



RUSTIQUE

FABRICATION MANUAL  
DECEMBER 2023



## PREFACE

The information provided in this manual should be treated as guidance only. VEKA UK Group cannot control how the information is interpreted and therefore, cannot be held responsible for any failure. Regulations regarding Health & Safety of operatives, along with relevant Building Regulations should be strictly adhered to, as such, VEKA UK Group cannot be held responsible for any failure to comply with them. This statement does not affect the Fabricators statutory rights.

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Do not scale drawings in this manual. Any drawings shown are visual representations only. VEKA UK Group reserves the right to alter designs, specifications and descriptions without prior notice as apart of our policy for continuous development and improvement.

Any glazing used should be in accordance with the most recent British Standard applicable to the installation.

### **PAS24:**

The information detailed within this manual is based on a typical domestic specification. PAS24 applications require different configurations / combinations. For further information on a PAS24 specification, please contact the VEKA Technical Department on [technical@veka.com](mailto:technical@veka.com) / 01282 725 360.

Alternatively, further information can be sought within our 'Guide to Enhanced Security of Windows and Doorsets' document.

### **SPECTRAL Foils:**

Due to their design, some systems require the use of hand-inserted gaskets. These can feature a thin film of lubricant, i.e. silicone or glycerol, which assists them being inserted within the gasket grooves during fabrication. Given their positioning, it is possible for some of the lubricant from the gaskets to migrate to the surface of the SPECTRAL foil, creating a slick appearance around the location of the gasket. Following extensive testing within our in-house lamination laboratory, we can confirm that this has no lasting effect on the foil and can be removed using warm soapy water and a non-abrasive cloth.

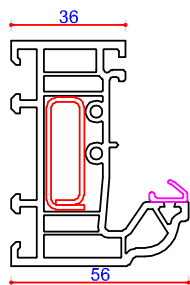


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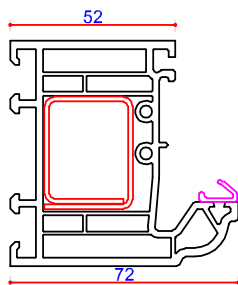
# COMPONENTS



## 701531 (P10531)

56mm Outer Frame

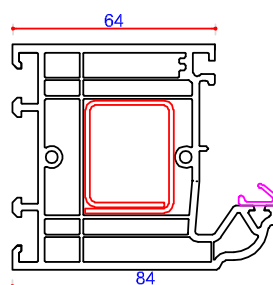
|                 |        |
|-----------------|--------|
| Steel Box       | 713155 |
| Steel Box       | 713187 |
| Steel U Channel | 713185 |
| Thermal Insert  | 709331 |



## 701532 (P10532)

72mm Outer Frame

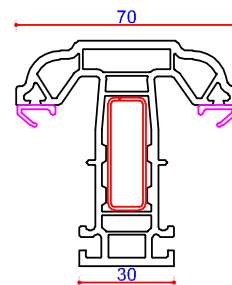
|                 |        |
|-----------------|--------|
| Steel Box       | 713174 |
| Steel Box       | 713191 |
| Steel U Channel | 713186 |
| Steel P Section | 713157 |
| Thermal Insert  | 709332 |



## 701204

84mm Outer Frame

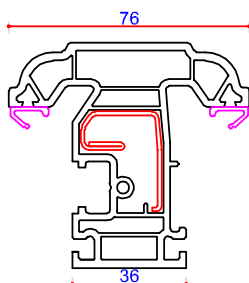
|                 |        |
|-----------------|--------|
| Steel Box       | 713174 |
| Steel Box       | 713191 |
| Steel U Channel | 713186 |
| Steel P Section | 713157 |
| Thermal Insert  | 709332 |



## 702533 (P10533)

70mm T Transom

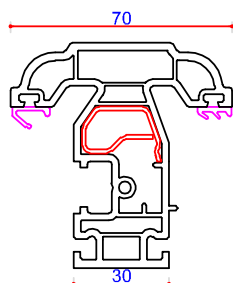
|                      |        |
|----------------------|--------|
| Steel Box            | 713187 |
| Steel Box            | 713155 |
| 35 x 12.5 Ported Alu | 715161 |



## 703538 (P10538)

Internally Beaded Sash

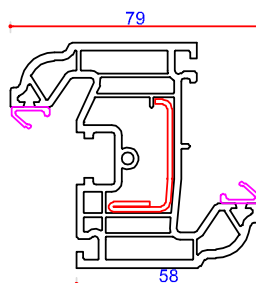
|                 |        |
|-----------------|--------|
| Steel P Section | 713152 |
|-----------------|--------|



## 703638 (P10638)

Internally Beaded Sash/Transom

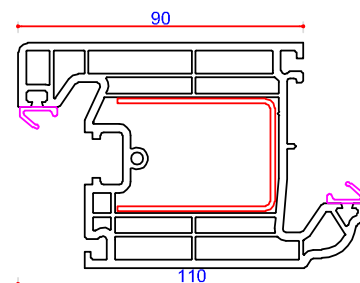
|                    |        |
|--------------------|--------|
| Steel P Section    | 713183 |
| Steel P Section    | 713184 |
| 13 x 23 Ported Alu | 715164 |



## 703539 (P10539)

Tilt & Turn Sash

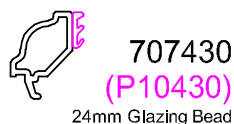
|                 |        |
|-----------------|--------|
| Steel L Section | 713161 |
|-----------------|--------|



## 705540 (P10540)

Door Sash - Open In

|                 |        |
|-----------------|--------|
| Steel U Channel | 713162 |
| Punched Steel U | 713163 |



**707430 (P10430)**  
24mm Glazing Bead



**707431 (P10431)**  
28mm Glazing Bead



**707432 (P10432)**  
32mm Glazing Bead



**707426 (P10426)**  
36mm Glazing Bead



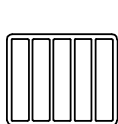
**707437 (P10437)**  
40mm Glazing Bead



**715163**  
35 x 58 Ported Aluminium



**715162**  
35 x 30 Ported Aluminium



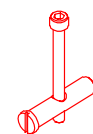
**709332**  
Thermal Insert



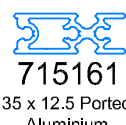
**712046**  
3mm Flipper Repair Gasket



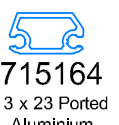
**712044**  
Concealed Repair Gasket



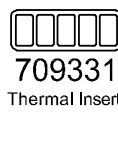
**744192**  
Mechanical Joint Pin



**715161**  
35 x 12.5 Ported Aluminium



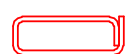
**715164**  
13 x 23 Ported Aluminium



**709331**  
Thermal Insert



**712181**  
Sash & Glazing Repair Gasket



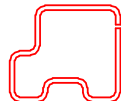
**713155 (S00155)**  
12x35 Steel Box



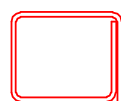
**713187 (S00187)**  
12x35 Steel Box



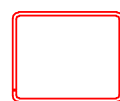
**713135 (S41135)**  
17x20 Steel Box



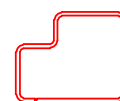
**713158 (S00158)**  
30x35 Steel Box



**713174 (S00174)**  
35x28 Steel Box



**713191 (S00191)**  
35x28 Steel Box

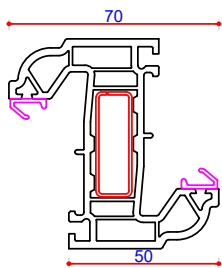


**713157 (S00157)**  
35x28 Steel P



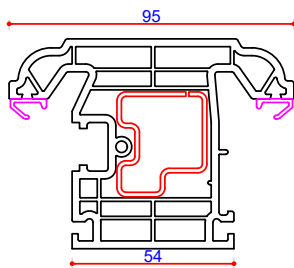
**713183 (S00183)**  
14.5x25 Steel P

# COMPONENTS



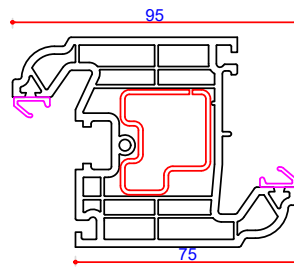
**702536 (P10536)**

70mm Z Transom  
Steel Box 713187  
Steel Box 713155



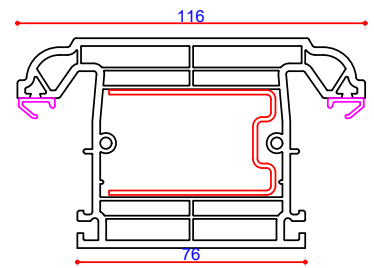
**705543 (P10543)**

95mm T Tran/Slim Open Out Door Sash  
Steel Box 713158  
Steel U Channel 713159  
35 x 30 Ported Alu 715162



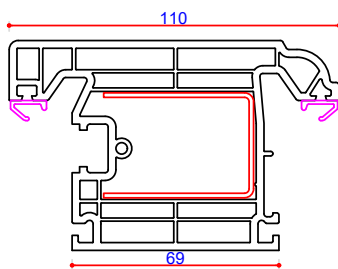
**705545 (P10545)**

95mm Z Tran/Slim Open In Door Sash  
Steel Box 713158  
Steel U Channel 713159



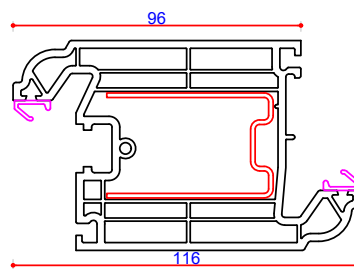
**702535 (P10535)**

116mm Midrail  
Steel U Channel 713166  
35 x 58 Ported Alu 715163



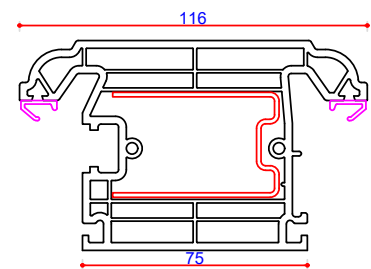
**705541 (P10541)**

Door Sash - Open Out  
Steel U Channel 713162  
Punched Steel U 713163



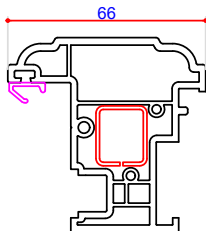
**705640 (P10640)**

Door Sash - Open In  
Steel U Channel 713166  
Punched Steel U 713167



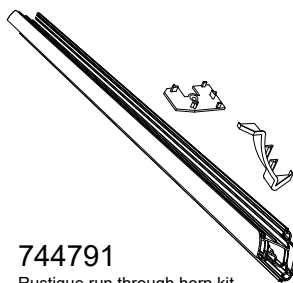
**705641 (P10641)**

Door Sash - Open Out  
Steel U Channel 713166  
Punched Steel U 713167



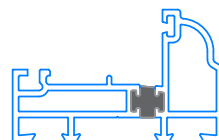
**702612**

French Overlap  
Steel Box 713135  
End Cap 709211



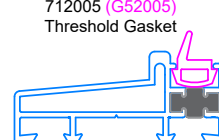
**744791**

Rustique run through horn kit.  
Includes 2m of 703538 pre milled and  
2 x 709808 end mouldings & end caps.



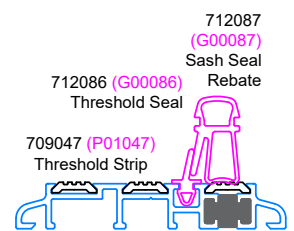
**704333 (A00333)**

French Door Low Threshold



**704092 (A00092)**

Standard Low Threshold



**704289 (A00289)**

Part M Low Threshold

712087 (G00087)  
Sash Seal  
Rebate

712086 (G00086)  
Threshold Seal

709047 (P01047)  
Threshold Strip

712005 (G52005)  
Threshold Gasket

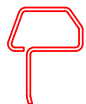
KEY:

■ PVC Profile  
■ Gasket  
■ Steel  
■ Aluminium



**713152 (S00152)**

26x31 Steel P



**713184 (S00184)**

25x32 Steel P



**713161 (S00161)**

20x35 Steel L



**713185 (S00185)**

22x 17.5 Steel U



**713186 (S00186)**

22x 33.5 Steel U



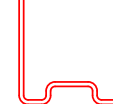
**713159 (S00159)**

35x35 Steel U



**713162 (S00162)**

35x50 Steel U

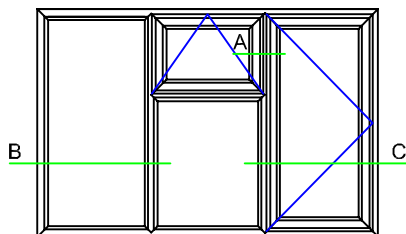


**713166 (S00166)**

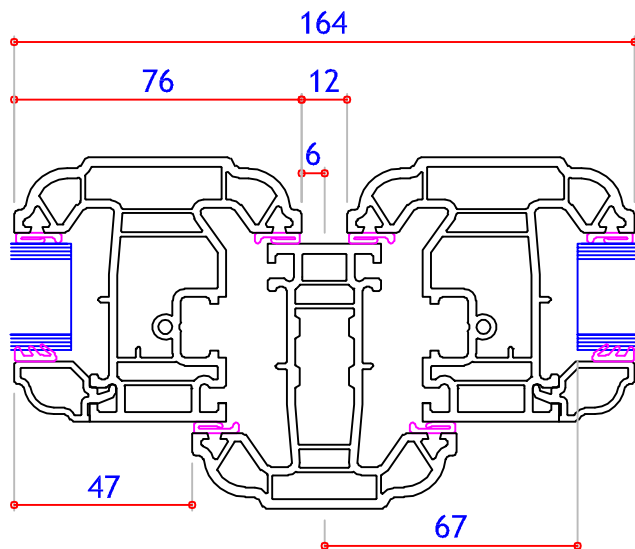
35x55.5 Steel U

# CROSS SECTIONS – CASEMENTS

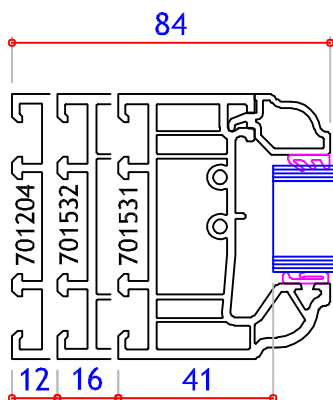
Casement Window.  
Internally Beaded  
76mm Casement Sash 703538  
70mm T Mullion 702533  
70mm Z Mullion 702536



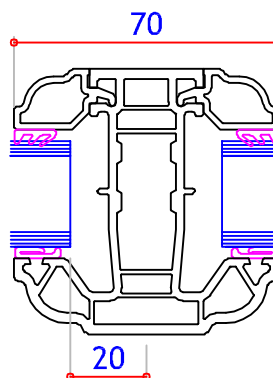
A



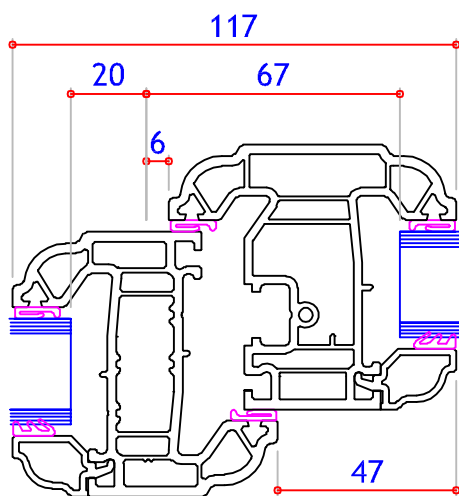
B



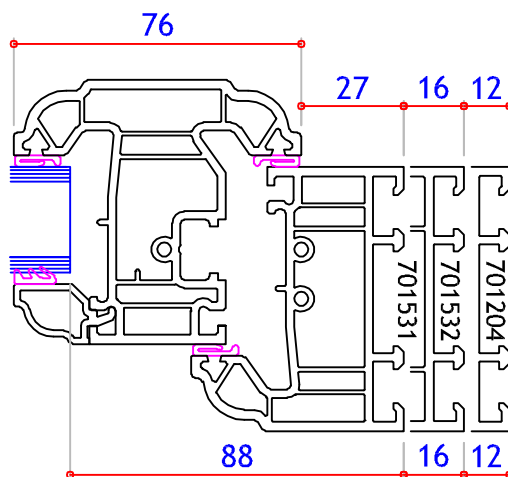
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C

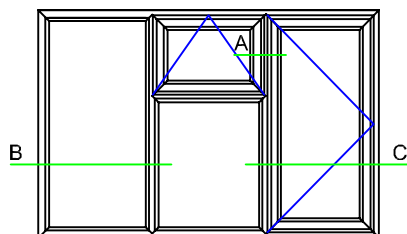


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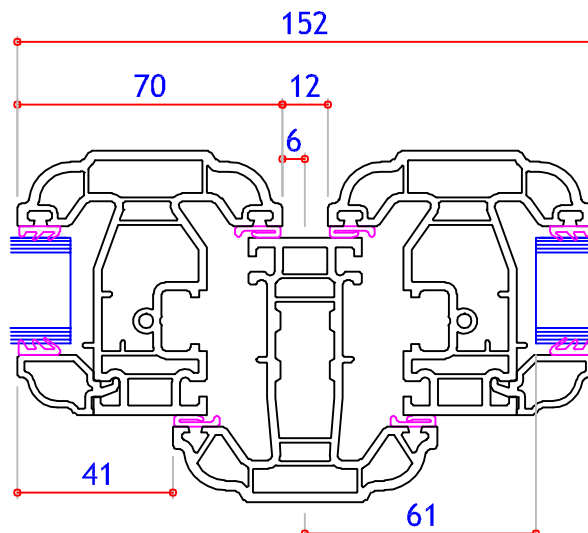


# CROSS SECTIONS – CASEMENTS

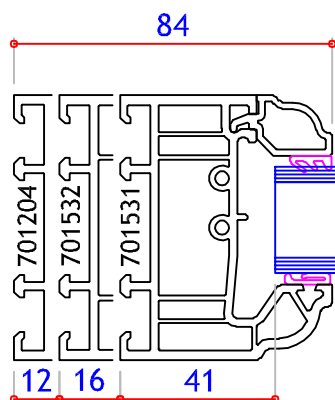
Casement Window.  
Internally Beaded  
70mm Casement Sash 703638  
70mm T Mullion 702533  
70mm Z Mullion 702536



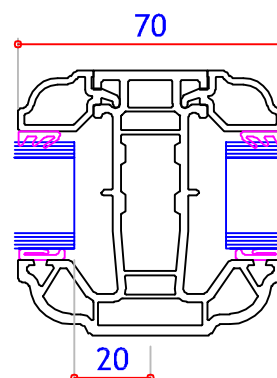
A



B

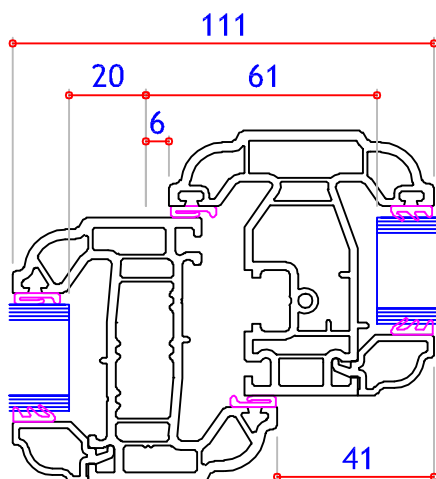


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20

C

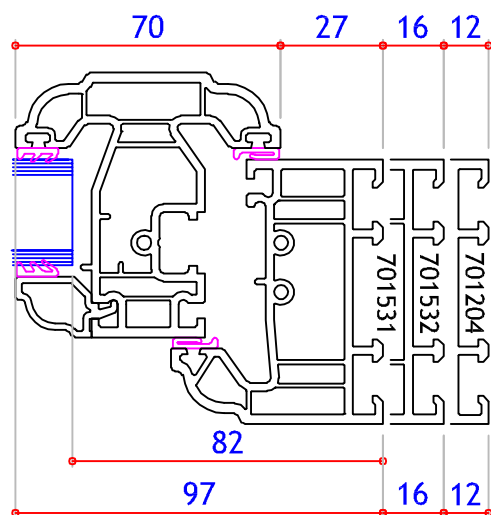


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27

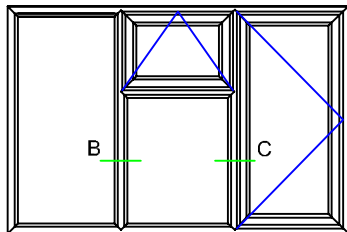
16

12

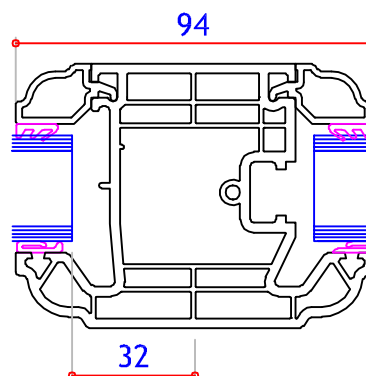


# CROSS SECTIONS – CASEMENTS

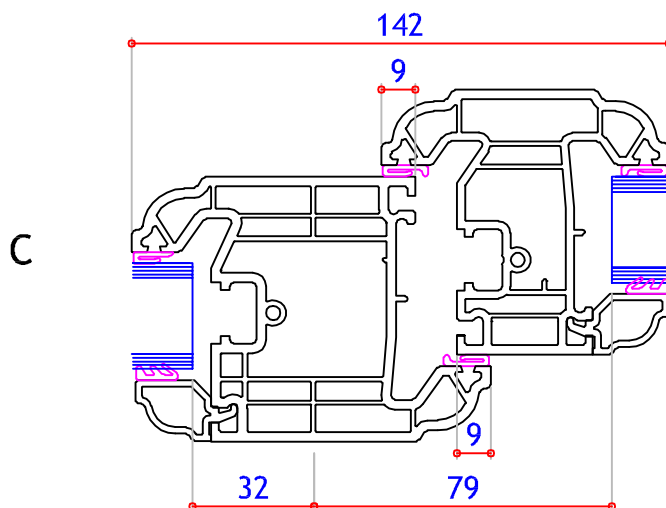
Casement Window.  
Alternative Transoms/Mullions  
95mm T Mullion 705543  
95mm Z Mullion 705545



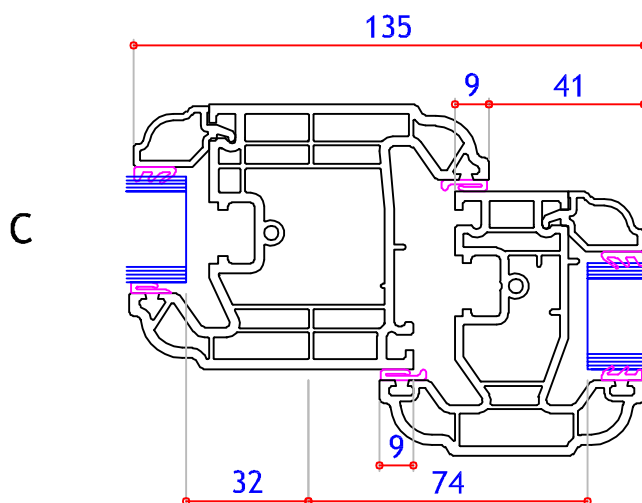
B



703538 Internally Beaded Sash

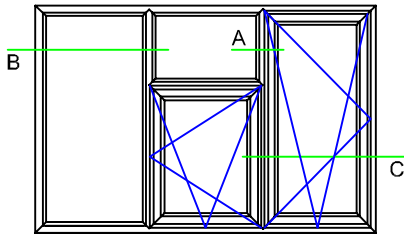


703638 Internally Beaded Sash

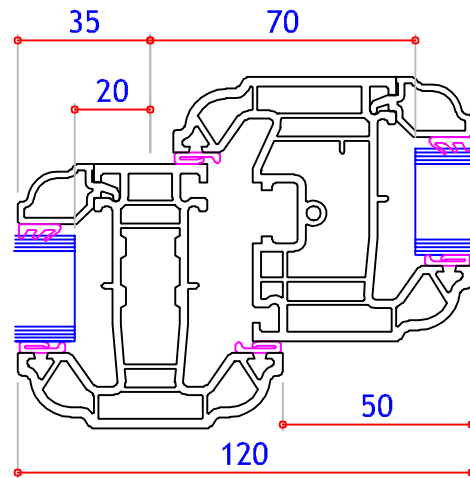


# CROSS SECTIONS – TILT & TURNS

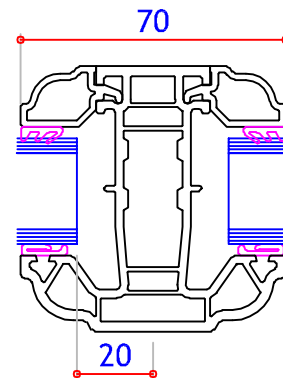
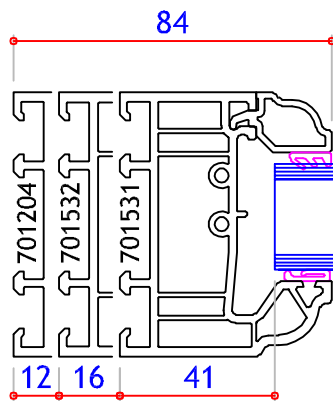
Tilt & Turn Window.  
Internally Beaded  
79mm Tilt & Turn Sash 703539  
70mm T Mullion 702533  
70mm Z Mullion 702536



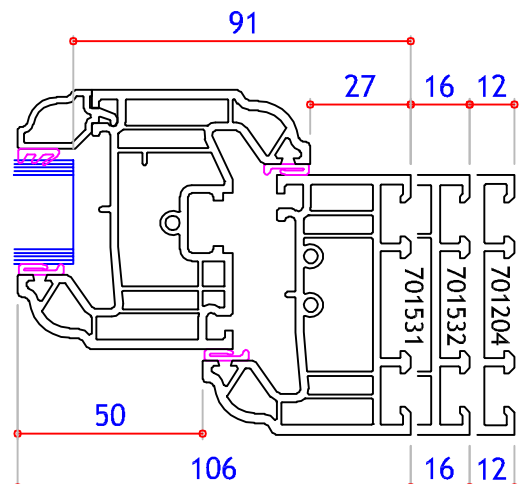
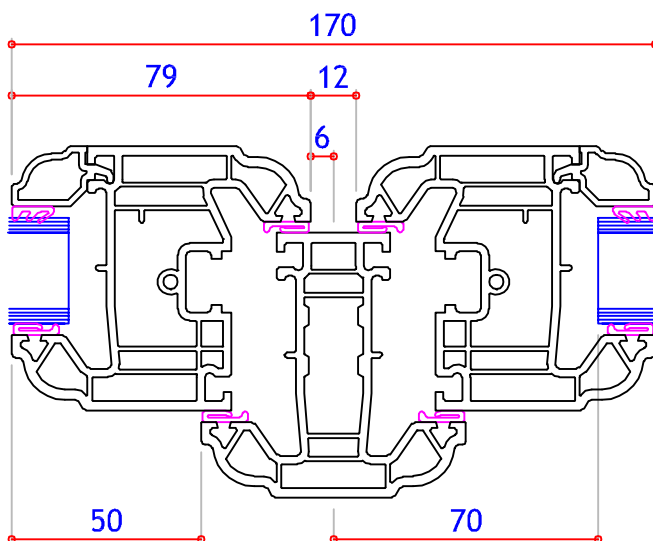
A



B

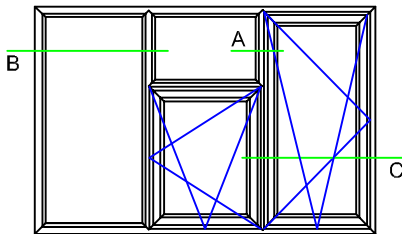


C

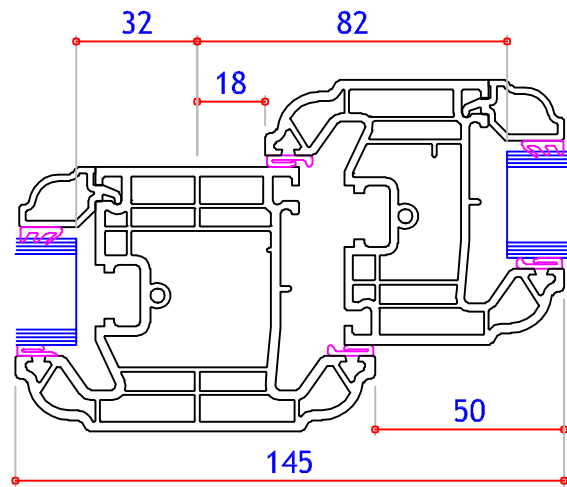


# CROSS SECTIONS – TILT & TURNS

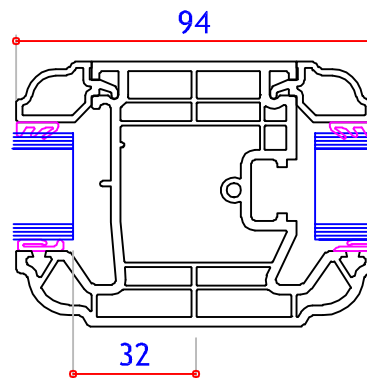
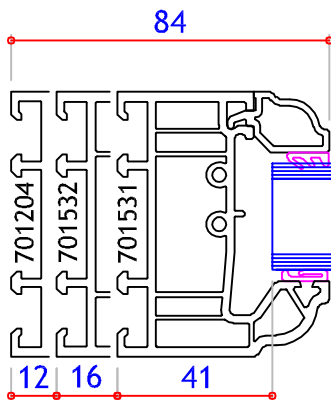
Tilt & Turn Window.  
Internally Beaded  
79mm Tilt & Turn Sash 703539  
95mm T Mullion 705543  
95mm Z Mullion 705545



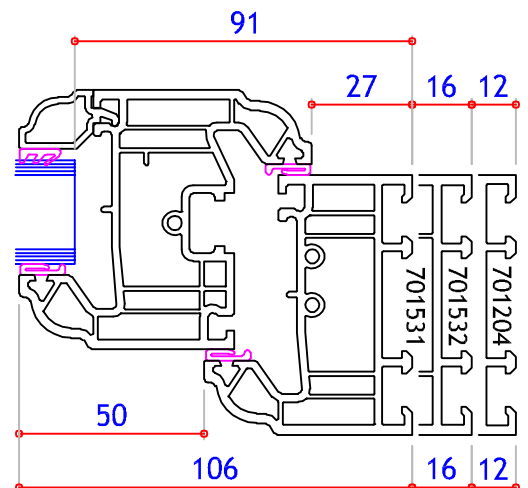
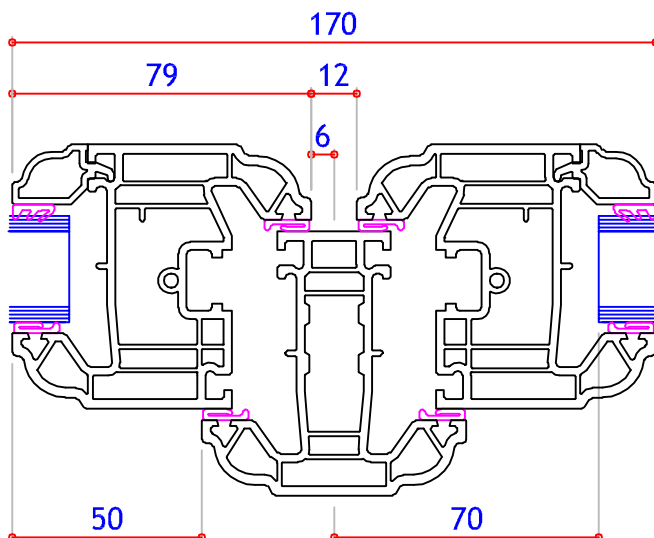
A



B



C

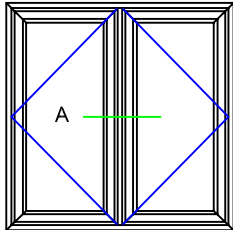


# CROSS SECTIONS – FRENCH WINDOWS

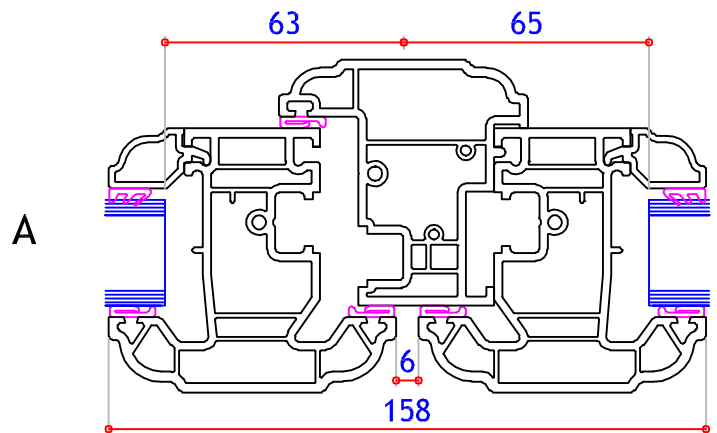
French Mullion Height = Finished Sash Size - 80 (accounts for end caps)  
(For both windows & doors)

French Window.  
Dummy Mullions  
French Overlap 702612

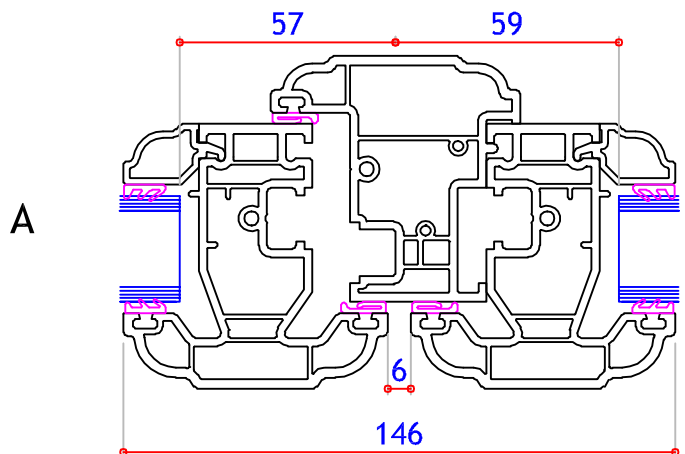
Casement



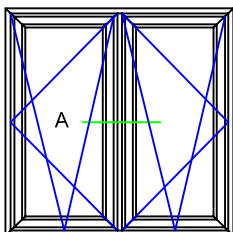
Internally Beaded Sash 703538



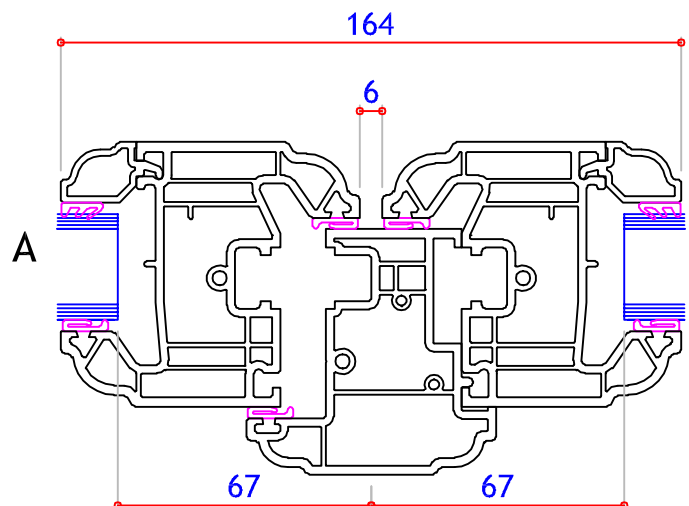
Internally Beaded Sash 703638



Tilt & Turn

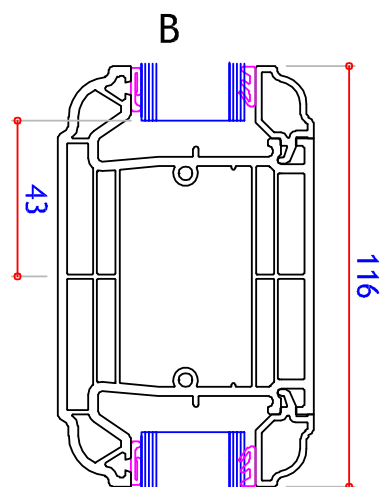
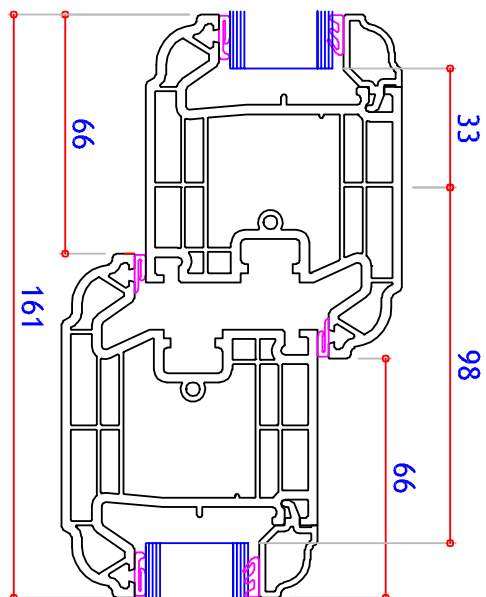
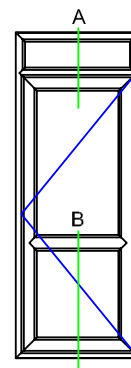
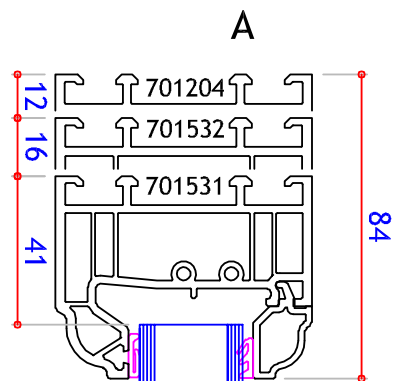


Tilt & Turn Sash 703539

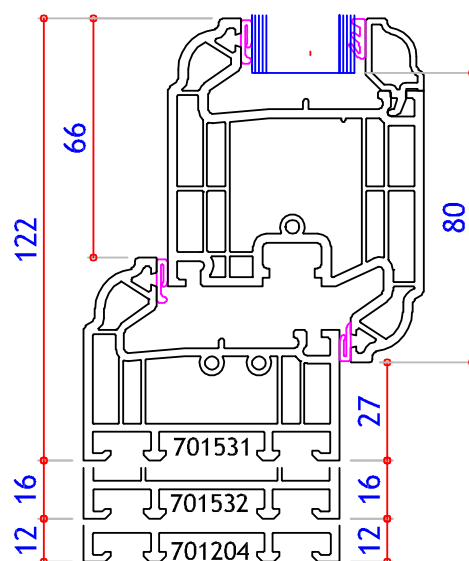
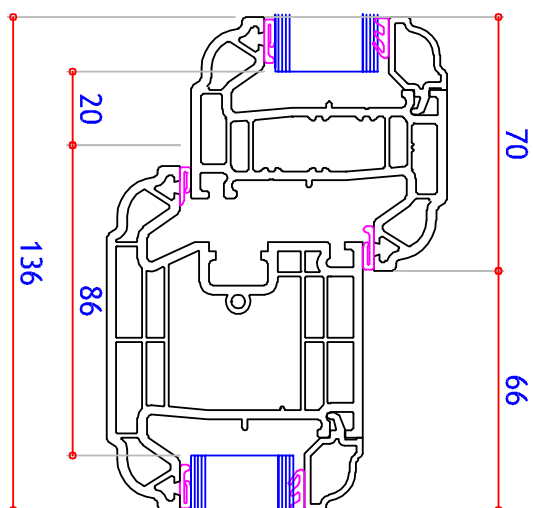


# CROSS SECTIONS – RESIDENTIAL DOOR (OPEN IN)

Residential Door  
Slim Door Sash - Open In 705545  
95mm T Transom 705543  
70mm T Transom (Alternative) 702533

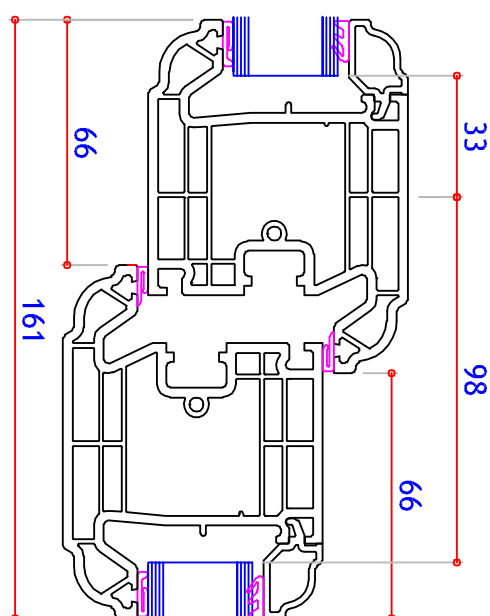
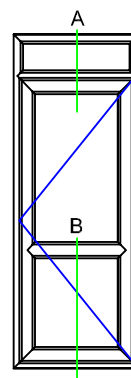
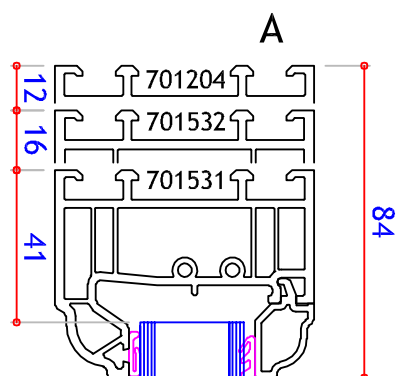


Alternative  
70mm T Transom 702533

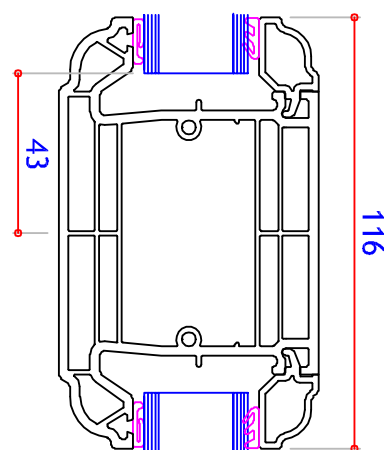


# CROSS SECTIONS – RESIDENTIAL DOOR (OPEN OUT)

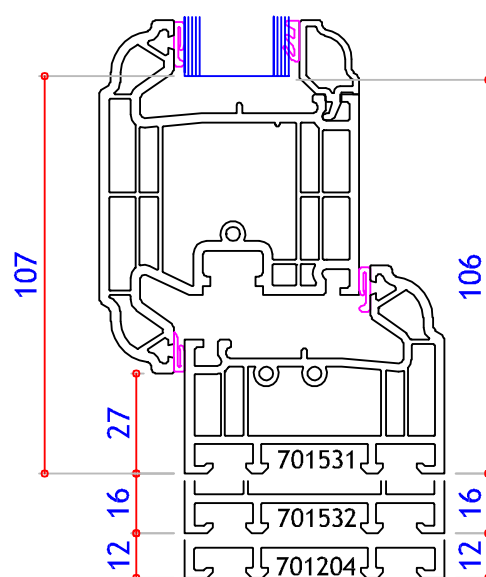
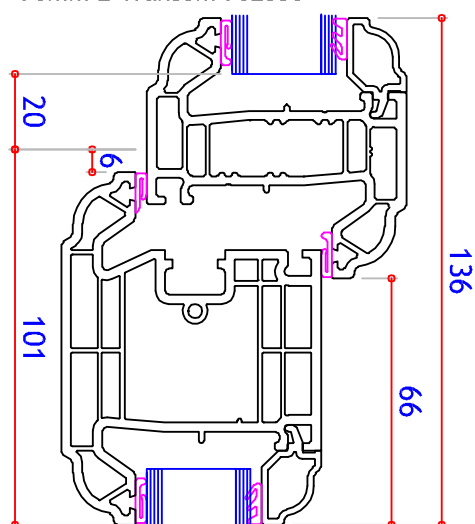
Residential Door  
Slim Door Sash - Open Out 705543  
95mm Z Transom 705545  
70mm Z Transom (Alternative) 702536



**B**

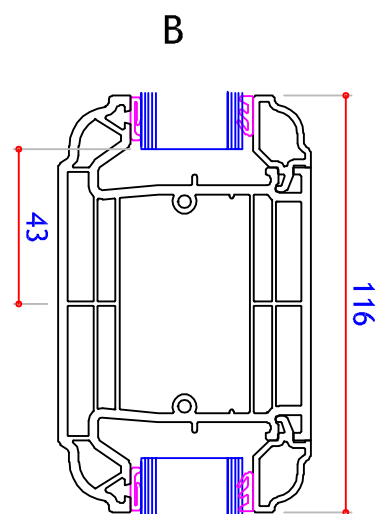
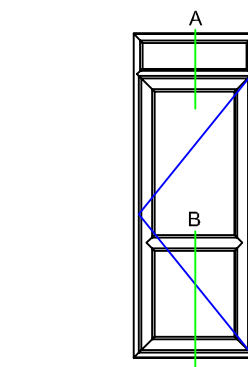
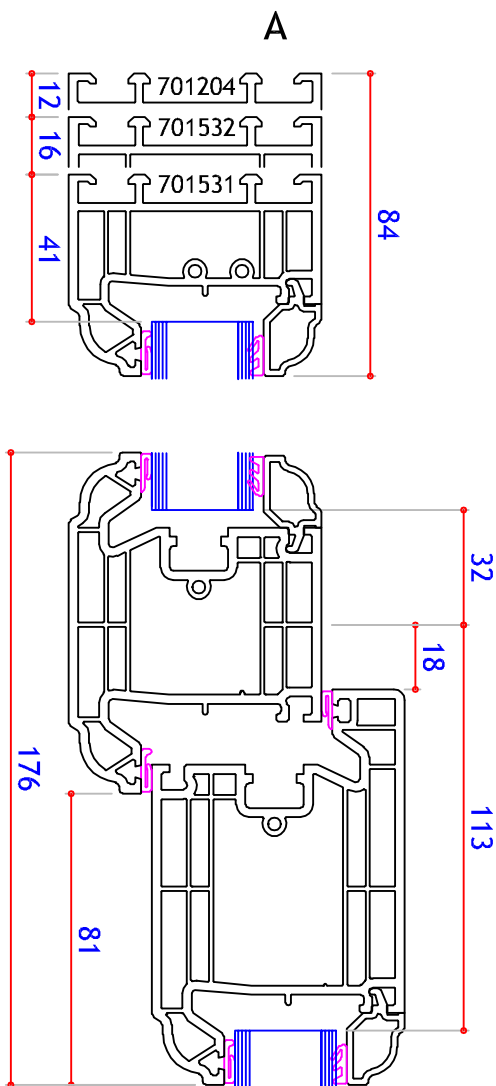


Alternative  
70mm Z Transom 702536

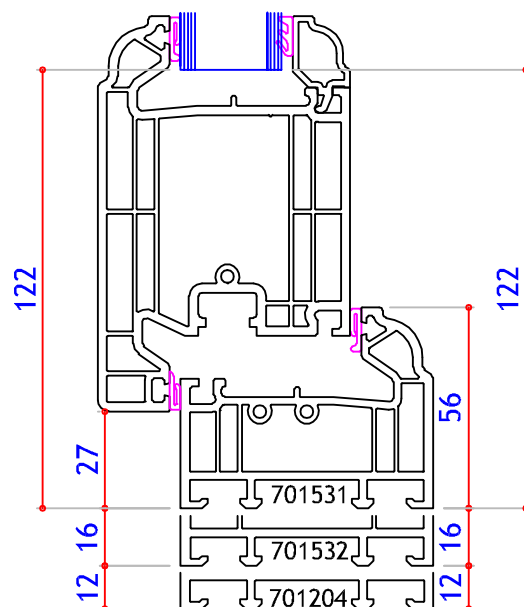
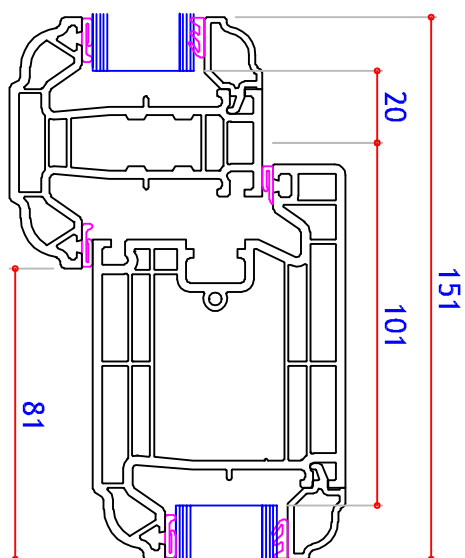


# CROSS SECTIONS – RESIDENTIAL DOOR (OPEN IN)

Residential Door  
 Door Sash - Open In 705540  
 95mm T Transom 705543  
 70mm T Transom (Alternative) 702533

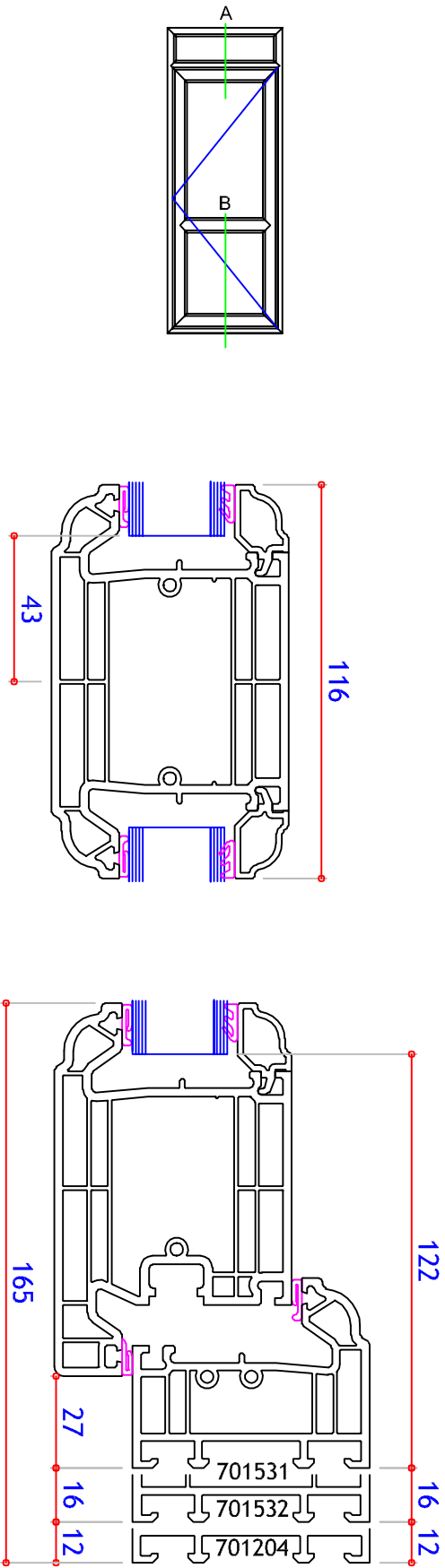
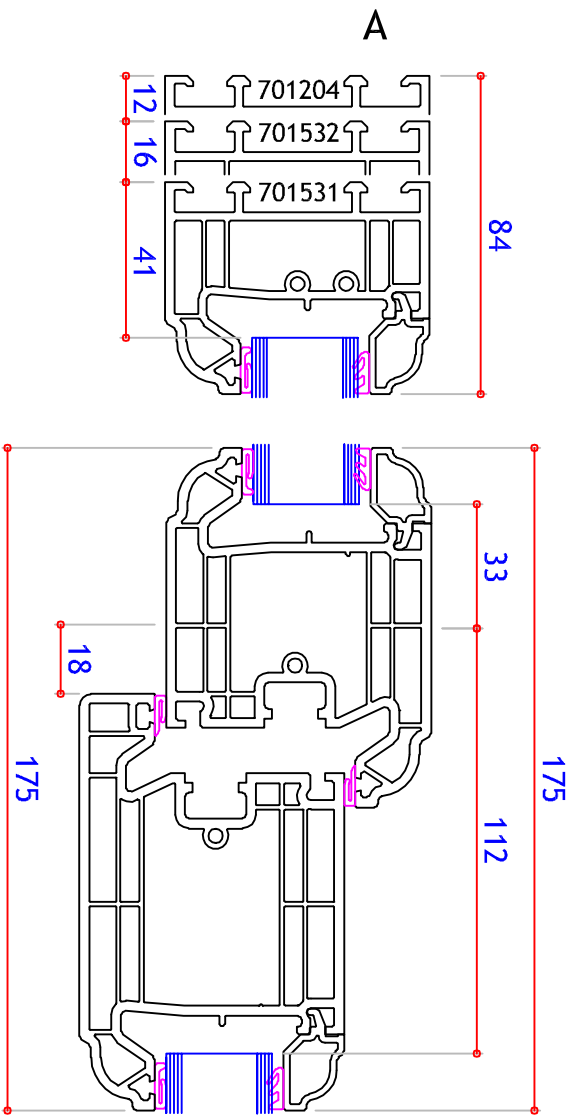


Alternative  
 70mm T Transom 702533

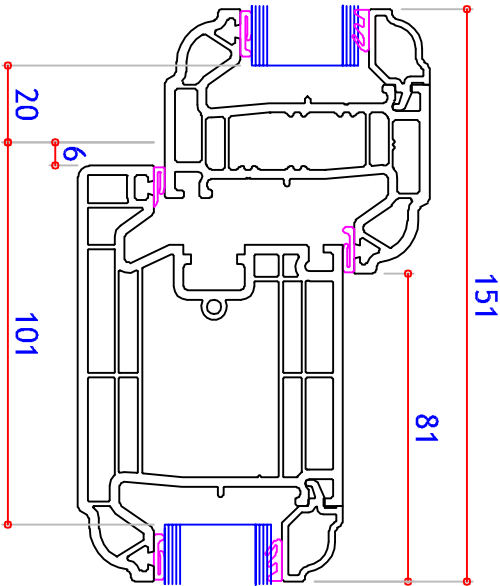


# CROSS SECTIONS - RESIDENTIAL DOOR (OPEN OUT)

Door Sash - Open Out 705541  
95mm Z Transom 705545  
70mm Z Transom (Alternative) 702536



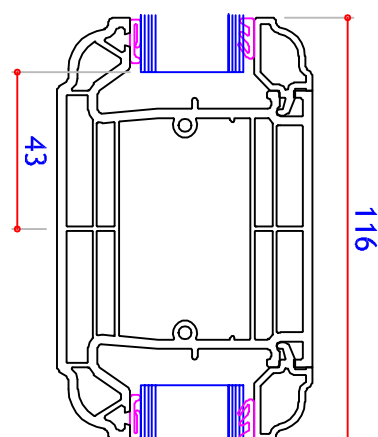
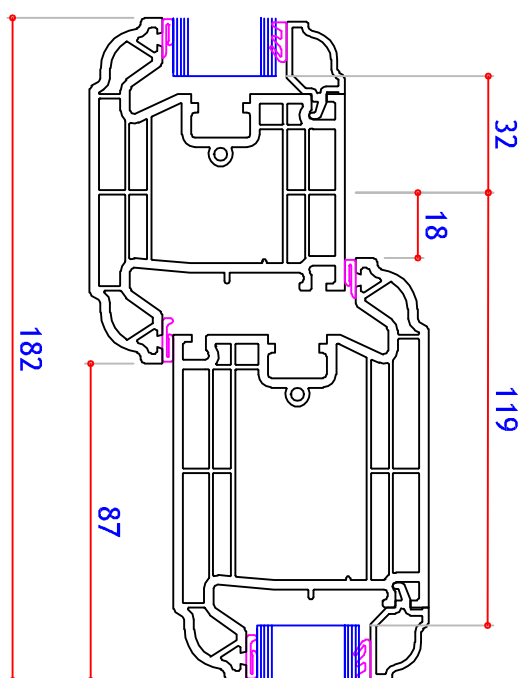
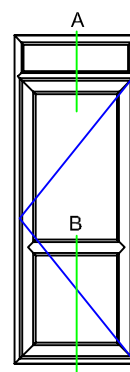
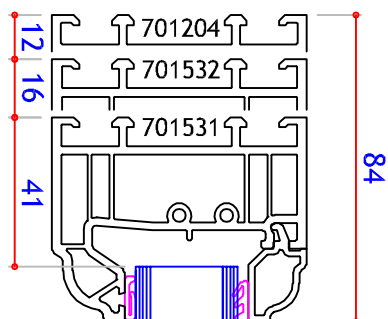
Alternative  
70mm Z Transom 702536



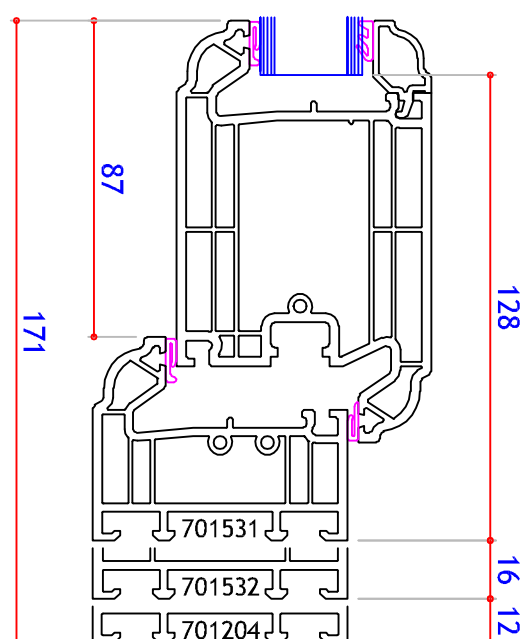
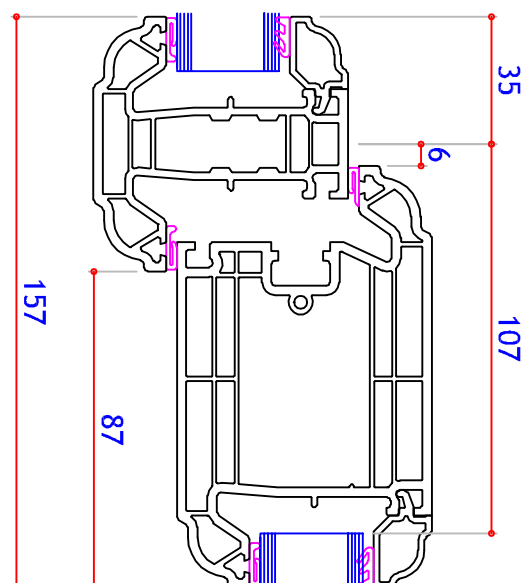
# CROSS SECTIONS – RESIDENTIAL DOOR (OPEN IN)

Residential Door  
 Door Sash - Open In 705640  
 95mm T Transom 705543  
 70mm T Transom (Alternative) 702533

A



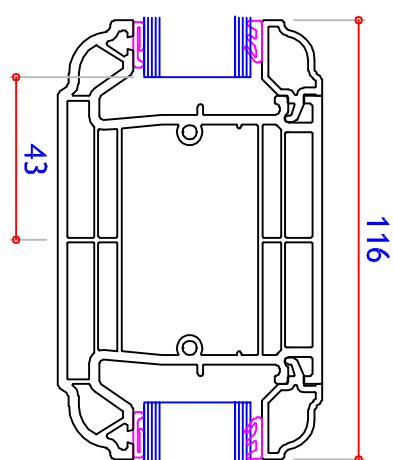
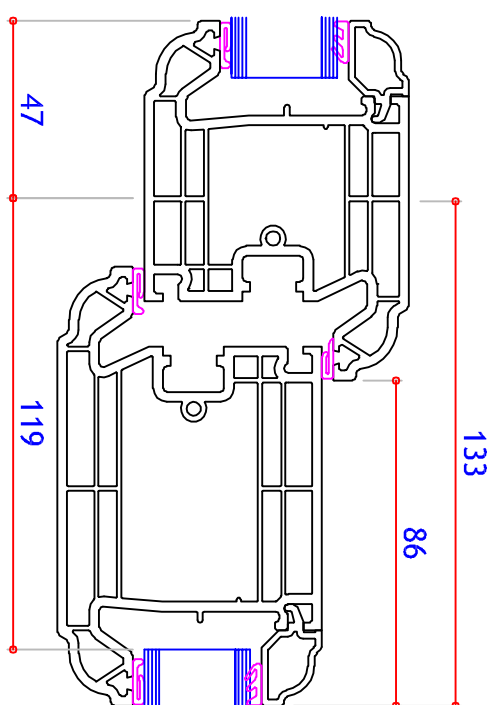
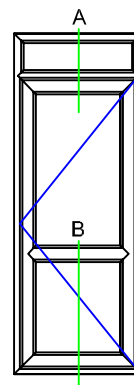
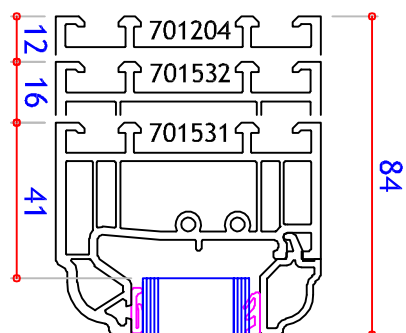
Alternative  
 70mm T Transom 702533



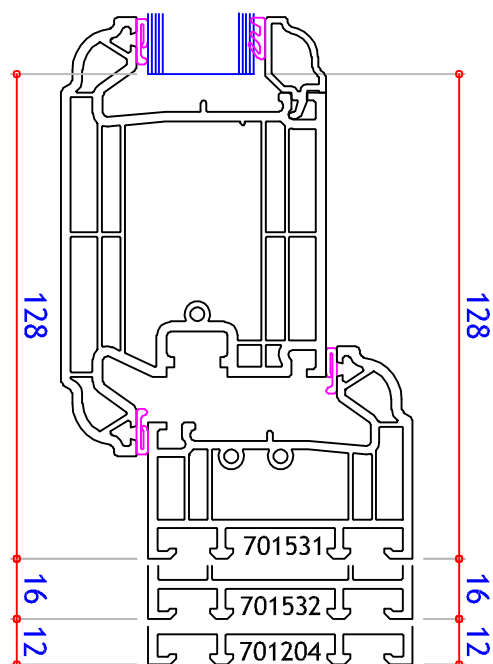
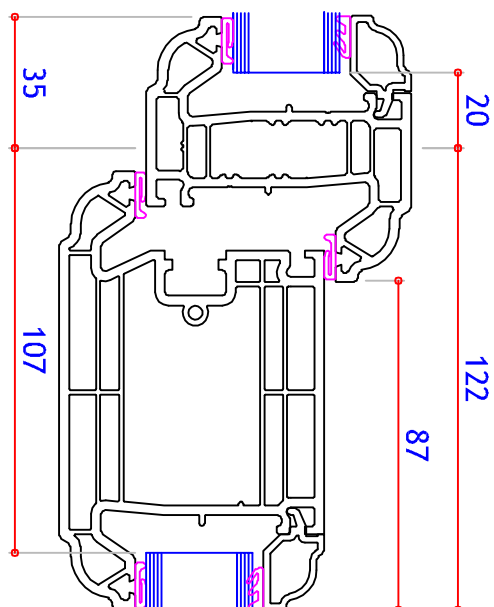
# CROSS SECTIONS – RESIDENTIAL DOOR (OPEN OUT)

Door Sash - Open Out 705641  
 95mm Z Transom 705545  
 70mm Z Transom (Alternative) 702536

A



Alternative  
 70mm Z Transom 702536

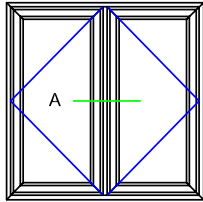


# CROSS SECTIONS – FRENCH DOORS

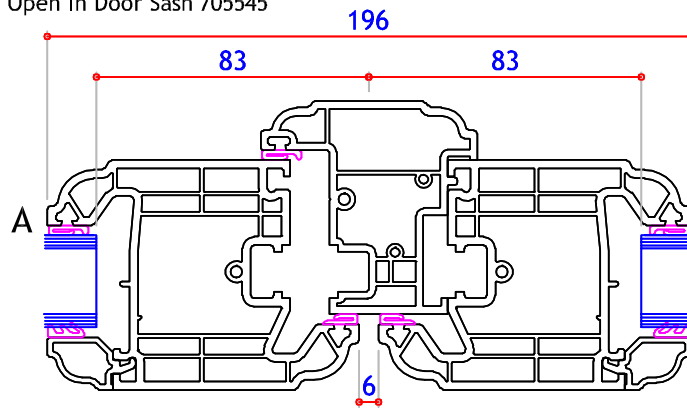
French Mullion Height = Finished Sash Size - 80 (accounts for end caps)  
(For both windows & doors)

French Door  
Dummy Mullions  
French Overlap 702612

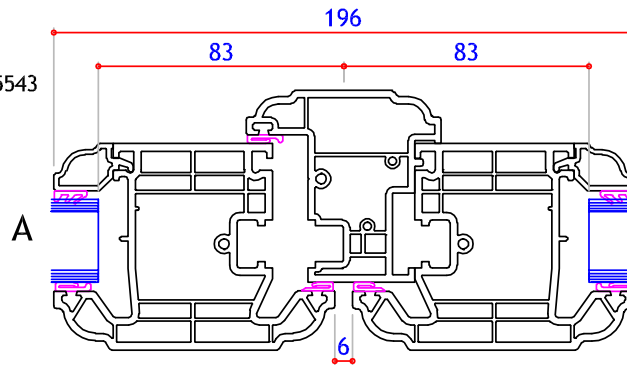
Door



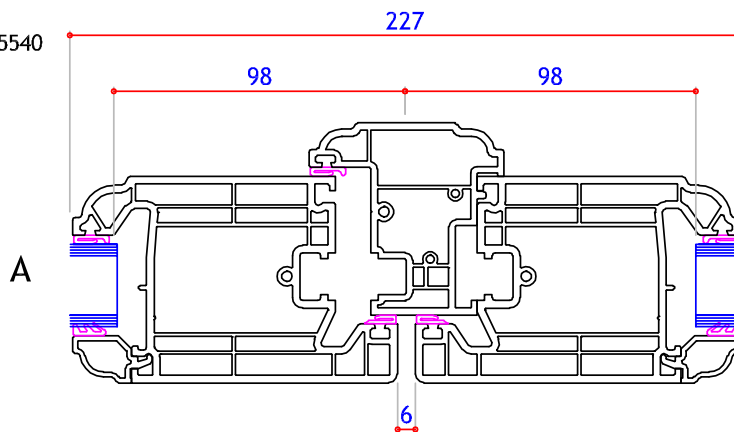
Open In Door Sash 705545



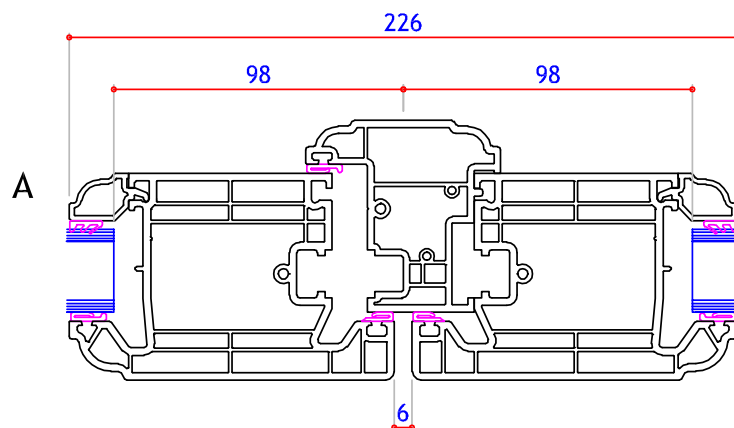
Open Out Slim Door Sash 705543



Open In Door Sash 705540

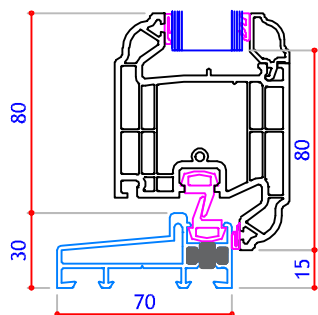


Open Out Door Sash 705541

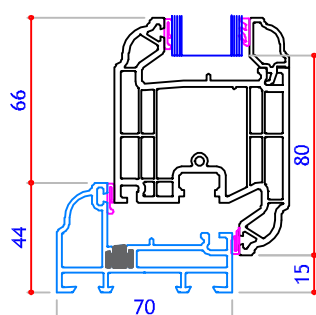


# CROSS SECTIONS – THRESHOLDS

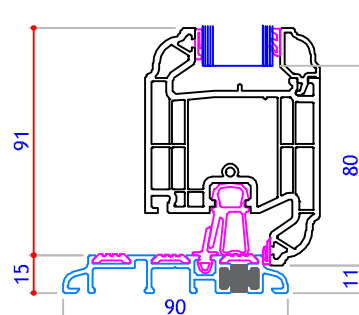
Slim Door Sash Open In 705545



Standard Low Threshold 704092

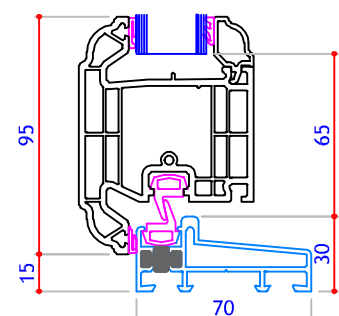


French Door Low Threshold 704333

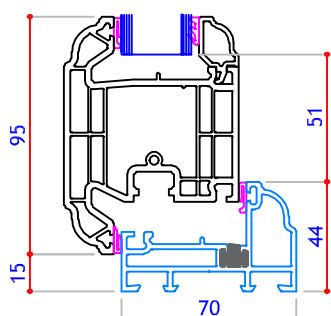


Part M Threshold 704289

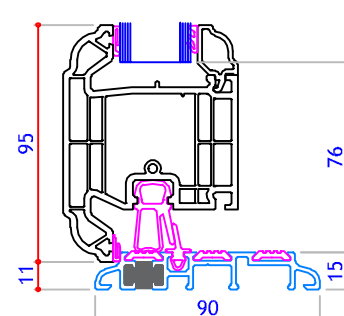
Slim Door Sash Open Out 705543



Standard Low Threshold 704092

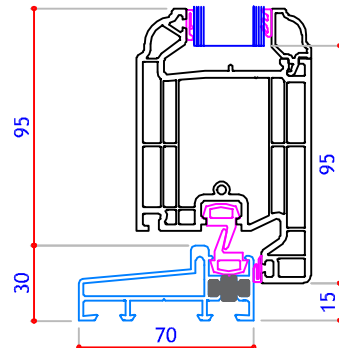


French Door Low Threshold 704333

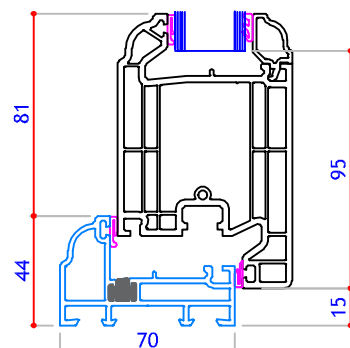


Part M Threshold 704289

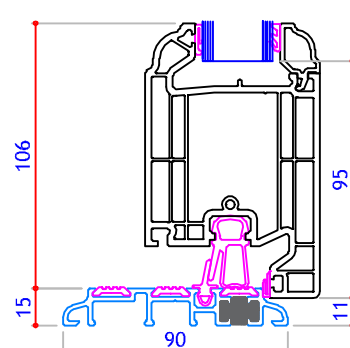
Door Sash Open In 705540



Standard Low Threshold 704092

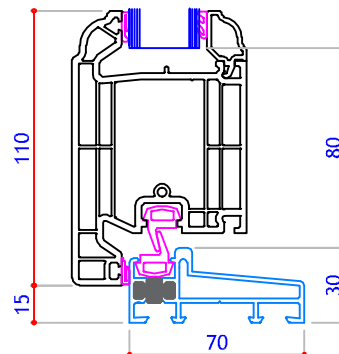


French Door Low Threshold 704333

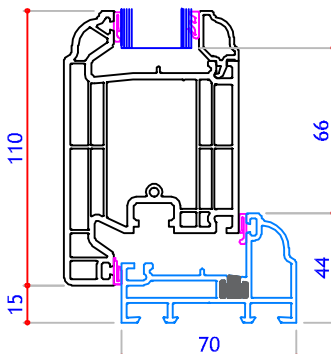


Part M Threshold 704289

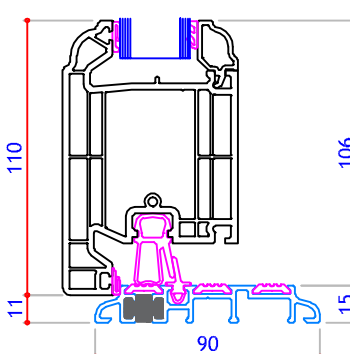
Door Sash Open Out 705541



Standard Low Threshold 704092



French Door Low Threshold 704333



Part M Threshold 704289

# DOMESTIC REINFORCEMENT SPECIFICATION

## (Maximum Exposure 1200Pa)

This domestic reinforcement specification is applicable to all double glazed casement and tilt & turn windows and is based on indicative testing undertaken at VEKA.

This specification of window should only be installed on houses up to two stories, in geographical locations where the wind load does not exceed 1200 Pascals. The specification is limited to window areas up to 2.6m<sup>2</sup> without cruciform mullions/transoms.

This specification can not be used to satisfy any kitemark/PAS24/SBD requirements.

The colour of the external foil determines if the product classes as light or dark. Please refer to the 'Variations' brochure for further information.

## Outer Frames

- No reinforcement is required as long as direct fixing is possible in accordance with the recommendations of the relevant British Standard BS8213-4:2016 (Code of practice for the survey and installation of windows and external doorsets).
- All frame members that are to be coupled together shall be reinforced. Depending upon the coupling section which is used, its application, and the required rigidity of the section, the reinforcement may have to be continuous.
- coloured profiles unreinforced up to 900mm

## Mullions (Vertical Frame Members)

- Light colours – No Specific requirements for mullions less than 1385mm
- Dark colours – No requirements for mullions less than 500mm

## Transoms (Horizontal Frame Members)

- Light colours – No specific requirements for transoms less than 1385mm
- Dark Colours – No Specific requirements for transoms less than 500mm
- NOTE: ALL GLASS SUPPORTING TRANSOMS OVER 900mm MUST BE FULLY REINFORCED

## Sashes



| Sash Type                | Maximum Un-Reinforced Width | Maximum Un-Reinforced Height |
|--------------------------|-----------------------------|------------------------------|
| Light Coloured Side Hung | 700mm                       | 1300mm                       |
| Dark Coloured Side Hung  | 500mm                       | 500mm                        |
| Light Coloured Top Hung  | 1100mm                      | 1100mm                       |
| Dark Coloured Top Hung   | 500mm                       | 500mm                        |
| Light Coloured Tilt&Turn | 1200mm                      | 1200mm                       |
| Dark Coloured Tilt&Turn  | 500mm                       | 500mm                        |

## Notes:

- Any sizes stated are either:- sash rebate lengths or the overall frame edge lengths.
- For full domestic specification please refer to the VEKA reinforcement document
- Mullions, transoms and sash sizes are based upon a design wind pressure of 1200Pa.
- For all other exposure categories, contact VEKA UK Group Technical Department for advice and guidance.
- When using cockspur handles, locally reinforce the area where the handle is to be secured.
- Use cavity locking wedges, run up blocks and glass packers as detailed in the manual.
- Consider glass weight – This specification is based upon 28mm DGUs using 4mm float / toughened glass.
- Please refer to the 'Variations' document for current guidance on what is a light or dark coloured foil

# MAXIMUM SIZES – TRIPLE GLAZING

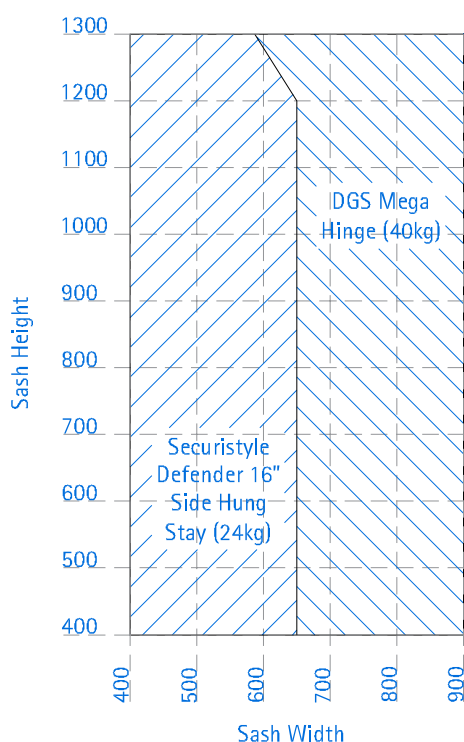
These sizes are based on triple glazed units made up of 3 panes with a total glass thickness of 12mm (4/12/4/12/4). The examples shown are using Securistyle Defender 16" side hung stays with a 24kg weight carrying capacity (minimum sash width 450mm) and DGS Mega Side Hung stays with a 40kg weight carrying capacity. The top hung maximum sizes are based on Securistyle Defender 24" top hung stays with a 40kg weight carrying capacity. To limit sash deflection due to glass weight, 709216 Flexi Corner Wedges must be used, or glazing packers must be positioned so that the centre of the packer is no more than 50mm from the edge of the glass.

Sash sizes outside the hatched area should not be manufactured as the deflection at the base will exceed the maximum permissible limit due to glass weight.

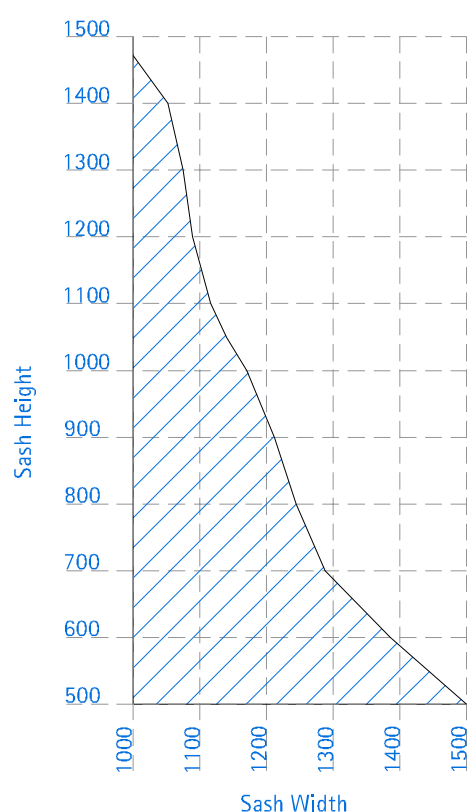
The base member of all triple glazed Casement sashes over 700mm wide must be reinforced.

The base member of all triple glazed Tilt & Turn sashes over 800mm wide must be reinforced.

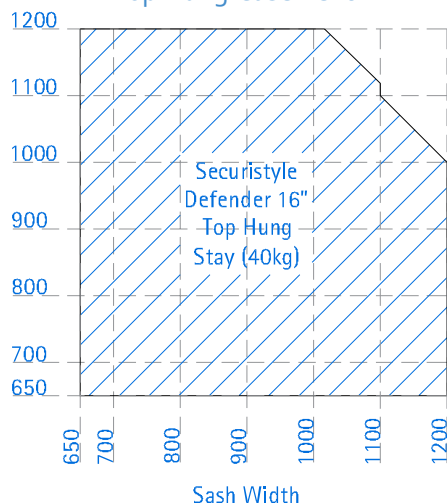
Side Hung Casement



Tilt & Turn



Top Hung Casement



# DRAINAGE

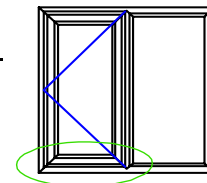
All horizontal lower rails of frames, transoms, and sashes within a window or door require drainage to allow a means of escape for any water that may enter the rebate.

This is achieved by milling entry slots from the upper rebate into the outer profile chamber, and escape slots through the base or face of the profile. The exact positions of the entry and exit slots vary depending on the shape of the sections that are being used.

When milling the slots, exercise care not to cut through the wall into the central reinforcement chamber otherwise any water entering will not be able to escape and will corrode the steel.

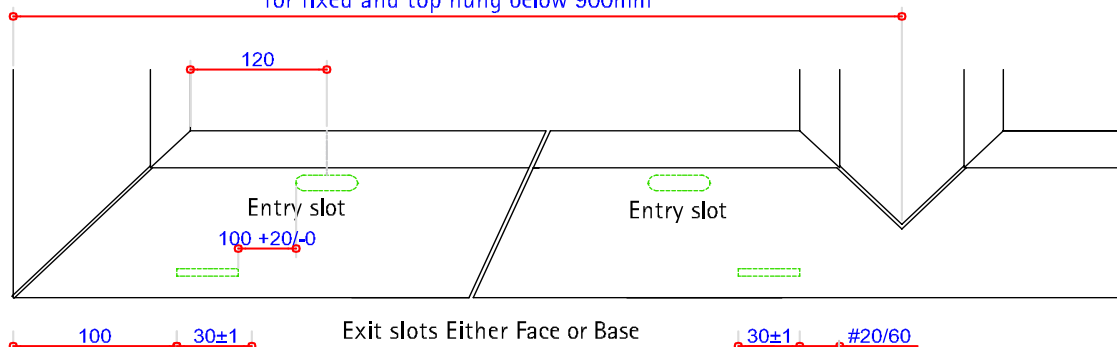
Some profiles have additional horizontal walls in the chambers and, dependent on the profile and the type of drainage that is required, these walls must be 'broken through'. To prevent air flow from restricting water flow through the drainage slots, they should be offset. This creates an indirect path through the profile which improves the efficiency of the drainage. Drainage slots should be 5mm wide x 30mm long, and the offset distance should be 100mm +20mm/-0mm between the entry and exit slots. Clear any swarf or debris that can build up within the inner chambers when milling has been completed, as this will restrict the flow of the water.

Example Shown:  
Reverse for opposite hand.



## Slot Positions In Outerframes

Only 1 EXIT slot required for side hung below 700mm and 1 EXIT slot required for fixed and top hung below 900mm



# When manufacturing casement windows, the distance from the rebate corner to the entry slot will vary depending on whether an espagnolette or shootbolt locking mechanism is to be fitted because of the keeper and its fixing screw position.

Espagnolette Distance: approx 20mm

Shootbolt Distance: approx 60mm, shootbolts are not recommended on side hung below 550mm.

One frame entry slot is required 50mm off centre. Over 1100mm additional entry slots are required.

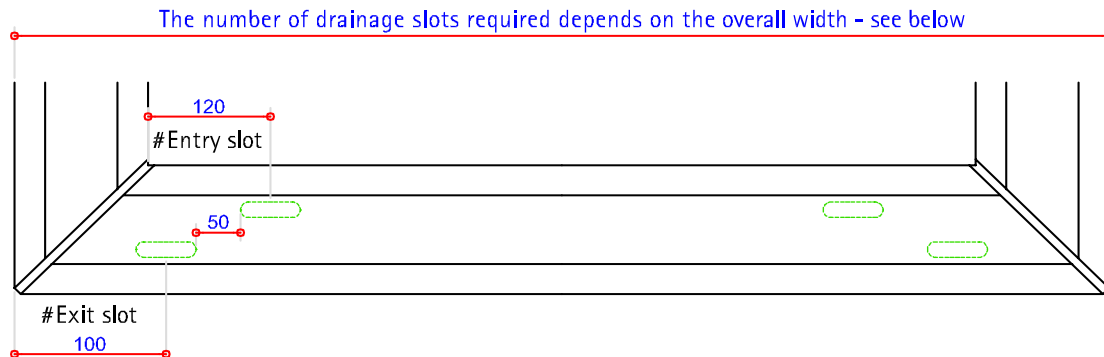
Friction stays may also hinder entry slots and therefore it may be necessary to reposition accordingly. 380mm from the hinge side for 12" stays and 480mm from the hinge side for 16" stays.

When making small side hung casements it is permissible to fit the rider block over the drainage slot.

For French casements below 1100mm, additional drainage slots located centrally are recommended.

# DRAINAGE (CONTINUED)

## Slot Positions In Sashes

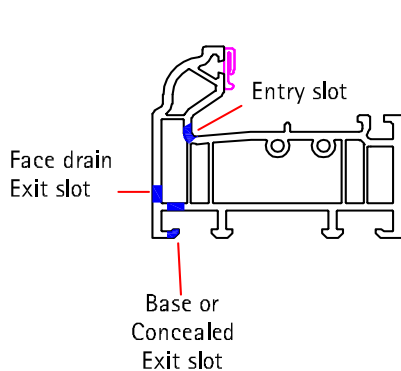


Side hung casements up to 700mm in width and top hung casements up to 900mm in overall frame/mullion width require one central EXIT slot and one ENTRY slot offset by 50mm.

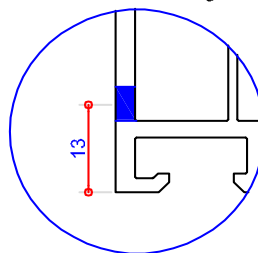
#For side hung casements above 700mm and top hung casements above 900mm see diagram above.

Tilt & Turns and Door Sashes up to 900mm in width require one central EXIT slot and one ENTRY slot offset by 50mm.

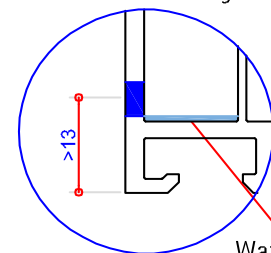
#For Tilt & Turns above 900mm, see diagram above.



Correct slot height



Incorrect slot height

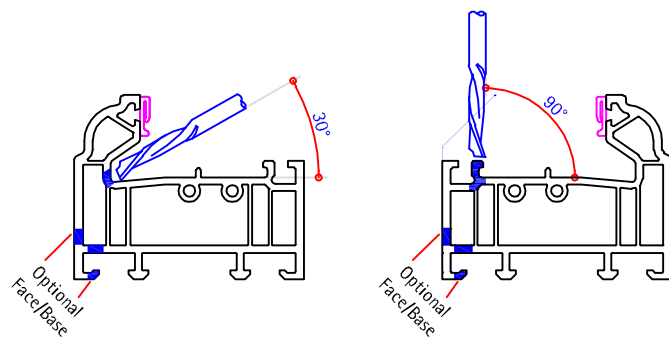


Where possible, face drainage slots should be milled at the closest point to the horizontal wall to reduce water build-up.

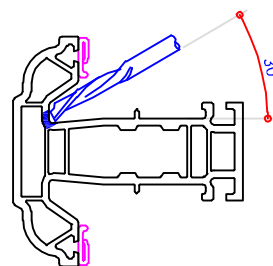
# DRAINAGE POSITIONS

When running up or down vertically into a web, ensure the cutter penetrates the web by 5mm.

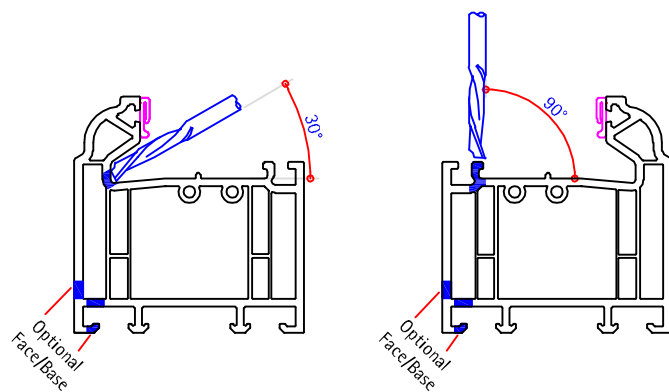
56mm Outer Frame 701531



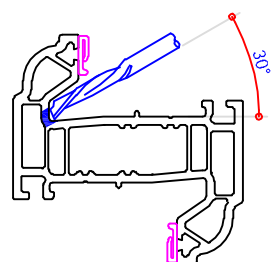
70mm T Transom 702533



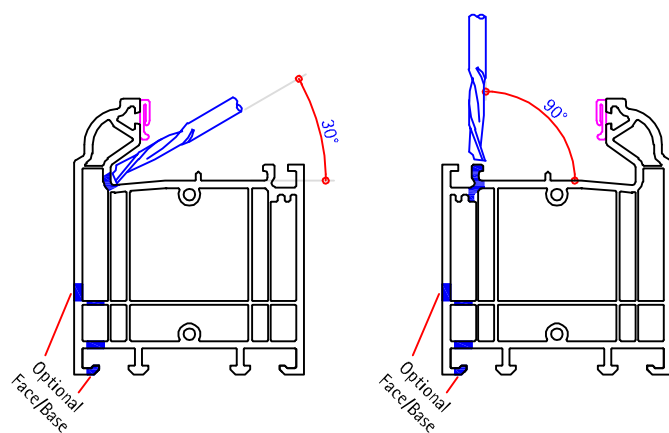
72mm Outer Frame 701532



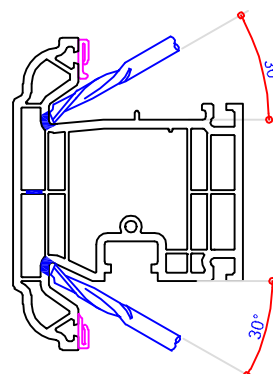
70mm Z Transom 702536



84mm Outer Frame 701204

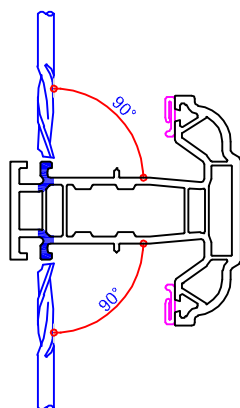


95mm Sash/T Transom 705543

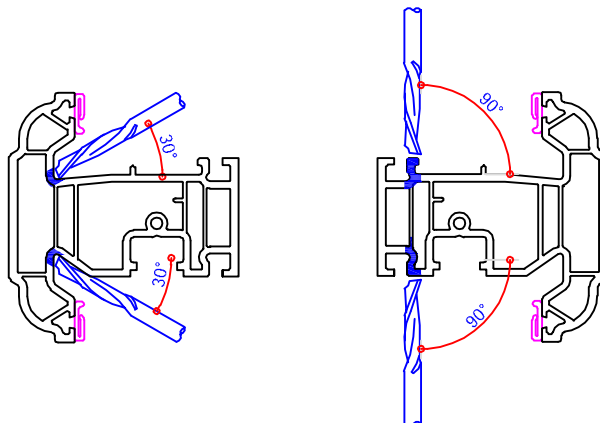


## DRAINAGE POSITIONS (CONTINUED)

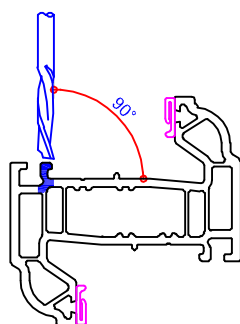
70mm T Transom 702533



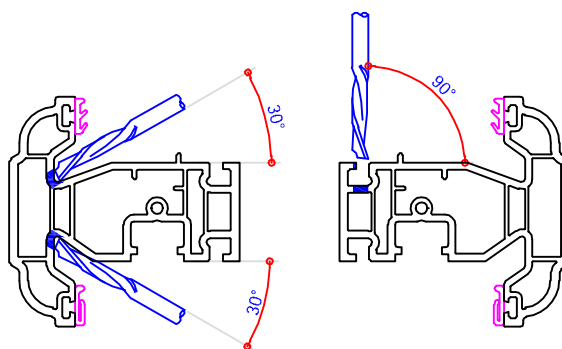
76mm Internally Beaded Sash/Transom 703538



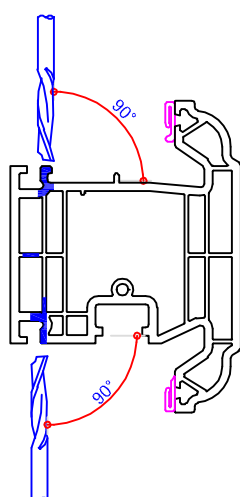
70mm Z Transom 702536



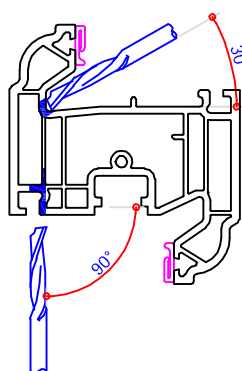
Internally Beaded Sash/Transom 703638



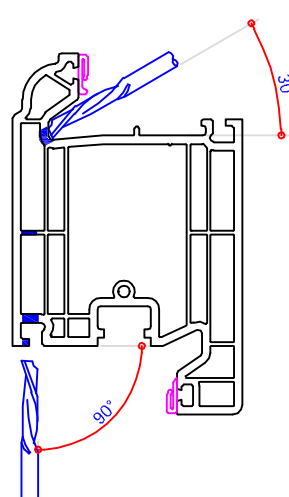
95mm Sash/T Transom 705543



Tilt & Turn Sash 703539

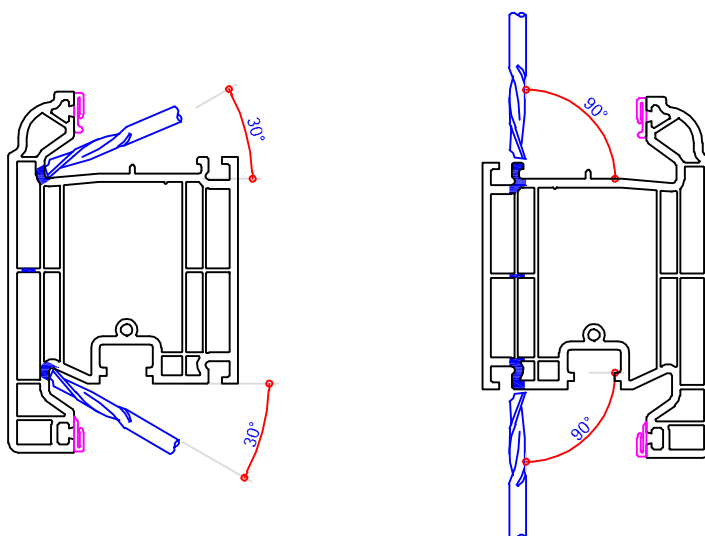


Door Sash Open In 705540

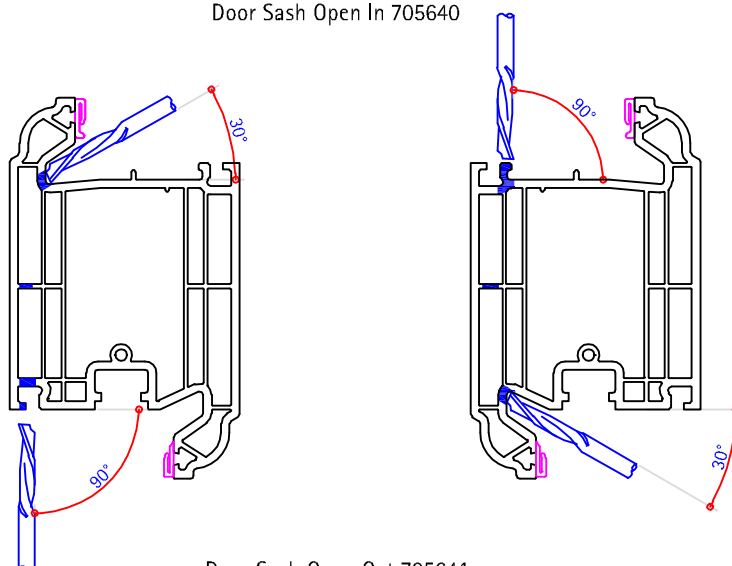


## DRAINAGE POSITIONS (CONTINUED)

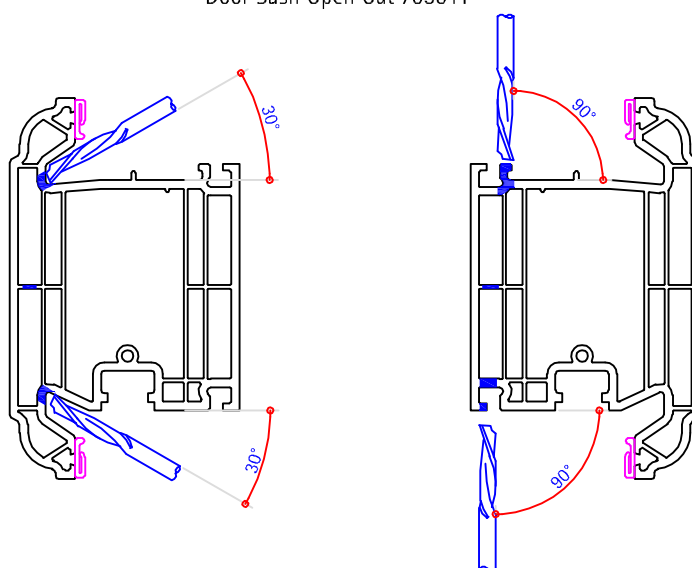
Door Sash Open Out 705541



Door Sash Open In 705640



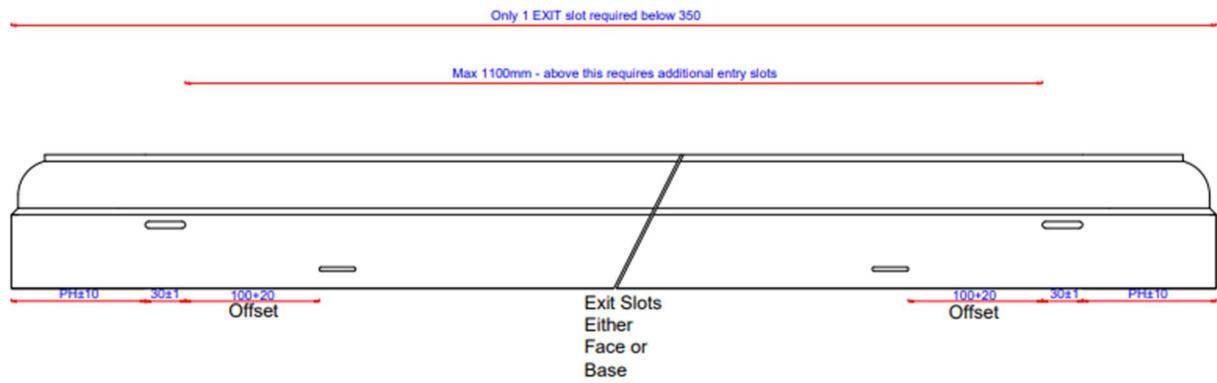
Door Sash Open Out 705641



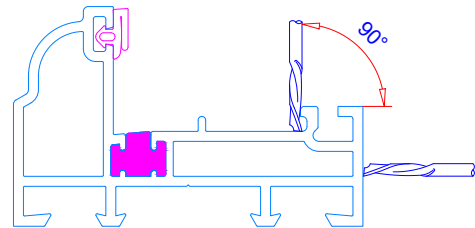
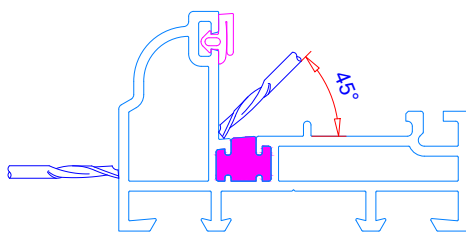
# DRAINAGE POSITIONS – THRESHOLDS

## Slot positions in Low Thresholds

### 704333 Low Threshold

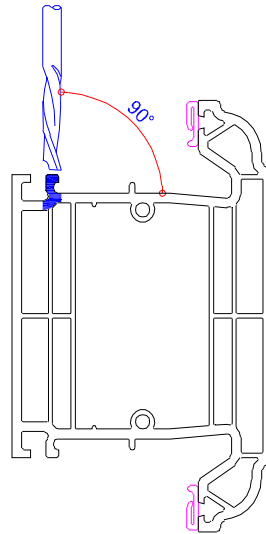
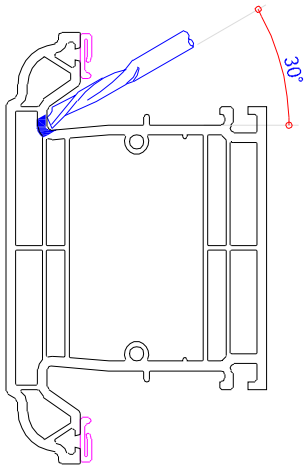


### 704333 Low Threshold

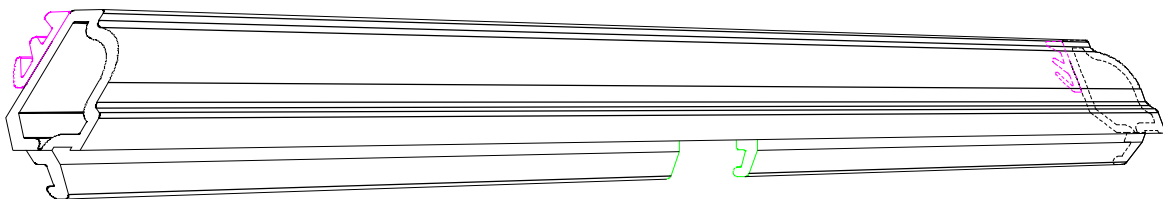
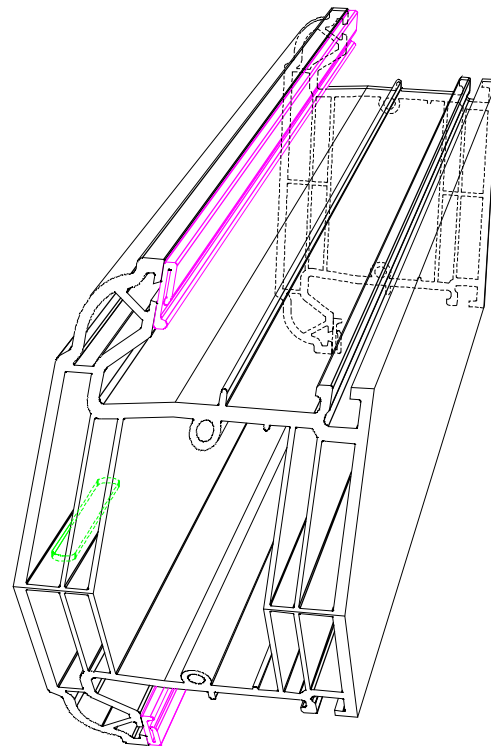


## DRAINAGE POSITIONS – MIDRAIL

116mm Midrail 702535



Door Sashes and Midrail - The centre web will need to be slotted prior to welding.

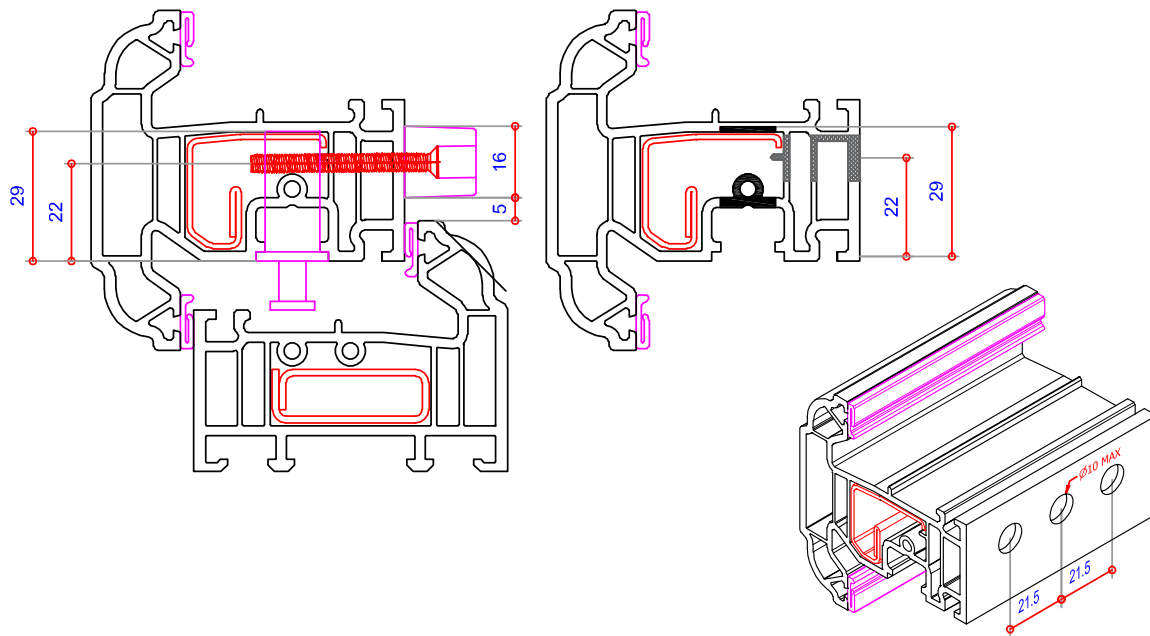


For externally beaded frames it is necessary to remove the glazing bead leg above the drainage slot.

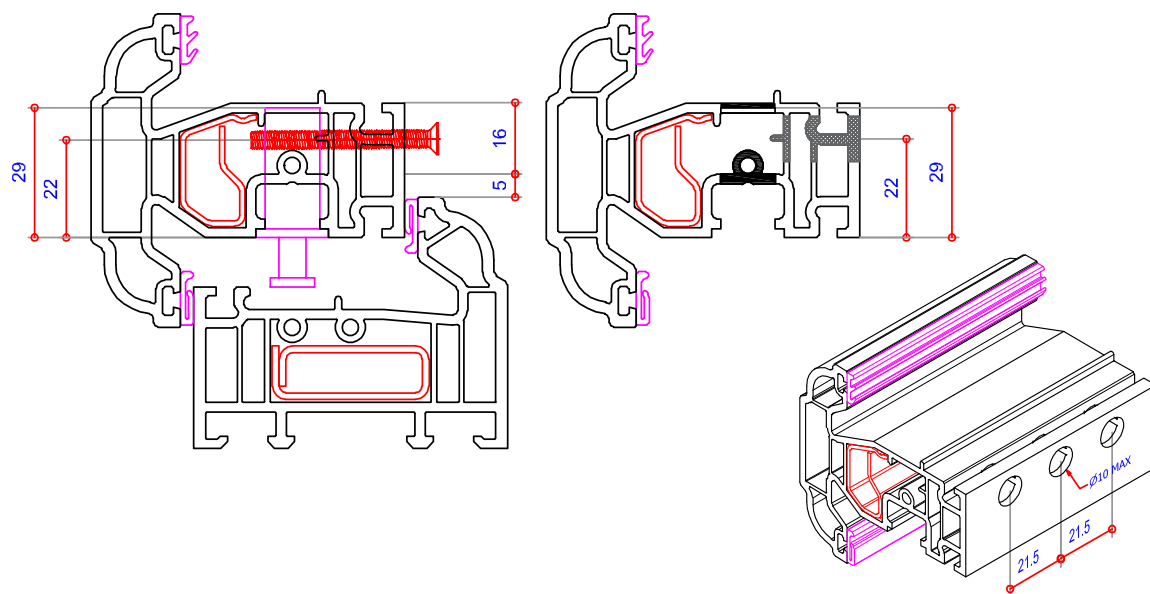
## DIMENSIONS

22mm Backset Espagnolette Considerations.

Internally Beaded Sash 703538.



Internally Beaded Sash 703638

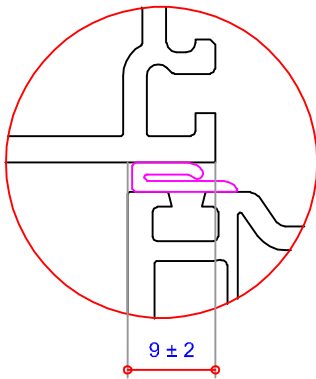


If the gear box routing breaks through the glazing rebate wall, it should be sealed with a closed cell tape of sufficient length to cover the hole and to prevent water ingress. Recommended size = 1.0mm thick x 16.5mm wide.

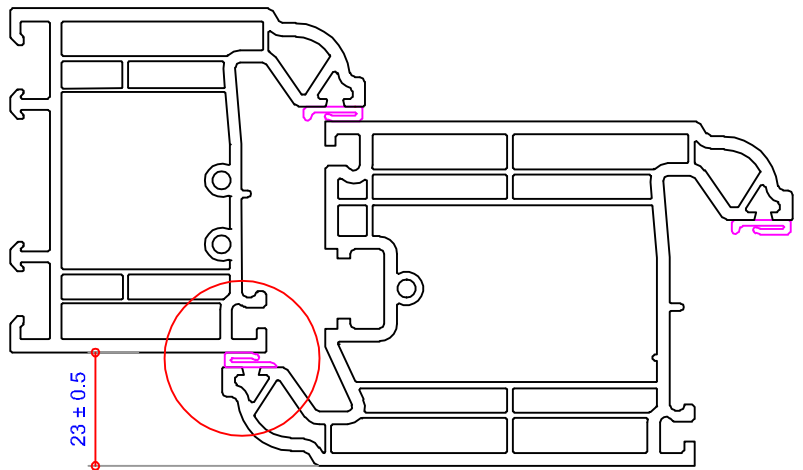
## DIMENSIONS (CONTINUED)

Sash Upstand Heights for Hinge Selection and Minimum and Maximum Overlap.

Minimum and Maximum Overlap.

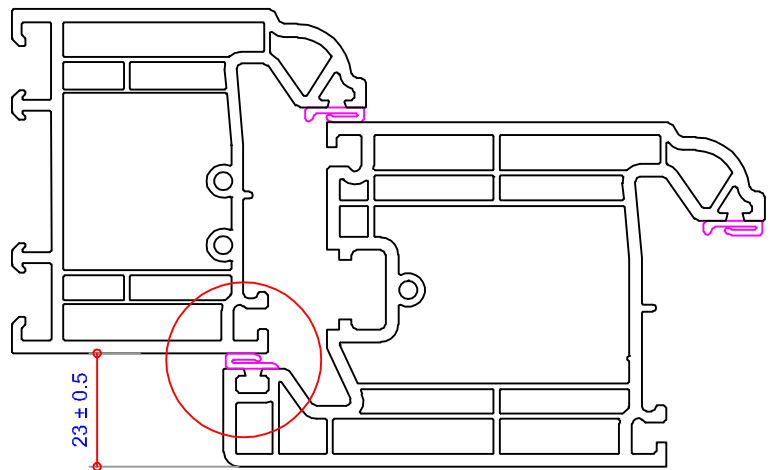
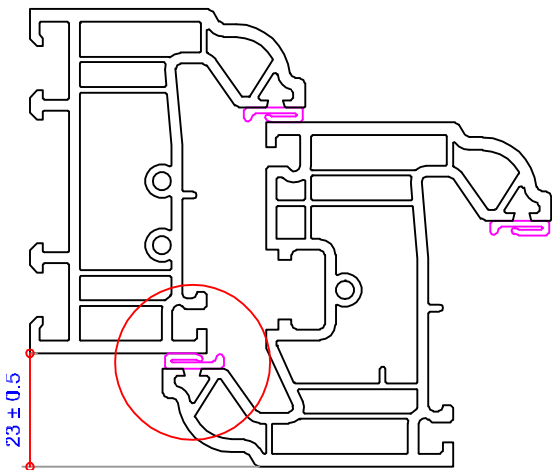


Slim Door Sash 705543 and 705545.



Tilt & Turn Sash 703539

Door Sash 705541 and 705540



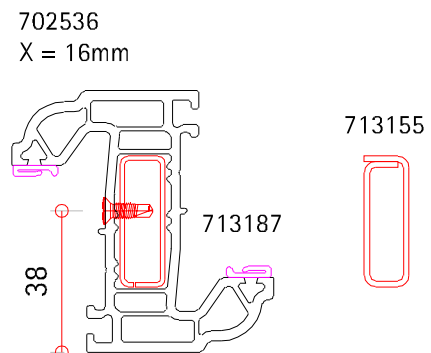
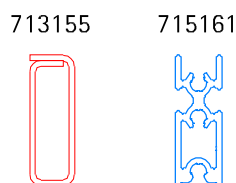
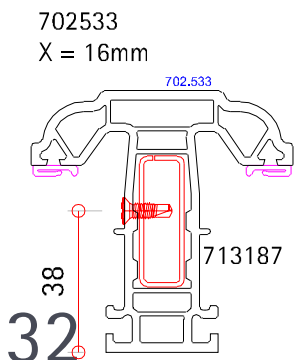
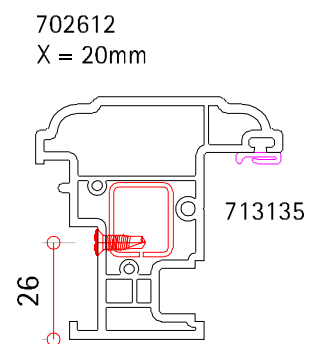
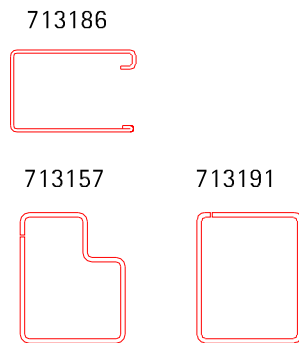
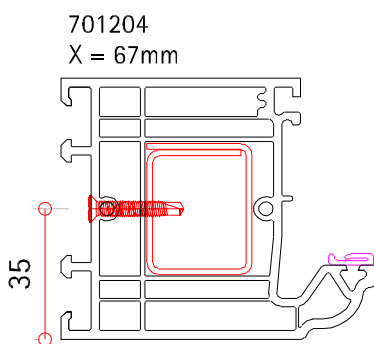
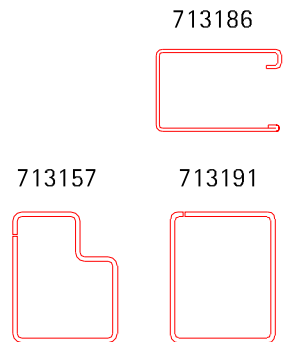
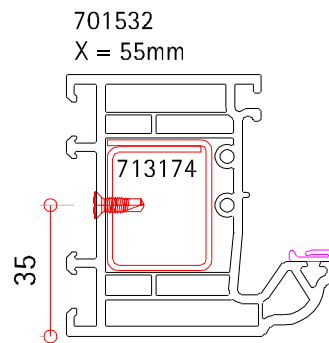
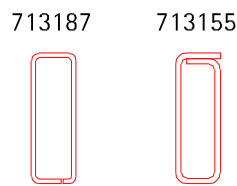
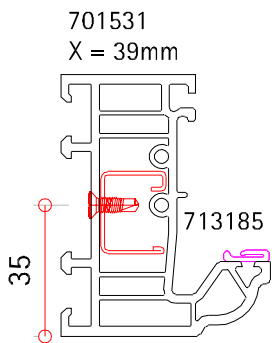
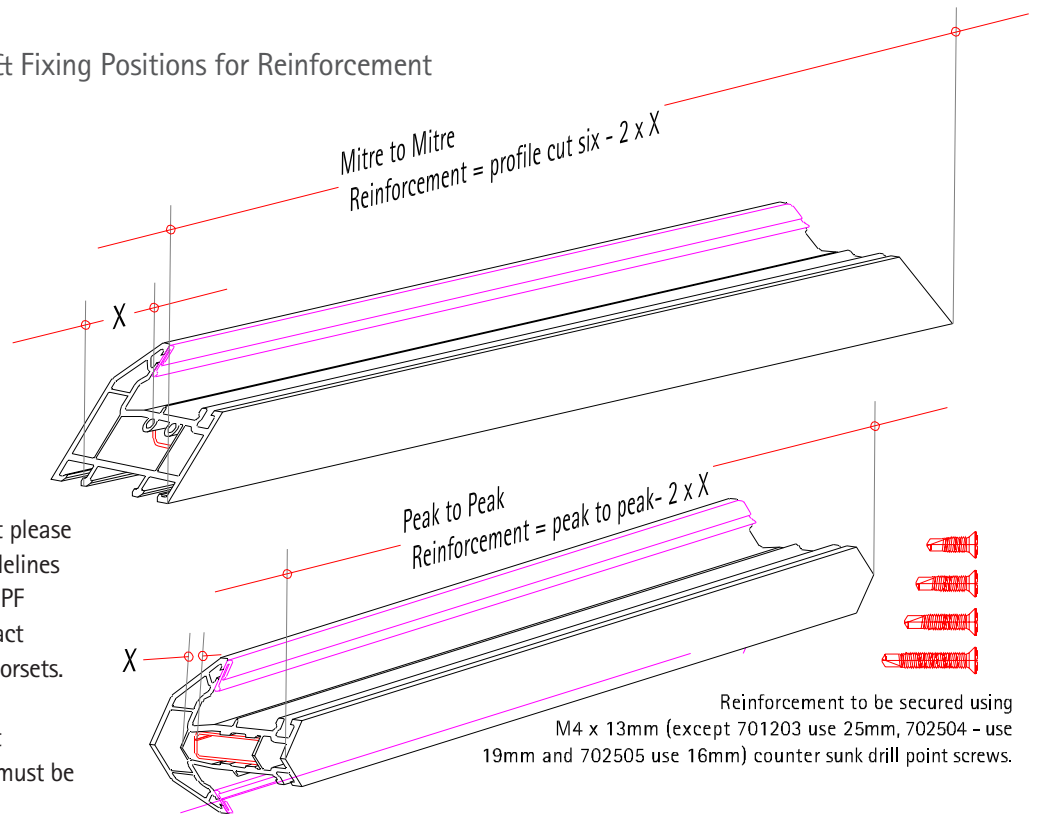
Door hinges need to be selected that will accommodate the sash upstands and still allow the hinge compression to be adjusted.

# REINFORCEMENT

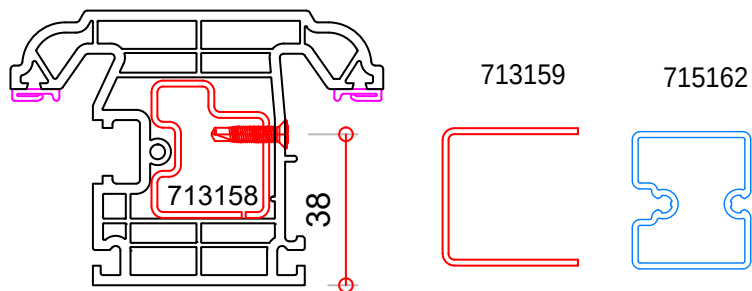
## Recommended Reductions & Fixing Positions for Reinforcement

For more details on reinforcement please refer to VEKA Reinforcement Guidelines available at [VEKAUK.com](http://VEKAUK.com) or the BPF - The Reinforcement of High impact modified PVC-U Windows and Doorsets.

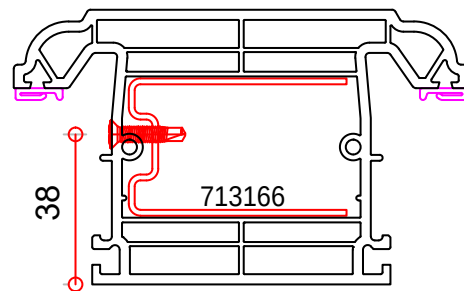
Note: 713185 and 713186 are not suitable for butt weld jambs and must be pieced.



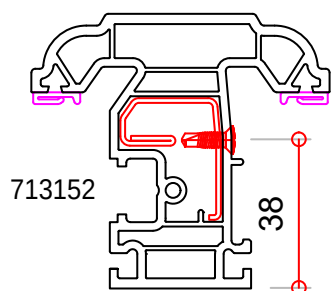
705543  
X = 25mm



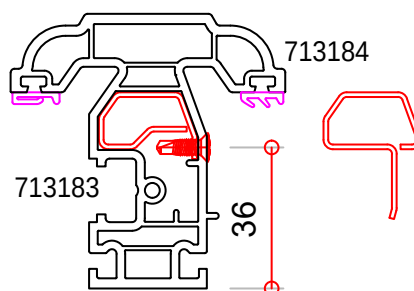
702535  
X = 41mm



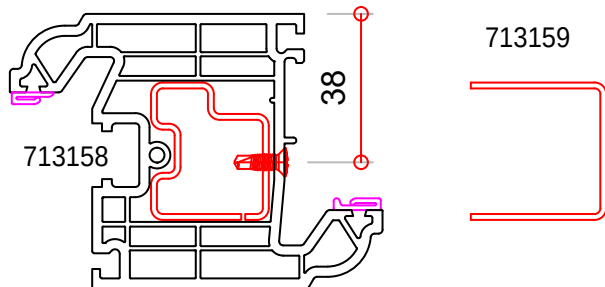
703538  
X = 58mm



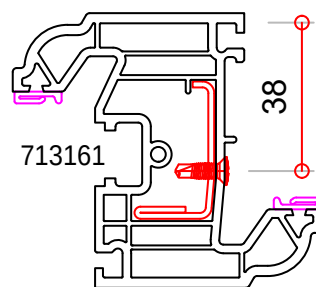
703638  
X = 58mm



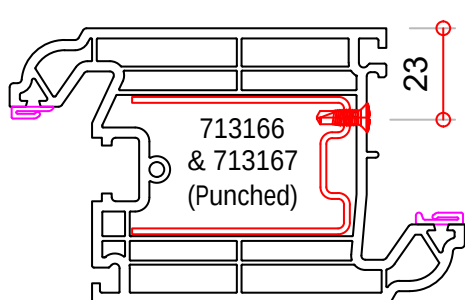
705545  
X = 29mm



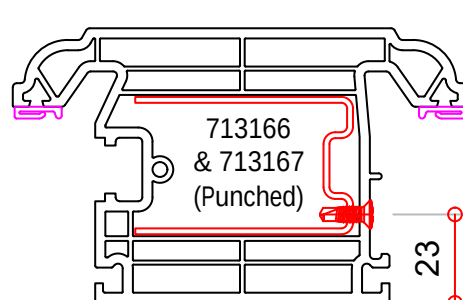
703539  
X = 62mm



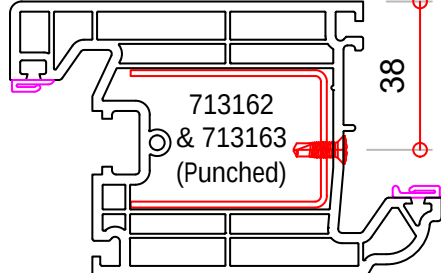
705640  
X = 98mm



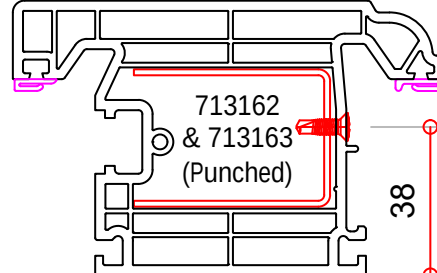
705641  
X = 98mm



705540  
X = 92mm



705541  
X = 92mm

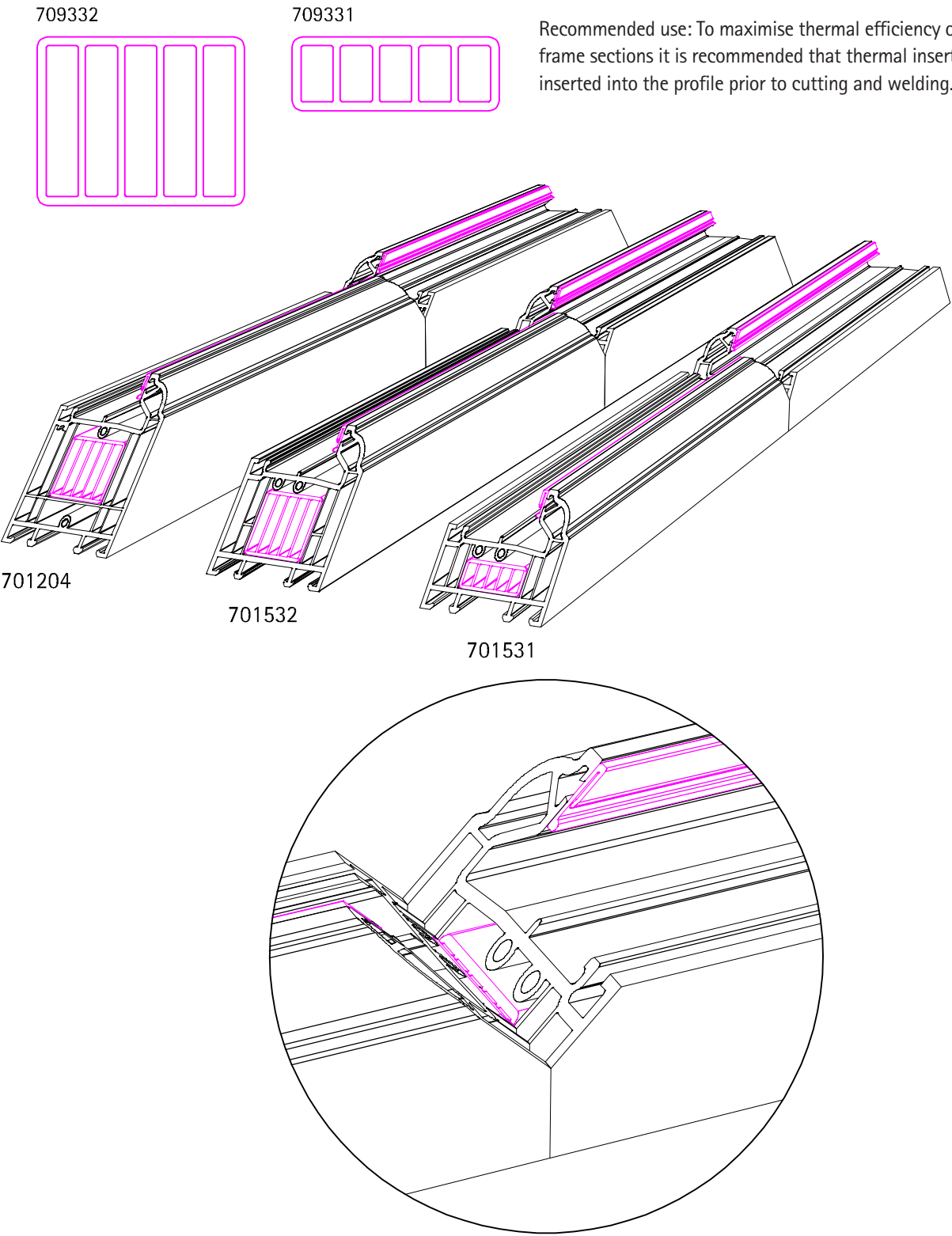


# THERMAL INSERTS

## Thermal Inserts

Limitations of use: Not to be used as part of a structural coupling. Thermal inserts can only be used in frames when no reinforcing is required.

Recommended use: To maximise thermal efficiency of outer frame sections it is recommended that thermal inserts are inserted into the profile prior to cutting and welding.



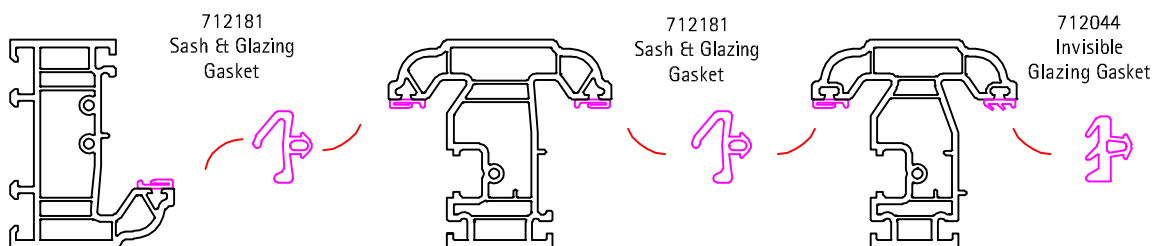
# REPAIR GASKETS

Damaged PCE gaskets can be replaced with hand inserted EPDM gasket as shown below. Please note, these gaskets can not be welded therefore need to be inserted after welding.

All Outerframes & Transom/Mullions

All Sash Profiles

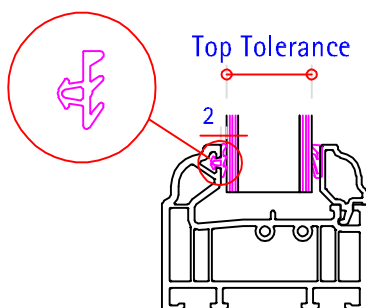
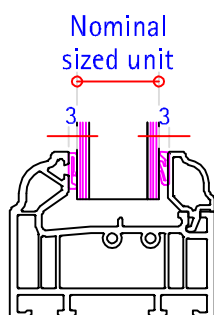
Internally Beaded Sash/transom 703514



If the glazed unit is on top tolerance, the PCE gasket can be removed from the frame and replaced using a hand inserted gasket as shown below to maintain the correct glazing compression.

Nominal sized sealed unit = 24mm, 28mm or 32mm

Concealed Gasket - for use on sealed units at top tolerance 712194.



Flipper Seal 712046

Suitable for reducing over compression on openers



Glazing Gasket 712045

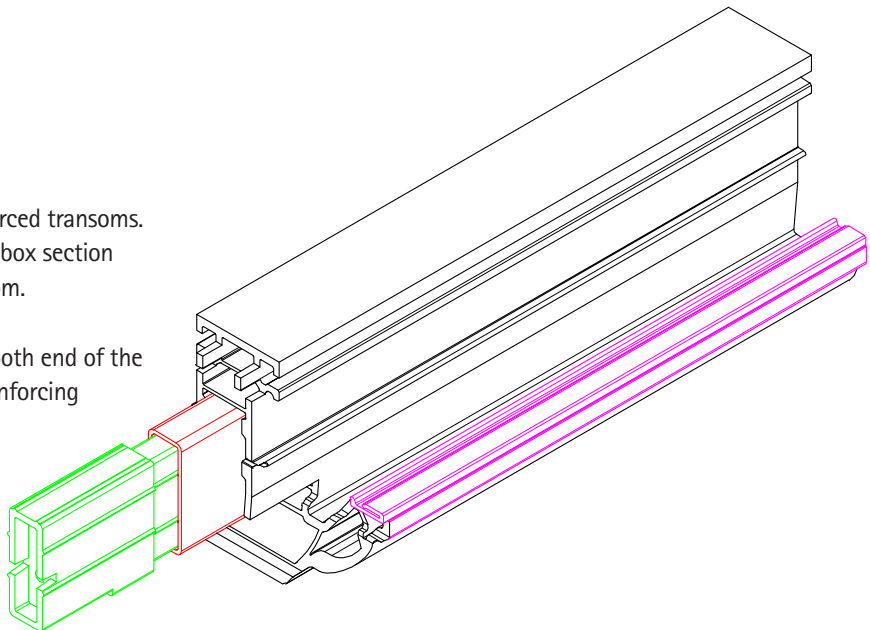
A higher visible sight line which can provide some improvement to weather performance by aiding the re-direction of moisture running off the glazing.

## MECHANICAL JOINT – USING MECHANICAL JOINT BLOCK

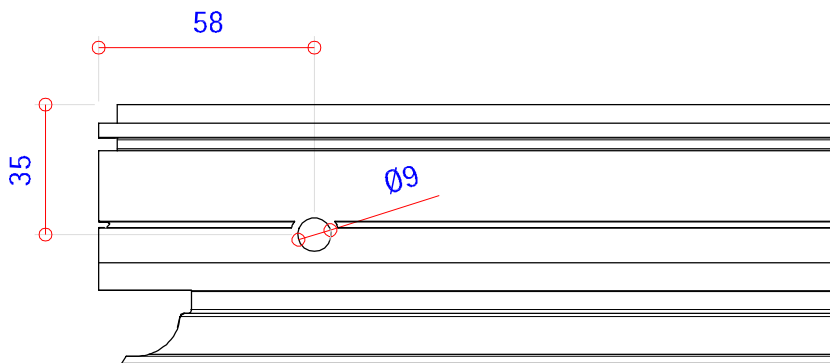
70mm T Transom 702533  
Steel Box (Optional) 713187  
Mechanical Joint Block 744269  
Mechanical Joint Fixing Sleeve 744787  
Fixing Screw 744788

744269 can be used in reinforced or unreinforced transoms.  
When reinforcing is required, cut the 713187 box section  
80mm shorter than the finished milled transom.

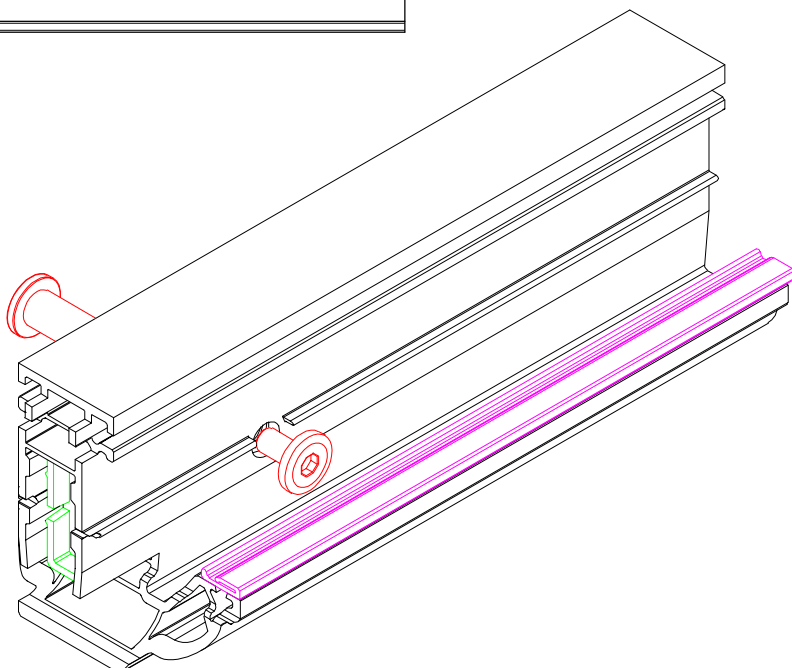
Insert the 744269 mechanical joint block in both end of the  
713187 steel box before inserting into the reinforcing  
chamber of the 702533 Transom. Secure the  
reinforcing in place using 3.9 x 16mm drill  
point screws at the appropriate centres.



Drill a 9mm diameter hole through the transom, mechanical joint block and steel reinforcing as illustrated. A small section of the pip  
will also need to be removed around the hole to allow the mechanical joint fixing sleeve and screw to sit flush.



Secure the moulding and reinforcing  
(if required) into the transom using  
the mechanical joint fixing sleeve  
and fixing screw.



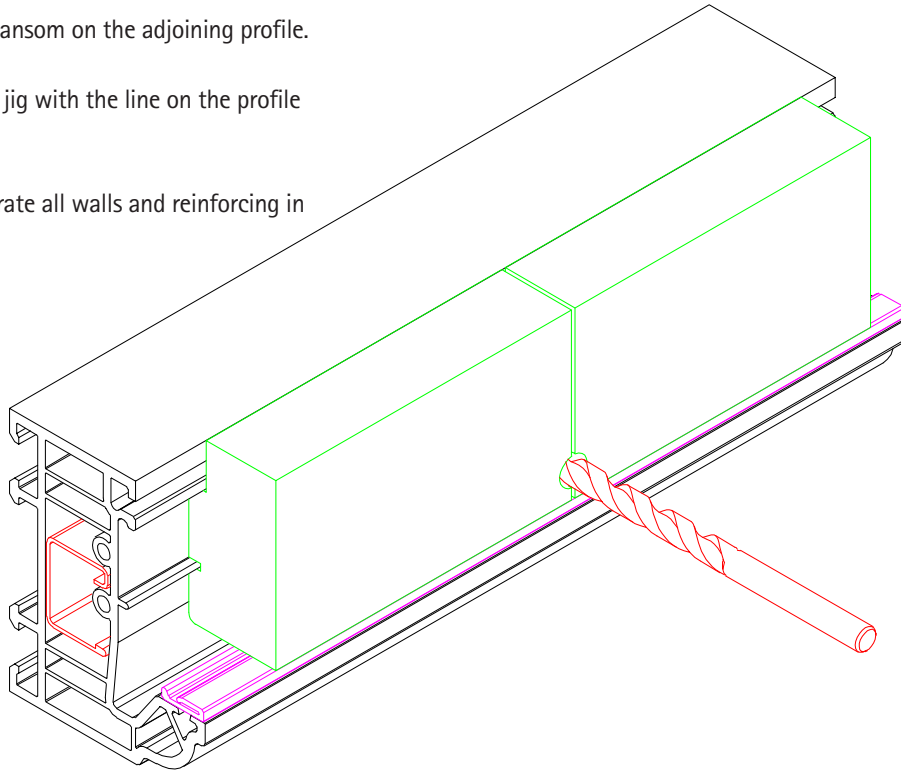
# MECHANICAL JOINT – OUTER FRAME PREPARATION

Jig: xxxxxx

Mark the centre of the transom on the adjoining profile.

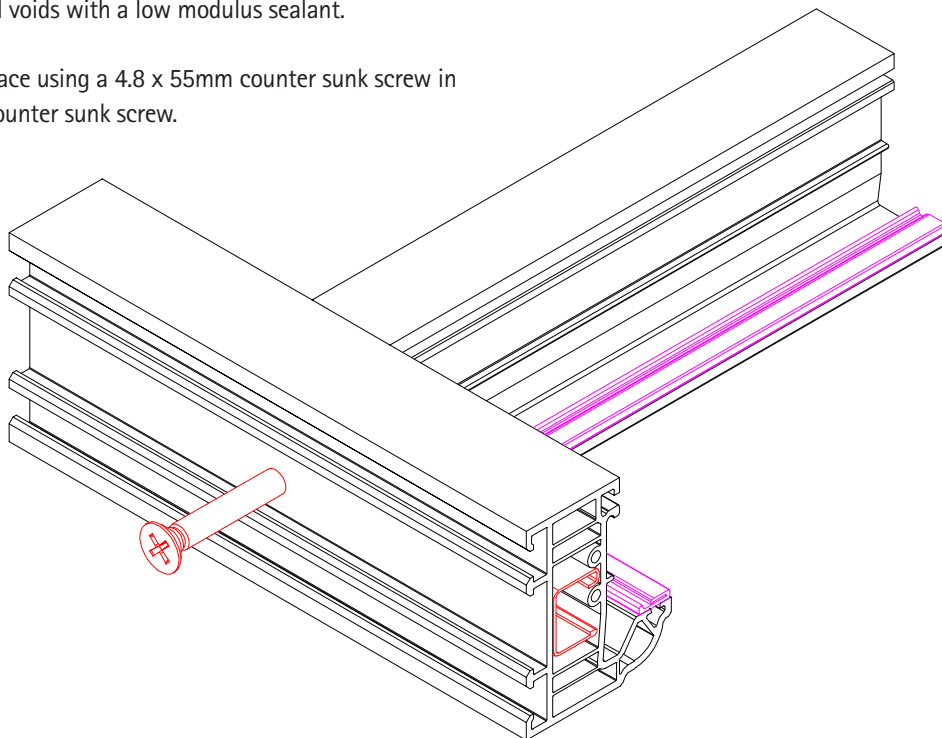
Line up the centre of the jig with the line on the profile and hold firmly in place.

Using a 5mm drill, penetrate all walls and reinforcing in the profile.



Seal all mating faces and voids with a low modulus sealant.

Secure the transom in place using a 4.8 x 55mm counter sunk screw in 701531 & 4.8 x 80mm counter sunk screw.



# MECHANICAL JOINT - USING SCREW PORTS

Seal all mating faces and voids using a low modulus sealant.

Transom reinforcement should be cut 60mm shorter than the overall transom length.

Screw Size:

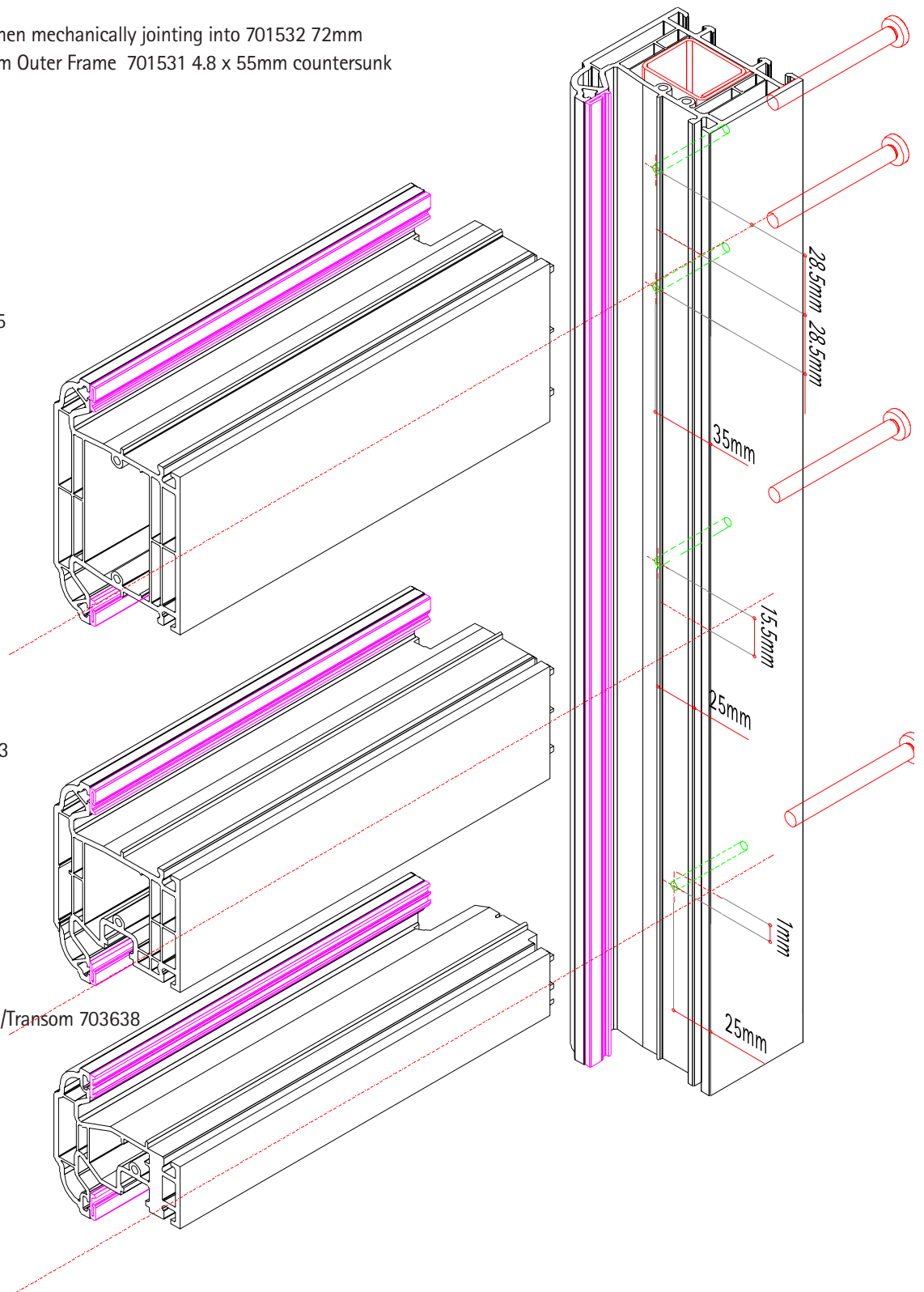
Image below is for when mechanically jointing into 701532 72mm Outerframe. For 56mm Outer Frame 701531 4.8 x 55mm countersunk screws

116mm Midrail 702535

95mm Transom 705543

Internally Beaded Sash/Transom 703638

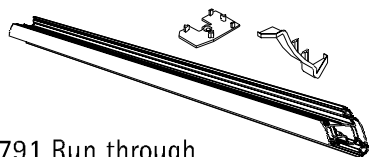
4.8 x 80mm countersunk screws



# RUN THROUGH HORNS

The dimensions indicated are for the milled profile sections and do not include in the horn end cap or the blanking plate.

Cut size for the sash jambs is finished sash height + 75mm.



744791 Run through horn kit. Includes 2m of 703538 pre milled and 2 x 709808 end moldings & end caps.

The base member of the sash is milled using the same cutter as the mechanically jointed transom.

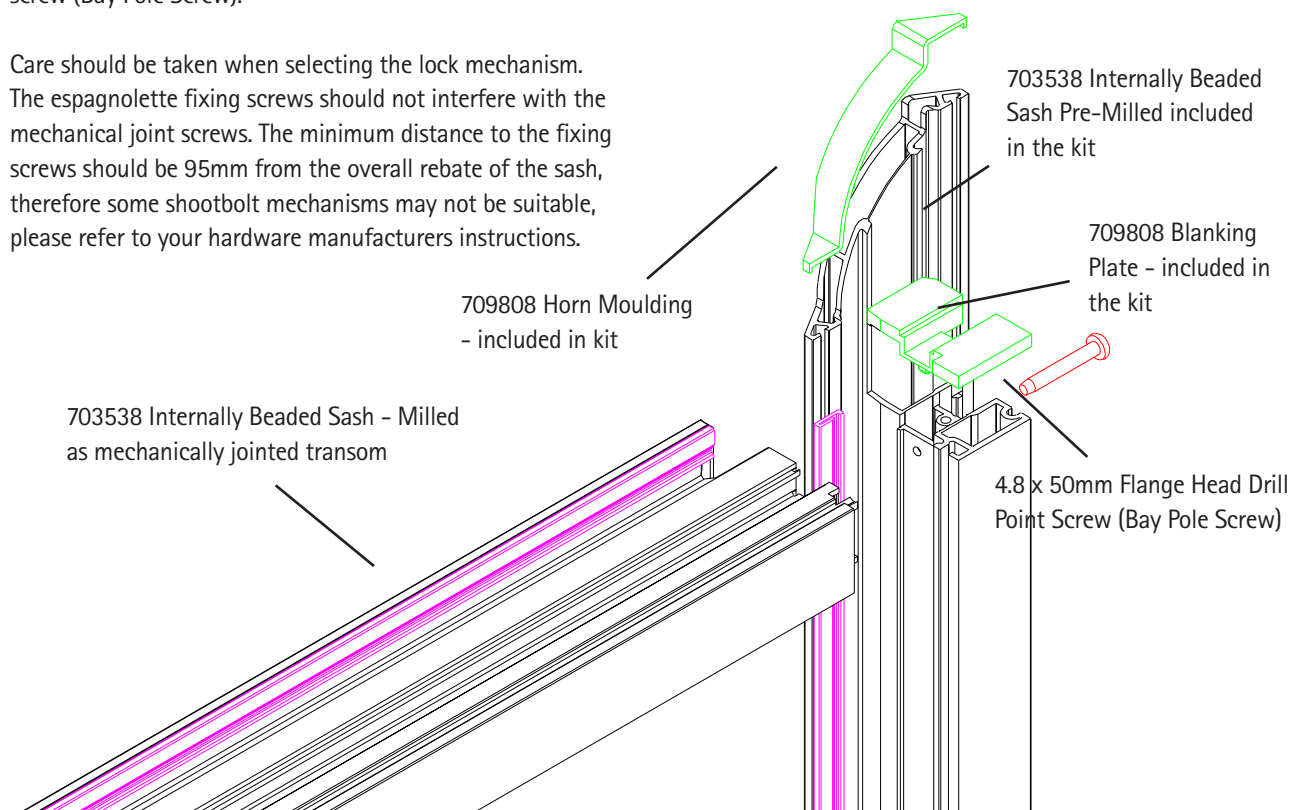
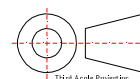
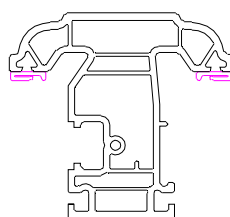
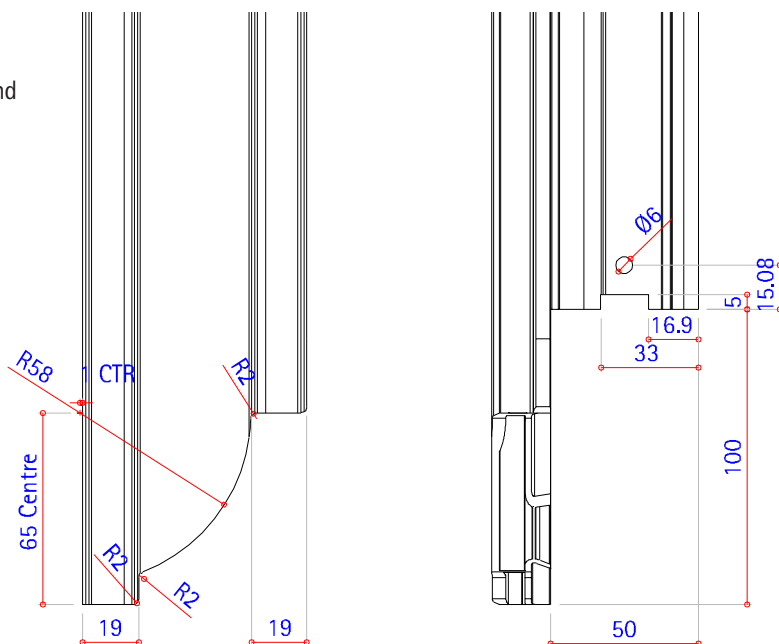
Pre drill through the jamb member for the mechanical joint screw.

Seal all mating faces and voids using a low modulus sealant.

Mouldings are fixed in place using a cyanoacrylate adhesive.

Secure in place using a 4.8 x 50mm flange head, drill point screw (Bay Pole Screw).

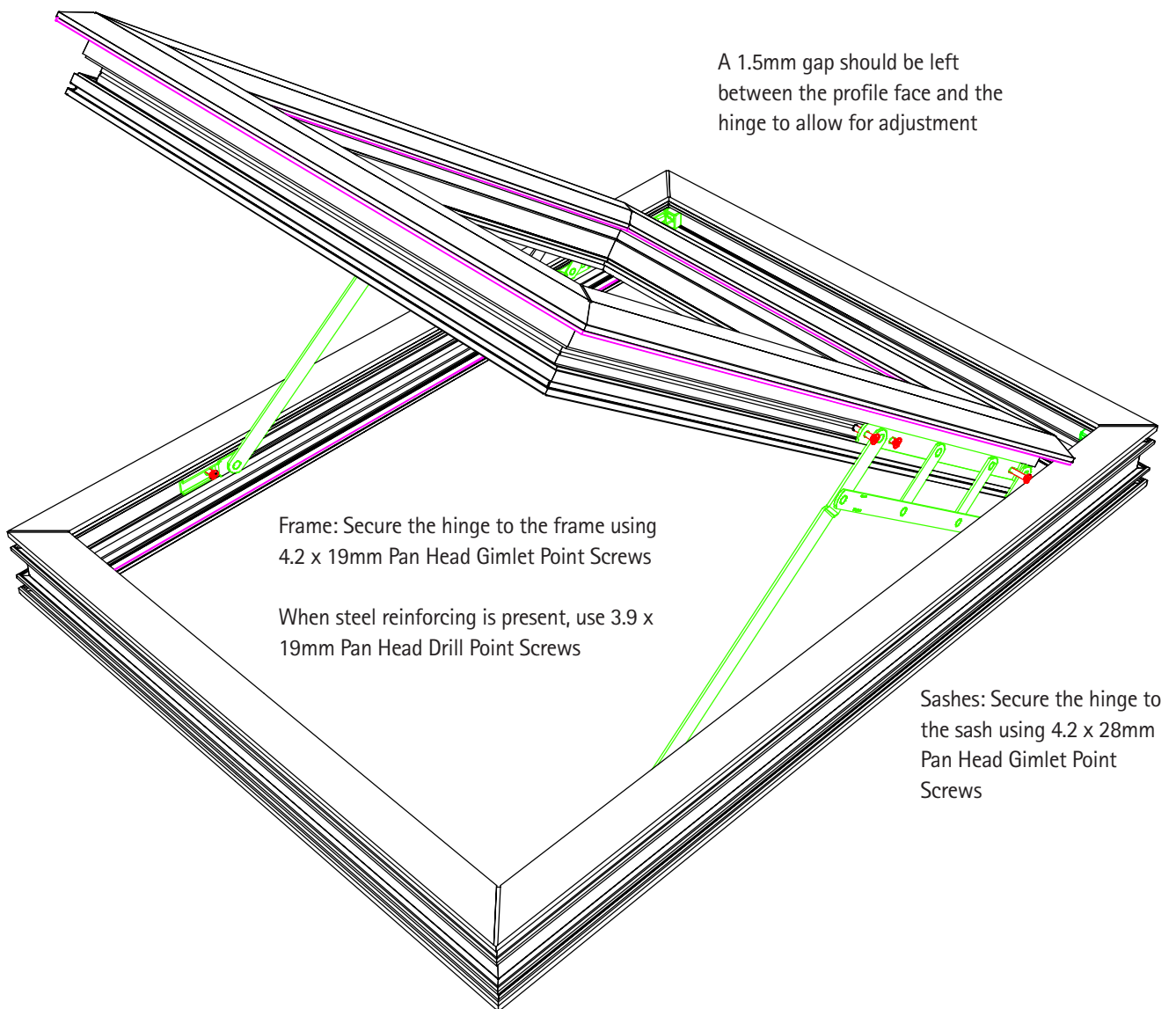
Care should be taken when selecting the lock mechanism. The espagnolette fixing screws should not interfere with the mechanical joint screws. The minimum distance to the fixing screws should be 95mm from the overall rebate of the sash, therefore some shootbolt mechanisms may not be suitable, please refer to your hardware manufacturers instructions.



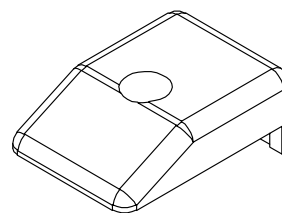
# FRICTION STAYS

Please refer to the hinge manufacturers guidelines.

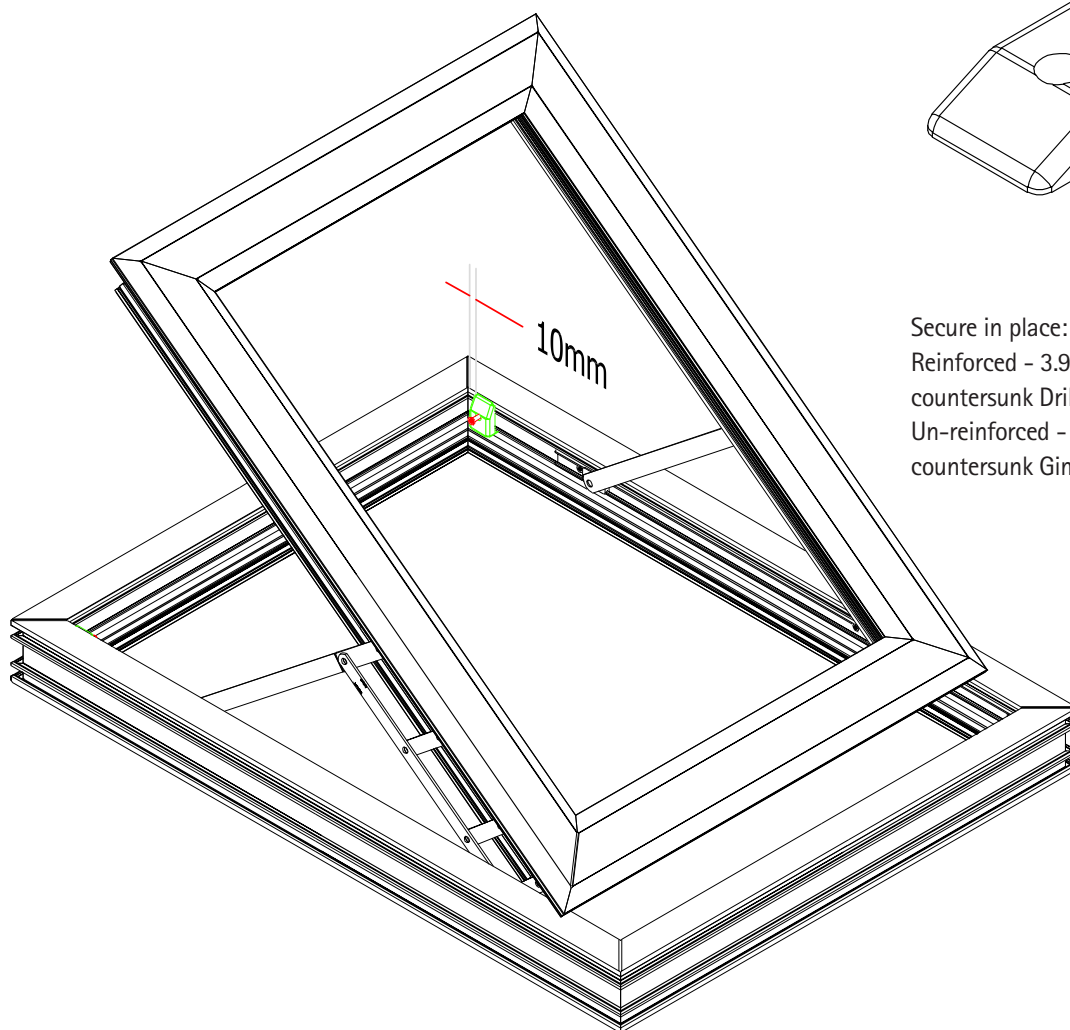
T & Z Transoms: Secure the hinge to the frame using 4.2 x 16mm Pan Head Gimlet Point Screws. When steel reinforcing is present, use 3.9 x 16mm Pan Head Drill Point Screws



# RUN UP BLOCKS

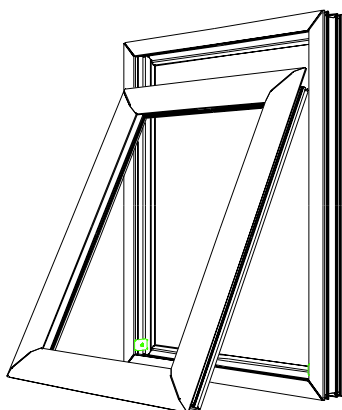


Secure in place:  
Reinforced – 3.9 x 25mm  
countersunk Drill Point Screw  
Un-reinforced – 4.3(4.2) x 25mm  
countersunk Gimlet Point Screw



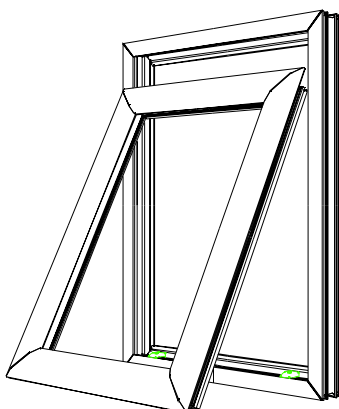
## Espag Locking

Run up blocks should be positioned as shown below.



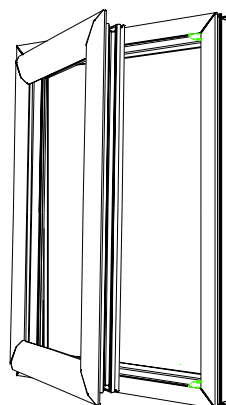
## Shootbolt Locking

Run up blocks should be equally positioned either side of the lock gear casing. Care should be taken to ensure the positioning does not interfere with the cams.



## Espag/Shootbolt Locking

Run up blocks should be positioned on the bottom corner of the frame, as shown. Care must be taken to ensure the positioning does not interfere with the cams.



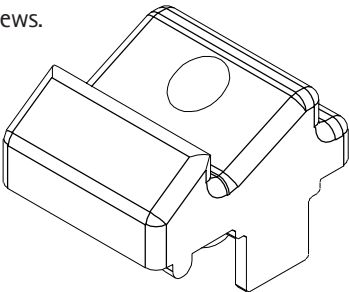
# DUMMY CASEMENTS

The Dummy Sash Block works with a sash overlap of 8 - 10mm

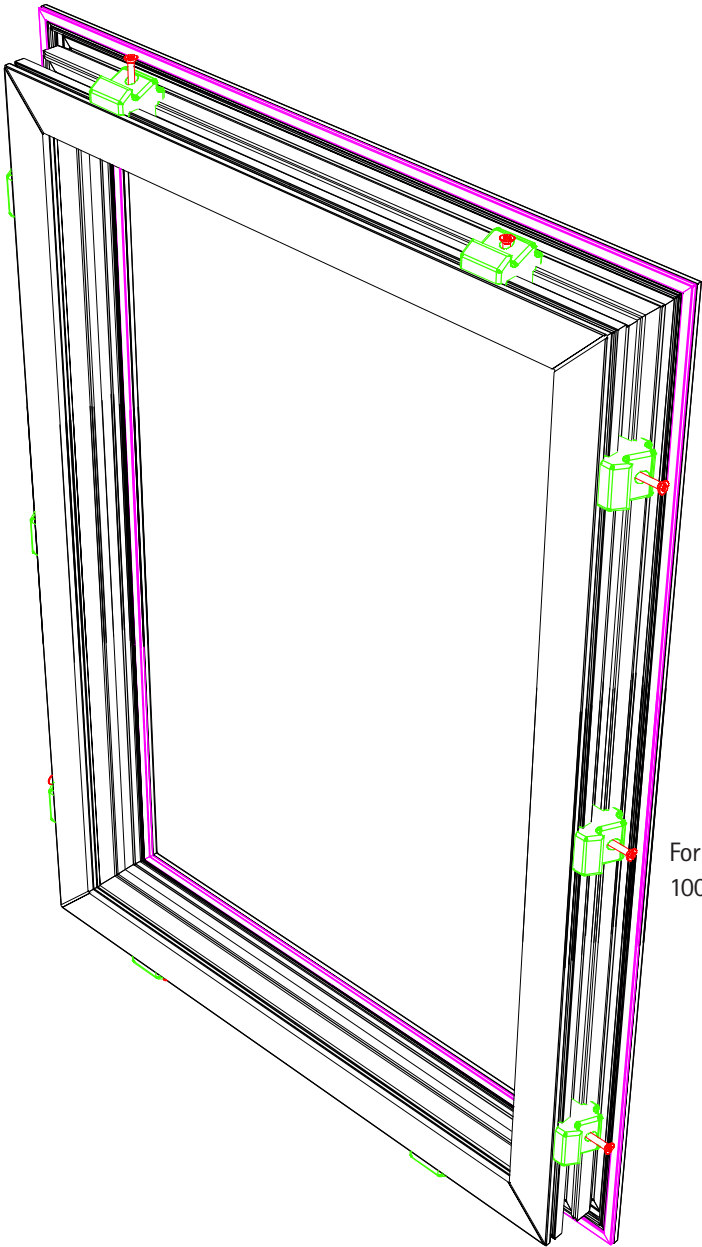
When fitting dummy sashes on both sides of a transom or mullion, fixings should be staggered.

Secure the Dummy Sash Block to the sash using 4.3 (4.2) x 30mm countersunk Gimlet Point Screws.

| Sash Location Block Details: |                    |
|------------------------------|--------------------|
| Sash Height / Width          | Quantity Per Side  |
| Under 1000mm                 | 2                  |
| Over 1000mm                  | 3                  |
| Over 1500mm                  | +1 Per extra 500mm |



Dummy Sash Block 709249

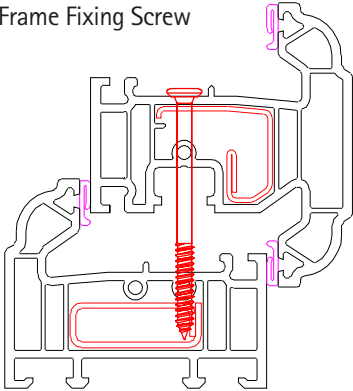


All Sashes - 200mm  
from each corner

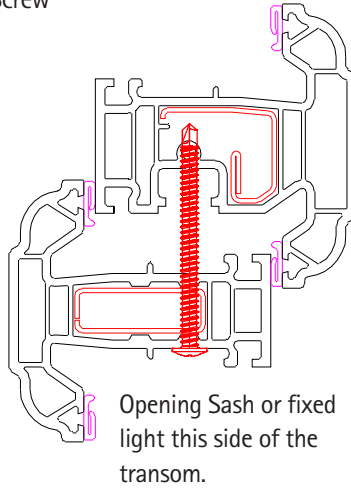
For sash sizes over  
1000mm, see table above

## DUMMY CASEMENTS (CONTINUED)

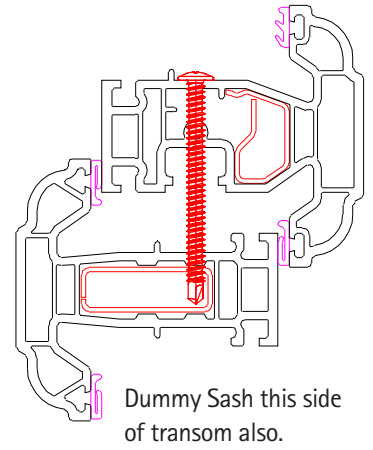
4.8 x 65mm Gimlet Point  
Frame Fixing Screw



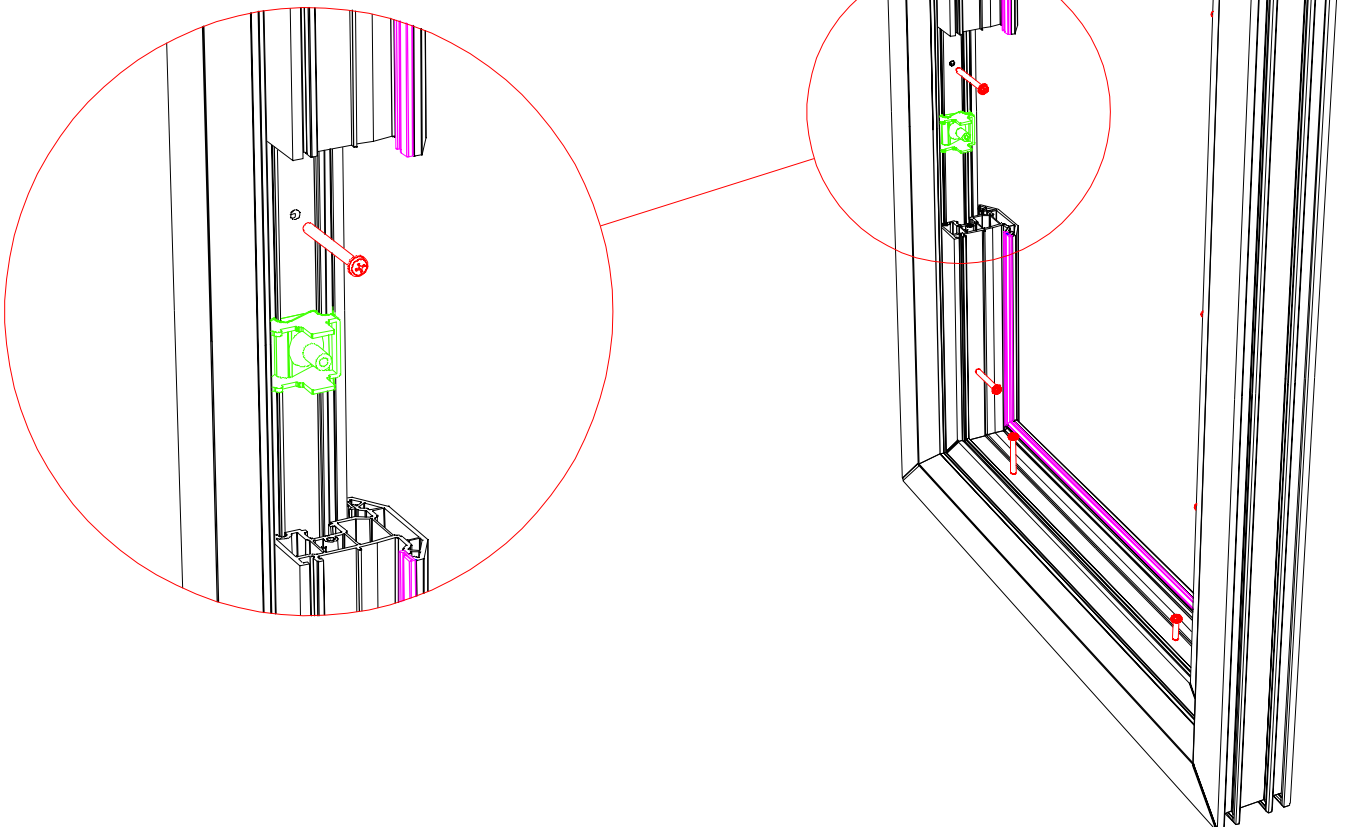
4.8 x 60mm Pan Head  
Drill Point Frame Fixing  
Screw



4.8 x 65mm Gimlet Point  
Frame Fixing Screw



Stagger the frame fixings adjacent to each Dummy Sash Block.



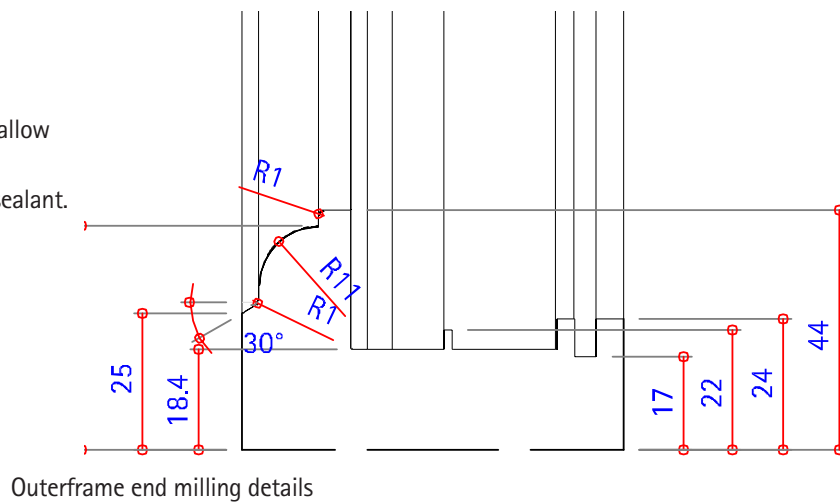
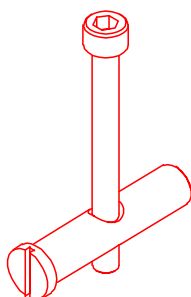
# LOW THRESHOLD

## Low Threshold 704345

Outerframe Jamb cut size = Overall height - 17mm.  
Cut the reinforcement approximately 85mm short to allow clearance for the pin.  
Seal all mating faces and voids using a low modulus sealant.

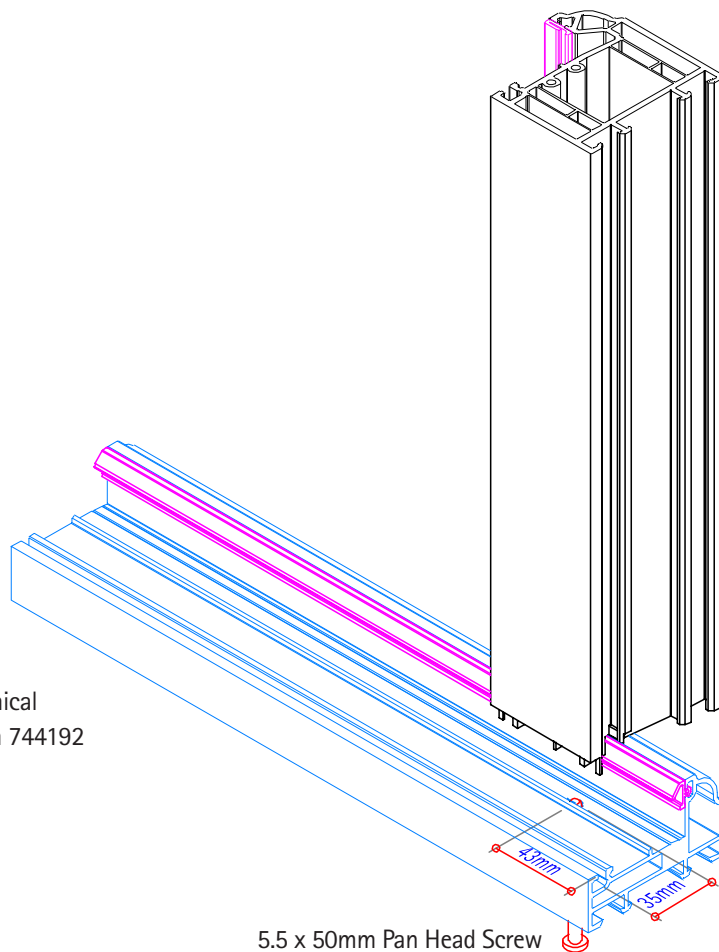
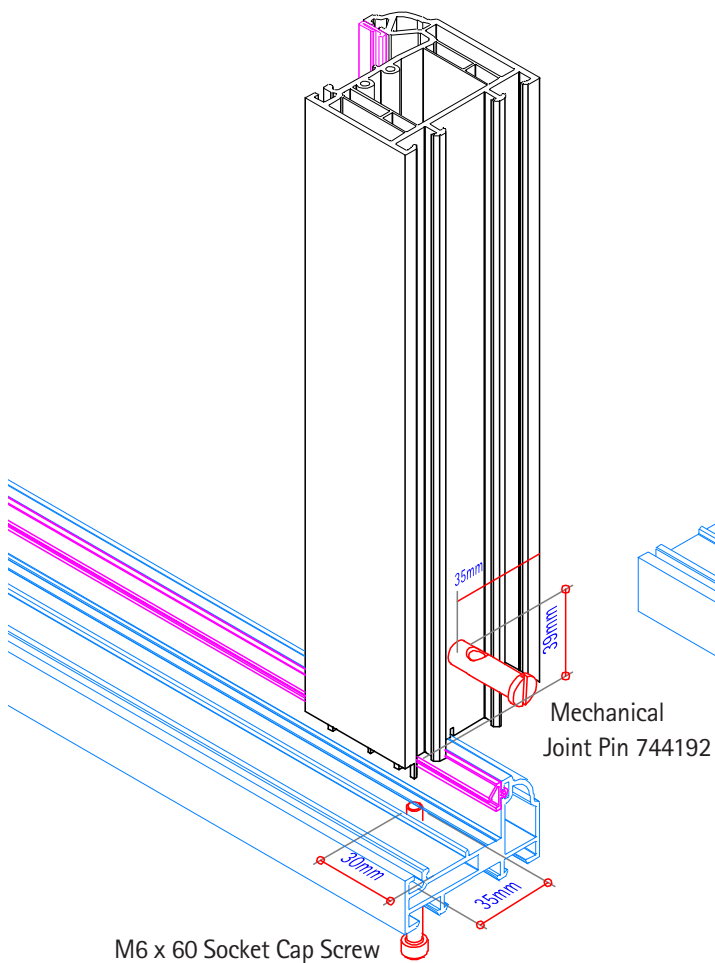
Mechanical Joint Pin 744192

M6 x 60 Socket Cap Screw 744673



### Option 1: Mechanical Joint using Pin & Bolt

### Option 2: Mechanical Joint using Screw Ports.

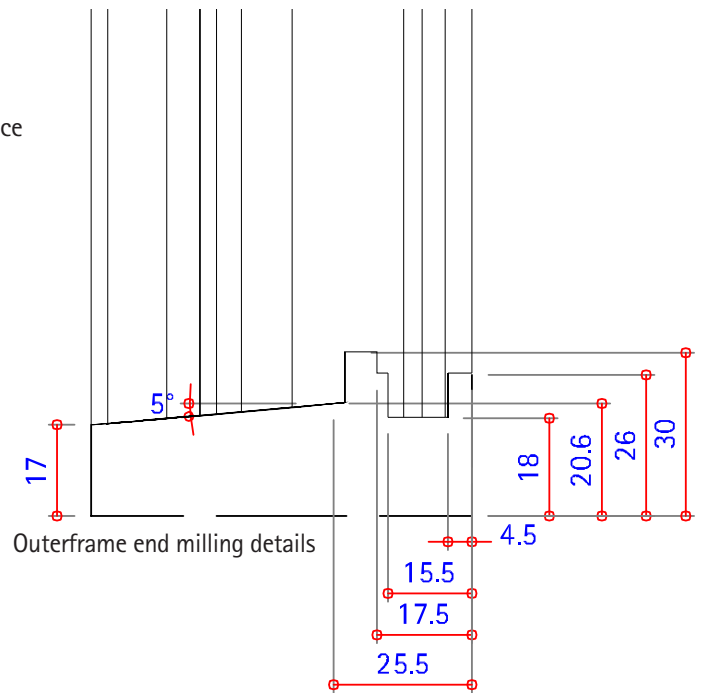
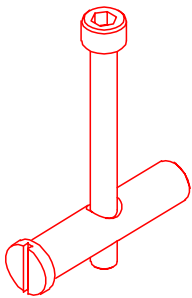


# LOW THRESHOLD (CONTINUED)

## Low Threshold 704092

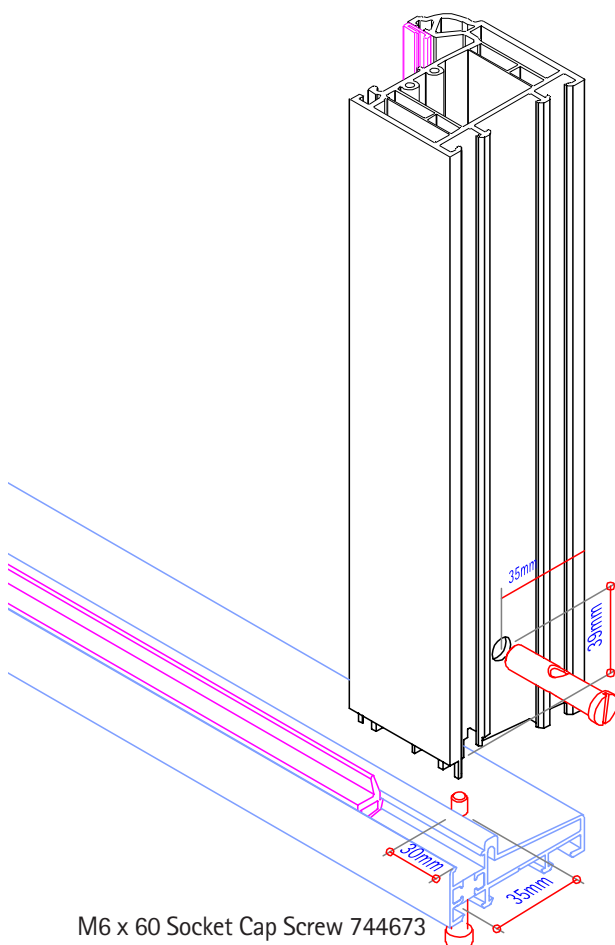
Outerframe Jamb cut size = Overall height - 17mm.  
Cut the reinforcement approximately 85mm short to allow clearance for the pin.  
Seal all mating faces and voids using a low modulus sealant.

Mechanical Joint Pin 744192  
M6 x 60 Socket Cap Screw 744673



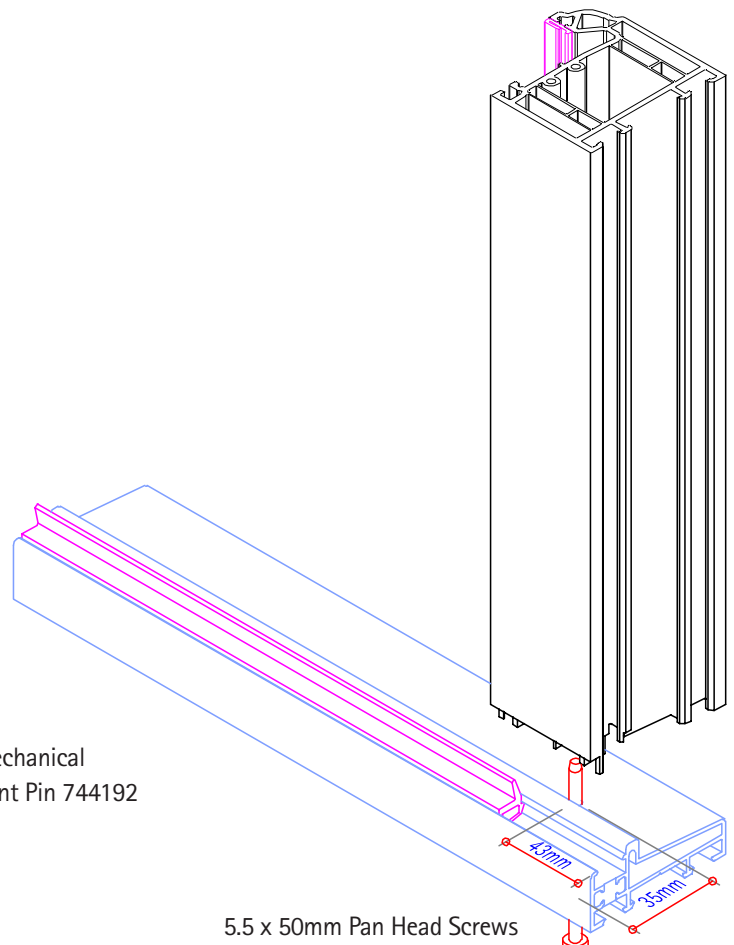
### Option 1: Mechanical Joint using Pin & Bolt

### Option 2: Mechanical Joint using Screw Ports.



Mechanical  
Joint Pin 744192

M6 x 60 Socket Cap Screw 744673



5.5 x 50mm Pan Head Screws

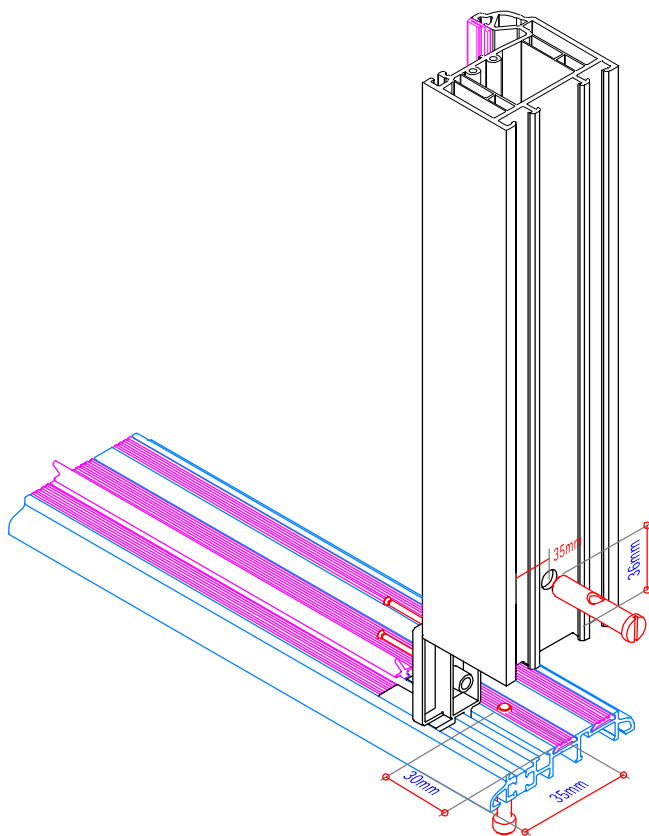
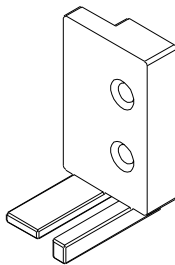
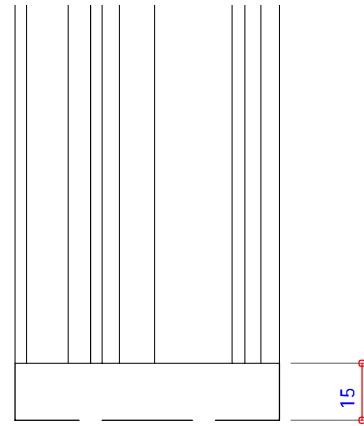
## LOW THRESHOLD (CONTINUED)

### Low Threshold 704289

Outerframe Jamb cut size = Overall height - 15mm.  
Cut reinforcement approximately 85mm short to allow clearance for the pin.  
Seal all mating faces and voids using a low modulus sealant.

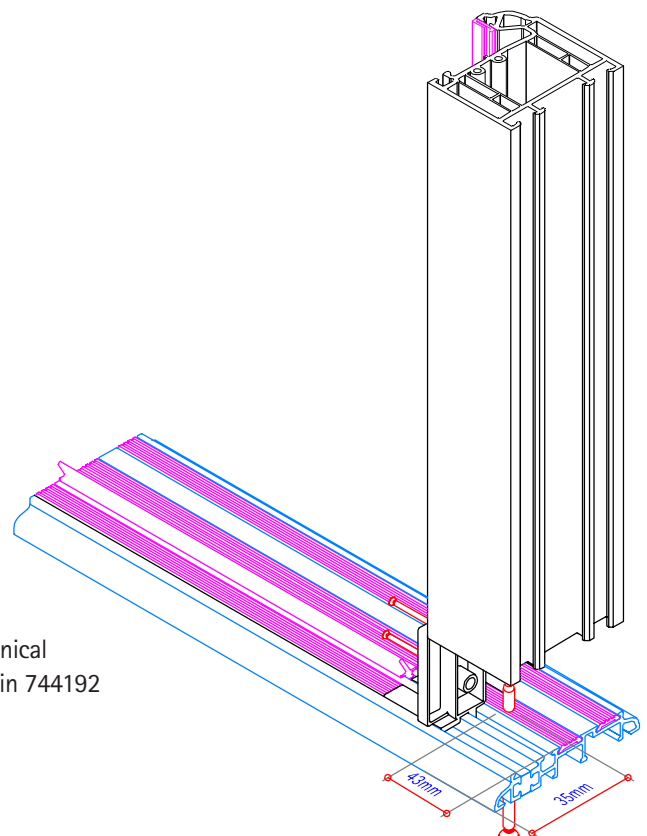
Please note: The Part M Threshold 704289 is not suitable on doors with shootbolt locking.

The 709225 Low Threshold Adapter is required on all frames fitted with the 704289 Part M Threshold and should always be fitted to the outerframe first. This ensures a square and flush mechanical joint.



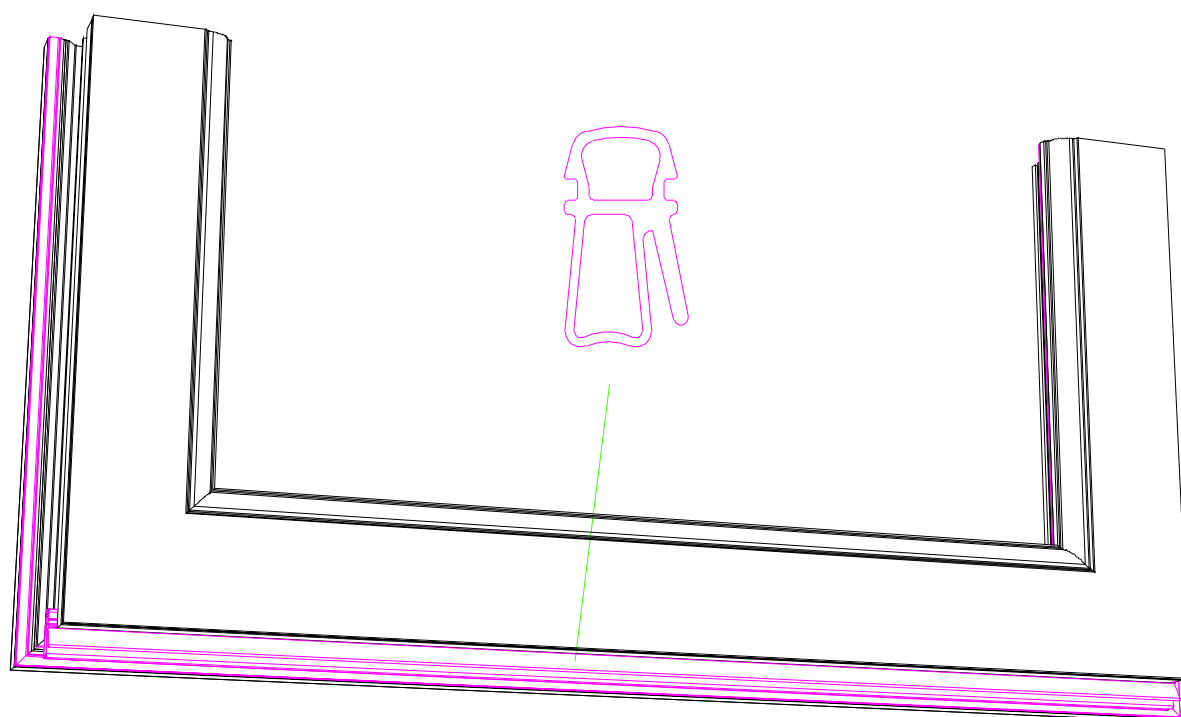
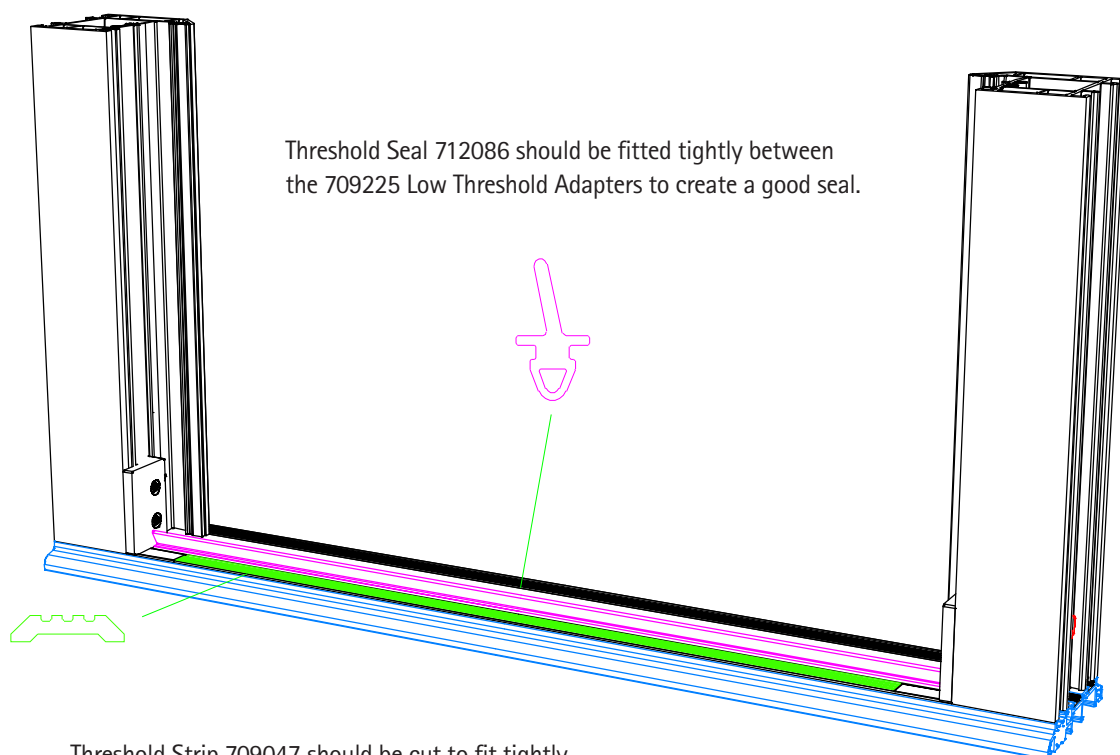
M6 x 60 Socket Cap  
Screw 744673

Mechanical  
Joint Pin 744192

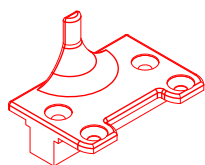


5.5 x 50mm Pan  
Head Screws

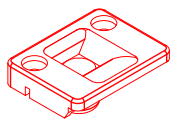
## LOW THRESHOLD (CONTINUED)



# CASEMENT SECURITY CLAWS



Casement Security Claw 744755



Security Claw Receiver for standard geometry friction stays - 709218 - X =

Security Claw Receiver for Egress and Easy Clean friction stays - 709219

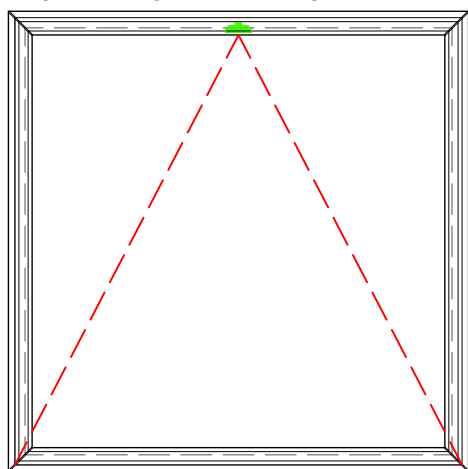
The security claw must be fitted to the hinge jamb ensure the hinge side integrity of a casement sash, as a requirement for enhanced security.

All security claws should be fixed within 100mm from the inside edge of the outerframe and in the centre as shown. 14mm diameter hole is required for the Security Claw Receiver.

When using 713185 or 713186 U-channel reinforcing, these need to be inserted as two separate pieces.

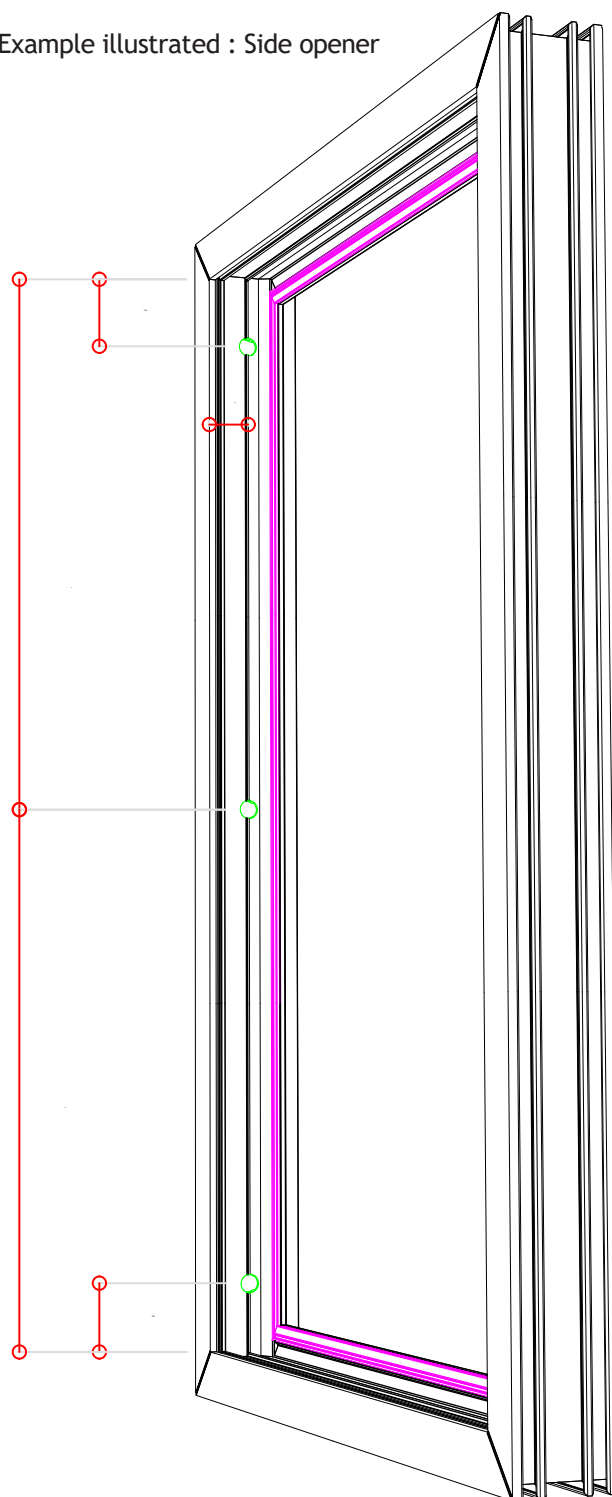
## Increasing Compression

The Casement Security Claw can also be used to increase compression and is recommended on top hung sash widths or side hung sash heights exceeding 1200mm.



Example Illustrated: Top opener

Example illustrated : Side opener



## Screw Specification:

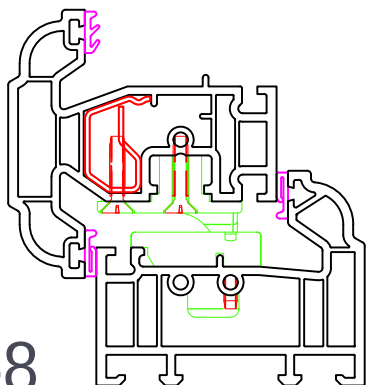
### Security Claw

4.3(4.2) x 25mm Counter Sunk Gimlet Point screw into PVC or 3.9 x 16mm Drill Point Screw into reinforcing.

### Security Claw Receiver

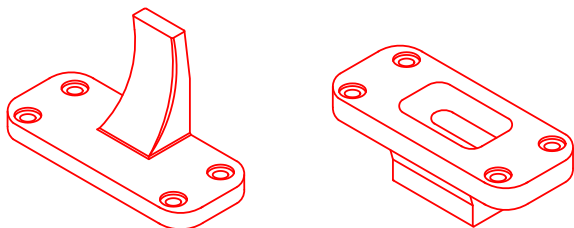
For Transoms - 4.3(4.2) x 20mm Counter Sunk Gimlet Point screw into PVC or 3.9 x 19mm Drill Point Screw into reinforcing.

For Outerframe - - 4.3(4.2) x 25mm Counter Sunk Gimlet Point screw into PVC or 3.9 x 22mm Drill Point Screw into reinforcing.

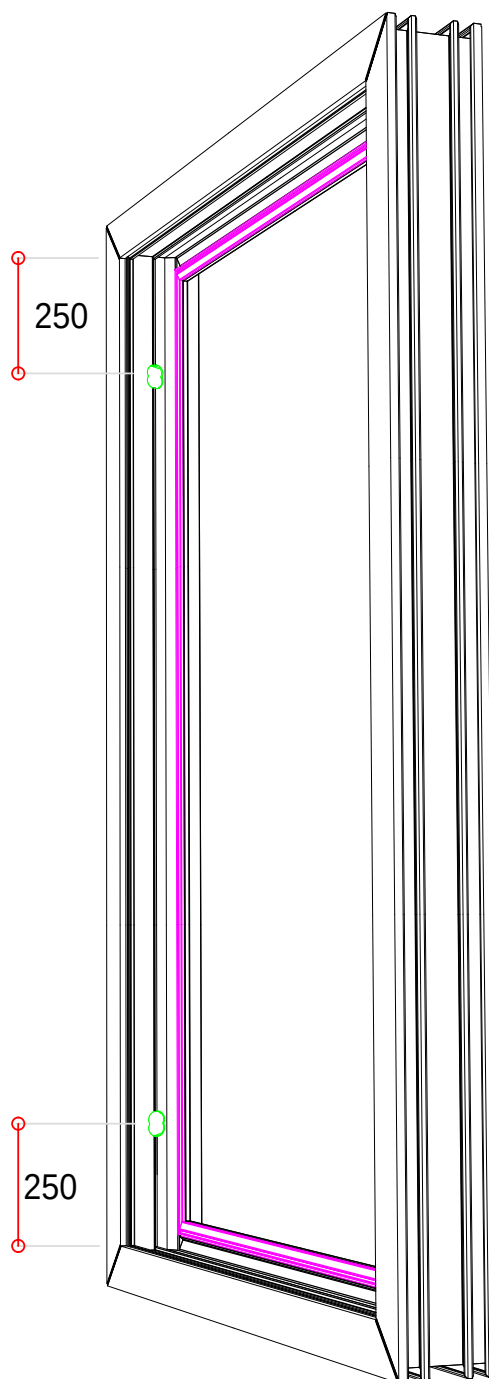
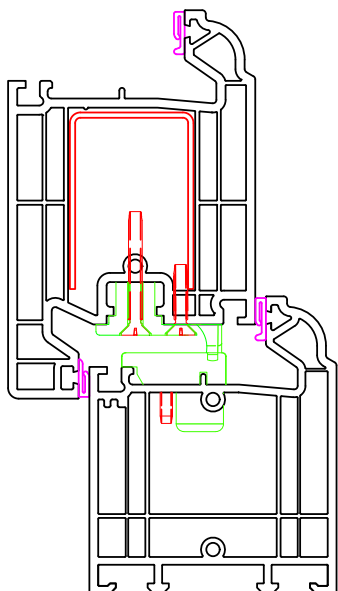
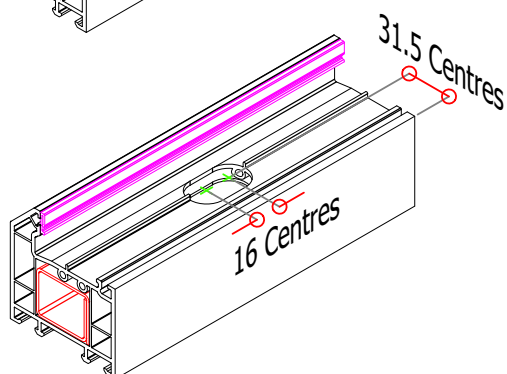
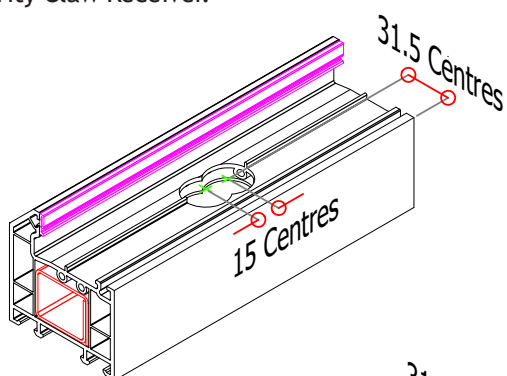


# DOOR SECURITY CLAWS

Door Security Claw & Keep 744769



All security claws should be fixed within 100mm from the inside edge of the outerframe and in the centre as shown. A 15/16mm diameter hole is required for the Security Claw Receiver.



## Screw Specification:

### Security Claw

4.3(4.2) x 35mm Counter Sunk Gimlet Point screw into Eurogroove & 4.3(4.2) x 25mm Counter Sunk Gimlet Point screw next to the Eurogroove.

### Security Claw Receiver

For Outerframe - 4.3(4.2) x 25mm Counter Sunk Gimlet Point screw into PVC or 3.9 x 22mm Drill Point Screw into reinforcing.

## AMENDMENTS

[illegible]

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