

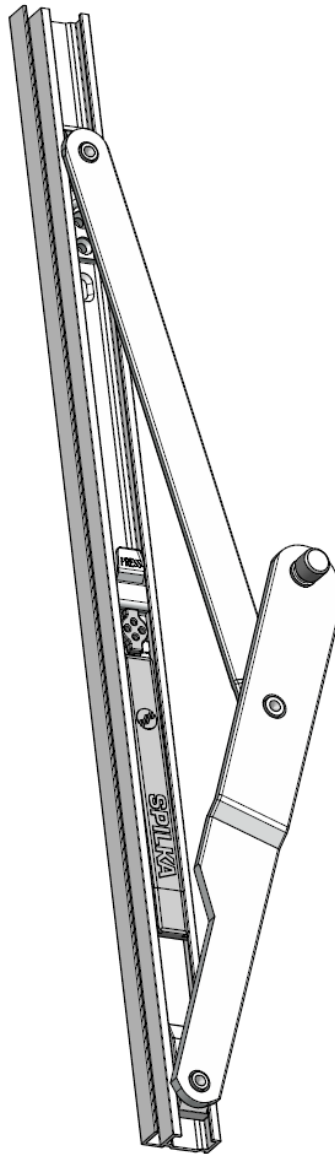
# AURA FULLY REVERSIBLE HINGES **FITTING INSTRUCTIONS**

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Secured by Design



Police Preferred Specification



## **CONTENT**

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# AURA FULLY REVERSIBLE HINGES **OVERVIEW**

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## **WINDOWS**

- Window heights from approx. 500mm to 1600mm
- Max sash weight 80kg
- Fire egress on certain sizes
- PAS24 obtainable with certain accessories

## **TESTED TO**

- BS-EN 6375 Part 1 & 2
- BS-EN 1670 Grade 4
- BS-EN 13126-11
- BS-EN 14351-1
- PAS 24 achievable with certain accessories

## **HINGE**

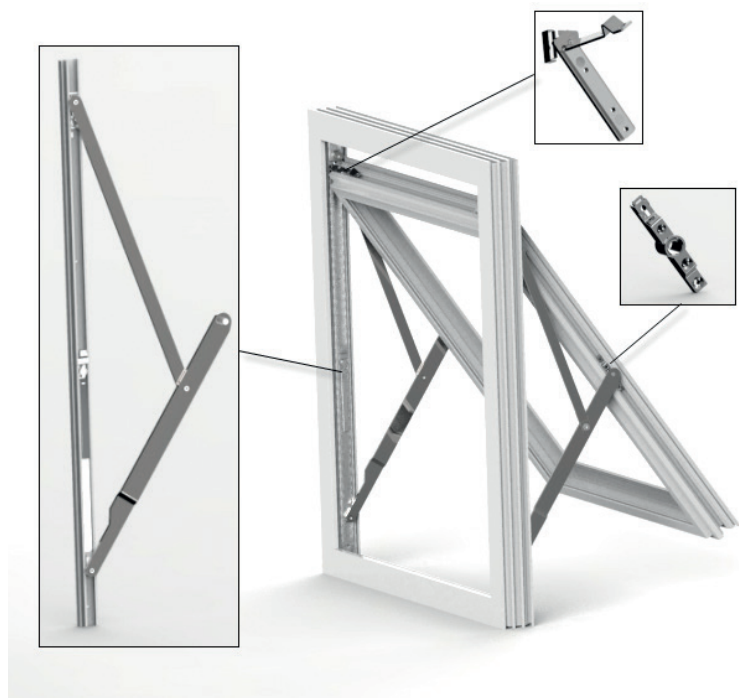
- Fits standard, fully reversible profiles with groove 12mm x 32mm
- 21 Module sizes from M6 to M16 in 50mm steps
- Two restrictor positions; easy close from first position, fixed ventilation in second position
- Lockable safety restrictor

## **HEAD SLIDES**

- Various head slides available depending on sash material and profile (PVCu, Aluminium and Timber)

## **CENTRE SASH ASSEMBLY**

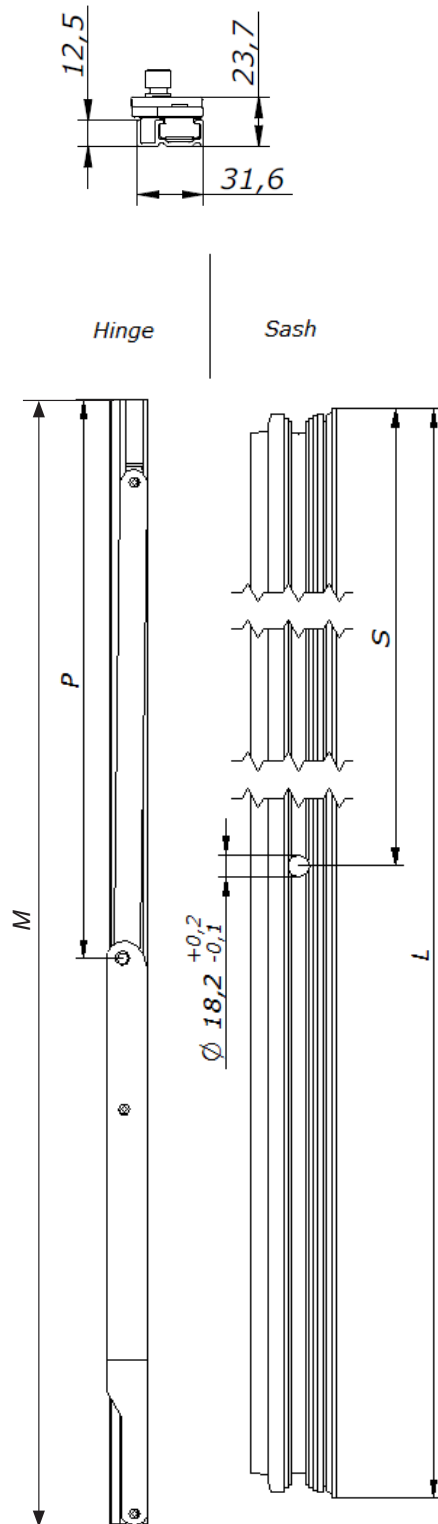
- Different types available depending on sash material and profile
- Quick, simple and safe connection / disconnection from hinge pivot point



# AURA FULLY REVERSIBLE HINGES **INSTALLATION**

## HINGE MODULE WINDOW SIZE GUIDE

- Module step: 50mm

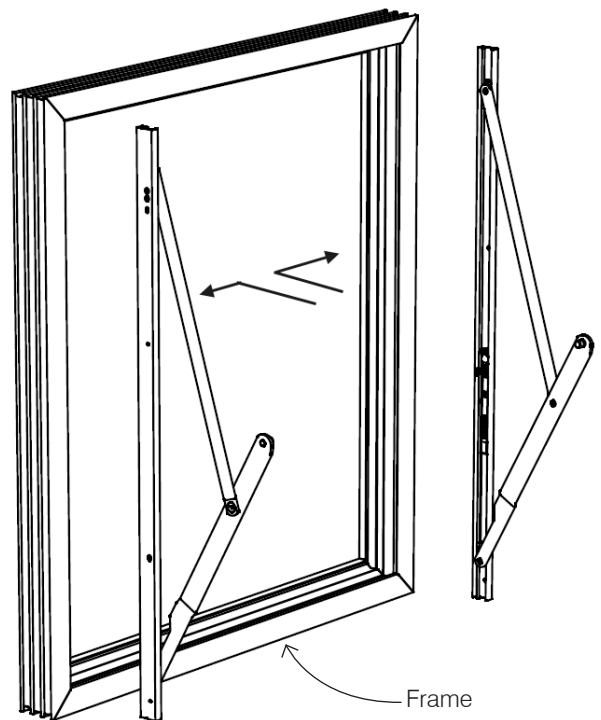
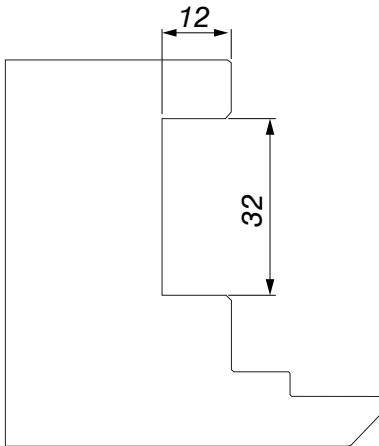


| Hinge Module | Part no. (pair) | M (mm) | P (mm) | Max. sash weight | L Min  | L Max |
|--------------|-----------------|--------|--------|------------------|--------|-------|
| M6           | 087000          | 524    | 259    | 80 kg            | 490,5  | 546   |
| M6,5         | 087002          | 580    | 286    | 80 kg            | 546,5  | 590   |
| M7           | 087005          | 624    | 309    | 80 kg            | 590,5  | 646   |
| M7,5         | 087007          | 680    | 336    | 80 kg            | 646,5  | 690   |
| M8           | 087010          | 724    | 359    | 80 kg            | 690,5  | 746   |
| M8,5         | 087012          | 780    | 387    | 80 kg            | 746,5  | 790   |
| M9           | 087015          | 824    | 409    | 80 kg            | 790,5  | 846   |
| M9,5         | 087017          | 880    | 436    | 80 kg            | 846,5  | 890   |
| M10          | 087020          | 924    | 459    | 80 kg            | 890,5  | 946   |
| M10,5        | 087022          | 980    | 481    | 80 kg            | 946,5  | 990   |
| M11          | 087025          | 1024   | 509    | 80 kg            | 990,5  | 1046  |
| M11,5        | 087027          | 1080   | 535    | 80 kg            | 1046,5 | 1090  |
| M12          | 087030          | 1124   | 559    | 80 kg            | 1090,5 | 1146  |
| M12,5        | 087032          | 1180   | 587    | 80 kg            | 1146,5 | 1190  |
| M13          | 087040          | 1224   | 609    | 80 kg            | 1190,5 | 1246  |
| M13,5        | 087042          | 1280   | 635    | 80 kg            | 1246,5 | 1290  |
| M14          | 087045          | 1324   | 659    | 80 kg            | 1290,5 | 1346  |
| M14,5        | 087047          | 1380   | 686    | 80 kg            | 1346,5 | 1390  |
| M15          | 087050          | 1424   | 709    | 80 kg            | 1390,5 | 1446  |
| M15,5        | 087052          | 1480   | 735    | 80 kg            | 1446,5 | 1490  |
| M16          | 087055          | 1524   | 759    | 80 kg            | 1490,5 | 1546  |

# AURA FULLY REVERSIBLE HINGES **INSTALLATION**

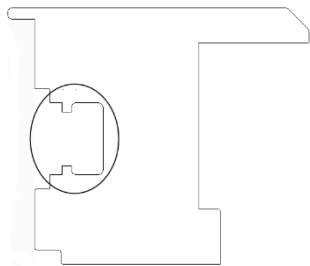
## **HINGES**

- The hinges are mounted in grooves within the frame jambs. Top, side and bottom profiles can be different.
- The hinge with the restrictor is to be fitted on the right-hand side of the frame seen from the outside.
- The groove for the hinge is approximately 12x32mm.

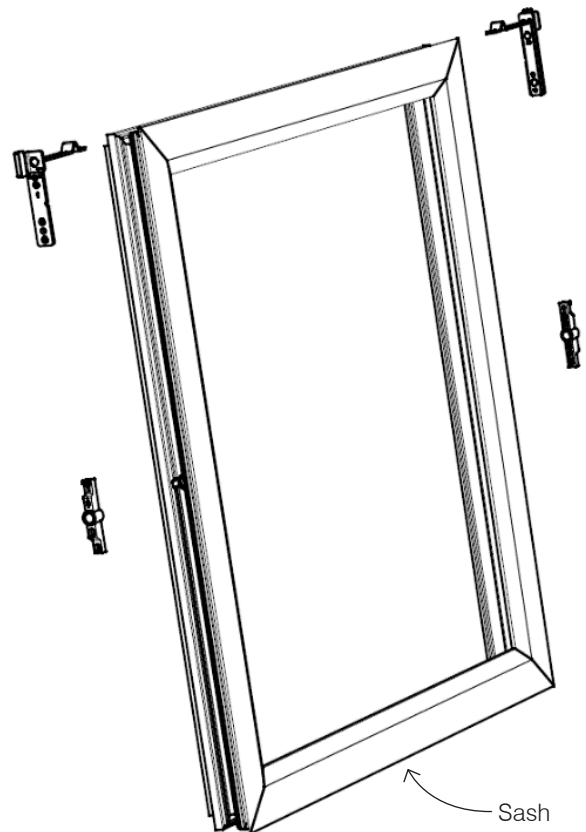
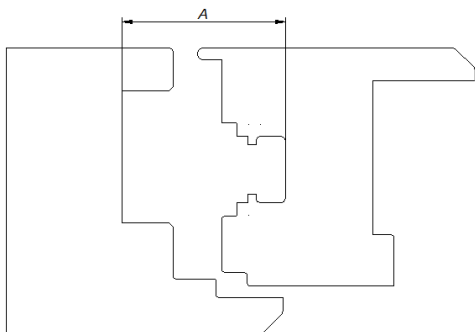


## **HEAD SLIDES AND CENTRE SASH ASSEMBLY**

- For PVC profiles, these components are to be mounted in the sash Eurogroove.
- Head slides are generally profile specific.



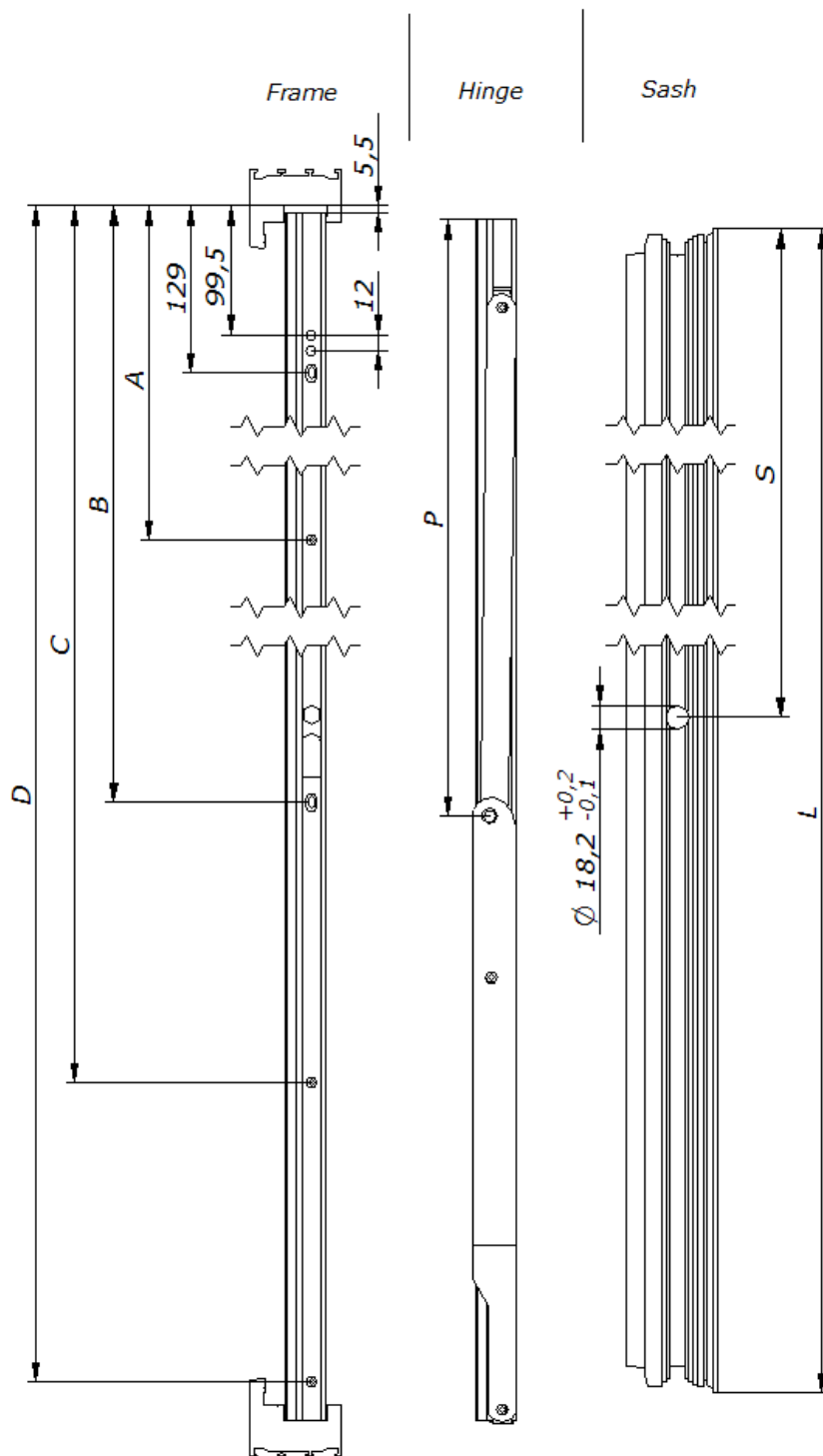
- Minimum net measure A for hinge plus centre sash assembly is 40mm for PVCu and 28mm for timber.



# AURA FULLY REVERSIBLE HINGES **INSTALLATION**

## FRAME

- When sash height L is known the module size and pivot point distance P can be determined (see table, page 3). If screw fixing positions are required, then they can be determined from the table and diagram below.



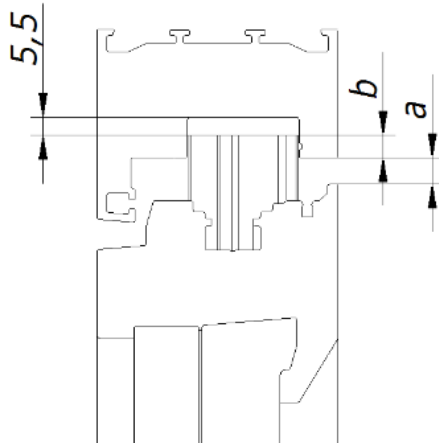
| Hinge Module | A     | B    | C      | D      | P   |
|--------------|-------|------|--------|--------|-----|
| M6           | -     | 380  | -      | 499,5  | 259 |
| M6.5         | -     | 436  | -      | 555,5  | 286 |
| M7           | -     | 480  | -      | 599,5  | 309 |
| M7.5         | -     | 536  | -      | 655,5  | 336 |
| M8           | 335,5 | 580  | -      | 699,5  | 359 |
| M8.5         | 335,5 | 636  | -      | 755,5  | 387 |
| M9           | 335,5 | 571  | -      | 799,5  | 409 |
| M9.5         | 335,5 | 627  | -      | 855,5  | 436 |
| M10          | 335,5 | 671  | -      | 899,5  | 459 |
| M10.5        | 435,5 | 727  | -      | 955,5  | 481 |
| M11          | 435,5 | 771  | -      | 999,5  | 509 |
| M11.5        | 435,5 | 698  | 875,5  | 1055,5 | 535 |
| M12          | 435,5 | 742  | 919,5  | 1099,5 | 559 |
| M12.5        | 435,5 | 798  | 975,5  | 1155,5 | 587 |
| M13          | 435,5 | 842  | 1019,5 | 1199,5 | 609 |
| M13.5        | 435,5 | 898  | 1075,5 | 1255,5 | 635 |
| M14          | 435,5 | 854  | 1069,5 | 1299,5 | 659 |
| M14.5        | 535,5 | 910  | 1125,5 | 1355,5 | 686 |
| M15          | 535,5 | 954  | 1169,5 | 1399,5 | 709 |
| M15.5        | 535,5 | 1010 | 1225,5 | 1455,5 | 735 |
| M16          | 535,5 | 1054 | 1269,5 | 1499,5 | 759 |

# AURA FULLY REVERSIBLE HINGES **INSTALLATION**

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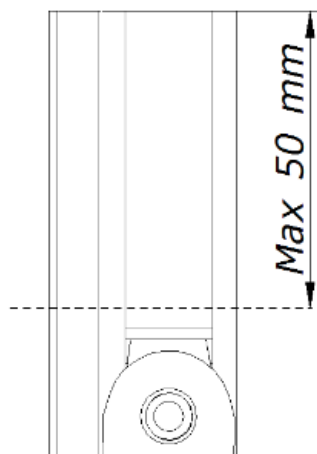
## HINGE AND PIVOT POSITION

- When clearance  $a$  and measure  $b$  are determined, distance  $S$  (drilling hole for centre sash assembly) can be calculated:  $S = P - (a+b)$ . See specific window profiles section for  $a$  and  $b$  values.
- Drilling hole  $\varnothing 18,2\text{mm}$  for centre sash assembly is in the centre of the eurogroove.
- Fixing points in frame and drilling for centre sash assembly are the same for both left and right sides.



## OVERSWING

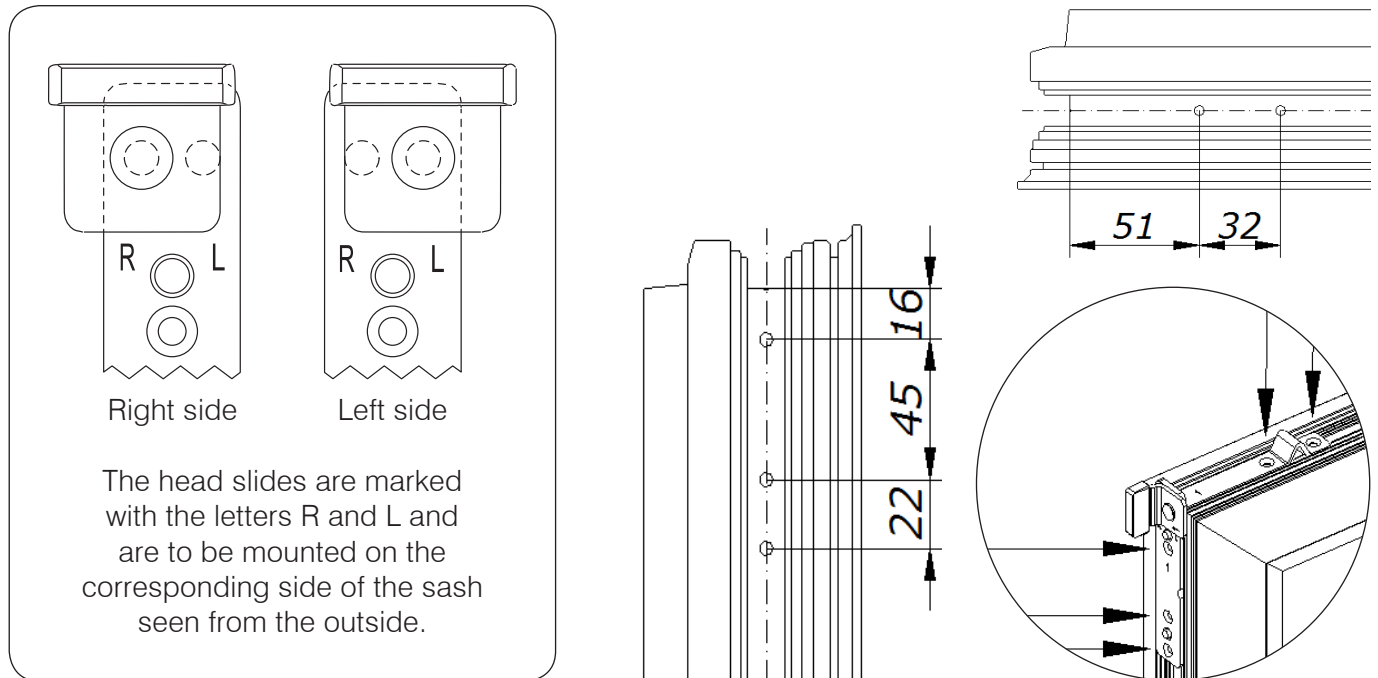
- If the selected hinge module for the specific window size results in an unwanted overswing, there is a possibility to cut the top of the aluminium track in order to fit a larger hinge module into the same window and by that reduce the overswing.
- It is possible to cut up to 50mm but note that only a cut between 0mm - 25mm will reduce the overswing.



# AURA FULLY REVERSIBLE HINGES **INSTALLATION**

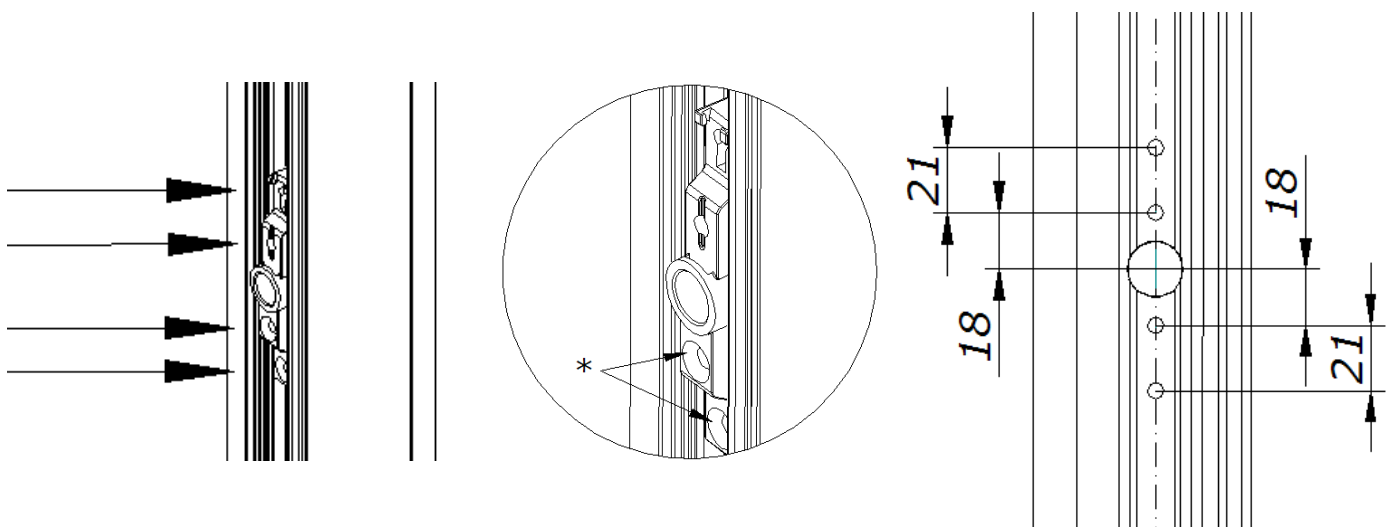
## HEAD SLIDES

- The head slide fixing points are in the centre of the eurogroove and the same for left and right side of the sash.



## CENTRE SASH ASSEMBLY

- Fixing points for the centre sash assembly (CSA) are in the centre of the eurogroove.
- Fix the two screws marked \* before attaching the hinge.
- The two remaining screws after. Position the CSA with the locking plate towards the top of the sash.
- Fixing points are the same for left and right side.

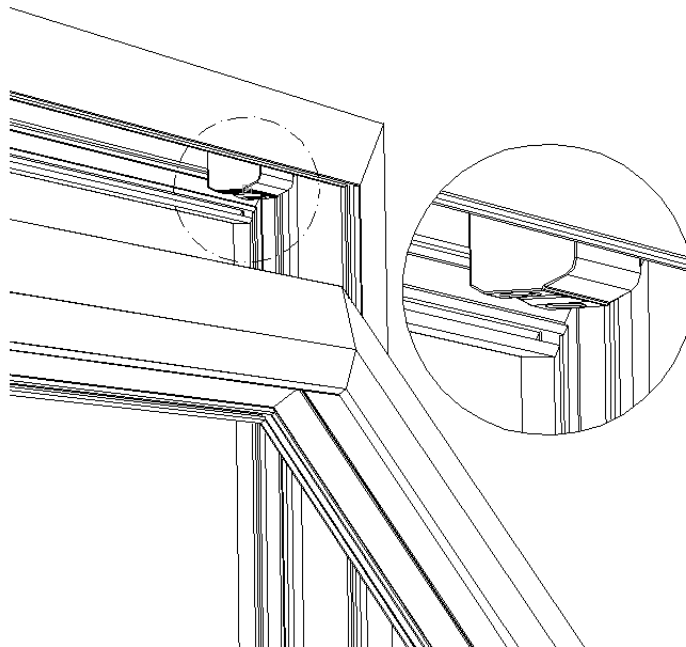


## AURA FULLY REVERSIBLE HINGES **INSTALLATION**

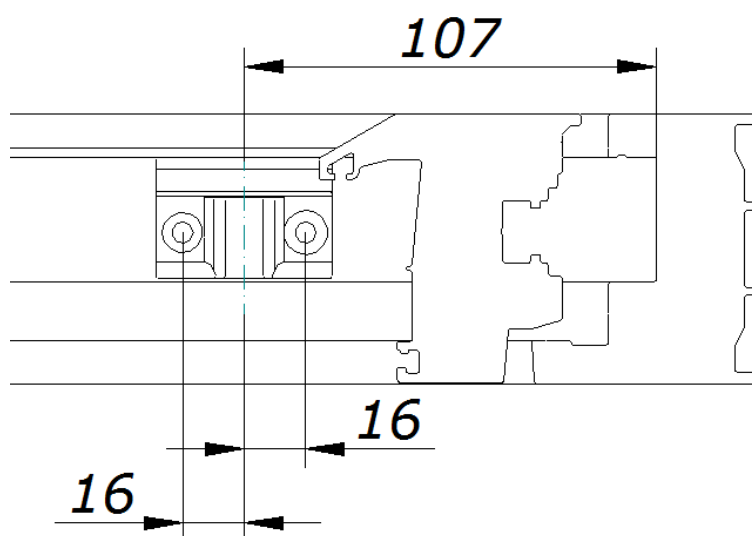
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### **SECURITY BLOCKS**

- If enhanced security is required (PAS24), then security blocks can be fixed into the groove on the top frame. The security detail on the head slide locks behind the block to give additional security.



- Positioning of the blocks may vary slightly depending on window profile dimensions. A guide measure is 107mm from inside groove in the side frame (see specific window profiles section for exact positioning).
- The block is fixed with two screws. Fixing points are the same for left and right side.



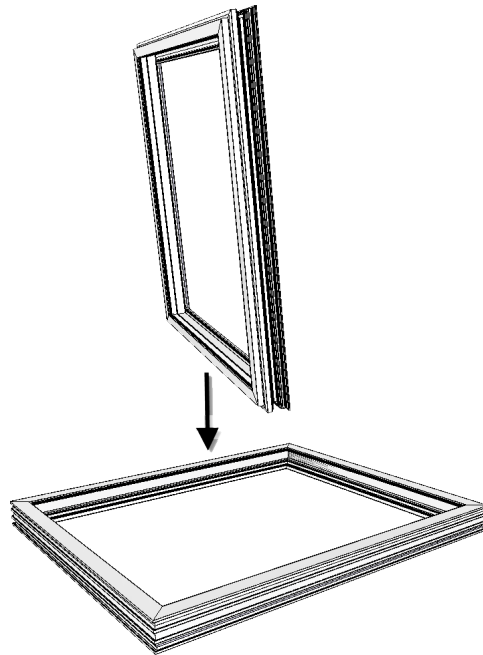
# ASSEMBLY

## AURA FULLY REVERSIBLE HINGES **ASSEMBLY**

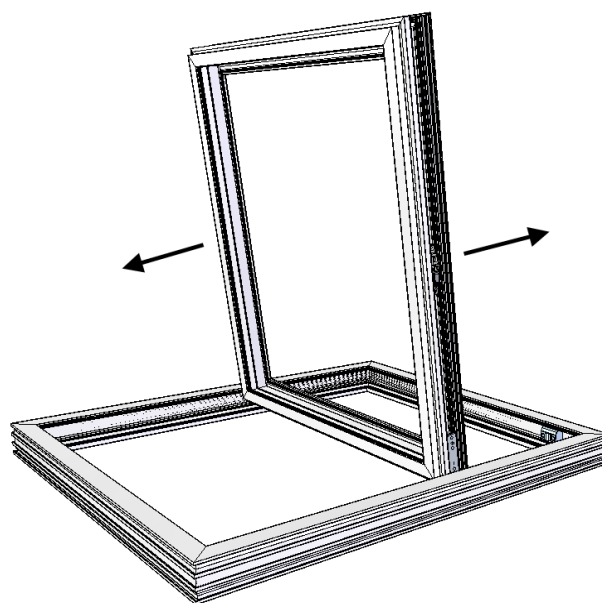
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### CONNECTING SASH TO FRAME

- Place the frame flat, inside face down.
- Lower the sash vertically with head slides downward. Make sure the sash is tilted to the frame to be able to lead the head slides into the track in the aluminium rail.

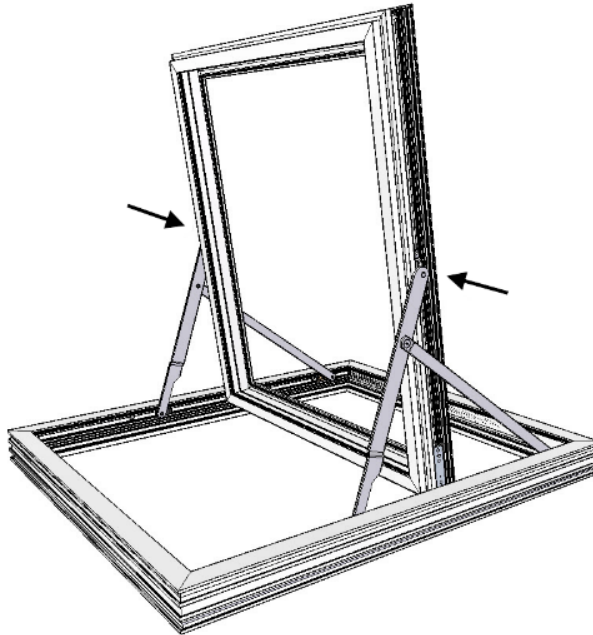


- Turn the sash perpendicular to the frame as indicated by the arrows to make the gliders engage in the track.

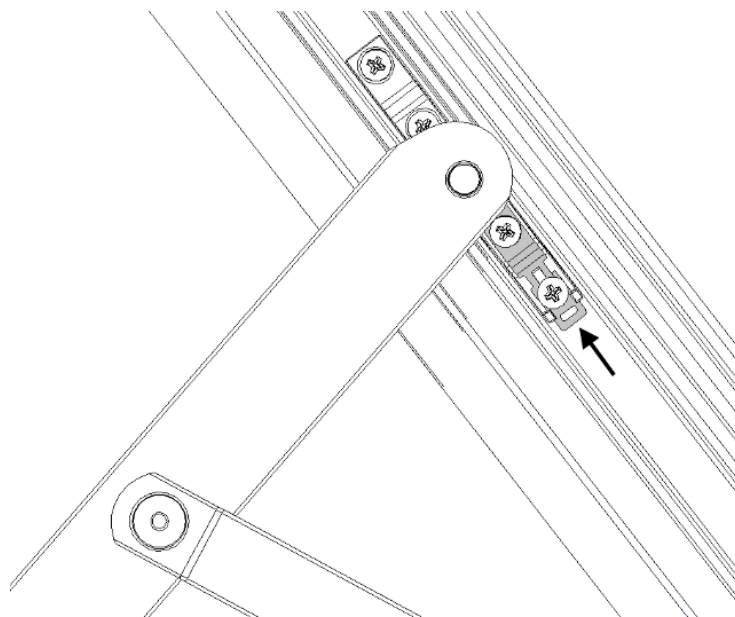


### CONNECTING SASH TO FRAME

- Lift one hinge at a time.
- Connect hinge pivot into centre sash assembly.



- Slide locking plate on centre sash assembly in the direction of the arrow.
- Fix with the two remaining screws. Check that the hinge arm is locked by pulling it outwards.





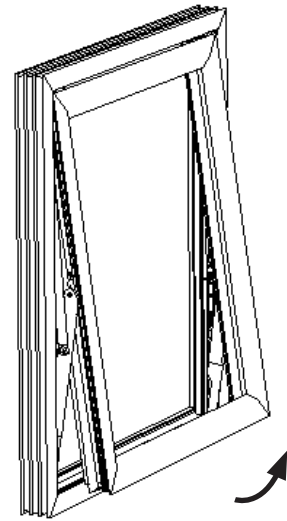
# OPERATION

## AURA FULLY REVERSIBLE HINGES OPERATION

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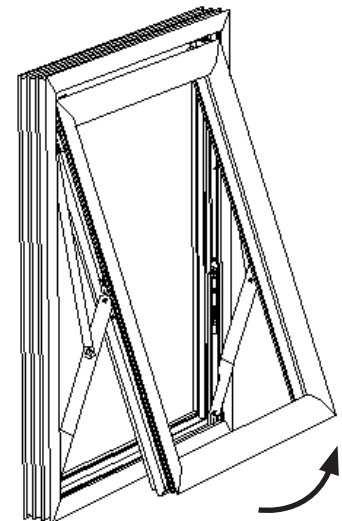
### FIRST RESTRICTOR POSITION - SAFETY

- First position allows a maximum opening of about 80mm-100mm. (Can vary downwards depending on profile type and window size)
- The window can be opened until it stops against the restrictor. In this first position, the window can be closed without using the restrictor release.
- To open the window further, the restrictor must be released.



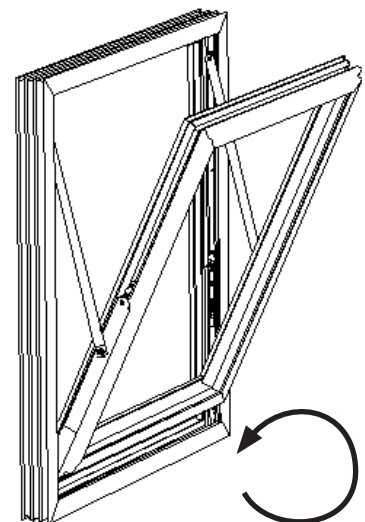
### SECOND RESTRICTOR POSITION - VENTILATION

- Second position allows an opening of approx. 150mm on the smallest module, increasing with module size up to about 290mm on the largest module.
- In the second position, the window is held by the restrictor in both directions.
- To open the window further or to close it, the restrictor needs to be released.



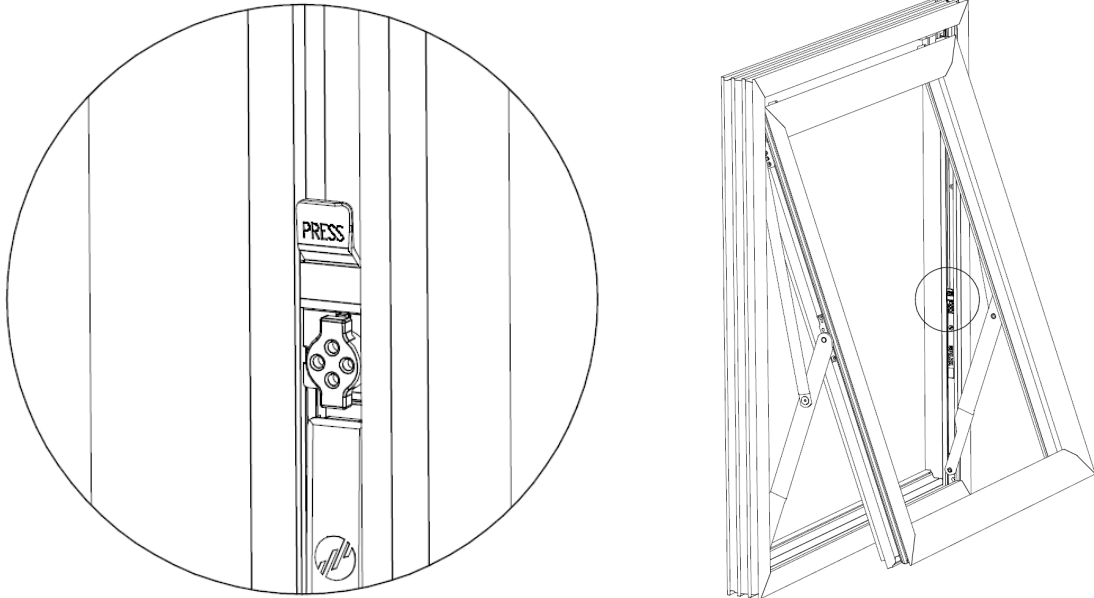
### REVERSED POSITION

- To facilitate easy window washing, turn the sash all the way around until the restrictor locks again. When engaged in the reversed position, the window is held by the restrictor in both directions
- To turn the window further or to close the window, the restrictor needs to be released.



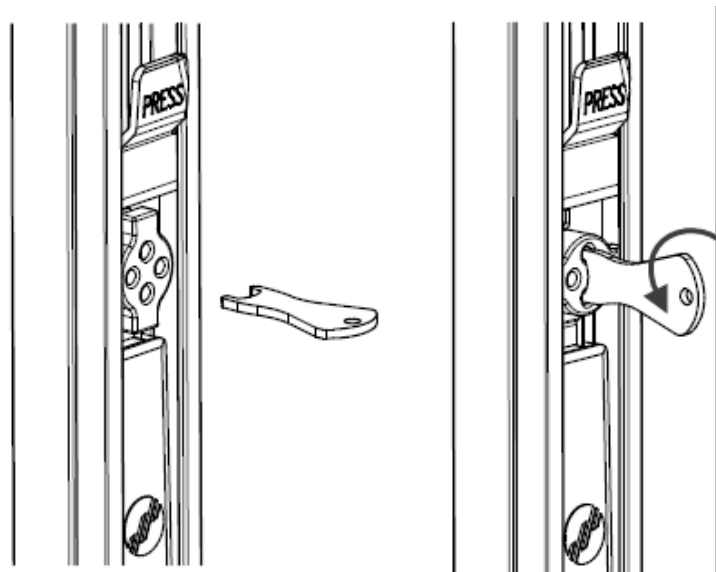
### RELEASE

- To release the restrictor, simply press and hold the release mechanism where it says "PRESS" while moving the sash. The release mechanism is located on the right side of the window (seen from the outside)



### LOCK

- To lock the restrictor, insert the key and turn the restrictor lock 90° clockwise or counter-clockwise to horizontal position. In this mode, the window cannot be opened any further. To unlock the restrictor, turn the key in the restrictor lock back to a vertical position.
- The window can still be closed from first position with the lock engaged but is not recommended as it puts a lot of stress on the restrictor parts, especially on the smaller hinge modules.





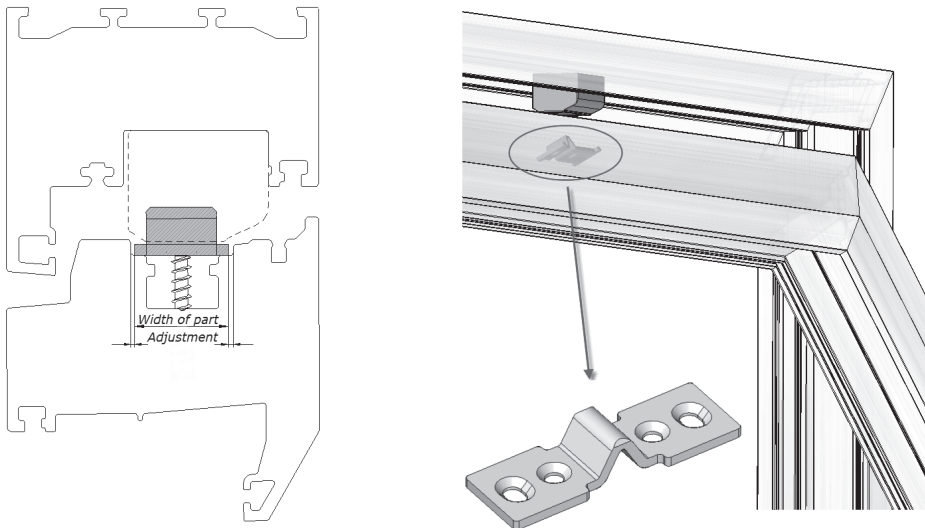
## ACCESSORIES & MAINTENANCE

## AURA FULLY REVERSIBLE HINGES **ACCESSORIES**

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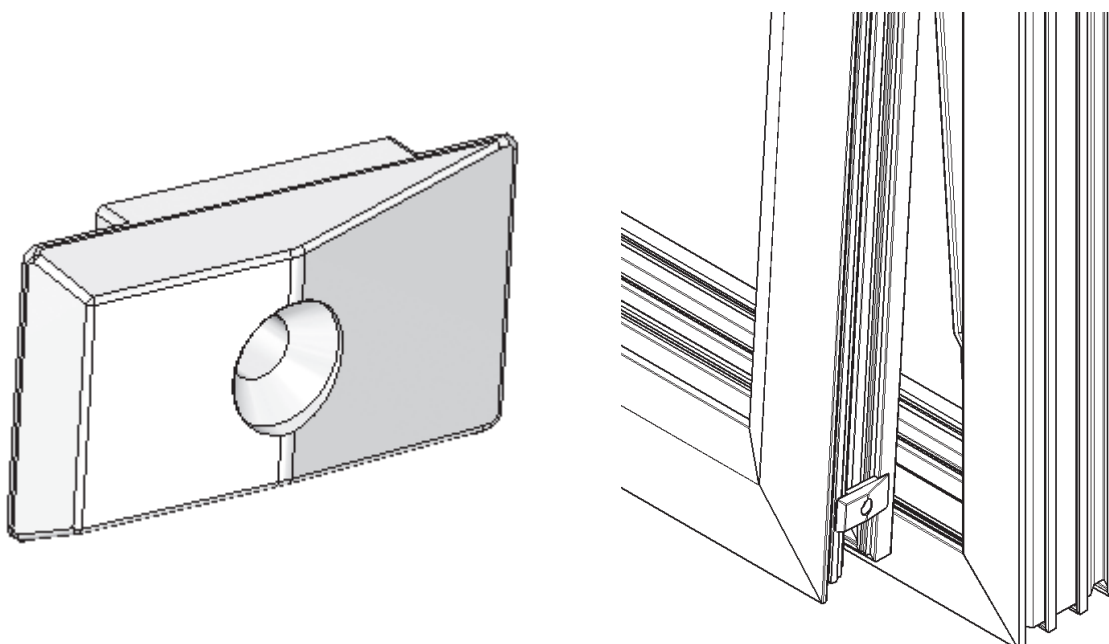
### **SECURITY PLATE**

- The security plate is used together with the security block to minimise the risk of deflections on wide PVCu windows. A security plate should be considered on window widths over 1200mm.
- The security plate is placed in the eurogroove in the sash and can be adjusted approximately  $\pm 1\text{mm}$  depending on profile type.



### **SASH GUIDING BLOCK**

- If required to centre the frame when closing the window, guiding blocks can be mounted in the eurogroove at the bottom of each side of the sash.



### GENERAL

#### WE RECOMMEND THAT

- All rivets connections should be lubricated once a year.
- Gliding channels in the aluminium rail should be cleaned and lubricated with a neutral clear grease or acid-free Vaseline once a year.
- If the hardware is exposed to harsh conditions (such as salt, dust or heavy rain) or if it becomes difficult to turn the window, cleaning and lubrication should be conducted more frequently.

### MATERIALS & SURFACE TREATMENT

#### HINGE ARMS

- Material: Cold rolled steel S235 JRG 2C+C.
- Surface treatment: Alkaline FE/Zn 8-12 $\mu$ m, bright chromated Cr (III) + Sealer

#### RIVETS / PIVOT PIN

- Material: Steel wire rod, QST 32/36 / Machining steel 11SMnPb30+C
- Surface treatment: Alkaline FE/Zn 8-12 $\mu$ m, bright chromated Cr (III) + Sealer

#### ALUMINIUM RAIL

- Material: Aluminium alloy EN-AW-6063-T6
- Surface treatment: Powder coating, polyester Corro-Coat PE-F

#### PLASTIC PARTS

- Material: POM UV Stable

#### DIE CASTINGS

- Material: Zink alloy Zamak 2
- Surface treatment: Bright chromated Cr (III) + Sealer



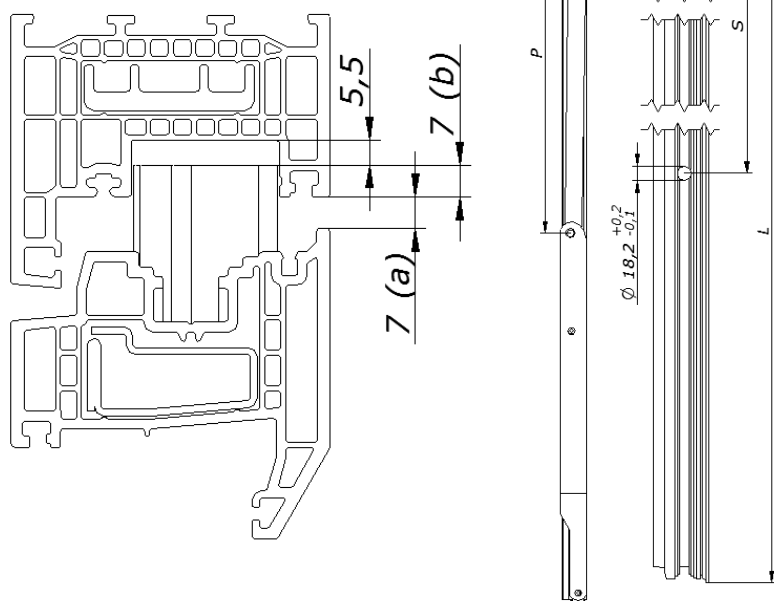
# PROFILE RELATED FITTING

| <b>PROFILE SYSTEMS</b>       | <b>PAGE</b> |
|------------------------------|-------------|
| SPECTUS PVCu                 | 23          |
| VEKA PVCu                    | 24          |
| HALO 58mm SASH PVCu          | 25          |
| HALO 70mm SASH PVCu          | 26          |
| REHAU PVCu                   | 27          |
| LB SHEERFRAME PVCu           | 28          |
| DECEUNINCK PVCu              | 29          |
| SENIOR ARCHITECTURAL SYSTEMS | 30          |
| TIMBER DESIGN 1              | 31 - 32     |
| TIMBER ALUMINIUM             | 33          |
| LINIAR PVCu                  | 34          |



## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .



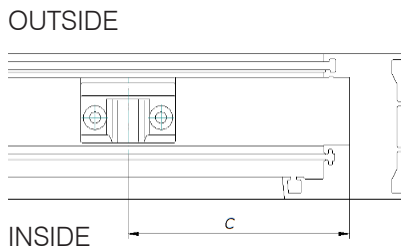
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 245    | 490,5  | 546   |
| M6,5         | 286    | 272    | 546,5  | 590   |
| M7           | 309    | 295    | 590,5  | 646   |
| M7,5         | 336    | 322    | 646,5  | 690   |
| M8           | 359    | 345    | 690,5  | 746   |
| M8,5         | 387    | 373    | 746,5  | 790   |
| M9           | 409    | 395    | 790,5  | 846   |
| M9,5         | 436    | 422    | 846,5  | 890   |
| M10          | 459    | 445    | 890,5  | 946   |
| M10,5        | 481    | 467    | 946,5  | 990   |
| M11          | 509    | 495    | 990,5  | 1046  |
| M11,5        | 535    | 521    | 1046,5 | 1090  |
| M12          | 559    | 545    | 1090,5 | 1146  |
| M12,5        | 587    | 573    | 1146,5 | 1190  |
| M13          | 609    | 595    | 1190,5 | 1246  |
| M13,5        | 635    | 621    | 1246,5 | 1290  |
| M14          | 659    | 645    | 1290,5 | 1346  |
| M14,5        | 686    | 672    | 1346,5 | 1390  |
| M15          | 709    | 695    | 1390,5 | 1446  |
| M15,5        | 735    | 721    | 1446,5 | 1490  |
| M16          | 759    | 745    | 1490,5 | 1546  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Spectus profile the measurement  $C = 107\text{mm}$

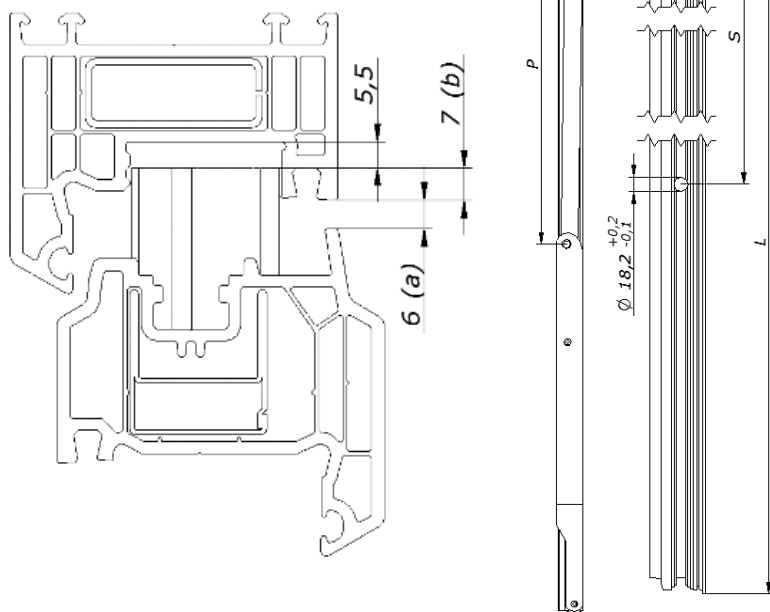


| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087221   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

## AURA FULLY REVERSIBLE HINGES **VEKA PVCu**

### DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .



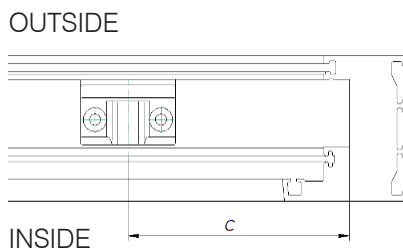
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 492,5  | 548   |
| M6,5         | 286    | 273    | 548,5  | 592   |
| M7           | 309    | 296    | 592,5  | 648   |
| M7,5         | 336    | 323    | 648,5  | 692   |
| M8           | 359    | 346    | 692,5  | 748   |
| M8,5         | 387    | 374    | 748,5  | 792   |
| M9           | 409    | 396    | 792,5  | 848   |
| M9,5         | 436    | 423    | 848,5  | 892   |
| M10          | 459    | 446    | 892,5  | 948   |
| M10,5        | 481    | 468    | 948,5  | 992   |
| M11          | 509    | 496    | 992,5  | 1048  |
| M11,5        | 535    | 522    | 1048,5 | 1092  |
| M12          | 559    | 546    | 1092,5 | 1148  |
| M12,5        | 587    | 574    | 1148,5 | 1192  |
| M13          | 609    | 596    | 1192,5 | 1248  |
| M13,5        | 635    | 622    | 1248,5 | 1292  |
| M14          | 659    | 646    | 1292,5 | 1348  |
| M14,5        | 686    | 673    | 1348,5 | 1392  |
| M15          | 709    | 696    | 1392,5 | 1448  |
| M15,5        | 735    | 722    | 1448,5 | 1492  |
| M16          | 759    | 746    | 1492,5 | 1548  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

### POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Veka profile the measurement  $C = 108\text{mm}$

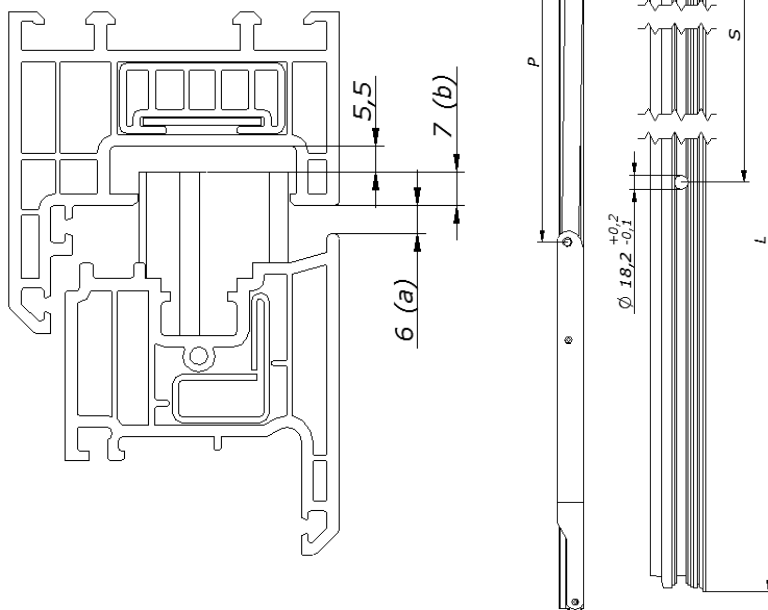


| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087222   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

# AURA FULLY REVERSIBLE HINGES **HALO PVCu 58mm SASH**

## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance *a* and measure *b* are determined, distance *S* can be calculated:  $S = P - (a+b)$ .



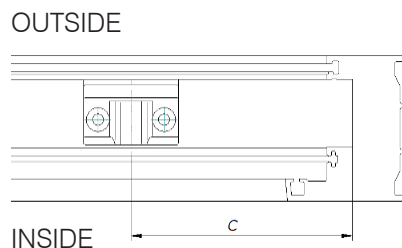
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 492,5  | 548   |
| M6,5         | 286    | 273    | 548,5  | 592   |
| M7           | 309    | 296    | 592,5  | 648   |
| M7,5         | 336    | 323    | 648,5  | 692   |
| M8           | 359    | 346    | 692,5  | 748   |
| M8,5         | 387    | 374    | 748,5  | 792   |
| M9           | 409    | 396    | 792,5  | 848   |
| M9,5         | 436    | 423    | 848,5  | 892   |
| M10          | 459    | 446    | 892,5  | 948   |
| M10,5        | 481    | 468    | 948,5  | 992   |
| M11          | 509    | 496    | 992,5  | 1048  |
| M11,5        | 535    | 522    | 1048,5 | 1092  |
| M12          | 559    | 546    | 1092,5 | 1148  |
| M12,5        | 587    | 574    | 1148,5 | 1192  |
| M13          | 609    | 596    | 1192,5 | 1248  |
| M13,5        | 635    | 622    | 1248,5 | 1292  |
| M14          | 659    | 646    | 1292,5 | 1348  |
| M14,5        | 686    | 673    | 1348,5 | 1392  |
| M15          | 709    | 696    | 1392,5 | 1448  |
| M15,5        | 735    | 722    | 1448,5 | 1492  |
| M16          | 759    | 746    | 1492,5 | 1548  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Halo 58mm sash profile the measurement  $C = 107.5\text{mm}$

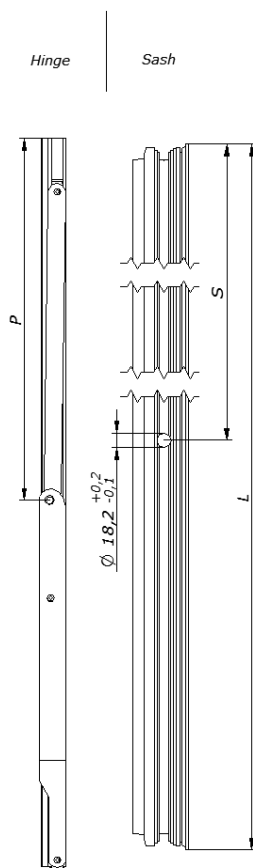
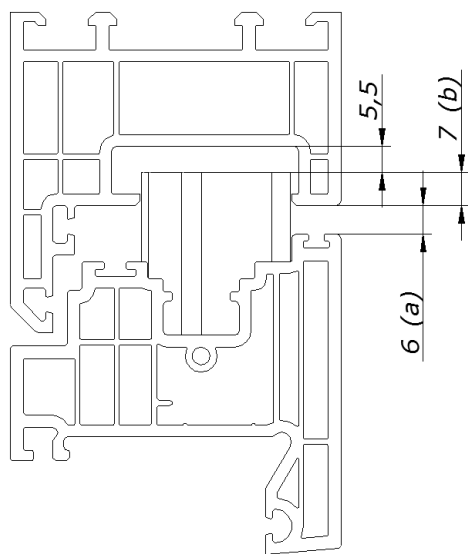


| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087221   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

## AURA FULLY REVERSIBLE HINGES **HALO PVCu 70mm SASH**

### DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .



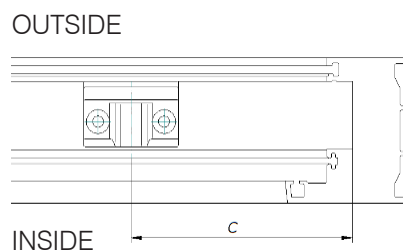
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 492,5  | 548   |
| M6,5         | 286    | 273    | 548,5  | 592   |
| M7           | 309    | 296    | 592,5  | 648   |
| M7,5         | 336    | 323    | 648,5  | 692   |
| M8           | 359    | 346    | 692,5  | 748   |
| M8,5         | 387    | 374    | 748,5  | 792   |
| M9           | 409    | 396    | 792,5  | 848   |
| M9,5         | 436    | 423    | 848,5  | 892   |
| M10          | 459    | 446    | 892,5  | 948   |
| M10,5        | 481    | 468    | 948,5  | 992   |
| M11          | 509    | 496    | 992,5  | 1048  |
| M11,5        | 535    | 522    | 1048,5 | 1092  |
| M12          | 559    | 546    | 1092,5 | 1148  |
| M12,5        | 587    | 574    | 1148,5 | 1192  |
| M13          | 609    | 596    | 1192,5 | 1248  |
| M13,5        | 635    | 622    | 1248,5 | 1292  |
| M14          | 659    | 646    | 1292,5 | 1348  |
| M14,5        | 686    | 673    | 1348,5 | 1392  |
| M15          | 709    | 696    | 1392,5 | 1448  |
| M15,5        | 735    | 722    | 1448,5 | 1492  |
| M16          | 759    | 746    | 1492,5 | 1548  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

### POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

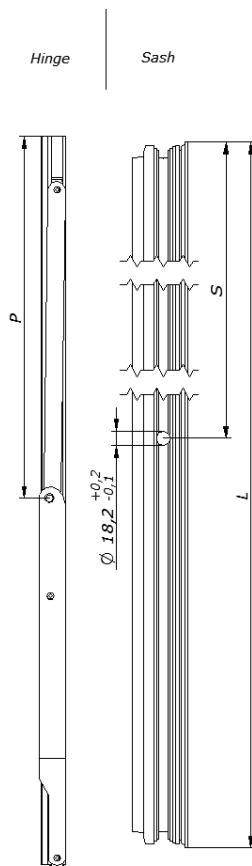
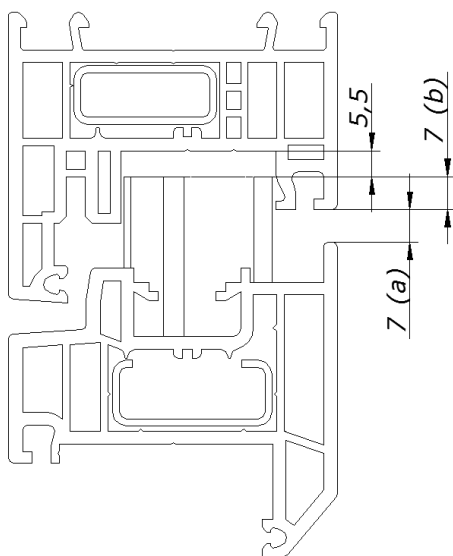
For Halo 70mm sash profile the measurement  $C = 107.5\text{mm}$



| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087227   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .



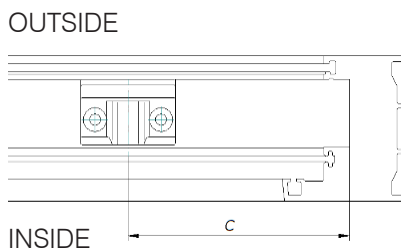
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 245    | 490,5  | 546   |
| M6,5         | 286    | 272    | 546,5  | 590   |
| M7           | 309    | 295    | 590,5  | 646   |
| M7,5         | 336    | 322    | 646,5  | 690   |
| M8           | 359    | 345    | 690,5  | 746   |
| M8,5         | 387    | 373    | 746,5  | 790   |
| M9           | 409    | 395    | 790,5  | 846   |
| M9,5         | 436    | 422    | 846,5  | 890   |
| M10          | 459    | 445    | 890,5  | 946   |
| M10,5        | 481    | 467    | 946,5  | 990   |
| M11          | 509    | 495    | 990,5  | 1046  |
| M11,5        | 535    | 521    | 1046,5 | 1090  |
| M12          | 559    | 545    | 1090,5 | 1146  |
| M12,5        | 587    | 573    | 1146,5 | 1190  |
| M13          | 609    | 595    | 1190,5 | 1246  |
| M13,5        | 635    | 621    | 1246,5 | 1290  |
| M14          | 659    | 645    | 1290,5 | 1346  |
| M14,5        | 686    | 672    | 1346,5 | 1390  |
| M15          | 709    | 695    | 1390,5 | 1446  |
| M15,5        | 735    | 721    | 1446,5 | 1490  |
| M16          | 759    | 745    | 1490,5 | 1546  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Rehau profile the measurement  $C = 107\text{mm}$

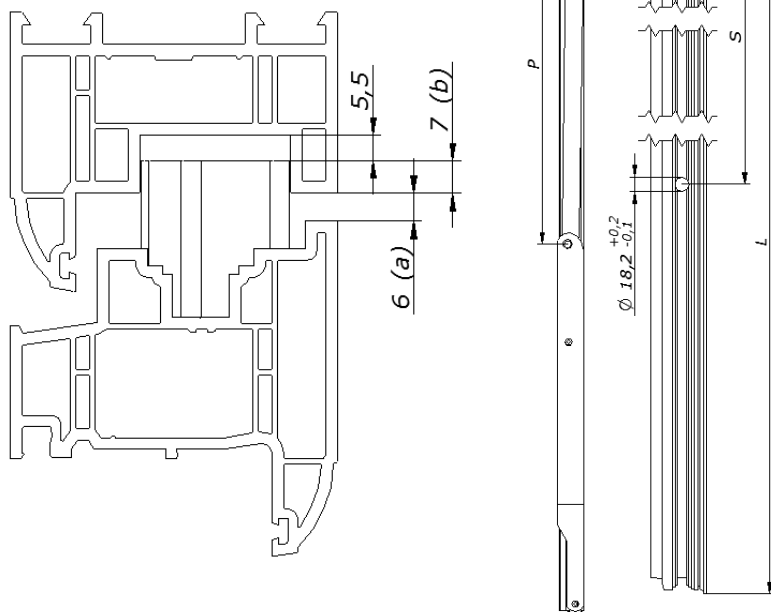


| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087223   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

# AURA FULLY REVERSIBLE HINGES **LB SHEERFRAME PVCu**

## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .



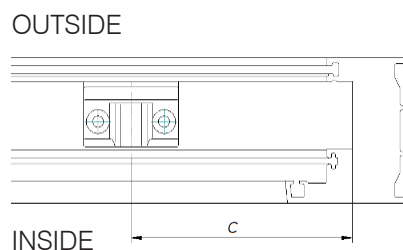
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 492,5  | 548   |
| M6,5         | 286    | 273    | 548,5  | 592   |
| M7           | 309    | 296    | 592,5  | 648   |
| M7,5         | 336    | 323    | 648,5  | 692   |
| M8           | 359    | 346    | 692,5  | 748   |
| M8,5         | 387    | 374    | 748,5  | 792   |
| M9           | 409    | 396    | 792,5  | 848   |
| M9,5         | 436    | 423    | 848,5  | 892   |
| M10          | 459    | 446    | 892,5  | 948   |
| M10,5        | 481    | 468    | 948,5  | 992   |
| M11          | 509    | 496    | 992,5  | 1048  |
| M11,5        | 535    | 522    | 1048,5 | 1092  |
| M12          | 559    | 546    | 1092,5 | 1148  |
| M12,5        | 587    | 574    | 1148,5 | 1192  |
| M13          | 609    | 596    | 1192,5 | 1248  |
| M13,5        | 635    | 622    | 1248,5 | 1292  |
| M14          | 659    | 646    | 1292,5 | 1348  |
| M14,5        | 686    | 673    | 1348,5 | 1392  |
| M15          | 709    | 696    | 1392,5 | 1448  |
| M15,5        | 735    | 722    | 1448,5 | 1492  |
| M16          | 759    | 746    | 1492,5 | 1548  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

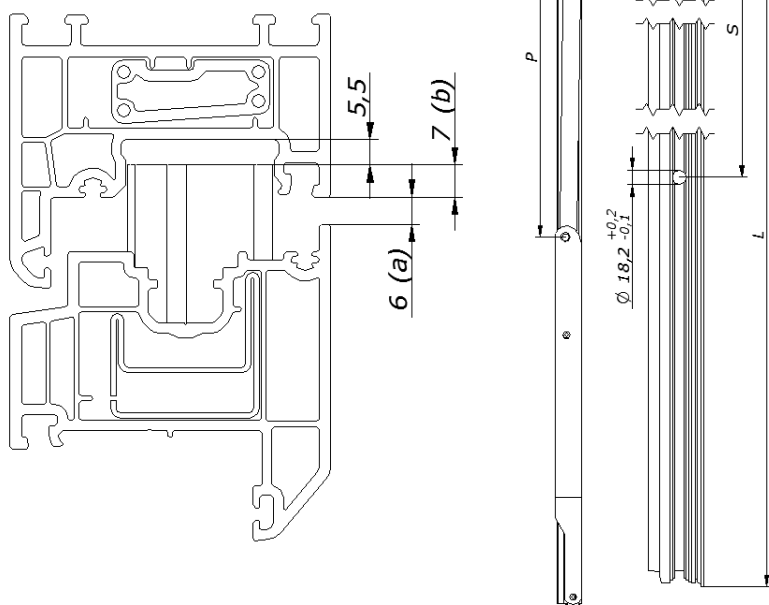
For LB Sheerframe profile the measurement  $C = 107.5\text{mm}$



| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087221   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance a and measure b are determined, distance S can be calculated:  $S = P - (a+b)$ .



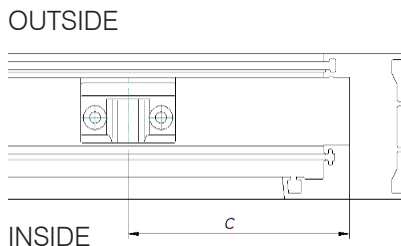
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 492,5  | 548   |
| M6,5         | 286    | 273    | 548,5  | 592   |
| M7           | 309    | 296    | 592,5  | 648   |
| M7,5         | 336    | 323    | 648,5  | 692   |
| M8           | 359    | 346    | 692,5  | 748   |
| M8,5         | 387    | 374    | 748,5  | 792   |
| M9           | 409    | 396    | 792,5  | 848   |
| M9,5         | 436    | 423    | 848,5  | 892   |
| M10          | 459    | 446    | 892,5  | 948   |
| M10,5        | 481    | 468    | 948,5  | 992   |
| M11          | 509    | 496    | 992,5  | 1048  |
| M11,5        | 535    | 522    | 1048,5 | 1092  |
| M12          | 559    | 546    | 1092,5 | 1148  |
| M12,5        | 587    | 574    | 1148,5 | 1192  |
| M13          | 609    | 596    | 1192,5 | 1248  |
| M13,5        | 635    | 622    | 1248,5 | 1292  |
| M14          | 659    | 646    | 1292,5 | 1348  |
| M14,5        | 686    | 673    | 1348,5 | 1392  |
| M15          | 709    | 696    | 1392,5 | 1448  |
| M15,5        | 735    | 722    | 1448,5 | 1492  |
| M16          | 759    | 746    | 1492,5 | 1548  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Deceuninck profile the measurement C = 107.5mm

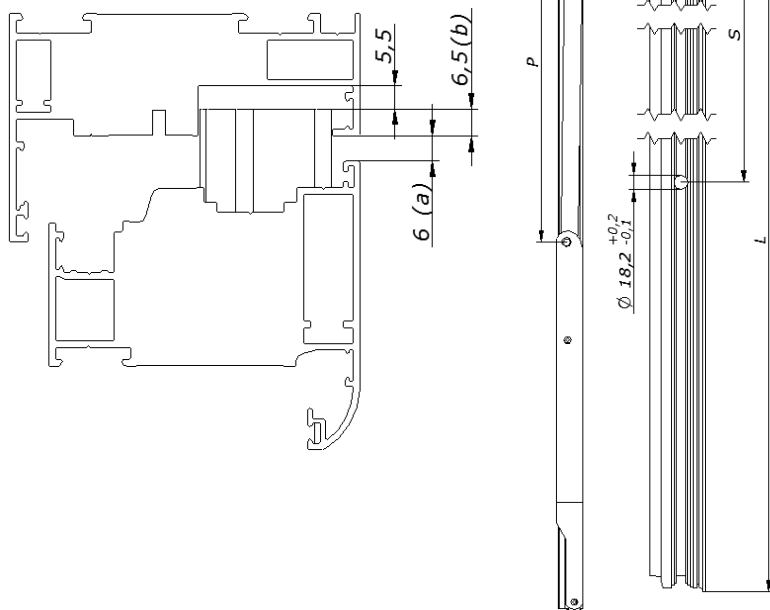


| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087221   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

# AURA FULLY REVERSIBLE HINGES **SENIOR ARCHITECTURAL SYSTEMS**

## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .



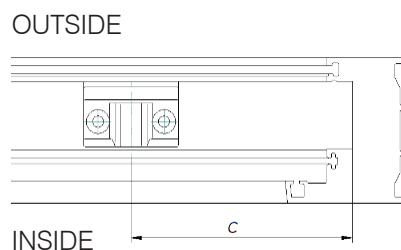
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 493,5  | 549   |
| M6,5         | 286    | 273    | 549,5  | 593   |
| M7           | 309    | 296    | 593,5  | 649   |
| M7,5         | 336    | 323    | 649,5  | 693   |
| M8           | 359    | 346    | 693,5  | 749   |
| M8,5         | 387    | 374    | 749,5  | 793   |
| M9           | 409    | 396    | 793,5  | 849   |
| M9,5         | 436    | 423    | 849,5  | 893   |
| M10          | 459    | 446    | 893,5  | 949   |
| M10,5        | 481    | 468    | 949,5  | 993   |
| M11          | 509    | 496    | 993,5  | 1049  |
| M11,5        | 535    | 522    | 1049,5 | 1093  |
| M12          | 559    | 546    | 1093,5 | 1149  |
| M12,5        | 587    | 574    | 1149,5 | 1193  |
| M13          | 609    | 596    | 1193,5 | 1249  |
| M13,5        | 635    | 622    | 1249,5 | 1293  |
| M14          | 659    | 646    | 1293,5 | 1349  |
| M14,5        | 686    | 673    | 1349,5 | 1393  |
| M15          | 709    | 696    | 1393,5 | 1449  |
| M15,5        | 735    | 722    | 1449,5 | 1493  |
| M16          | 759    | 746    | 1493,5 | 1549  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

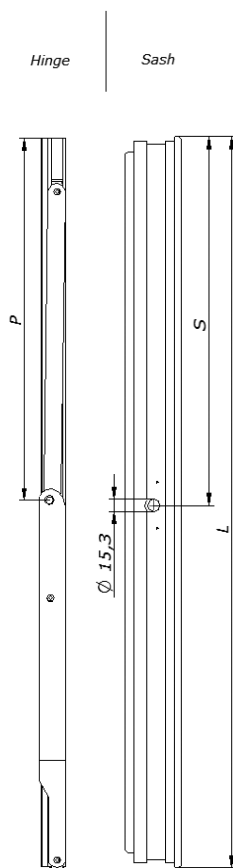
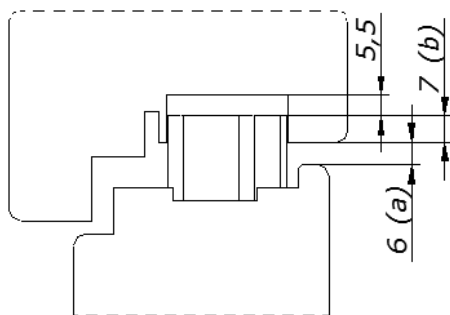
For Senior Architectural Systems profile the measurement  $C = 107.5\text{mm}$



| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087224   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |

## DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a+b)$ .

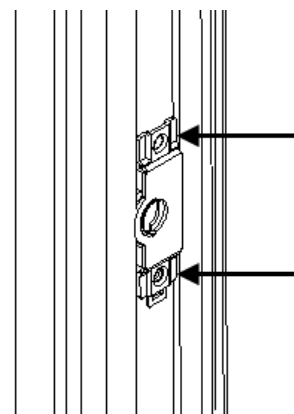
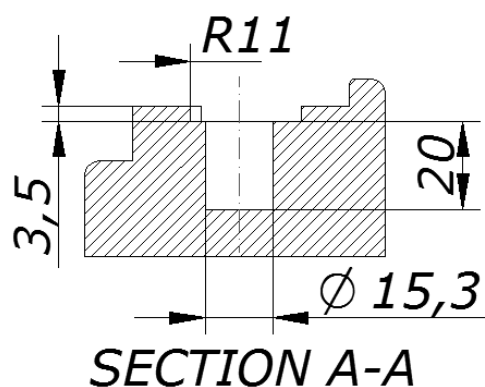
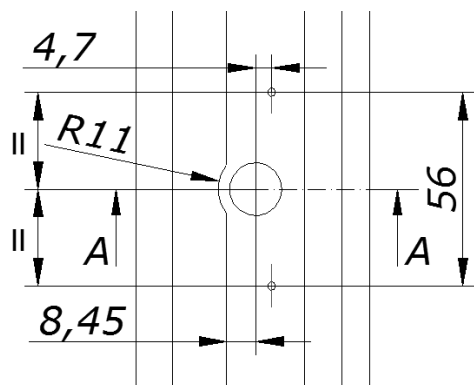


| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 492,5  | 548   |
| M6,5         | 286    | 273    | 548,5  | 592   |
| M7           | 309    | 296    | 592,5  | 648   |
| M7,5         | 336    | 323    | 648,5  | 692   |
| M8           | 359    | 346    | 692,5  | 748   |
| M8,5         | 387    | 374    | 748,5  | 792   |
| M9           | 409    | 396    | 792,5  | 848   |
| M9,5         | 436    | 423    | 848,5  | 892   |
| M10          | 459    | 446    | 892,5  | 948   |
| M10,5        | 481    | 468    | 948,5  | 992   |
| M11          | 509    | 496    | 992,5  | 1048  |
| M11,5        | 535    | 522    | 1048,5 | 1092  |
| M12          | 559    | 546    | 1092,5 | 1148  |
| M12,5        | 587    | 574    | 1148,5 | 1192  |
| M13          | 609    | 596    | 1192,5 | 1248  |
| M13,5        | 635    | 622    | 1248,5 | 1292  |
| M14          | 659    | 646    | 1292,5 | 1348  |
| M14,5        | 686    | 673    | 1348,5 | 1392  |
| M15          | 709    | 696    | 1392,5 | 1448  |
| M15,5        | 735    | 722    | 1448,5 | 1492  |
| M16          | 759    | 746    | 1492,5 | 1548  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

## PIVOT POINT POSITION

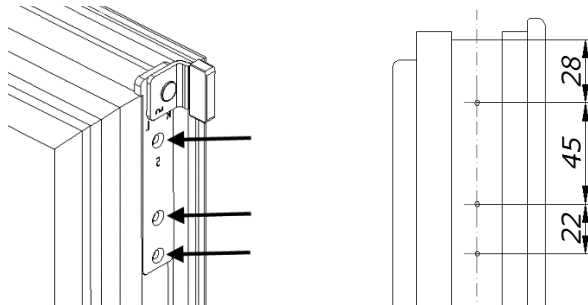
Please note the hole for the pivot point on timber profile is offset to the below measurements.



## AURA FULLY REVERSIBLE HINGES **TIMBER DESIGN 1**

### HEAD SLIDES

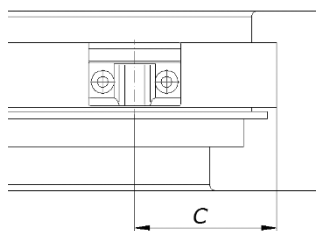
Fixing points for the head slides are in the centre of the sash groove. Pre-drilled holes for head slide and centre sash assembly =  $\varnothing 2,5\text{mm}$ .



### POSITION FOR SECURITY BLOCK

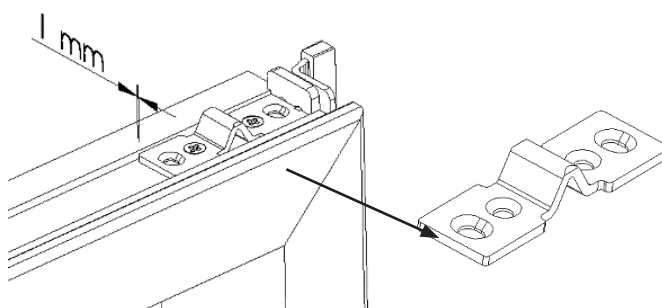
The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Timber profile design 1 the measurement C = 60mm



### SECURITY PLATE

For this profile, the head slides do not have integrated security, therefore separate security details are needed. These are to be placed in the top sash (same groove as the head slides) They are to be positioned against the head slides and with 1mm gap on the inside of the groove.



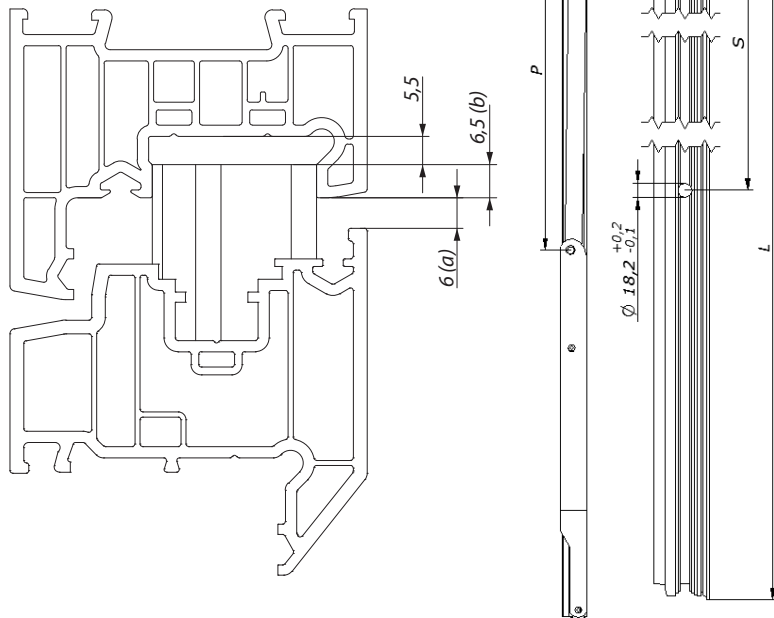
| Components                        | Part no. | Qty.   |
|-----------------------------------|----------|--------|
| Head slide set                    | 087225   | 1 pair |
| Centre sash assembly - left hand  | 087201   | 1      |
| Centre sash assembly - right hand | 087202   | 1      |
| Security plate                    | TBA      | 2      |
| Security block                    | 087210   | 2      |



## AURA FULLY REVERSIBLE HINGES **LINIAR PVCu**

### DRILLING FOR CENTRE SASH ASSEMBLY

When clearance  $a$  and measure  $b$  are determined, distance  $S$  can be calculated:  $S = P - (a + b)$ .



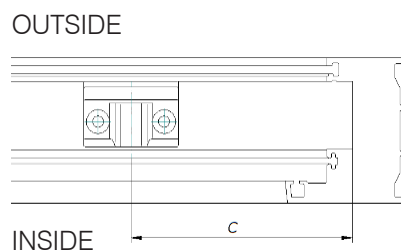
| Hinge Module | P (mm) | S (mm) | L Min  | L Max |
|--------------|--------|--------|--------|-------|
| M6           | 259    | 246    | 493,5  | 549   |
| M6,5         | 286    | 273    | 549,5  | 593   |
| M7           | 309    | 296    | 593,5  | 649   |
| M7,5         | 336    | 323    | 649,5  | 693   |
| M8           | 359    | 346    | 693,5  | 749   |
| M8,5         | 387    | 374    | 749,5  | 793   |
| M9           | 409    | 396    | 793,5  | 849   |
| M9,5         | 436    | 423    | 849,5  | 893   |
| M10          | 459    | 446    | 893,5  | 949   |
| M10,5        | 481    | 468    | 949,5  | 993   |
| M11          | 509    | 496    | 993,5  | 1049  |
| M11,5        | 535    | 522    | 1049,5 | 1093  |
| M12          | 559    | 546    | 1093,5 | 1149  |
| M12,5        | 587    | 574    | 1149,5 | 1193  |
| M13          | 609    | 596    | 1193,5 | 1249  |
| M13,5        | 635    | 622    | 1249,5 | 1293  |
| M14          | 659    | 646    | 1293,5 | 1349  |
| M14,5        | 686    | 673    | 1349,5 | 1393  |
| M15          | 709    | 696    | 1393,5 | 1449  |
| M15,5        | 735    | 722    | 1449,5 | 1493  |
| M16          | 759    | 746    | 1493,5 | 1549  |

**L Min** and **L Max** shows the minimum and maximum window size for each hinge module

### POSITION FOR SECURITY BLOCK

The security block is to be placed in the groove in the top frame. The block must be placed against the outside wall of the track to get support from the frame if subject to force.

For Senior Architectural Systems profile the measurement  $C = 107.5\text{mm}$



| Components           | Part no. | Qty.   |
|----------------------|----------|--------|
| Head slide set       | 087224   | 1 pair |
| Centre sash assembly | 087200   | 2      |
| Security block       | 087210   | 2      |



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