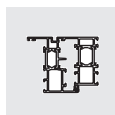


# ALU axxent PLUS-DK

## Assembly instructions



**BD3.5**

Single sash square turn and tilt element

Aluminium eurogroove 15/20

Chamber dimension 21

Versions A0004/A0006/A0022

Hinge clearance (BD)  $\geq 3.5$

Anti-mishandling device on the gear (FBS-G)

Horizontal tilt point (KPW)

### Size range

|             |      | Windows          | Patio doors      |
|-------------|------|------------------|------------------|
| Sash width  | (mm) | 450 – 1600       | 450 – 1300       |
| Sash height | (mm) | 600 – 2000       | 2000 – 2600      |
| Sash weight | (kg) | max. 100/130/150 | max. 100/130/150 |

The following application diagrams are valid:

-max. 100 kg

document Nr.: H58.AWDLS012EN

-max. 130 kg

document Nr.: H58.AWDLS013EN

-max. 150 kg

document Nr.: H58.AWDLS016EN

Opening angle:

-max. 100 kg/130 kg ( $\leq 110^\circ$ )

-max. 150 kg ( $\leq 90^\circ$ )

The following documentation is required:

-Profile information ALU20

document Nr.: H45.ALUS001EN

-ALU axxent PLUS-DK/TBT assembly instructions

document Nr.: H39.axntLS001EN

-ALU Maintenance instructions

document Nr.: H49.ALUS001EN

-ALU Service instructions

document Nr.: H47.ALUS001EN

-ALU Operating instructions

document Nr.: H47.ALUS002EN

-Sash brake ALU with damper ( $> 130$  kg)

document-Nr.: H48.ZubhLS017EN

### Please observe:

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

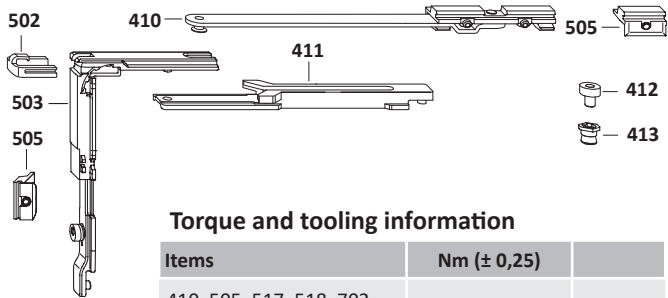
Specifications from the profile manufacturers or system owners for windows and patio doors!



See SIEGENIA download portal for all documentation!

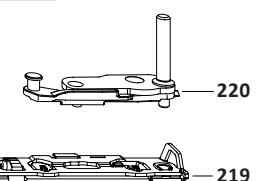
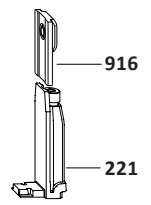
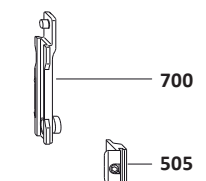
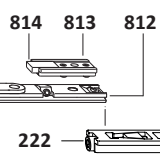
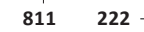
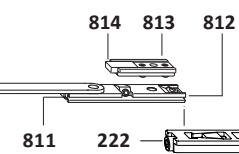
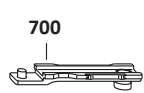
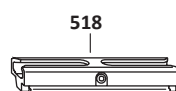
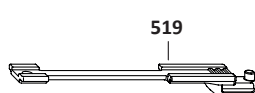
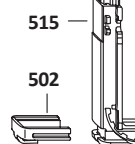
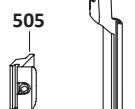
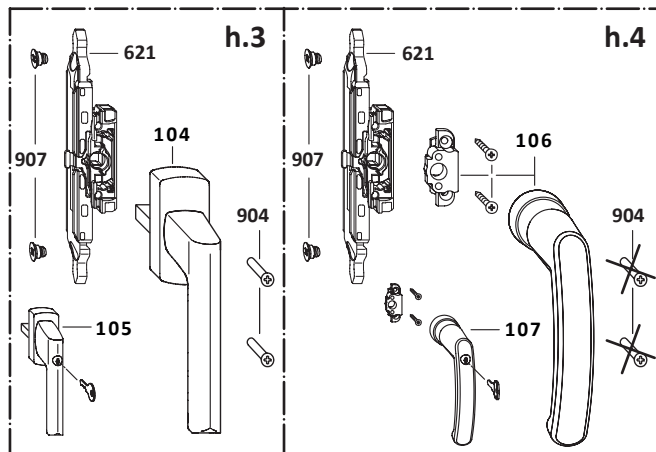
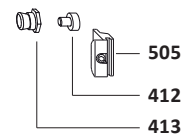
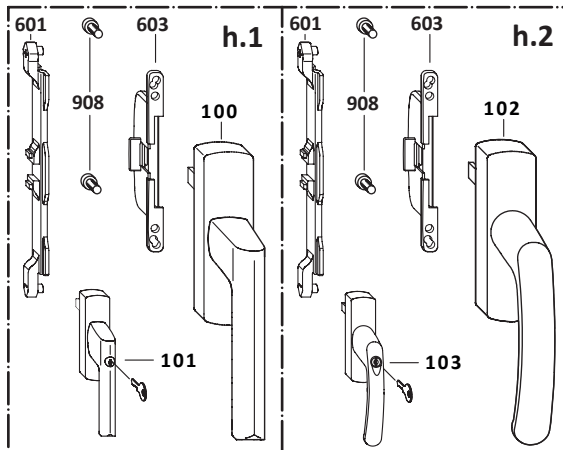
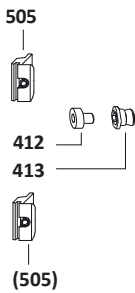
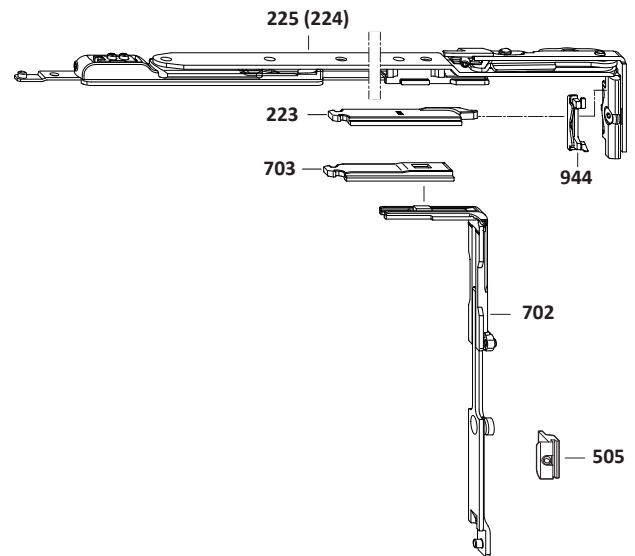
## Hardware list

Single sash square turn and tilt  
Hinge side ALU axxent PLUS



## Torque and tooling information

| Items                        | Nm (± 0,25) |       |
|------------------------------|-------------|-------|
| 410, 505, 517, 518, 702, 802 | 1,5         | ⬡ 2,5 |
| 224, 225, 812                | 2,5         | ⬡ 2,5 |
| 219                          | 3           | ⬡ 2,5 |
| 908, 916                     | 2,5         | ⬡ 4   |
| 412                          | 4           | ⬡ 4   |
| 902, 904, 907                | 2,7         | ⊗ PZ2 |
| 106, 107                     | 2,5         | ⊕ PH2 |





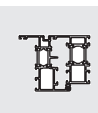
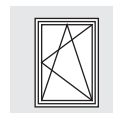
## Hardware list

Single sash square turn and tilt  
Hinge side ALU axxent PLUS

ALU axxent PLUS

FBS-G KPW

|     | 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 in the SIEGENIA download portal              |                 |                 |                 |
|     | 101   |                     | ALU Si-line lockable handle                   |                                                       |                                                                      |                 |                 |                 |
| h.2 | 102   |                     | ALU Globe handle                              |                                                       |                                                                      |                 |                 |                 |
|     | 103   |                     | ALU GLOBE lockable handle                     |                                                       |                                                                      |                 |                 |                 |
| h.3 | 104   |                     | TITAN handle                                  | Only use in combination with gear set                 | □ 7 mm x 25 mm, cam Ø 10 mm<br>only use in combination with gear set |                 |                 |                 |
|     | 105   |                     | TITAN lockable handle                         |                                                       |                                                                      |                 |                 |                 |
| h.4 | 106   |                     | ALU Globe RR handle                           |                                                       | See Handle ALU Globe RR in the SIEGENIA download portal              |                 |                 |                 |
|     | 107   |                     | ALU Globe RR lockable handle                  |                                                       |                                                                      |                 |                 |                 |
|     |       | 1                   | BS ALU axxent PLUS-DK A0004 RH size 1         | FB ≤ 600 ≤ 100 kg                                     | MMBS0281-10001_                                                      | 1               | MMBS0281-10002_ | 10              |
|     |       |                     |                                               |                                                       | A0004 LH size 1                                                      | MMBS0282-10001_ | 1               | MMBS0282-10002_ |
|     |       |                     | A0004 RH size 2                               | FB > 600                                              | MMBS0311-10001_                                                      | 1               | MMBS0311-10002_ | 10              |
|     |       |                     |                                               |                                                       | A0004 LH size 2                                                      | MMBS0312-10001_ | 1               | MMBS0312-10002_ |
|     |       |                     | A0006 RH size 1                               | FB ≤ 600 ≤ 100 kg                                     | MMBS0291-10001_                                                      | 1               | MMBS0291-10002_ | 10              |
|     |       |                     |                                               |                                                       | A0006 LH size 1                                                      | MMBS0292-10001_ | 1               | MMBS0292-10002_ |
|     |       |                     | A0006 RH size 2                               | FB > 600                                              | MMBS0321-10001_                                                      | 1               | MMBS0321-10002_ | 10              |
|     |       |                     |                                               |                                                       | A0006 LH size 2                                                      | MMBS0322-10001_ | 1               | MMBS0322-10002_ |
|     | 219   | 1                   | Bottom hinge right/left ALU axxent PLUS       | Installation frame                                    |                                                                      |                 |                 |                 |
|     | 220   | 1                   | Bottom hinge right/left ALU axxent PLUS       | Installation sash                                     |                                                                      |                 |                 |                 |
|     | 221   | 1                   | Sash hinge BSU right/left ALU axxent PLUS     |                                                       |                                                                      |                 |                 |                 |
|     | 222   | 1                   | Guiding piece BSU ALU axxent PLUS             |                                                       |                                                                      |                 |                 |                 |
|     | 223   | 1                   | Deadbolt BS0 right/left ALU axxent PLUS       | omitted for MV (replacement by item 703)              |                                                                      |                 |                 |                 |
|     | 224   | 0...1               | Top stay size 1 right/left ALU axxent PLUS-DK |                                                       |                                                                      |                 |                 |                 |
|     | 225   | 0...1               | Top stay size 2 right/left ALU axxent PLUS-DK |                                                       |                                                                      |                 |                 |                 |
|     | 944   | 0...1               | Accessory set ALU axxent PLUS A0022           | Only use in combination with BS ALU axxent PLUS A0006 | MZBS0180-10001_                                                      | 1               | MZBS0180-10006_ | 100             |
|     |       | 0...1               | Accessory set ALU axxent PLUS                 | > 100 kg                                              | -                                                                    | -               | MZBS0130-00003_ | 20              |
|     | 902   | 1                   | Countersunk screw M5 x 13                     |                                                       |                                                                      |                 |                 |                 |
|     | 916   | 1                   | Long stop                                     |                                                       |                                                                      |                 |                 |                 |
|     |       | 0...1               | ALU additional stay                           | FB > 1250<br>FB > 1020 > 100 kg                       | 857076                                                               | 1               | 247006          | 10              |
|     | 410   | 1                   | Additional stay                               |                                                       |                                                                      |                 |                 |                 |
|     | 411   | 1                   | Striker plate                                 |                                                       |                                                                      |                 |                 |                 |
|     | 412   | 1                   | Locking cam                                   |                                                       |                                                                      |                 |                 |                 |
|     | 413   | 1                   | Eccentric rivet                               |                                                       |                                                                      |                 |                 |                 |
|     |       | 0...1               | Sash brake with damper                        | FB > 850 ≤ 1000<br>> 130 kg                           | MSBR0150-10001_                                                      | 1               | MSBR0150-10005_ | 50              |
|     |       |                     | ALU axxent PLUS short                         |                                                       |                                                                      |                 |                 |                 |
|     |       |                     | Sash brake with damper ALU long               | FB > 1000 > 130 kg                                    | MSBR0120-10001_                                                      | 1               | MSBR0120-10005_ | 50              |
|     | 811   | 1                   | Spring                                        |                                                       |                                                                      |                 |                 |                 |
|     | 812   | 1                   | Top hinge block                               |                                                       |                                                                      |                 |                 |                 |
|     | 813   | 1                   | Stop                                          |                                                       |                                                                      |                 |                 |                 |
|     | 814   | 1                   | Filling piece for end position cushioning     |                                                       |                                                                      |                 |                 |                 |
|     | 816   | 0...1               | Sash brake ALU axxent short                   |                                                       |                                                                      |                 |                 |                 |
| 817 | 0...1 | Sash brake ALU long |                                               |                                                       |                                                                      |                 |                 |                 |
|     |       | 1                   | Locking side ALU DK FBS-G KPW                 |                                                       | MMVS0470-10001_                                                      | 1               | MMVS0470-10003_ | 20              |
|     | -     | 1                   | Locking bolt DK                               | not required                                          |                                                                      |                 |                 |                 |
|     | 502   | 2                   | Clamping piece EUL                            |                                                       |                                                                      |                 |                 |                 |
|     | 503   | 1                   | VSO corner drive                              |                                                       |                                                                      |                 |                 |                 |
|     | 505   | 2                   | Striker                                       |                                                       |                                                                      |                 |                 |                 |
|     | 515   | 1                   | Corner drive VSU                              |                                                       |                                                                      |                 |                 |                 |
|     | 517   | 1                   | Run-up block                                  |                                                       |                                                                      |                 |                 |                 |
|     | 518   | 1                   | Tilt locking part                             |                                                       |                                                                      |                 |                 |                 |
| 519 | 1     | Tilt lock DK        |                                               |                                                       |                                                                      |                 |                 |                 |

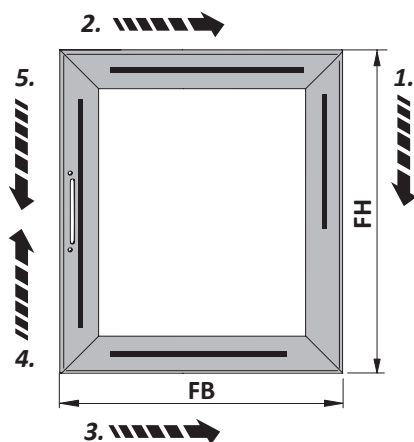


|                     | Item  | Pieces | Material description                                                | Material number | VE | Material number | VE |
|---------------------|-------|--------|---------------------------------------------------------------------|-----------------|----|-----------------|----|
| h.1<br>h.2          | 0...1 | 1      | Coupling set ALU FBS-G $Y \geq 9 < 10$                              | MMKL0030-10001_ | 1  | MMKL0030-10003_ | 20 |
|                     |       |        | $Y \geq 10$                                                         | MMKL0010-10001_ | 1  | MMKL0010-10003_ | 20 |
|                     |       |        | USH $\geq 12$                                                       | MMKL0040-10001_ | 1  | MMKL0040-10003_ | 20 |
|                     | 601   | 1      | Coupling bracket                                                    |                 |    |                 |    |
|                     | 603   | 1      | Anti-mishandling device                                             |                 |    |                 |    |
|                     | 908   | 2      | Cheese head screw M5 x 12                                           |                 |    |                 |    |
| h.3<br>h.4          | 0...1 | 1      | Gear set ALU FBS                                                    | MMGI0080-10001_ | 1  | MMGI0080-10003_ | 20 |
|                     | 621   | 1      | ESG M6 FBS                                                          |                 |    |                 |    |
|                     | 904   | 2      | Countersunk screw M5 x 35                                           |                 |    |                 |    |
|                     | 907   | 2      | Coupling screw M6                                                   |                 |    |                 |    |
|                     |       |        | Only use in combination with h.3/h.4 (see SIEGENIA download-portal) |                 |    |                 |    |
| depending on system | 0...1 | 1      | MV ALU-VS/BS axxent PLUS                                            | MMMV0060-10001_ | 1  | MMMV0060-10003_ | 20 |
|                     | 505   | 3      | Striker                                                             |                 |    |                 |    |
|                     | 700   | 1      | Slider                                                              |                 |    |                 |    |
|                     | 702   | 1      | Corner drive axxent BSO ALU axxent PLUS                             |                 |    |                 |    |
|                     | 703   | 1      | Coupling piece BSO MV ALU axxent PLUS                               |                 |    |                 |    |
|                     | 0...3 | 1      | Locking part ALU                                                    | -               | -  | 317556          | 20 |
|                     | 412   | 1      | Locking cam                                                         |                 |    |                 |    |
|                     | 413   | 1      | Eccentric rivet                                                     |                 |    |                 |    |
|                     | 505   | 1      | Striker                                                             |                 |    |                 |    |
|                     | 0...1 | 1      | MV ALU slider                                                       | MMMV0070-10001_ | 1  | MMMV0070-10003_ | 20 |
|                     | 505   | 2      | Striker                                                             |                 |    |                 |    |
|                     | 700   | 1      | Slider                                                              |                 |    |                 |    |
|                     |       |        | FH > 1250                                                           |                 |    |                 |    |
|                     |       |        | FH > 2400                                                           |                 |    |                 |    |
|                     |       |        | FB > 1250                                                           |                 |    |                 |    |

## Accessories

|     |       |                                       |                                  |                 |   |                 |    |
|-----|-------|---------------------------------------|----------------------------------|-----------------|---|-----------------|----|
| 802 | 0...1 | Sash lifter ALU                       | see SIEGENIA download-portal     | MMFH0010-10001_ | 1 | MMFH0010-10003_ | 20 |
| -   | 0...1 | Adjusting piece AV grey ( $\pm 0.5$ ) | see ALU maintenance instructions | -               | - | MBDR0030-09705_ | 50 |

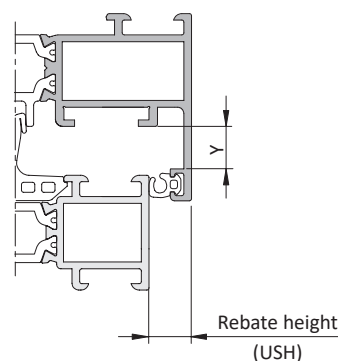
## Observe assembly sequence!

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

## sequence of installation in the sash:

- without centre lock (-2. -3. -4. -5.)
- with centre lock (1. -2. -3. -4. -5.)

| USH (mm) | Y (mm)        | Material number |
|----------|---------------|-----------------|
| 7 - 10   | $\geq 9 < 10$ | MMKL0030-10003_ |
|          | $\geq 10$     | MMKL0010-10003_ |
| 12       | -             | MMKL0040-10003_ |





### Assembly of the bottom hinge (219) at BSU (fig. 1)



**Note:** grease bottom hinge (219) before hanging the sash!

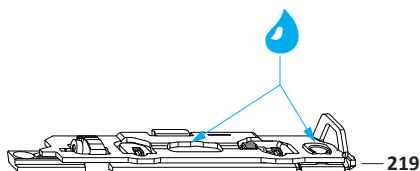


Fig. 1

ALU axxent PLUS-DK/TBT assembly instructions see Document Nr.: H39.axntLS001EN

## ASSEMBLY INSTRUCTIONS

**SIEGENIA**  
brings spaces to life

# ALU

## axxent PLUS

Assembly and disassembly instructions:  
ALU axxent PLUS-DK/TBT

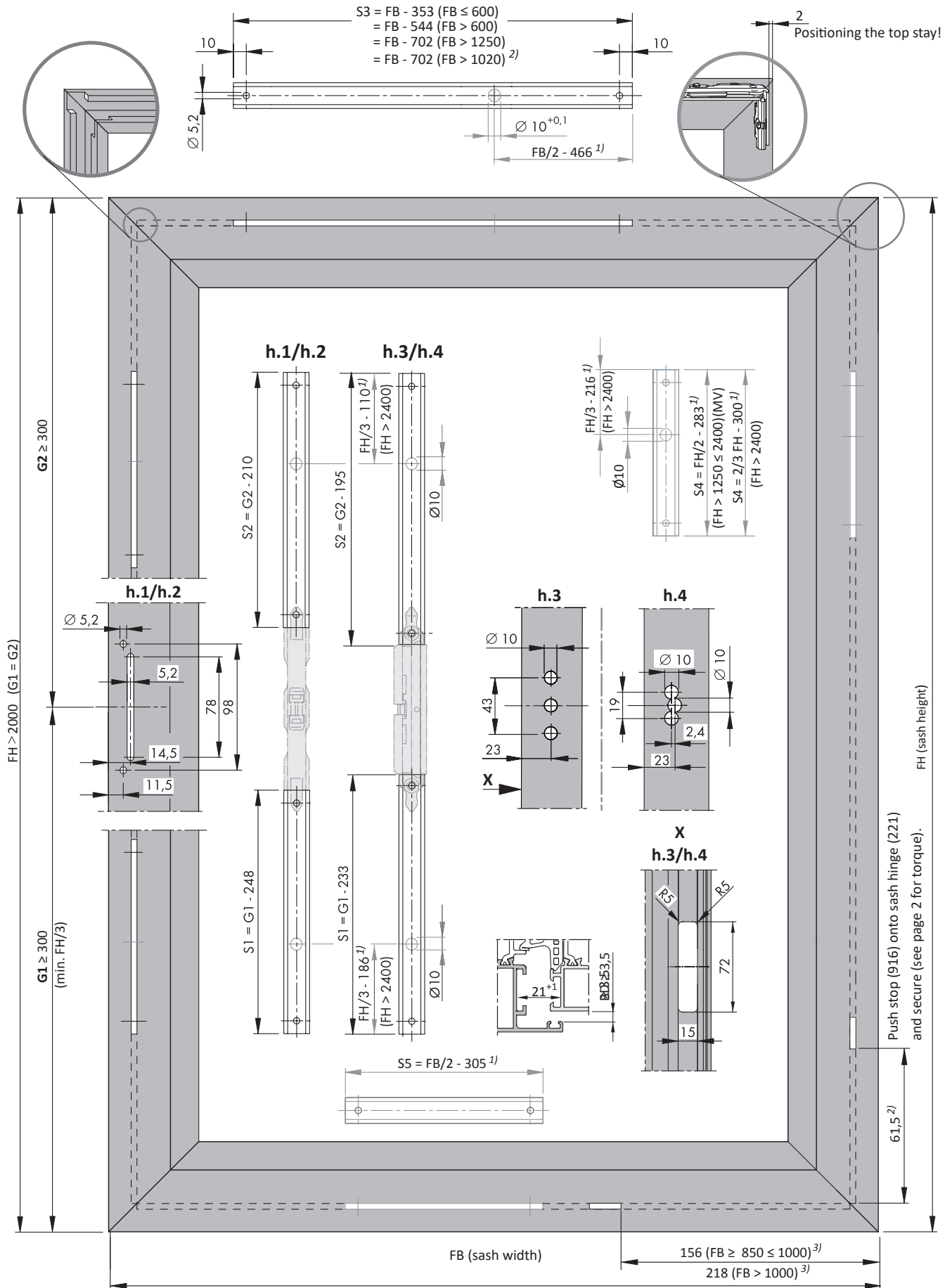
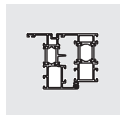
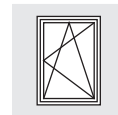
Window systems

Door systems

Comfort systems

## Sash dimensions

Single sash square turn and tilt  
Hinge side ALU axxent PLUS



1) with MV

2) > 100 kg

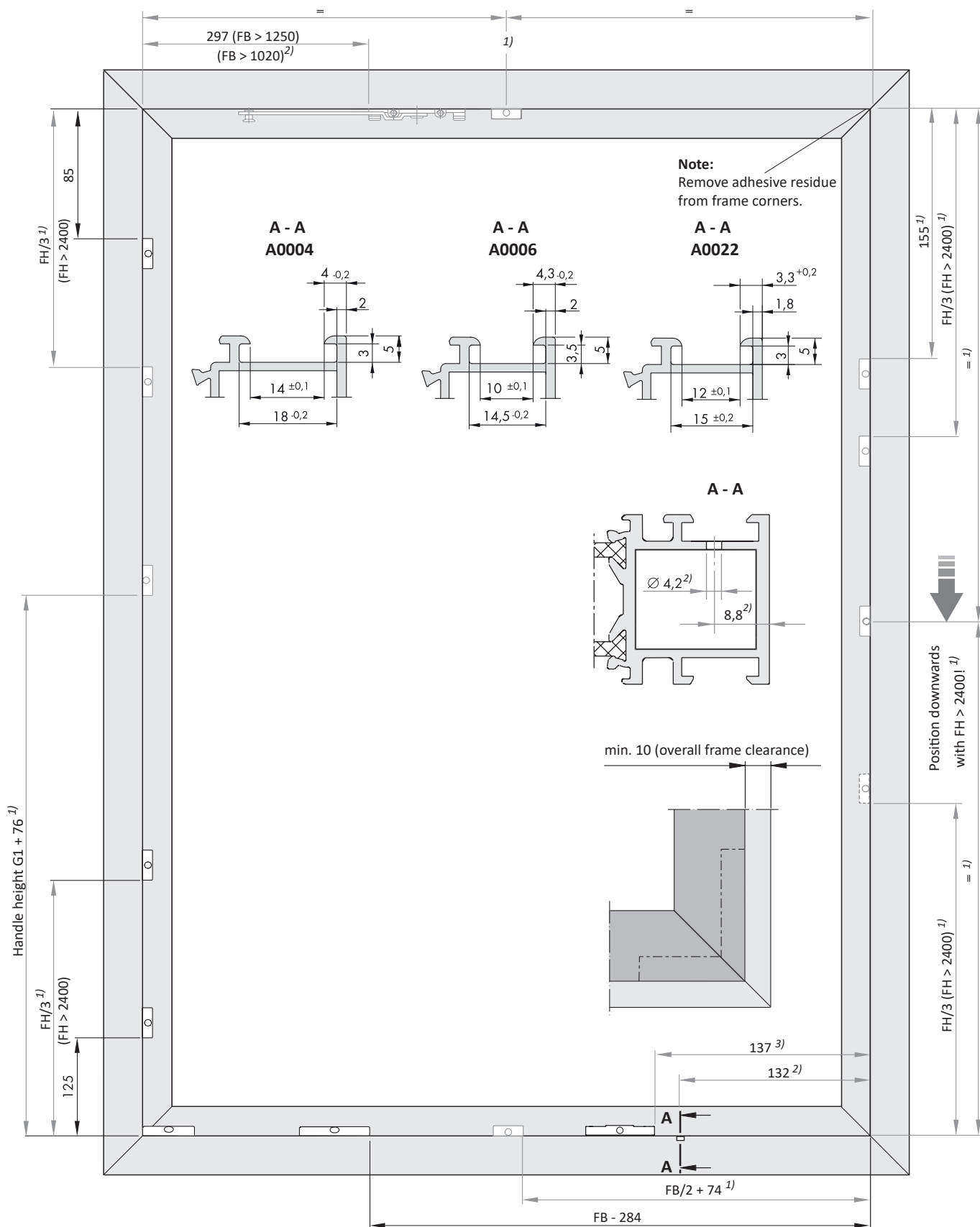
3) > 130 kg



# **Frame dimensions** Single sash square turn and tilt Hinge side ALU axxent PLUS

ALU axxent PLUS

**FBS-G KPW**



1) with MV

2) > 100 kg

3) > 130 kg