100					
RAL 9005 (dark colours)				-	-	MKBS0010-02306_	100					
404	0...1	Top stay ALU 5100 size 1	FB > 375 ≤ 600	MSKK0010-00001_	1	MSKK0010-00003_	20					
405	0...1	Top stay ALU 5100 size 2	FB > 600 ≤ 1600	MSKK0210-00001_	1	MSKK0210-00003_	20					
	0...1	ALU additional stay	FB > 1250	857076	1	247006	10					
			410	1	Additional stay							
			411	1	Striker plate							
			412	1	Locking cam							
			413	1	Eccentric rivet							
	1	ALU DK FBS-G KPS locking side		MMVS0250-10001_	1	MMVS0250-10003_	20					
			500	1	Locking bolt DK							
			502	1	Clamping piece EUL							
			503	1	VSO corner drive							
			505	1	Striker							
			507	1	Tilt lock cam 10							
			509	1	E striker cam 10							
			510	1	Tilt locking part							
513	1	Run-up block										
h.1	0...1	Coupling set ALU FBS-G Y ≥ 9 < 10 mm	Only use in combination with h.1/h.2 (see page 4 for rebate height (USH) and for dimension Y)	MMKL0030-10001_	1	MMKL0030-10003_	20					
				MMKL0010-10001_	1	MMKL0010-10003_	20					
h.2	601	1	Coupling bracket									
	603	1	Mishandling device									
	908	2	Cheese head screw M5 x 12									

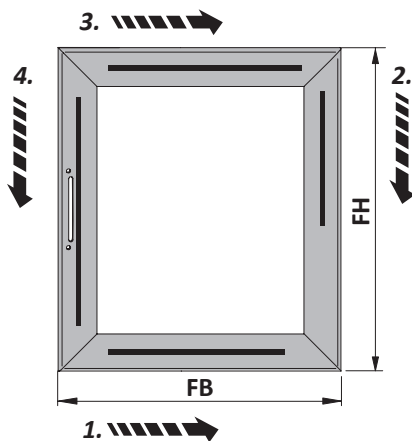


	Item	Pieces	Material description	Material number	P/U	Material number	P/U	
h.3 h.4		0...1	Gear set ALU FBS	Only use in combination with h.3/h.4 (see SIEGENIA download -portal)	MMGI0080-10001_	1	MMGI0080-10003_	20
	621	1	ESG M6 FBS					
	904	2	Countersunk screw M5 x 35					
	907	2	Coupling screw M6					
system- dependent		0...2	MV ALU-DK/TBT	FH/FB > 1250	857045	1	246979	20
	505	2	Striker					
	700	1	Slider					
	701	1	VSU/BSO corner drive					
Recessed groove dep. on system		0...2	MV ALU-DK/TBT A0172	FH/FB > 1250 (see page 5)	MMMV0050-10001_	1	MMMV0050-10003_	20
	505	2	Striker					
	700	1	Slider					
	716	1	Corner drive VSU/BSO A0172					
Accessories	419	0...1	MV stay striker	FB > 600 only use with top stay ALU 5100 size 2 (item 405) and striker (item 505) if necessary (see page 5)	MXSK0010-10001_	1	MXSK0010-10003_	20
	435	0...1	Tilt limiter ALU 5100 ¹⁾	FB > 600 ≤ 1250 may only be used with top stay ALU 5100 sz. 2 (405). FB > 1250 may only be used with tilt limiter additional stay ALU (437) (see page 5).	MXSK0030-00001_		MXSK0030-00020_	20
	437	0...1	Tilt limiter additional stay ALU ¹⁾	Only use in conjunction with tilt restriction ALU 5100 (435) (see page 5).	MFKB0020-02301_	1	MFKB0020-02305_	50
	505	0...1	Striker	FB > 600 use with MV stay striker (419)	859322	1	265413	20
	802	0...1	Sash lifter ALU	see SIEGENIA download-portal	MMFH0010-10001_	1	MMFH0010-10003_	20
	-	0...1	Jig ALU 5100 additional screw connection	for bearing (item 938) and countersunk screw M5 x 13 (item 943) > 80 kg (see page 7)	MARB0070-50001_	1	-	-

1) Limits the tilt-opening width from 170 mm to about 120 mm

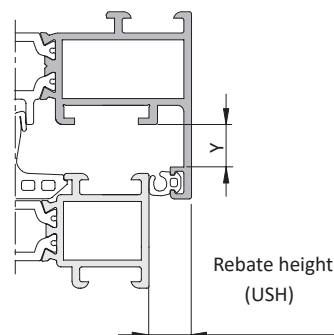
Observe assembly sequence!

Design versions for coupling set (item 601-603-908) (h.1/h.2)



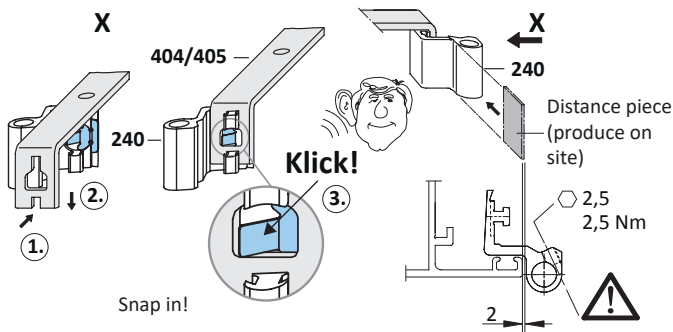
Sequence of installation in the sash
 -without centre lock (3.- 4.)
 -with centre lock (1.-2.- 3.- 4.)

USH (mm)	Z (mm)	Material number
7 - 10	≥ 9 < 10	MMKL0030-10003_
	≥ 10	MMKL0010-10003_

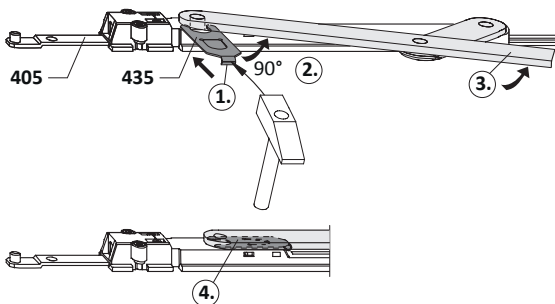




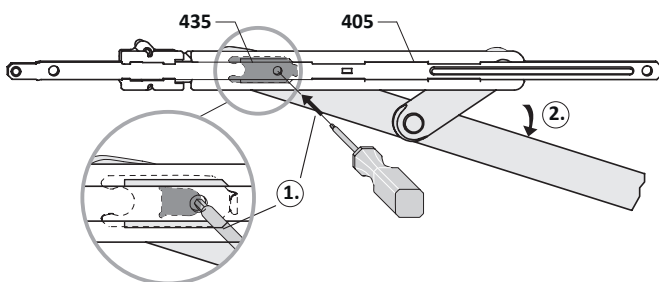
Assembly instructions for stay hinge (item 240) with top stay ALU 5100 size 1/2 (item 404/405)



Assembly of tilt limiter (item 435) with top stay ALU 5100 size 2 (item 405)



Removal of tilt limiter (item 435) from top stay ALU 5100 size 2 (item 405)

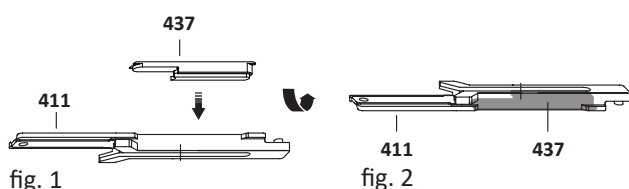


Assembly for tilt limiter ALU additional stay (437)

Note: The tilt limiter ALU additional stay (437) can only be inserted in the striker plate (411) before assembly.

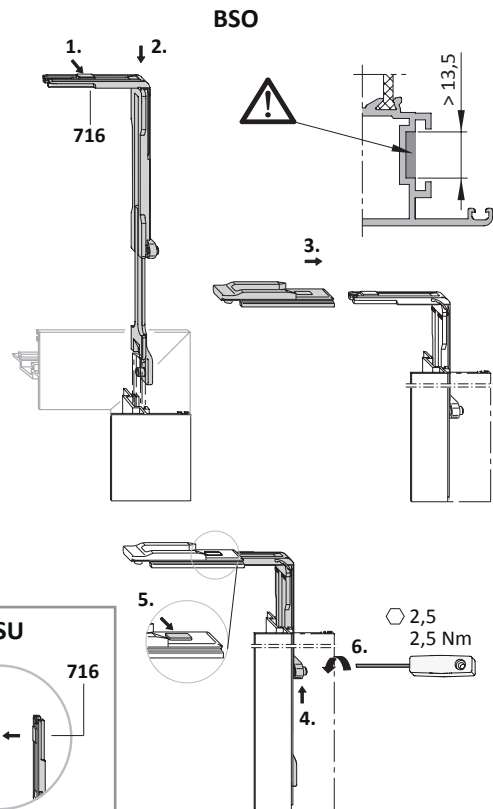
Assembly: Turn the striker plate (411) and insert the tilt limiter ALU additional stay (437) into the striker plate (411) from above (see fig. 1).

To insert in the sash groove, turn the striker plate (411) with tilt limiter ALU additional stay (437) (see fig. 2).

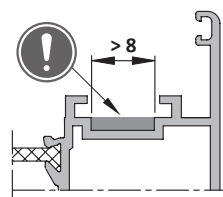


Instructions for installing the corner drive VSU/BSO A0172 (item 716) to the BSO (VSU)

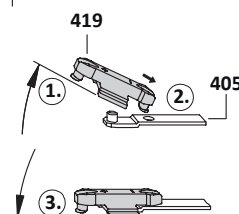
Note: Only use for recessed groove MV ALU-D VSU/VSO A0172!



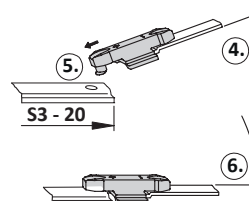
Assembly instructions for MV stay striker (item 419) with top stay ALU 5100 size 2 (item 405) and operating rod S3



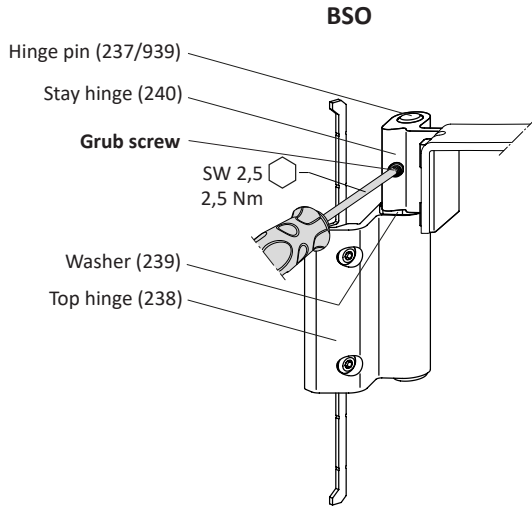
Note: With recessed sash groove (A0172) from FB > 600 mm use MV stay striker (419) with top stay ALU 5100 Gr. 2 (405) (observe sequence 1 to 6).



Note: If necessary couple the MV stay striker (419), also for neutral versions, as an additional locking point (as shown in the adjacent figure) with top stay ALU 5100 Gr. 2 (405). In addition, a locking part (505) is required in the frame (without illustration).



Note: when coupling operating rod S3 with MV stay striker (419) and top stay ALU 5100 Gr. 2 (405), shorten operating rod S3 by 20 mm.



WARNING

Window sash falling out when the grub screw is not tightened.

Unsecured hinge pin (237/939) slips out of the stay hinge (240). The window sash can fall out and cause serious injuries.

- Push hinge pin (237/939) from below into the top hinge (238), washer (239) and stay hinge as far as stop.
- Secure hinge pin (237/939) with **grub screw** in stay hinge (240) (torque 2.5 Nm).

ALU 5100 Maintenance instructions see Document no.: H49.ALUS001EN

ALU 5100 Service instructions see Document no.: H47.ALUS001EN

MAINTENANCE INSTRUCTIONS



ALU

Maintenance instructions:
ALU axxent PLUS, ALU 2200, ALU 5100, ALU 5200, ALU-DK/TBT200, ALU-D300, AU RB/SF

Window systems
Door systems
Comfort systems

SERVICE INSTRUCTIONS



ALU

Service instructions:
ALU axxent PLUS, ALU 2200, ALU 5100, ALU 5200, ALU-DK/TBT200, ALU-D300, AU RB/SF

Window systems
Door systems
Comfort systems



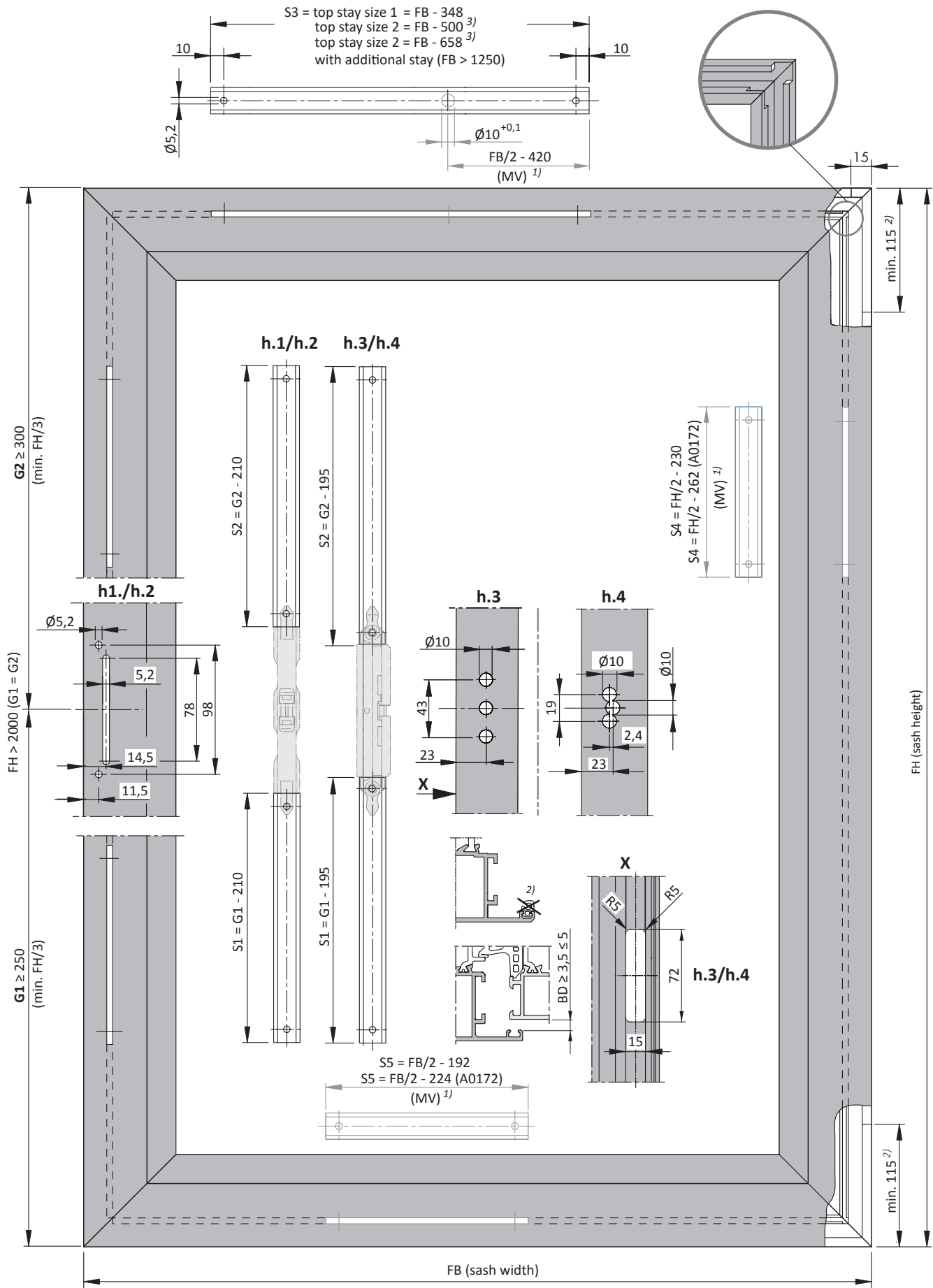
Sash dimensions

Single-sash square turn and tilt hinge side ALU 5100

ALU 5100

FBS-G

3



1) See page 4 for installation recommendation of centre locks and additional locks
 2) Remove the rebate seal in the hinge gap area (minimum gap area 3.5 mm)
 3) When coupling operating rod S3 with MV stay striker (419) and top stay ALU 5100 Gr. 2 (405) shorten operating rod S3 by 20 mm.



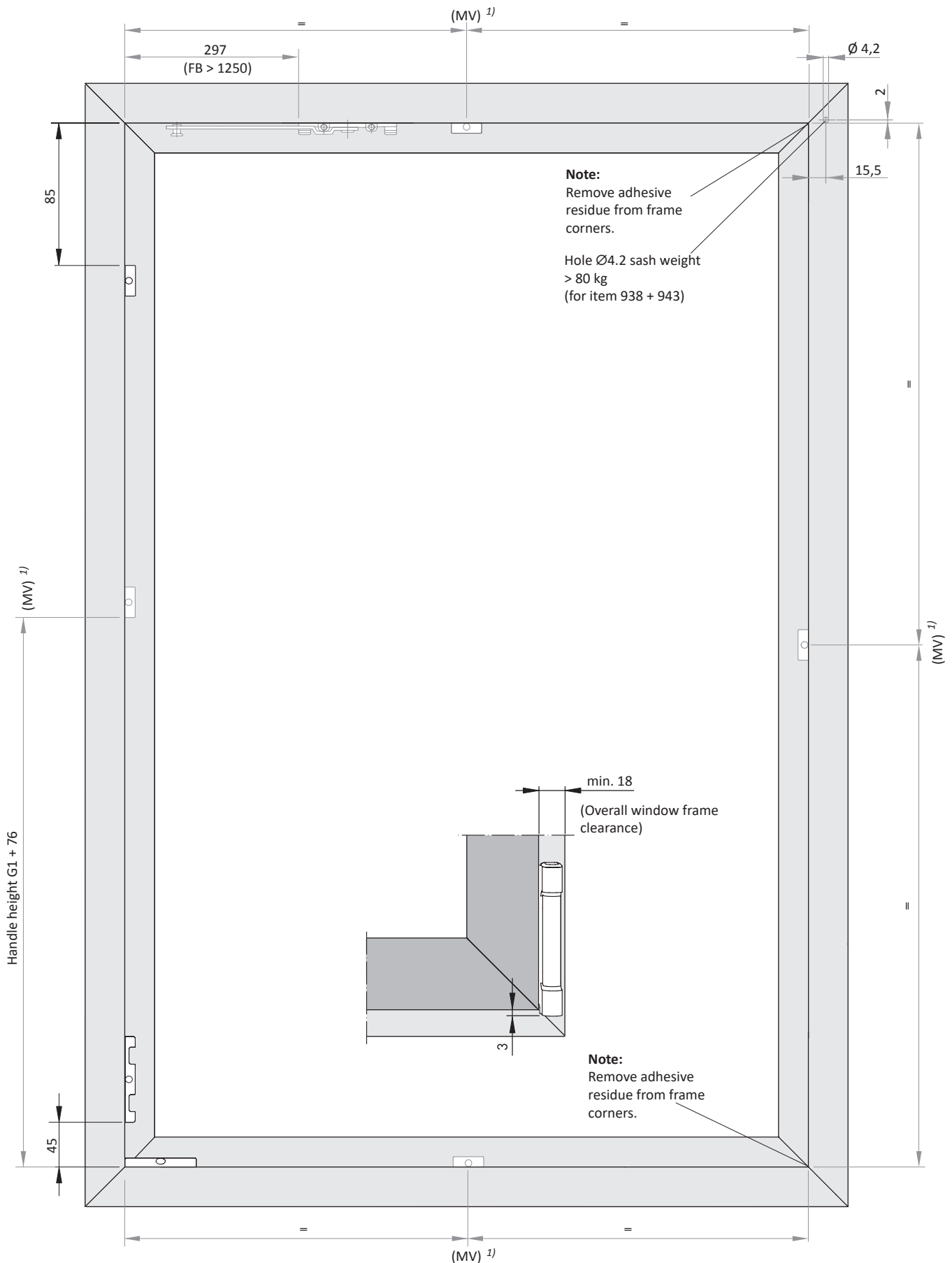
Frame dimensions

Single-sash square turn and tilt hinge side ALU 5100

ALU 5100

FBS-G

3



1) See page 4 for installation recommendation for the centre locks and additional locks