ALU 5200-K

Assembly instructions




1-sash square tilt sash

Aluminium Eurogroove 15/20

Chamber dimension 21

Versions A0004/A0006/A0022

Hinge clearance (BD) 4

Size range

		1 tilt only stay	2 tilt only stays
Sash width	(mm)	≥ 400 ≤ 1020	> 1020 ≤ 2400
Sash height	(mm)	≥ 450 ≤ 1200	≥ 450 ≤ 1200
Sash weight	(kg)	max. 30	max. 50

The following documents are required:

-Profile recommendation ALU20	document Nr.: H45.ALUS001EN
-ALU Maintenance instructions	document Nr.: H49.ALUS001EN
-ALU Service instructions	document Nr.: H47.ALUS001EN
-ALU Operating instructions	document Nr.: H47.ALUS002EN
-ALU Important notices	document Nr.: H45.ALUS003EN

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!

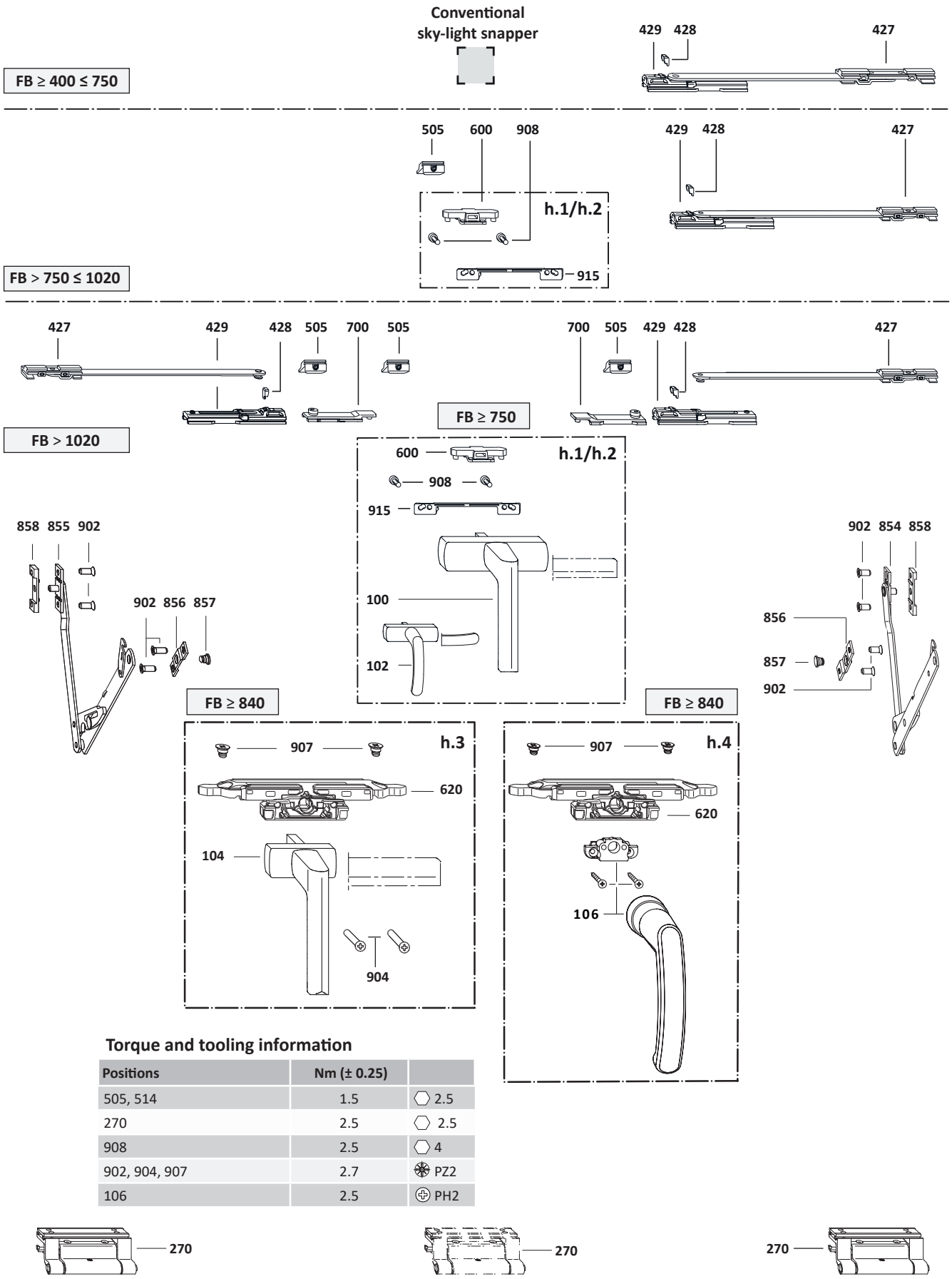
See SIEGENIA download portal for all documentation!

Hardware overview

1-sash square tilt sash







Torque and tooling information

Positions	Nm (± 0.25)	
505, 514	1.5	⬡ 2.5
270	2.5	⬡ 2.5
908	2.5	⬡ 4
902, 904, 907	2.7	✱ PZ2
106	2.5	⊕ PH2

	Item	Pieces	Material description		Material number	VE	Material number	VE
h.1	100	1	**ALU Si-line handle**	(Only use in combination with coupling set)	See ALU handle overview, document no.: H48. ZubhLS007en in SIEGENIA download portal			
	no illus.		**ALU Si-line lockable handle**					
h.2	102		**ALU Globe handle**					
	no illus.		**ALU GLOBE lockable handle**					
h.3	104		**TITAN handle**	(Only use in combination with gear set)	□ 7 mm x 25 mm, cam ∅ 10 mm Only use in combination with gear set			
	no illus.		**TITAN lockable handle**					
h.4	106		**ALU Globe RR handle**		See ALU Globe RR handle overview document no.: H48. ZubhLS006en in SIEGENIA download portal			
	no illus.		**ALU Globe RR lockable handle**					
	270	**2...3** *1)*	**Tilt only hinge ALU** (only for hinge clearance BD ≥ 4)	**Silver**	**MMKB0020-52501_**	**1**	**MMKB0020-52503_**	**20**
				Brown	**MMKB0020-53301_**	**1**	**MMKB0020-53303_**	**20**
				RAL 9010	**MMKB0020-50301_**	**1**	**MMKB0020-50303_**	**20**
				RAL 9016	**MMKB0020-50401_**	**1**	**MMKB0020-50403_**	**20**
				RAL 9005	**MMKB0020-52301_**	**1**	**MMKB0020-52303_**	**20**
				EV 1	**MMKB0020-52401_**	**1**	**MMKB0020-52403_**	**20**
				Mill finish	**MMKB0020-50001_**	**–**	**MMKB0020-50003_**	**20**
		0...1	**Tilt only security stay size 1** *2)*	FH ≥ 450 ≤ 600	**AMFP0010-10001_**	**1**	**AMFP0010-10012_**	**5**
		0...1	**Tilt only security stay size 2** *2)*	FH > 600 ≤ 1200	**AMFP0020-10001_**	**1**	**AMFP0020-10012_**	**5**
	854	1	Top stay right					
	855	1	Top stay left					
	856	2	Stop plate					
	857	2	Bolt					
	902	8	Countersunk screw M5 x 13					
	858	**0...2**	**Packer**	for A0004 (see page 4)	**889220**	**1**	**303863**	**200**
		1...2	**ALU tilt only stay**	FB > 1020 (use 2 tilt only stays)	**848876**	**1**	**239155**	**50**
	427	1	Tilt only stay					
	428	1	Barrier					
	429	1	Stop					
		1	**VS ALU-K**	FB ≥ 1020	**MMVS0330-10001_**	**1**	**MMVS0330-10003_**	**20**
	505	2	Striker					
	700	2	Slider					
	505	**0...1**	**Striker**	1x FB > 750 ≤ 1020 1x FB > 1500	**859322**	**1**	**265413**	**20**
h.1 h.2		**0...1**	**ALU coupling set**	FB ≥ 750 (only use in combination with h.1/h.2)	**MMKL0060-10001_**	**1**	**MMKL0060-10003_**	**20**
	600	1	Coupling bracket					
	908	2	Cheese head screw M5 x 12					
h.3 h.4		**0...1**	**ALU gear set**	FB ≥ 840 (only use in combination with h.3/h.4. See SIEGENIA-download portal)	**MMGI0090-10001_**	**1**	**MMGI0090-10003_**	**20**
	620	1	M6 ESG					
	904	2	Countersunk screw M5 x 35					
	907	2	Coupling screw M6					
system-dependent		**0...2**	**MV ALU-D VS/BS**	1x FB > 1250 ≤ 1500 2x FB > 1500	**857052**	**1**	**246986**	**20**
	505	1	Striker					
	709	1	Striker MV					
	710	1	Locking bolt					
	Accessories							
	915	**0...1**	**ALU handle support**	Only use for h.1/h.2	**–**	**–**	(see table on page 4)	**200**

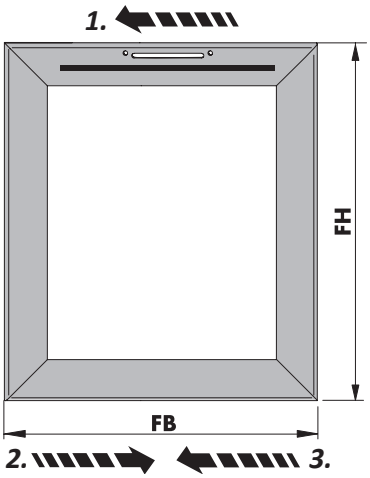
1) From FB > 1200 mm, an additional ALU tilt only hinge as a CL is recommended!

2) Contents of the packaging unit 1 right and 1 left tilt only security stay!

Assembly sequence, variants and assembly

1-sash square tilt sash

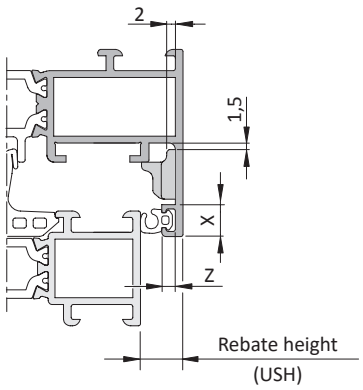
Observe assembly sequence!



Sequence of installation in the sash:

Design variations for handle support (item 915) (h.1/h.2)

USH (MM)	Z (MM)	X ≤ 7 MM	X > 7 ≤ 8.5 MM
7 - 10	≤ 2	MFHA0010-10020_	MFHA0010-10020_
	> 2 ≤ 3		MFHA0020-10020_
	> 3		-
12	-	MFHA0030-10020_	-



ALU maintenance instructions
(see SIEGENIA download portal)



ALU service instructions
(see SIEGENIA download portal)



ALU operating instructions
(see SIEGENIA download portal)

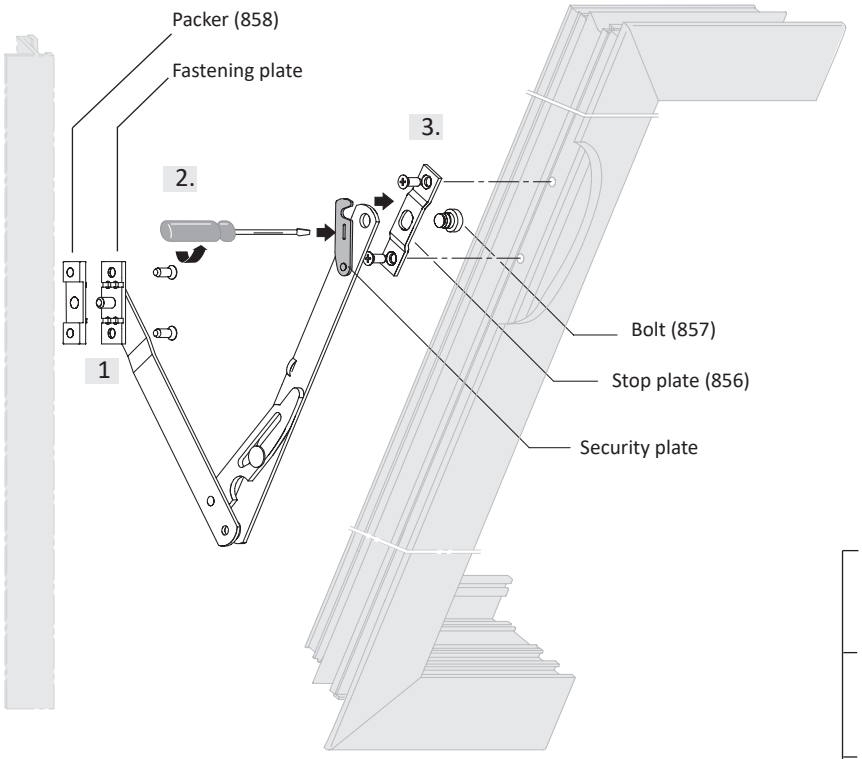


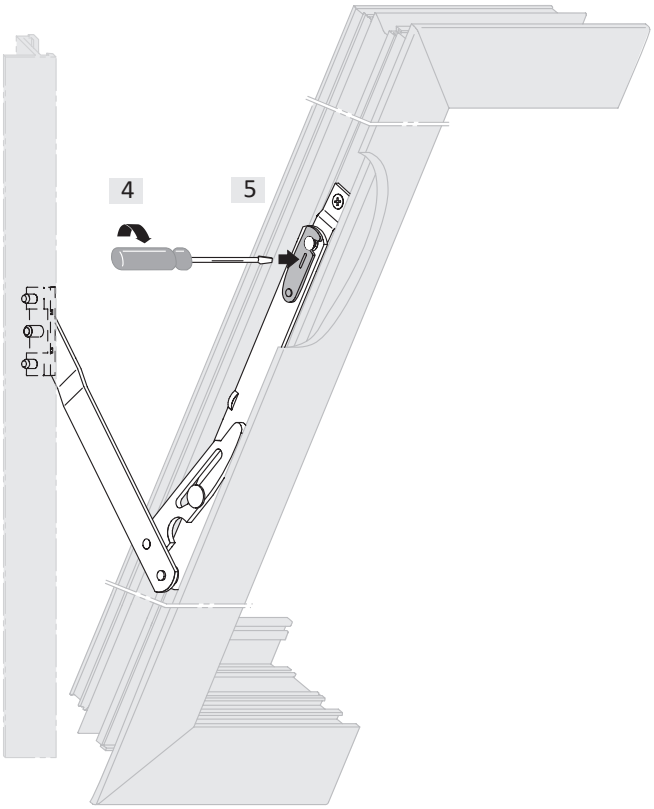
⚠ WARNING **Unsecured sash frames can pose a risk of injury.**

> When being mounted in the frame, an unsecured window sash can suddenly tilt downwards, resulting in serious injuries.

> Always have two people present when hanging or lift-off of the tilt sash.

> All rules and regulations regarding occupational safety must always be observed in overhead work, work on ladders and work involving great heights.





Installing the tilt only security stay

Preparation:
Drill holes for tilt only security stay according to
specifications on page 7.

1. Place fastening plate on frame groove and fix in place with countersunk screws M5 x 13 (902)
(Torque 2.7 ± 0.25 Nm).

2. Insert stop plate (856) and bolt (857) into the guide groove and fix into place with countersunk screws M5 x 13 (902) be-
(torque 2.7 ± 0.25 Nm).

3. Tilt up the security plate of the tilt only security stay.

4. Hang tilt only security stay in the mounted bolt (857).

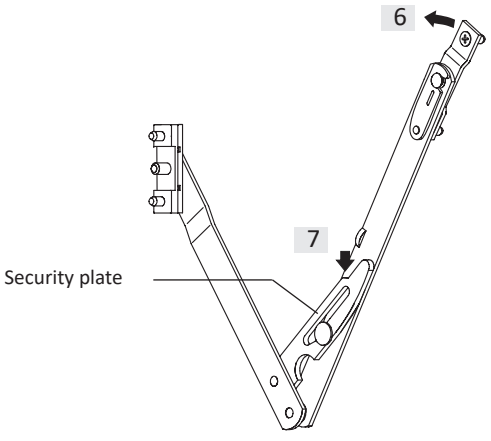
5. Tilt back the security plate to the original position.

Lift-off in the reverse order.

Top stay in full tilt cleaning position

6. In tilt position, lift sash slightly.

7. Press short stay arm downward and lower sash into full tilt cleaning position.



Assembly settings and installation sequence

1-sash square tilt sash

Preparation

8 From FB (sash width) > 750 mm ≤ 2400 mm make punch out for ALU handle (h.1/h.2) from FB > 1020 mm ≤ 2400 mm for TITAN handle (h.3) / ALU RR handle (h.4) (see page 7).

9 Open the operating rod guide groove.

10 From FB > 840 mm, rework operating rods S3 according to specifications on page 7.

Sash

11 Insert tilt only hinge ALU (270) horizontally from the bottom.

12 Position tilt only hinge ALU (270) according to the specifications on page 7 and screw on with M5 x 7 countersunk screws (torque 2.5 ± 0.25 Nm).

13 Position stop (429) according to the dimensions on page 7 and lock in place with punching screw (torque 2.5 ± 0.25 Nm).

FB ≥ 400 ≤ 750

14 Fix standard sky-light snapper (sash hardware).

FB > 750 ≤ 1020

15 Insert coupling bracket (600) horizontally from the top.

16 Screw on handle ALU (h.1/h.2) and handle support ALU (915) with M5 x 12 (908) cheese head screws (torque 2.5 ± 0.25 Nm).

FB > 1020 ≤ 2400 (ALU coupling set)

17 Insert slider (700) with operating rod S3, coupling bracket (600), operating rod S3 and slider (700) horizontally at top.

18 Screw on handle ALU (h.1/h.2) and handle support ALU (915) with M5 x 12 (908) cheese head screws (torque 2.5 ± 0.25 Nm).

FB 840 ≤ 1020 (ALU gear set)

19 Slide in operating rods (30 mm) horizontally from the top.

20 Insert ESG ALU M6 (620) into the opening provided (see page 7).

21 Screw ESG ALU M6 (620) to the operating rods with coupling screws M6 (907) (PZ 2, torque 2.75 ± 0.25 Nm).

22 Screw on handle TITAN (h.3) with countersunk screw M5 x 35 (904) (PZ 2, torque 2.5 ± 0.25 Nm).

23 Screw on handle ALU RR (h.4) according to documentation no.: H48.ZubhLS006EN.

FB > 1020 ≤ 2400 (ALU gear set)

24 Insert slider (700) with operating rod S3, operating rod S3 and slider (700) horizontally at the top.

25 Insert ESG ALU M6 (620) into the opening provided (see page 7).

26 Screw ESG ALU M6 (620) to the operating rods S3 with coupling screws M6 (907) (PZ 2, torque 2.75 ± 0.25 Nm).

27 Screw on handle TITAN (h.3) with countersunk screw M5 x 35 (904) (PZ 2, torque 2.5 ± 0.25 Nm).

28 Screw on handle ALU RR (h.4) according to documentation no.: H48.ZubhLS006EN.

Frame

FB ≥ 400 ≤ 750

29 Position tilt only stays ALU (427) according to the specifications on page 8 and fix each in place with a grub screw (torque 2.5 ± 0.25 Nm).

FB ≥ 400 ≤ 750

30 Fix standard sky-light snapper (frame fitting part).

FB > 750 ≤ 2400

31 Position strikers (505) according to specifications on page 8 and fix each in place with a grub screw (torque 1.5 ± 0.25 Nm).

Final assembly

32 Insert sash with the frame.

33 Adjust sash laterally.

34 Open sash and tighten cheese head screws on top hinge (torque 2.5 ± 0.25 Nm).

35 Check that the window works correctly.

36 If necessary, adjust the sash compression using eccentric locking cam.

Hinging the tilt only stay

37 Push back the anti-lift device of the stop (429) (fig. 1).

38 Insert pan head rivet of the ALU tilt only stay (427) into the guide provided (fig 1).

39 Release the anti-lift device of the stop (429) (fig. 2).

40 Insert barrier (428) into provided groove and snap into place (fig. 2).

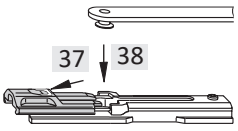


Fig. 1

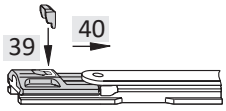
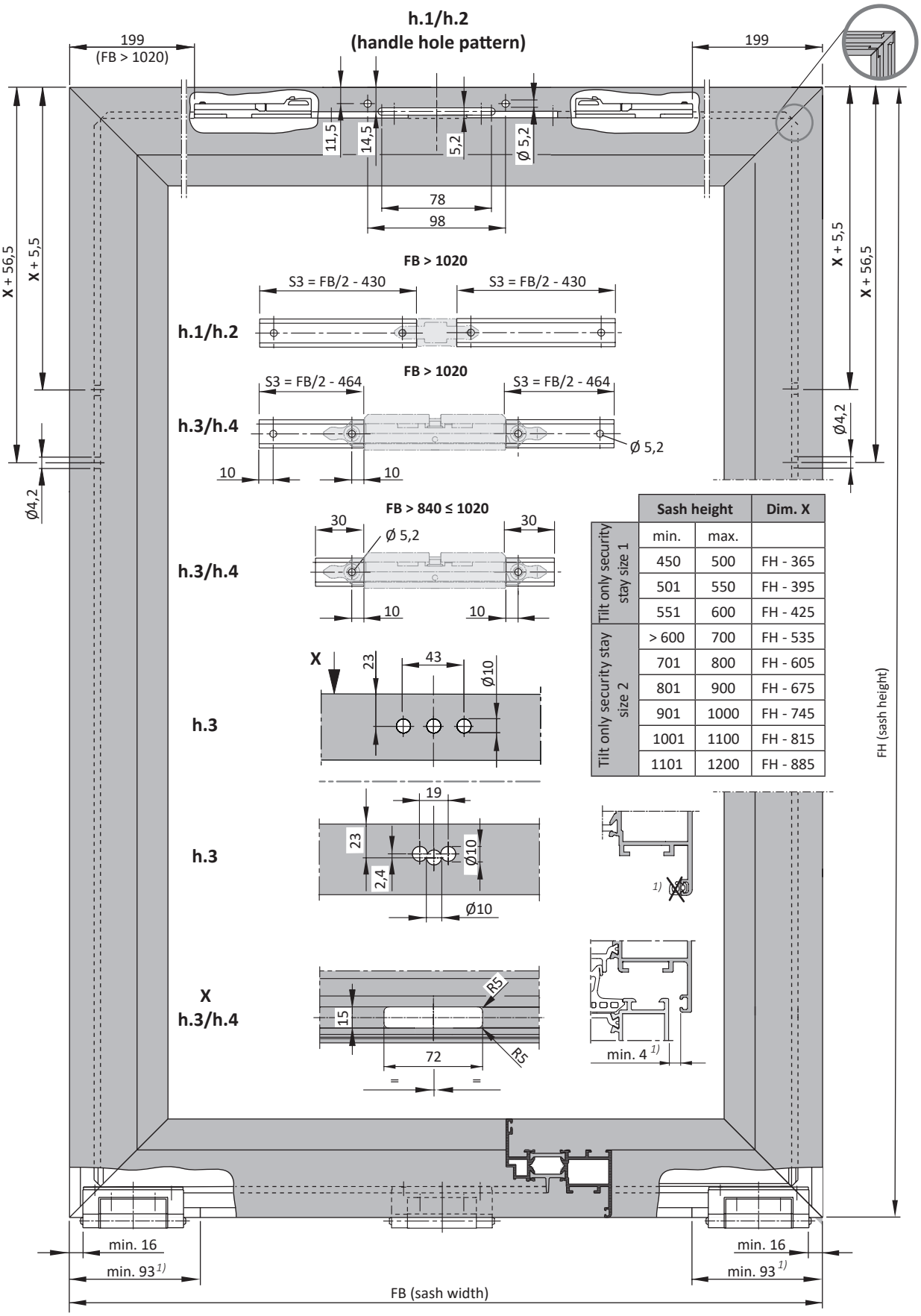


Fig. 2

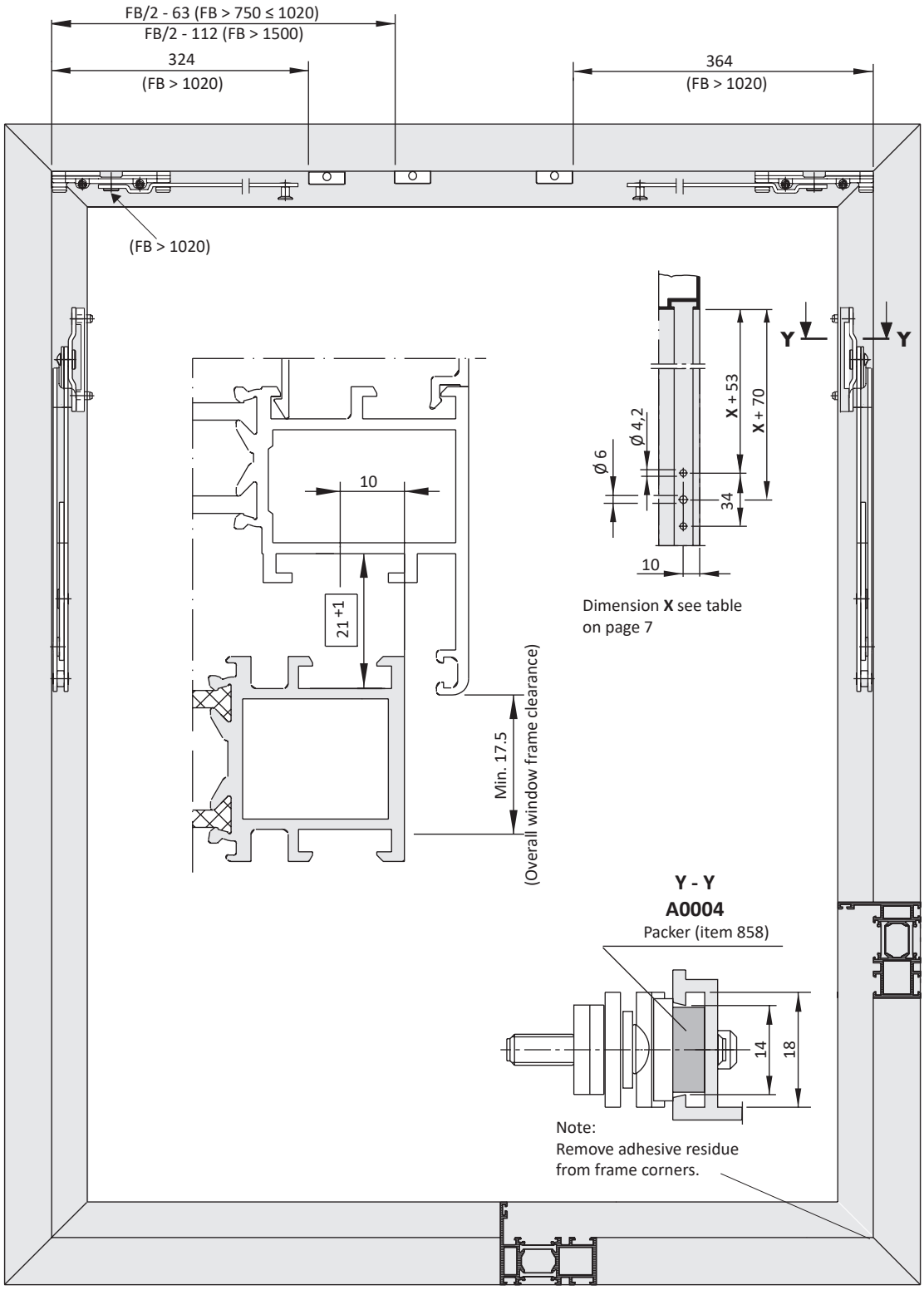


	Sash height		Dim. X
	min.	max.	
Tilt only security stay size 1	450	500	FH - 365
	501	550	FH - 395
	551	600	FH - 425
Tilt only security stay size 2	> 600	700	FH - 535
	701	800	FH - 605
	801	900	FH - 675
	901	1000	FH - 745
	1001	1100	FH - 815
	1101	1200	FH - 885

1) Remove the rebate seal in the gap area (minimum hinge gap 4 mm)

Frame dimensions

1-sash square tilt sash



1) For installation of the centre locks and additional locks see page 3.