

Series 548 High Performance Hinged Door



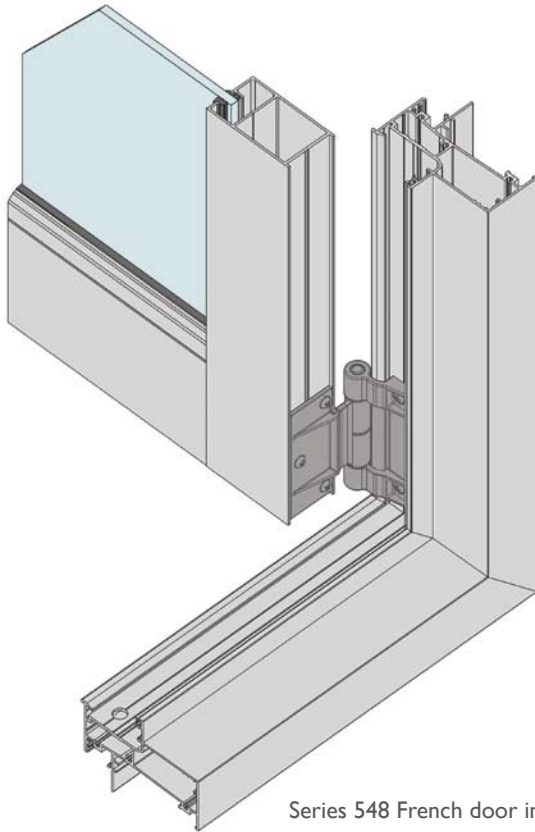
Photo courtesy of Viewco Glass. Builder: Solve Projects.



Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

KEY FEATURES / PERFORMANCE CHARACTERISTICS



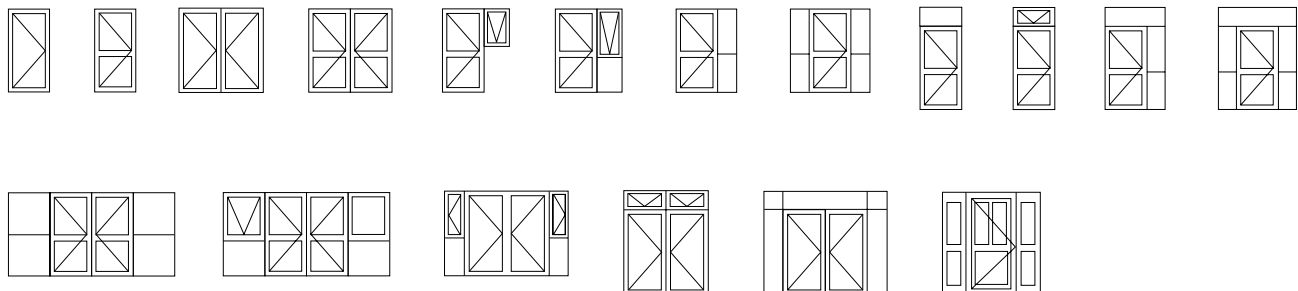
Series 548 French door internal view

- Successfully tested for compliance with AS 2047.
- The Vantage Series 548 Hinged door has been successfully tested to keep water out.
- Open out door will resist up to 300Pa of water. Open in door will resist up to 200Pa of water.
- Doors are hinged off a heavy duty double tubular jamb with thickened webs where hinges are attached.
- Rebated door stiles give a flush appearance when the two doors meet and provide superior weather protection.
- Door sections suit high quality hardware and are capable of supporting the glass without sagging.
- Parliament hinges allow external swing doors to be opened up 180° back against the wall.
- Concealed lock keeper specially designed to fit in the cavity on the leading edge of the “lazy side” door and eliminates unsightly holes milled in the aluminium for latch and lock bolt.
- The heavy duty door panels are capable of carrying 20mm insulating glass

Maximum Panel Height*	2350mm
Maximum Panel Width*	920mm
Maximum Glass Thickness	≤ 20mm

* Subject to individual site conditions and wind loads. Contact AWS Technical Support for more information, e-mail techsupport@awsaustralia.com.au

TYPICAL CONFIGURATIONS



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SOUND REDUCTION

A number of glass combinations have been tested in this hinged unit. Panel stiles were fitted with co-extruded Santoprene bulb seals.

Glass Description		
6.38mm Laminated glass	31dB(A)	RW32
19mm Insulating glass unit	32dB(A)	RW33



WERS RATINGS

Single Glazed

Glass Description	COOLING	HEATING	Uw	SHGCw	Tvw	Inf
5mm Clear	29%	15%	6.0	0.57	0.58	0.80
5mm Grey	40%	8%	6.0	0.42	0.32	0.80
5mm EverGreen	42%	6%	6.0	0.42	0.32	0.80
6.38mm Laminate	32%	15%	6.0	0.54	0.58	0.80
6.38mm Solace	44%	30%	4.5	0.46	0.53	0.80
6.38mm Comfort Plus	52%	23%	4.5	0.35	0.38	0.80

Double Glazed

Glass Description	COOLING	HEATING	Uw	SHGCw	Tvw	Inf
4Clr/10Gap/4Clr	42%	35%	4.3	0.51	0.52	0.80
4Az/10Gap/4EA	60%	28%	3.8	0.28	0.40	0.80
4/10Ar/4EA	48%	41%	3.6	0.48	0.48	0.80
4Clr/10Gap/4EA	47%	39%	3.8	0.47	0.48	0.80
5Clr/8Gap/5Clr	43%	33%	4.3	0.49	0.52	0.80
5EG/8Ar/5EA	60%	29%	3.7	0.29	0.39	0.80



2D & 3D CAD FILES AVAILABLE

GO TO: www.vantagealuminium.com.au > CAD & Revit 3D Files
CAD file: DWG or DXF VAN_548



MORE INFORMATION

For the latest updates regarding this product visit our website
www.vantagealuminium.com.au

HOW TO SPECIFY

SYSTEM NAME

Vantage Series 548 High Performance Hinged Door

FINISH

Powder Coat
Anodised

COLOUR

Select from the Vantage range of approved powder coat or anodising colours

GLASS

Specify thickness ≤ 20mm

Specify thermal performance where applicable (Uv & SHGC)

Specify acoustic performance where applicable (RW)

HARDWARE

Refer to hardware selection guide for compatible options



Specification Assistance

Need help specifying this product? email techsupport@awsaustralia.com.au and our qualified technical advisors will assist you with product selection and specification for your project.

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SPECIFIERS CHECKLIST

Not all hinged doors are the same. If you want your hinged door to perform, keep the elements on the outside where they belong and operate smoothly for years to come there are some things you should check/compare when choosing your supplier - compare us with the others.

FEATURE	Series 548	Opposition
<p>Will the hinged door keep the water out - has it been tested? The Vantage Series 548 hinged door has been successfully tested to keep water out. Open out door will resist up to 300Pa of water. Open in door will resist up to 200Pa of water. If sliding doors have to comply why not hinged doors in our opinion?</p>	YES	
<p>Are the door stiles strong enough to support the door? The Vantage Series 548 doors are hinged off a heavy duty double tubular jamb with thickened webs where hinges are attached. If the jamb is not strong enough nothing you can do in the future will make the door perform. Many of our competitors hang doors off sections not much stronger than our window sections, this usually results in the doors dropping and/or the hinge fixing failing.</p>	NO	
<p>Rebated door meeting stiles? Rebated door stiles give a flush appearance when the two doors meet and provide superior weather protection. These rebated stiles are one of the main reasons why these doors keep the water out.</p>	YES	
<p>Are the door panel sections strong enough? We have deliberately designed the door sections to suit high quality hardware and be capable of supporting the glass without sagging. There is no value hanging a flimsy door panel in the opening if it won't stand the test of time as hinged doors are subjected to far more abuse than sliding doors. Many of our competitors hinged doors are about the same size as our sliding door stiles.</p>	YES	
<p>Are parliament type hinges available? Parliament hinges allow external swing doors to be opened up 180° back against the wall. The Vantage parliament hinge has been cycle tested 120,000 times without any visual lowering of performance. This hinge is made from high tensile extruded aluminium.</p>	YES	
<p>On pairs of doors is the lock keeper concealed? Concealed lock keeper specially designed to fit in the cavity on the leading edge of the "lazy side" door and eliminates unsightly holes milled in the aluminium for latch and lock bolt. This recessed keeper plus the rebated stile makes it extremely difficult for intruders to access the latch and bolt for forced entry.</p>	YES	
<p>Can the door panels be double glazed ? The heavy duty door panels are capable of carrying 20mm insulating glass made up of 5mm glass with 10mm air gap and another sheet of 5mm glass.</p>	YES	
<p>High quality hardware? Heavy duty custom hinges that are designed to suit the door & frame without having to fit shims. Custom injection moulded lock keepers remove the need for ugly shims and cutouts in the stiles and / or frame. Specially designed compression blocks at the four corner joints of the door. These take the "sloppiness" out of corner joints and make sure that the door stays rigid and square. Compare our door with others available and you will see what we mean about strength and rigidity. Co-extruded Santoprene door stop seal. Custom locking options, ANDO™, MIRO™ and ICON™</p>	YES	

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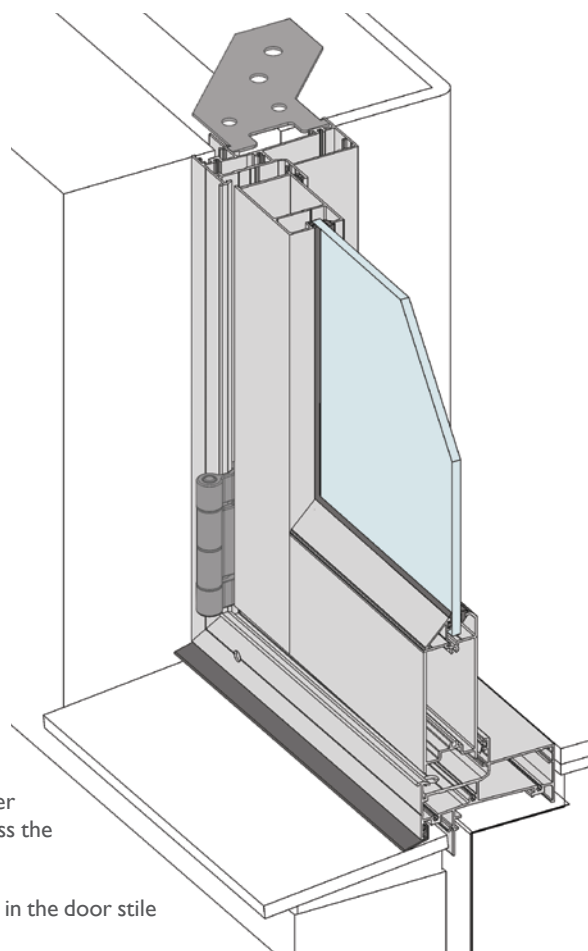
DESIGN FEATURES

1. Hinged doors unlike sliding doors are not included in the current Australian Standard AS2047 and many manufacturers take advantage and do not test them. But this will not console any customer when water floods across their expensive carpeted floors. The solution would be to tile the floor behind the hinged door and supply the home owner with a mop and bucket or preferably fit a Vantage Series 548 external swing hinged door has been successfully tested to 300Pa water resistance and the internal swing door to 150Pa. These two water ratings would allow you to install these doors in exposed locations. We also offer lowline sills for high traffic areas.

2. The Vantage Series 548 Hinged door features an unusual design embellishment - extra wide top and bottom rails that give the door the chunky appearance of traditional timber designs.

This strength of appearance is also backed up by true structural integrity. Vantage Series 548 doors feature a thoughtful but invisible innovation - specially designed backing plates at the four corner joints of the door to make sure that the door stays rigid and square. Compare our door with others available and you will see what we mean about strength and rigidity.

3. Rebated door stiles give a flush appearance when the two doors meet and provide superior weather protection. Unightly applied rebates are eliminated.
4. Concealed lock keeper specially designed to fit in the cavity on the leading edge of the "lazy side" door and eliminates unsightly holes milled in the aluminium for latch and lock bolt. This recessed keeper plus the rebated stile makes it extremely difficult for intruders to access the latch and bolt for forced entry.
5. Doors can be supplied with standard or multi point lever lock installed in the door stile or with a tulip knob lock placed in a door chair rail.
6. Mitred frame for maximum weather performance as the weather seals are continuous. The sump type sill drains the water down and out.
7. No unsightly shims and packers under the keeper and or hinges as we use custom injection moulded lock keepers, flush bolt blocks and flush bolt guides.
8. Custom hinges wrap around the door stile and jamb removing the need for notching and shimming. These custom components dramatically improve the appearance.
9. Two frame widths, the Universal 80mm or the 102mm wide frame that will couple with any of the Vantage window to door couplers as detailed later in these notes.
10. Custom Parliament hinges can be fitted to 80mm universal frame and allow french doors to project out and avoid opening against the brick jamb, can open a full 180 degrees and lie parallel with the exterior wall. These hinges are unusual in being made from extremely strong, extruded aluminium rather than die cast aluminium. They have been tested to more than 120,000 opening cycles without any reduction of performance.
11. Door panels can be fitted with ClearVENT™ sashless double-hung inserts.
12. Custom ANDO™, ICON™ and MIRO™ lever latch sets complete the package and both are illustrated in this section.

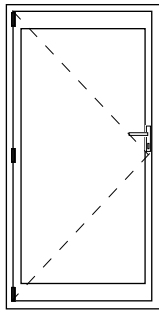


All of the important features are shown in full colour at: www.vantagealuminium.com.au

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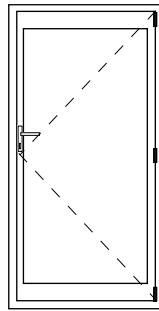
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TYPICAL CONFIGURATIONS

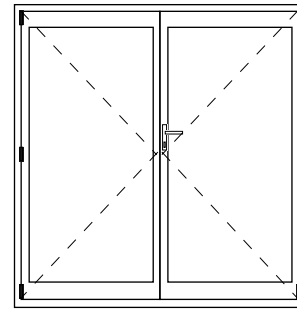


Standard lock
Lever latch set
(key both sides)

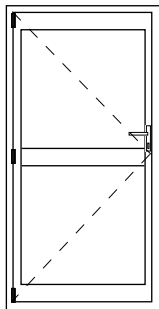
Type. 'LEH' (external swing)
Type. 'LIH' (internal swing)



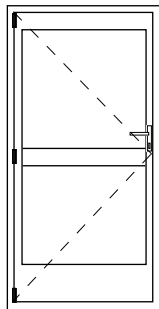
Type. 'REH' (external swing)
Type. 'RIH' (internal swing)



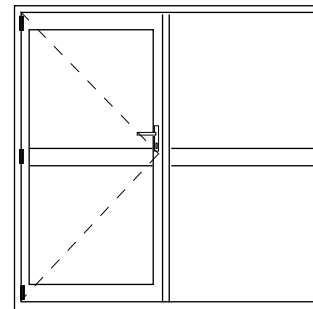
Type. 'EHH' (external swing)
Type. 'IHH' (internal swing)



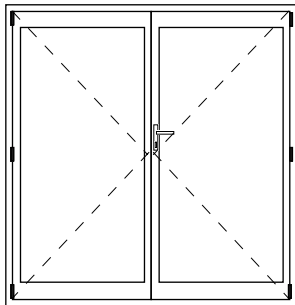
Optional
68 or 122mm Chair rail can be applied through door and sidelight.



Optional
Tall bottom rail



Optional
Sidelight with run through head and sill and heavy duty mullion designed to carry hinges.



S = Serviceability limit state (deflection = L/150).
U = Ultimate strength limit state (factored yield strength = 104 MPa).

These tables have been calculated using nominal section properties.

A typical assembly has been tested as per the requirements of AS2047,

Ultimate strength rating has been limited to 4500 Pa.

2200 Serviceability ratings were restricted by the maximum water resistance (300Pa) achieved on this product.

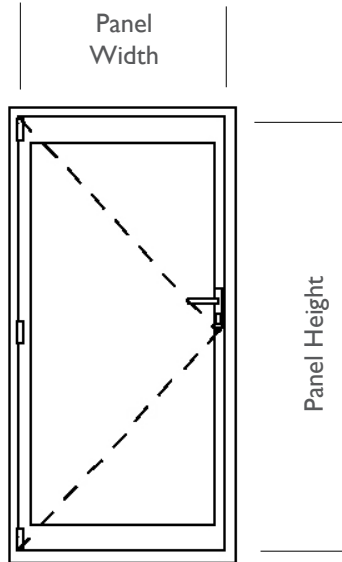
Frame Height mm	Panel Width mm	Meeting Stiles	
		S	U
2100	1000	2200	4500
2100	1200	2114	4500
2100	1400	1808	3942
2100	1600	1588	3455
2100	1800	1424	3090
2400	1000	1677	4222
2400	1200	1380	3470
2400	1400	1177	2956
2400	1600	1030	2583
2400	1800	920	2301

Wind Ratings (Pa) Meeting stiles.

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LIMITATIONS



Maximum hinge Door Panel Sizes with Cast Hinges

Hinge quantity	3. hinges - height less than or equal to 2200mm 4. hinges - height greater than to 2200mm.	
Maximum weight	with 3. hinges	30 kg
	with 4. hinges	50 kg
Maximum panel width	920mm	
Maximum panel height	2350mm	

with Parliament Hinges

Maximum weight	with 3. hinges	50 kg
Maximum width	920mm	
Maximum height	Will vary depending on weight.	

Note: 3 Point locking systems or flushbolts are recommended for door panels over 2040mm high and doors in exposed positions.

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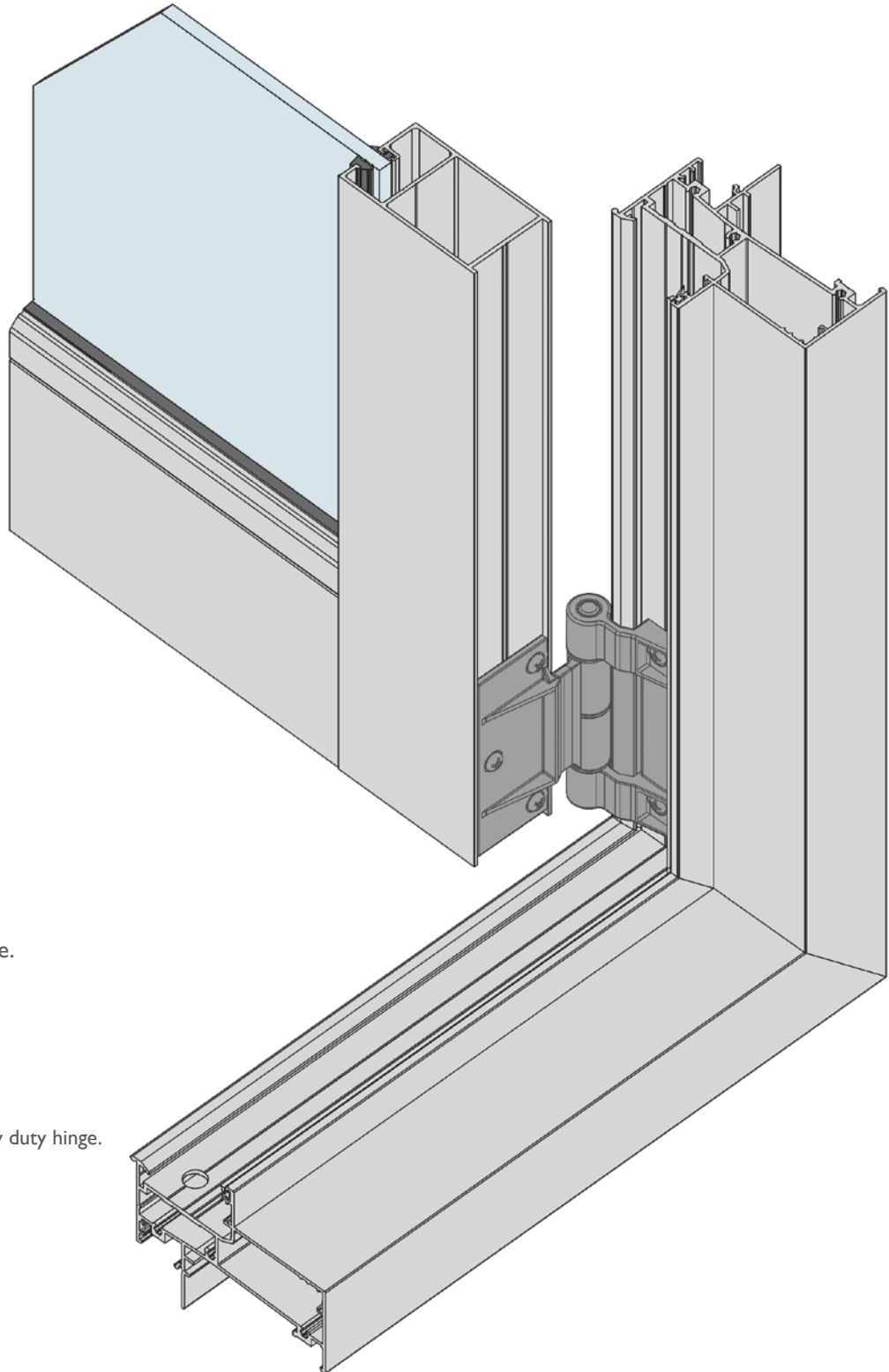
HARDWARE MAKES THE DIFFERENCE

Standard Hinge

Designed to allow door panels to open 90°.

Hinge frame leaf fixed through reinforced portions of frame with 10# stainless steel self tapping screws.

The hinge leaves nest into the frame and stile removing the need for unsightly shims, maximise strength and to ensure that the gap between frame and stile is maintained.



Vantage custom die cast hinge.

finishes available:

- Black
- Pearl white
- AWS Silver
- Special paint

We also offer an extruded heavy duty hinge.

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HARDWARE MAKES THE DIFFERENCE

Parliament Hinge

Designed to allow door panels to open 180° and lay back against the wall as detailed.

Hinge fixed on two planes to both frame and stile with 10# countersunk stainless steel self tapping screws.

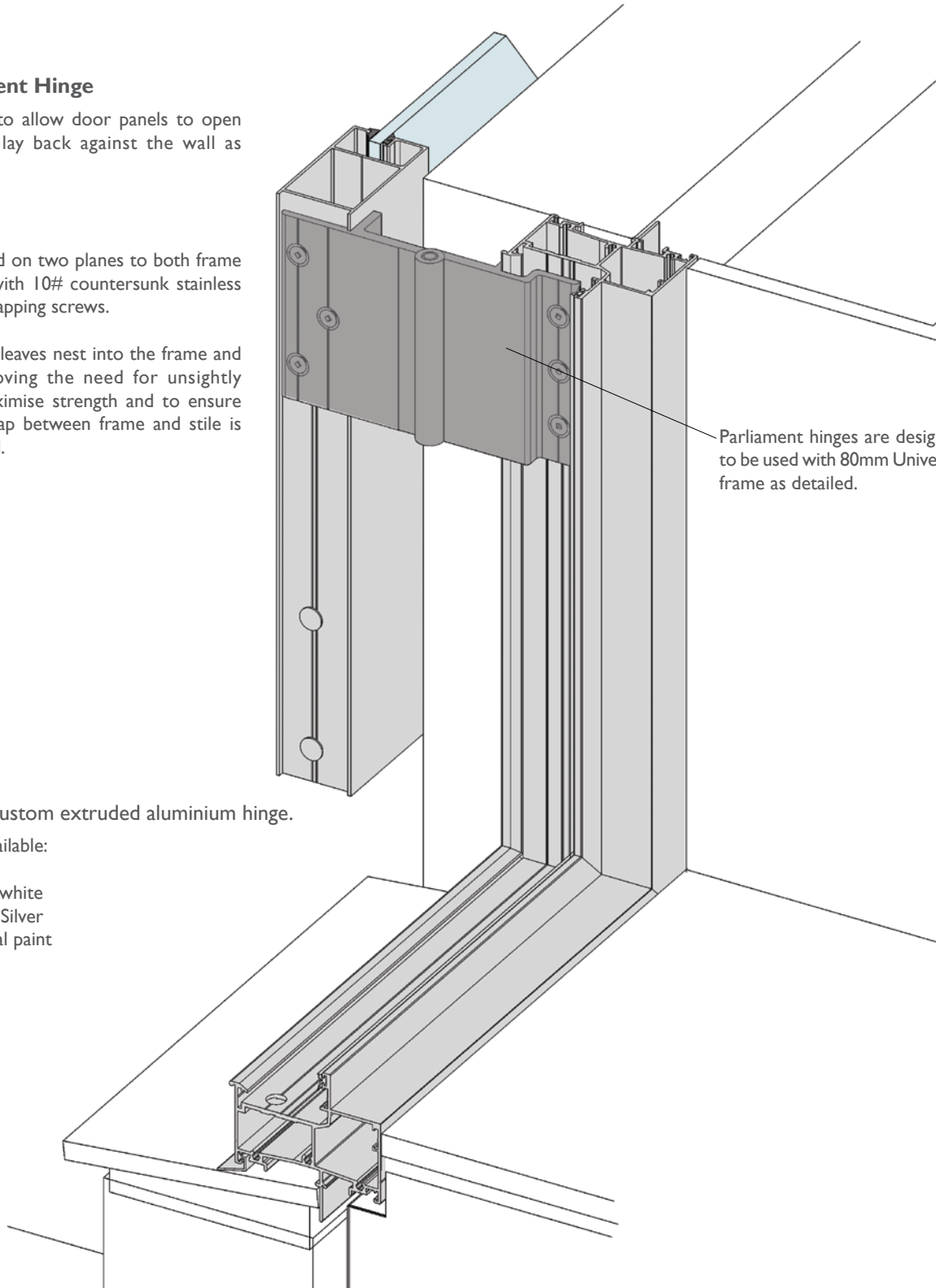
The hinge leaves nest into the frame and stile removing the need for unsightly shims, maximise strength and to ensure that the gap between frame and stile is maintained.

Parliament hinges are designed to be used with 80mm Universal frame as detailed.

Vantage custom extruded aluminium hinge.

finishes available:

- Black
- Pearl white
- AWS Silver
- Special paint



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HARDWARE MAKES THE DIFFERENCE



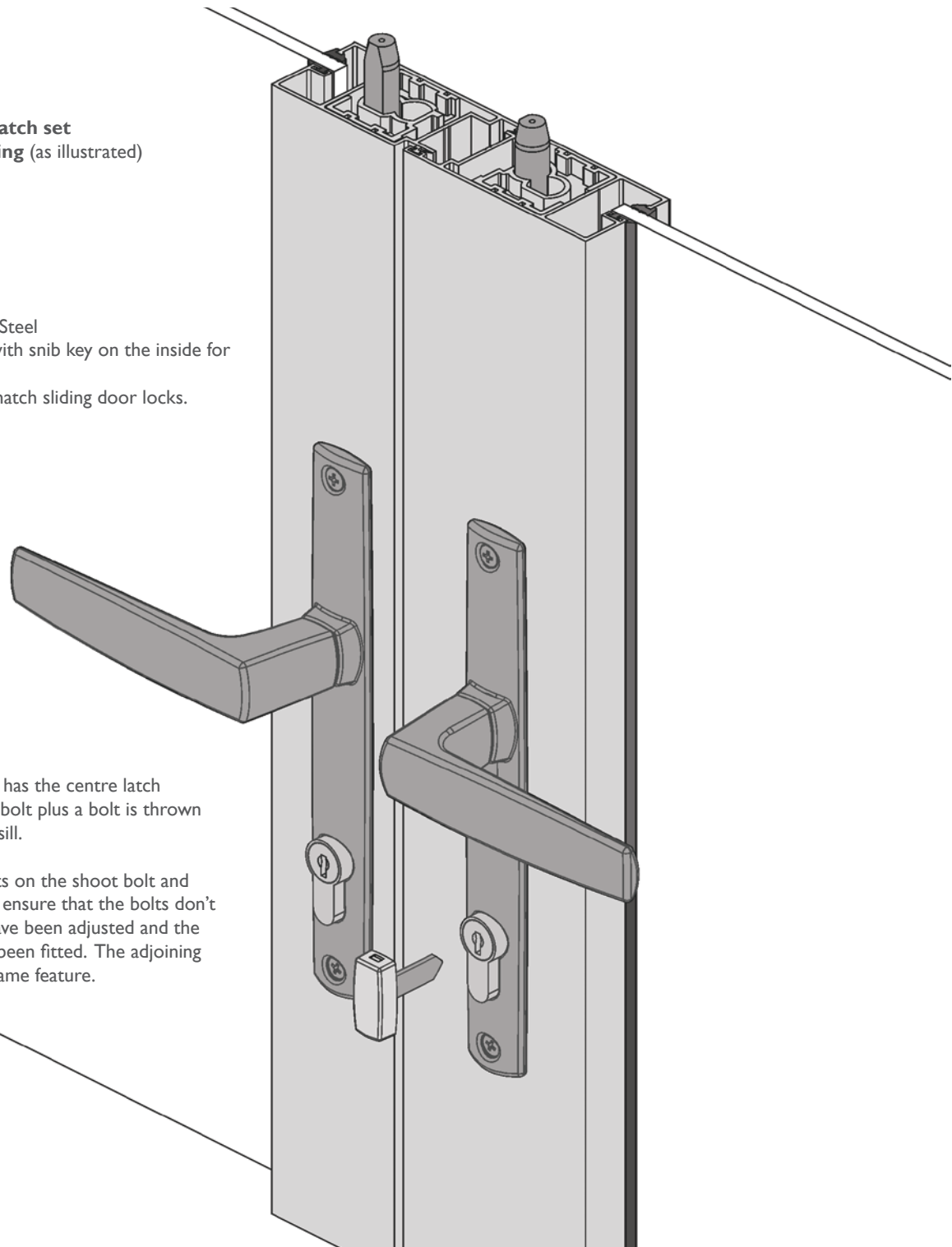
ANDO™ lever latch set 2 & 4 point locking (as illustrated)

finishes available:

- Black
- Pearl white
- Primrose
- AVS Silver
- Special paint
- 316 Stainless Steel

Comes standard with snib key on the inside for everyday latching.

Can be keyed to match sliding door locks.



Note:

Four point locking has the centre latch tongue and throw bolt plus a bolt is thrown into the head and sill.

There are flat spots on the shoot bolt and the guide block to ensure that the bolts don't move after they have been adjusted and the guide blocks have been fitted. The adjoining flushbolt has the same feature.

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HARDWARE MAKES THE DIFFERENCE



ICON™

Latch Set

finishes available:

- 316 Stainless steel

ALTERNATIVE

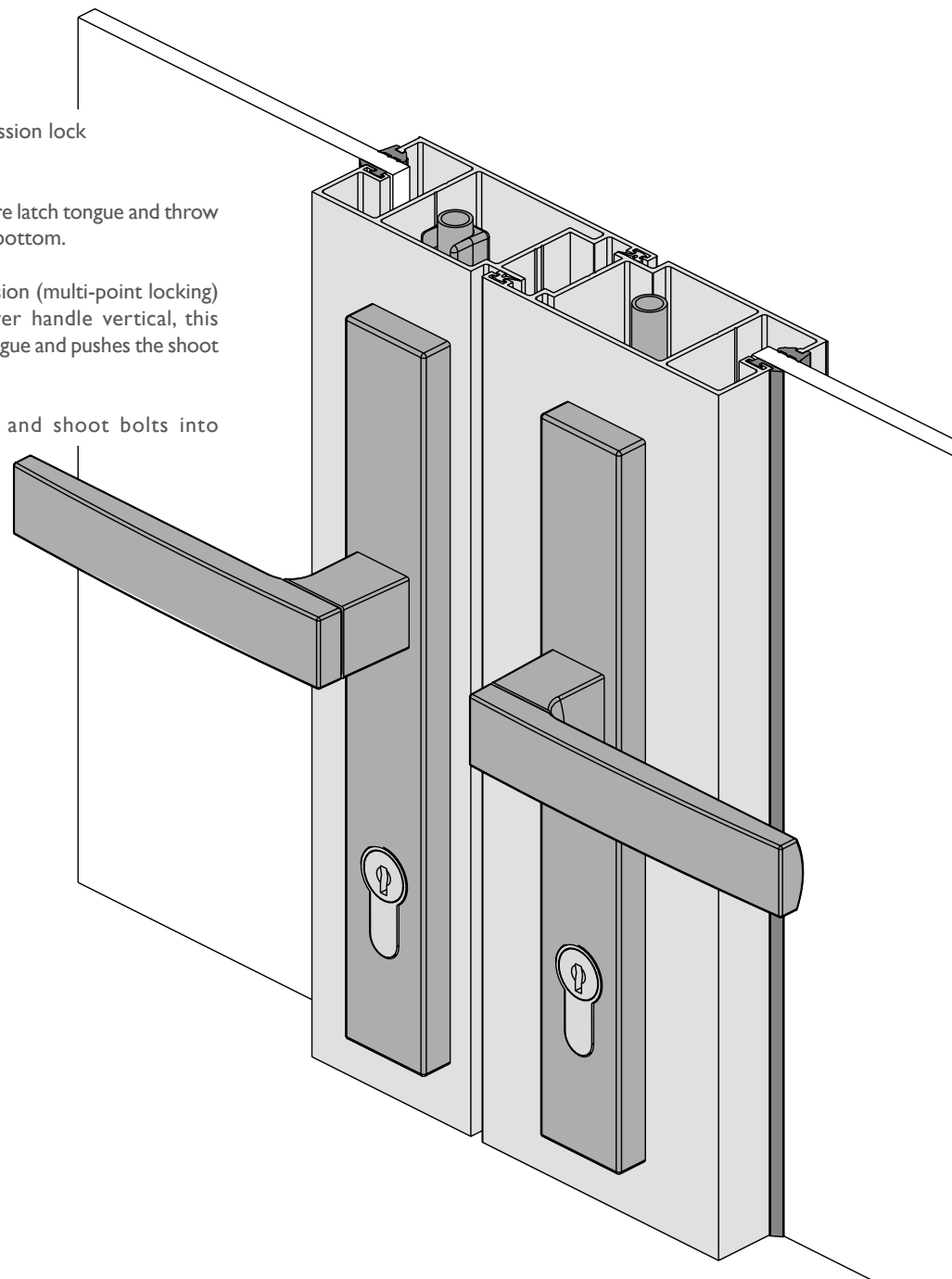
Also available as lever compression lock

Notes:

Four point locking has the centre latch tongue and throw bolt plus shoot bolts top and bottom.

To activate the lever compression (multi-point locking) feature turn the internal lever handle vertical, this activates the central locking tongue and pushes the shoot bolts into head and sill keeper.

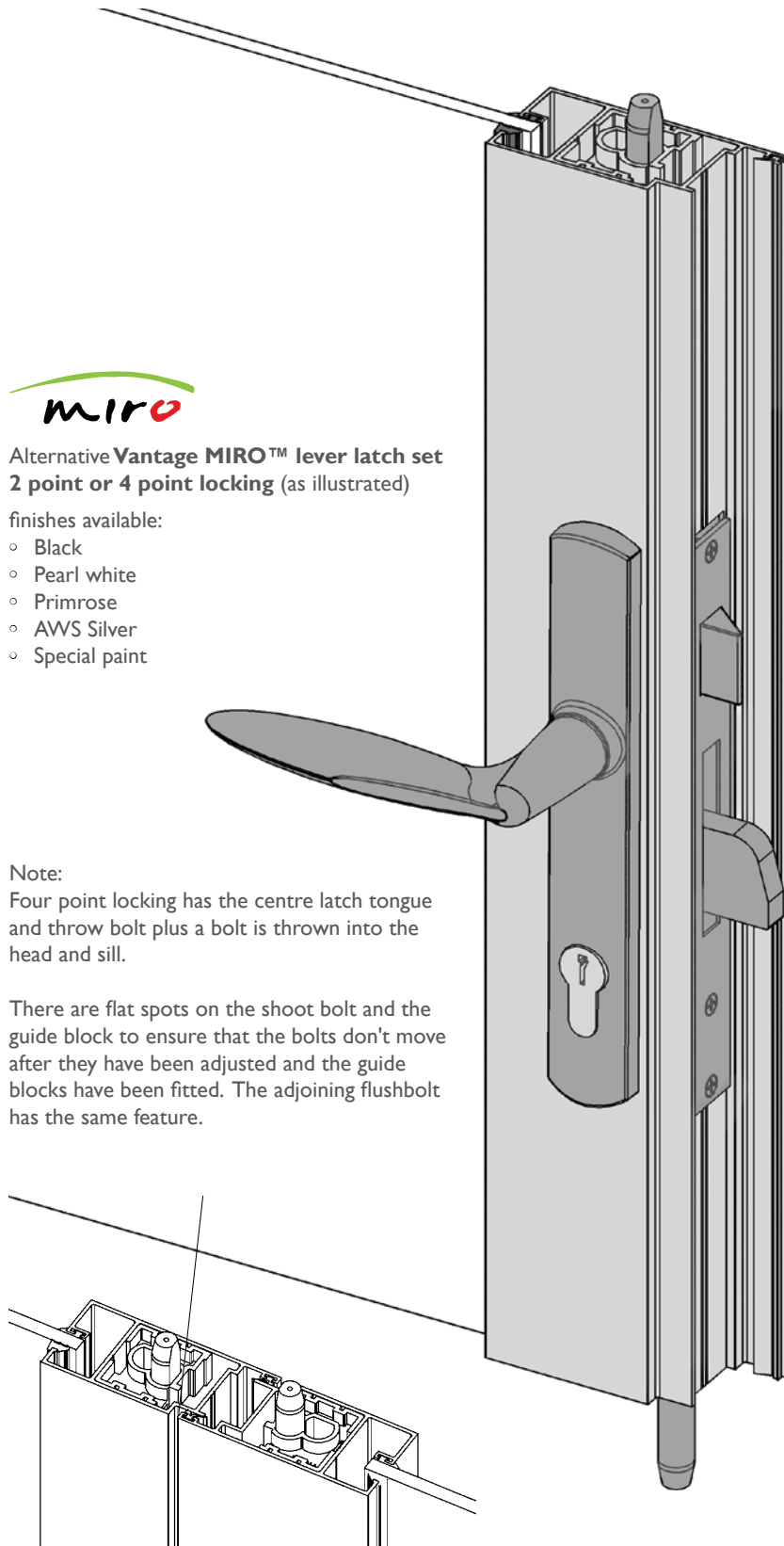
Turning the key locks bolt and shoot bolts into position.



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HARDWARE MAKES THE DIFFERENCE



Alternative **Vantage MIRO™** lever latch set
2 point or 4 point locking (as illustrated)

finishes available:

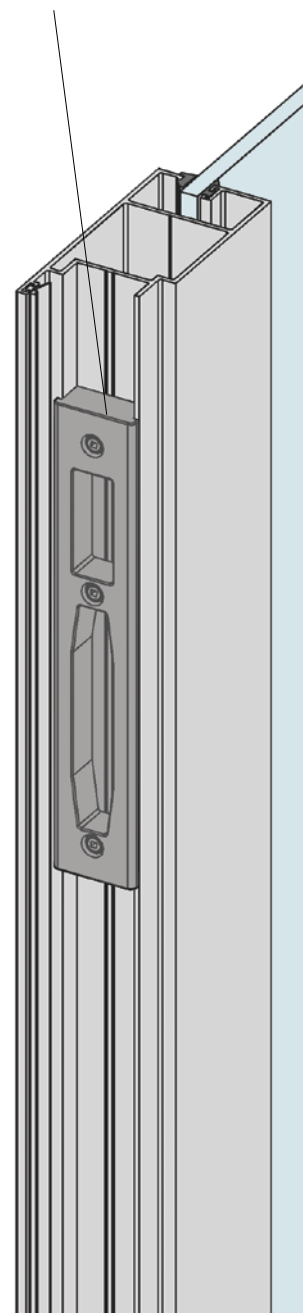
- Black
- Pearl white
- Primrose
- AWS Silver
- Special paint

Note:

Four point locking has the centre latch tongue and throw bolt plus a bolt is thrown into the head and sill.

There are flat spots on the shoot bolt and the guide block to ensure that the bolts don't move after they have been adjusted and the guide blocks have been fitted. The adjoining flushbolt has the same feature.

Custom moulded glass filled nylon lock keeper designed to suit both ANDO™, ICON™ and MIRO™ locks.



Series 548 High Performance Hinged Door

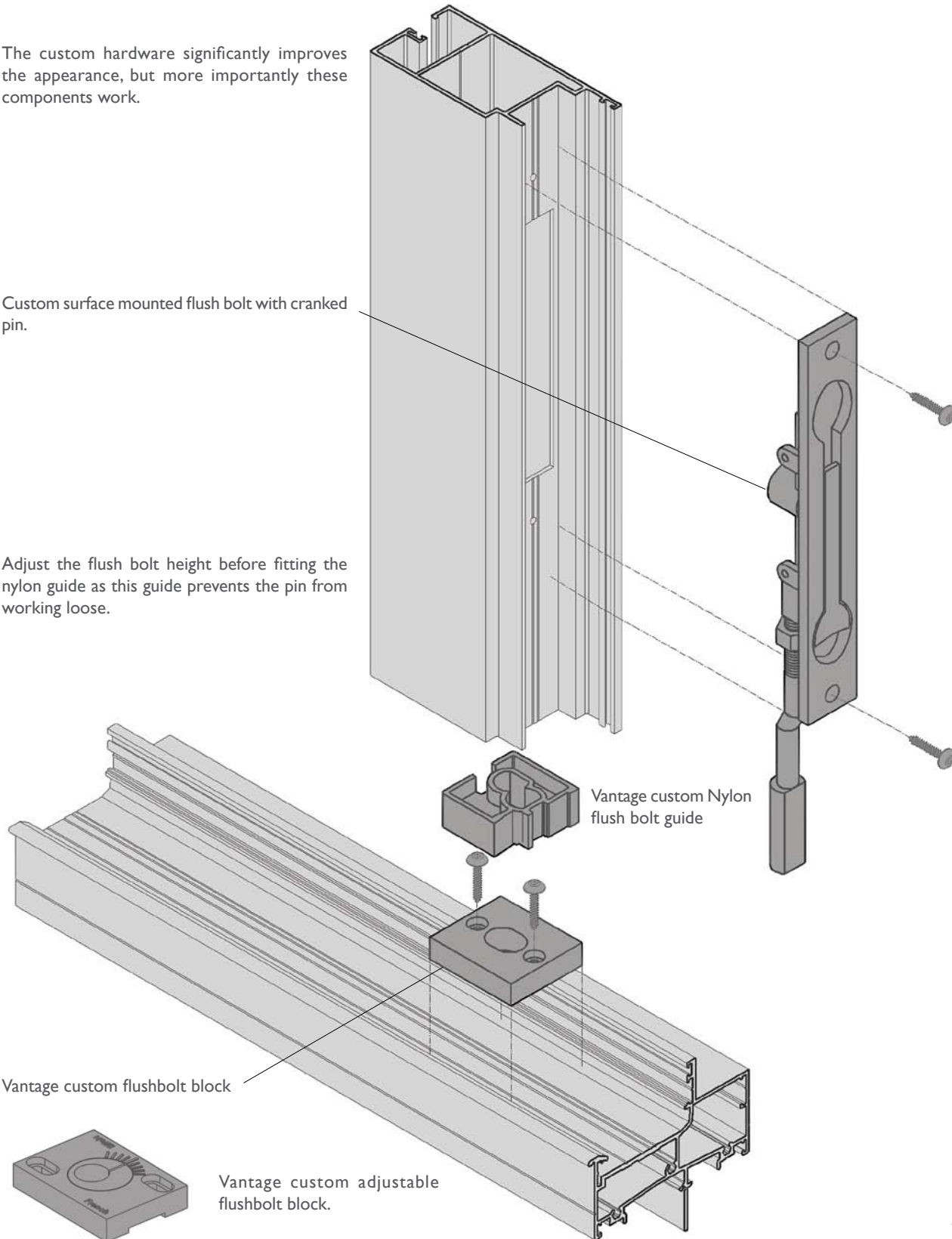
DATE: NOV 09
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HARDWARE MAKES THE DIFFERENCE

The custom hardware significantly improves the appearance, but more importantly these components work.

Custom surface mounted flush bolt with cranked pin.

Adjust the flush bolt height before fitting the nylon guide as this guide prevents the pin from working loose.



Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

VERTICAL SECTION THROUGH STANDARD SILL - SINGLE GLAZED

Sill detail

External opening hinged door
102mm frame
Single glazed

Door safety glass in accordance with AS 1288.

Captive Santoprene security backing.

Roll-in PVC glazing wedge

Standard splayed glazing bead. We also offer an alternative square bead.

Stainless steel door assembly screws.

Standard 113mm high bottom rail.

Optional bottom rail weatherbar.

Co-extruded Santoprene frame seal.

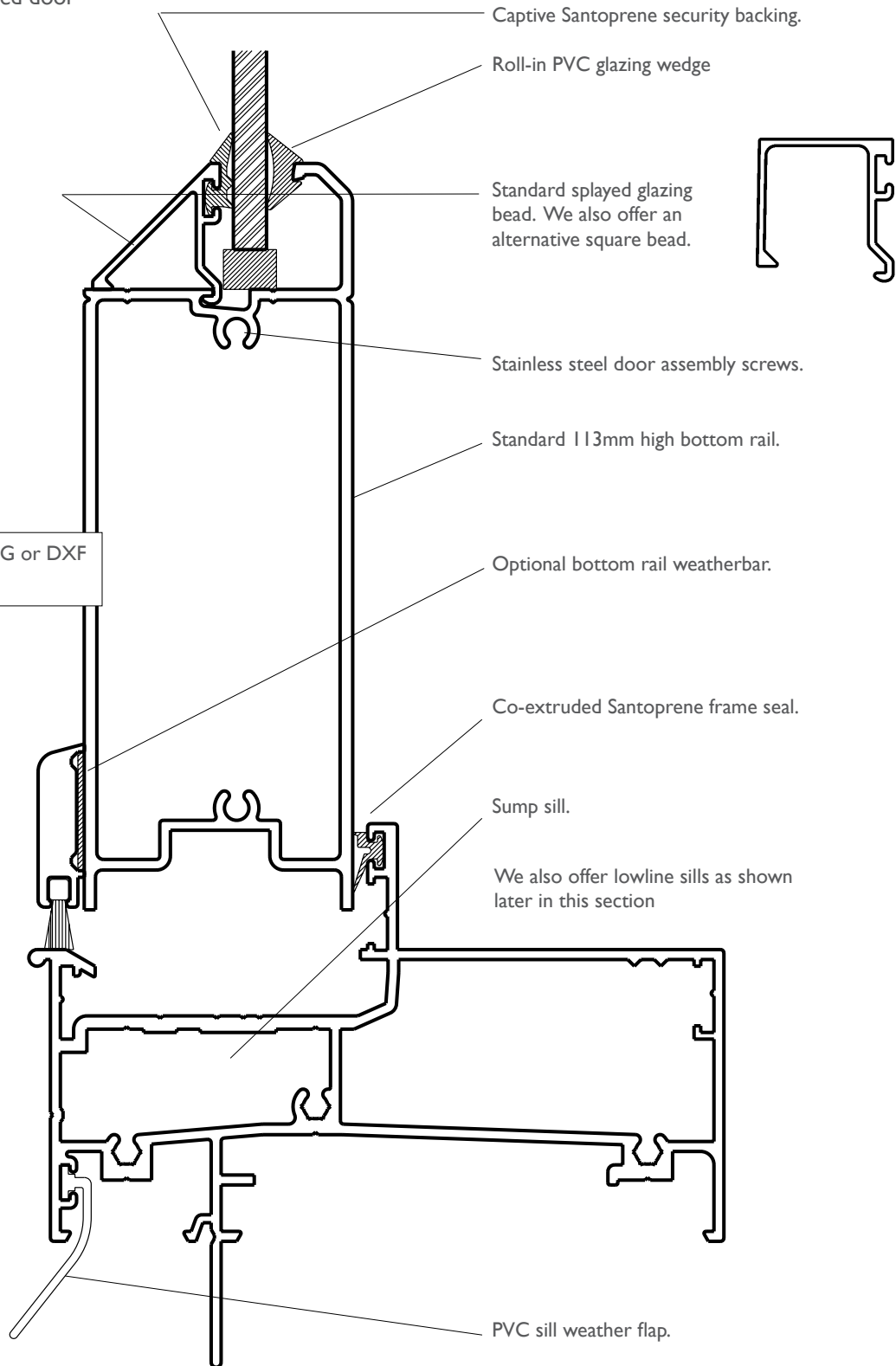
Sump sill.

We also offer lowline sills as shown later in this section

PVC sill weather flap.



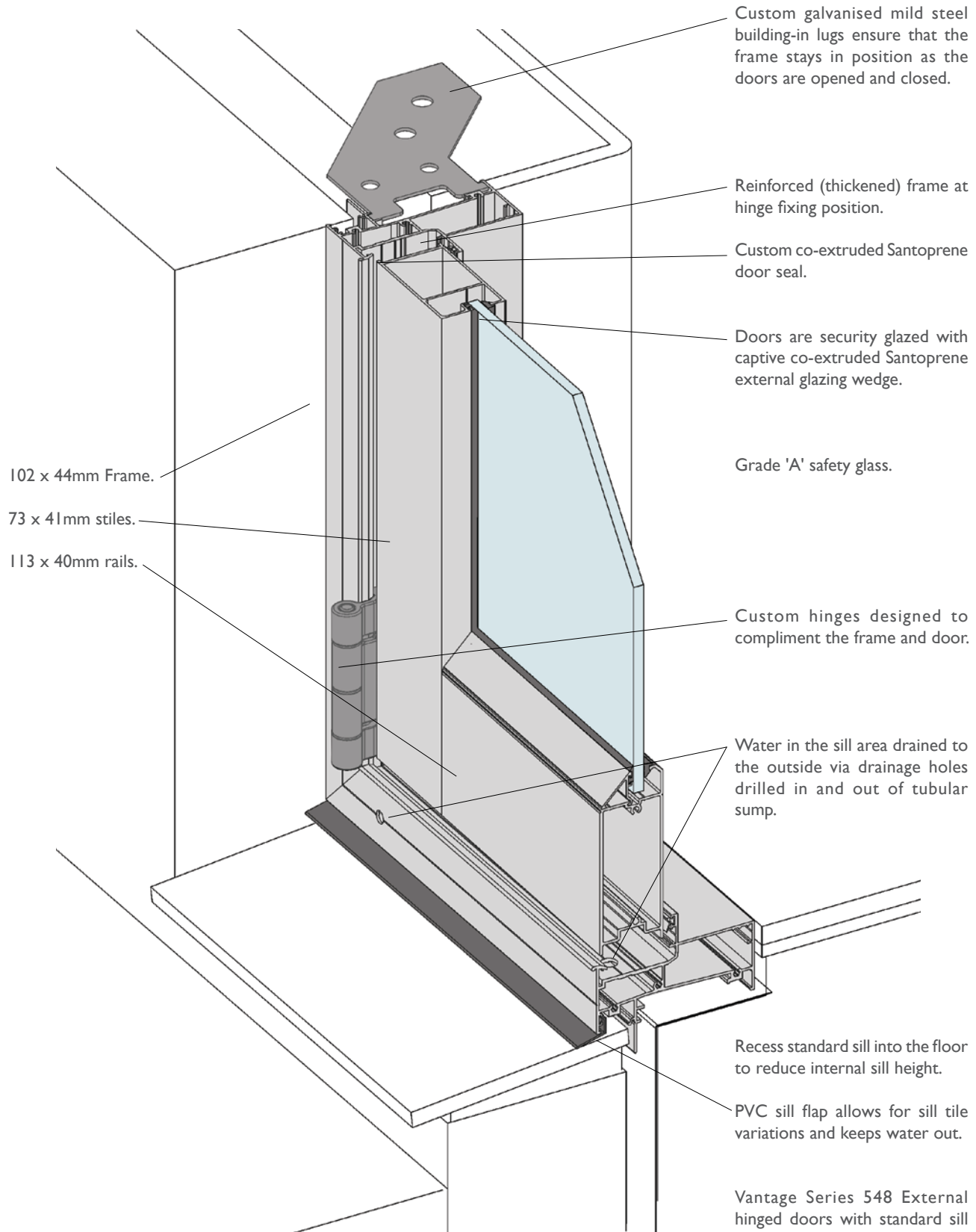
CAD file: DWG or DXF
VAN_548



Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

SINGLE GLAZED EXTERNAL HINGED DOOR SILL CORNER



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Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

VERTICAL SECTION THROUGH STANDARD SILL - DOUBLE GLAZED

Sill detail

External opening hinged door
102mm frame
Double glazed

Door safety glass in accordance with AS 1288.

Captive Santoprene security backing.

Roll-in PVC glazing wedge

Stainless steel door assembly screws.

Standard 113mm high bottom rail.

Co-extruded Santoprene frame seal.

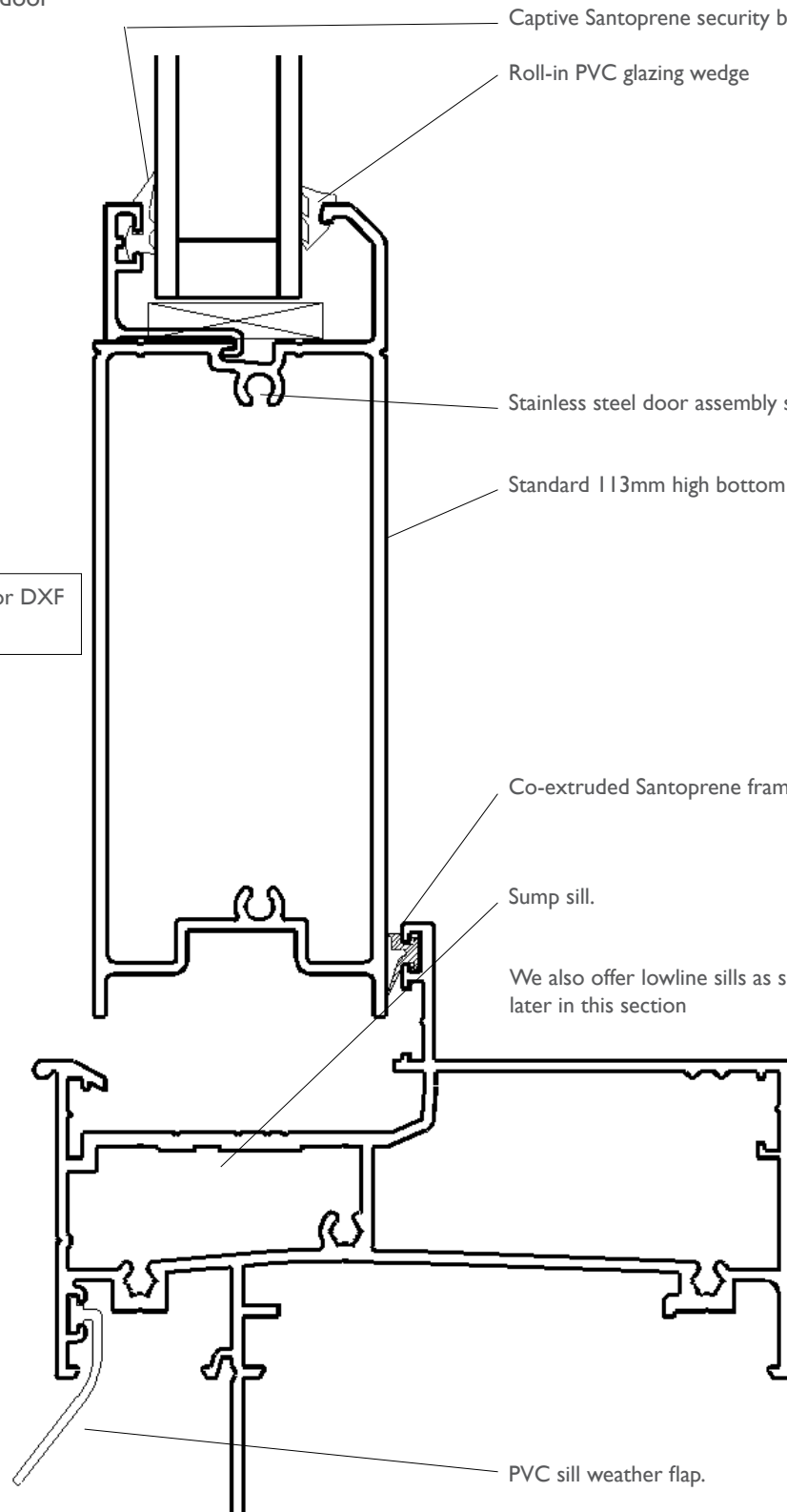
Sump sill.

We also offer lowline sills as shown later in this section

PVC sill weather flap.



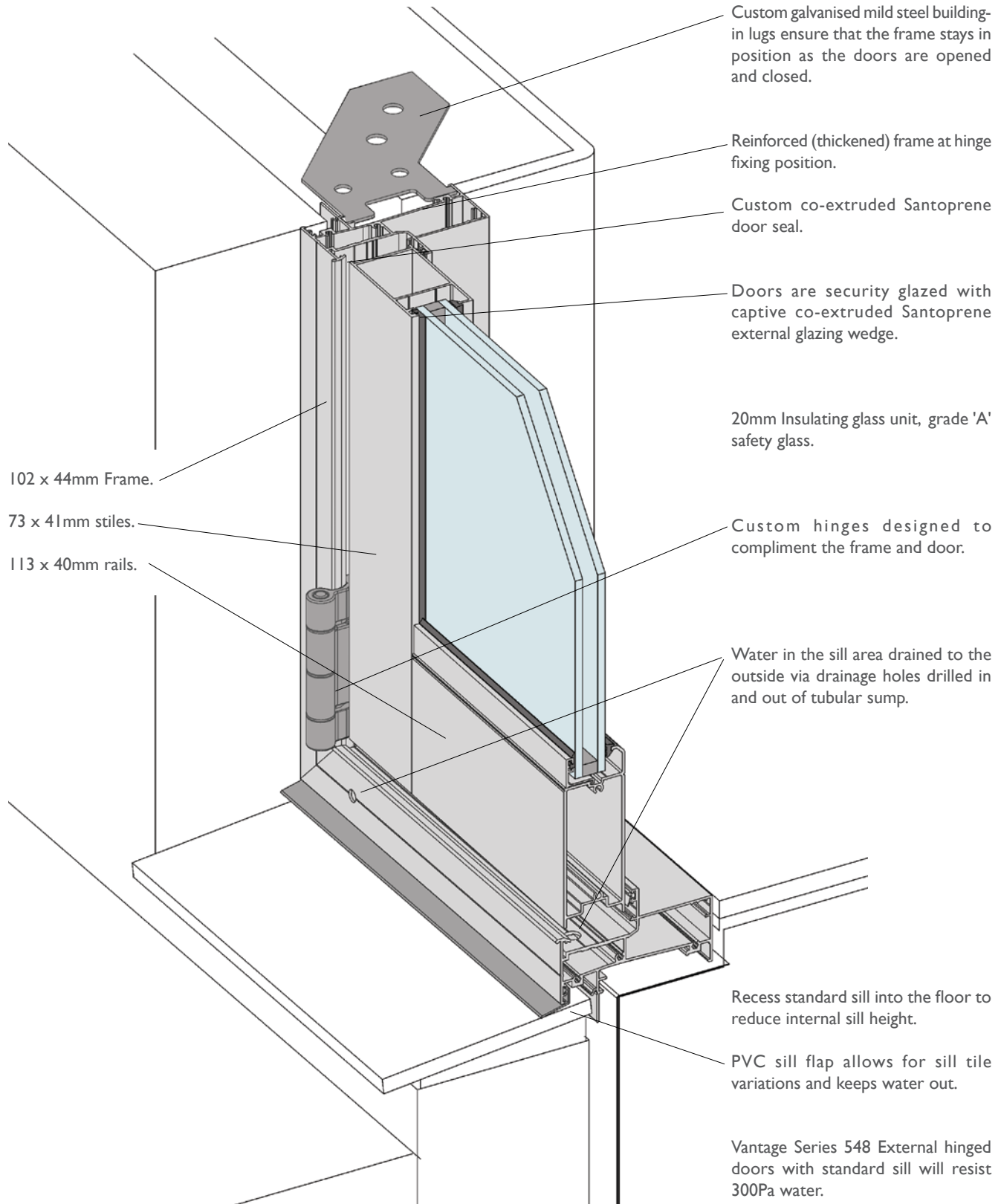
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VAN_548



Series 548 High Performance Hinged Door

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DOUBLE GLAZED HINGED DOOR SILL CORNER



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Series 548 High Performance Hinged Door

DATE: NOV 09
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SCALE: NOT TO SCALE

VERTICAL SECTION THROUGH ALTERNATIVE LOWLINE SILL

Lowline Sill detail

External opening hinged door
102mm frame
Alternative square
glazing bead

Door safety glass in accordance with AS 1288.

Captive Santoprene security backing.

Roll-in PVC glazing wedge

Stainless steel door assembly screws.

Standard 113mm high bottom rail.



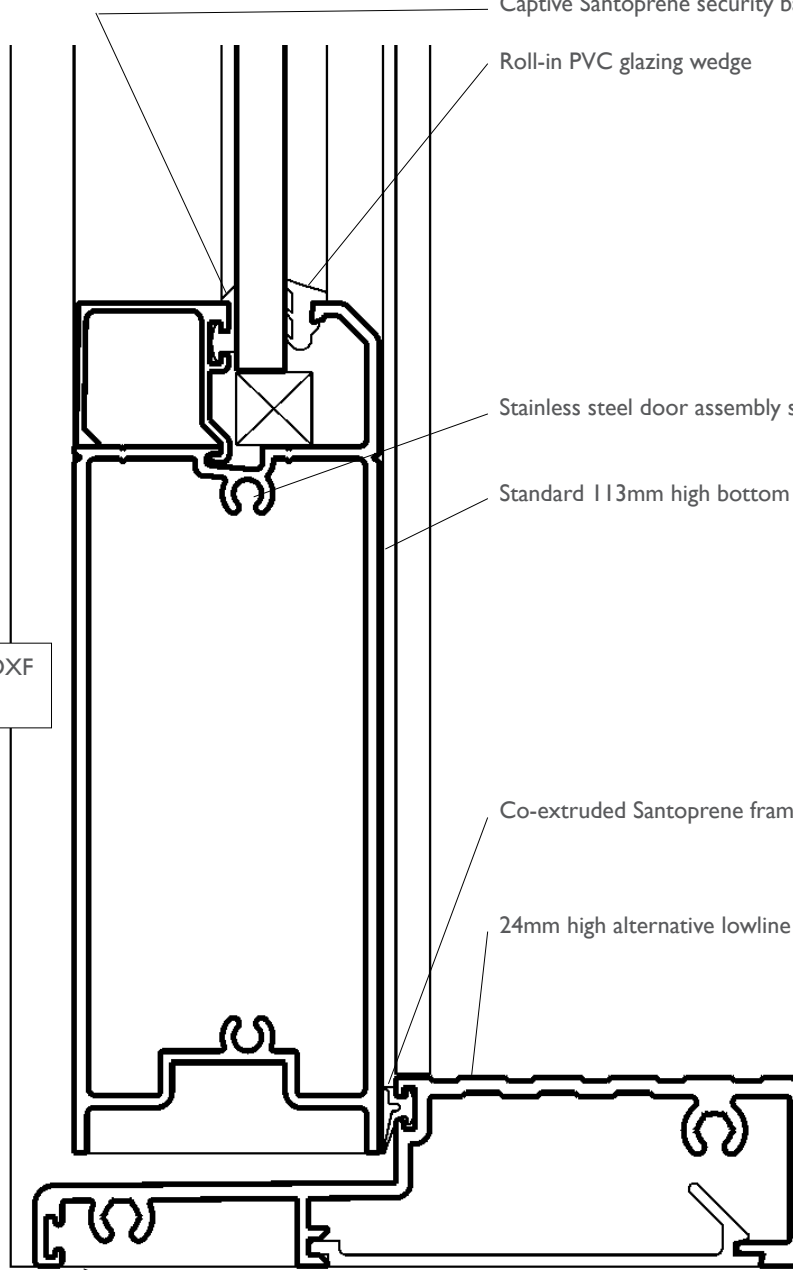
CAD file: DWG or DXF
VAN_548

Co-extruded Santoprene frame seal.

24mm high alternative lowline sill.

150mm lengths of flat filler to assist with installation.

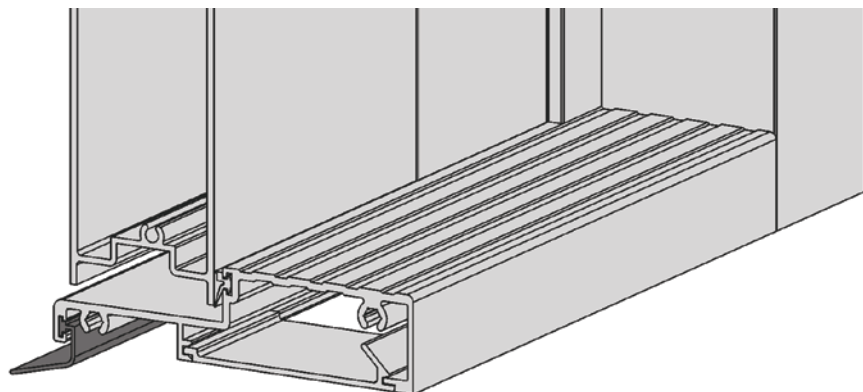
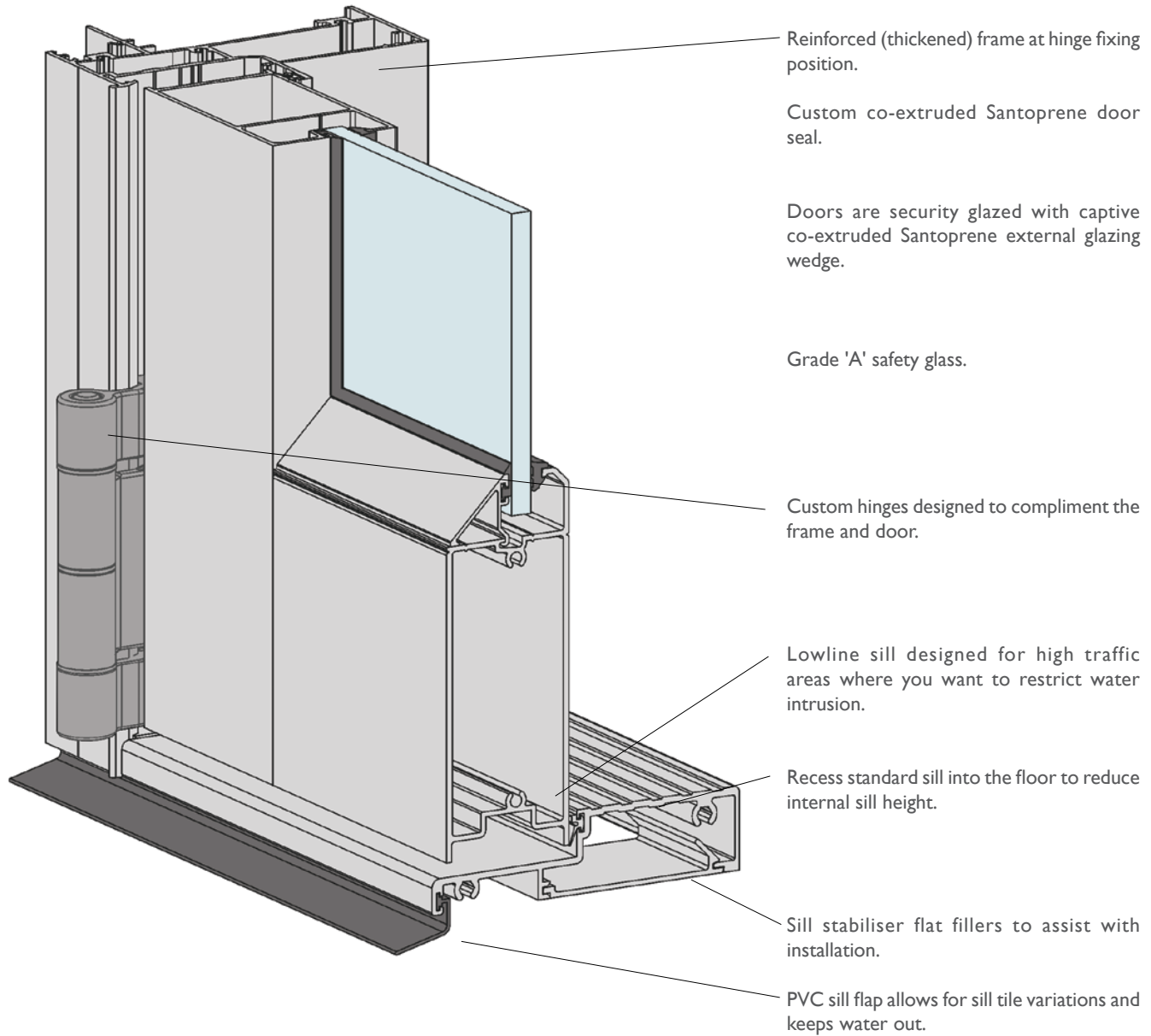
Sill will accept PVC sill flap if required.



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SINGLE GLAZED HINGED DOOR SILL CORNER



Series 548 High Performance Hinged Door

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REPLACES: AUG 03
SCALE: FULL SIZE

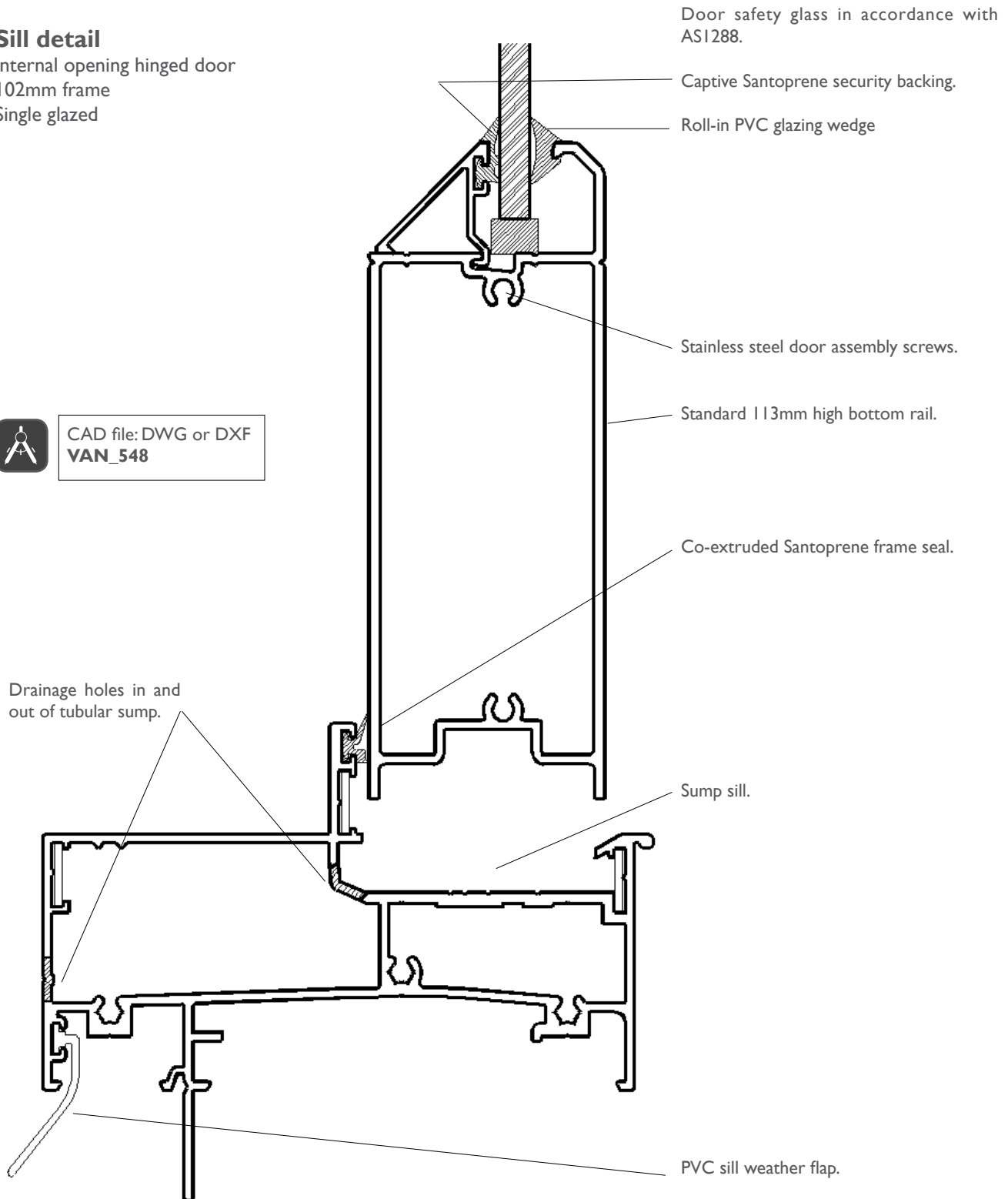
VERTICAL SECTION THROUGH STANDARD SILL - SINGLE GLAZED

Sill detail

Internal opening hinged door
102mm frame
Single glazed



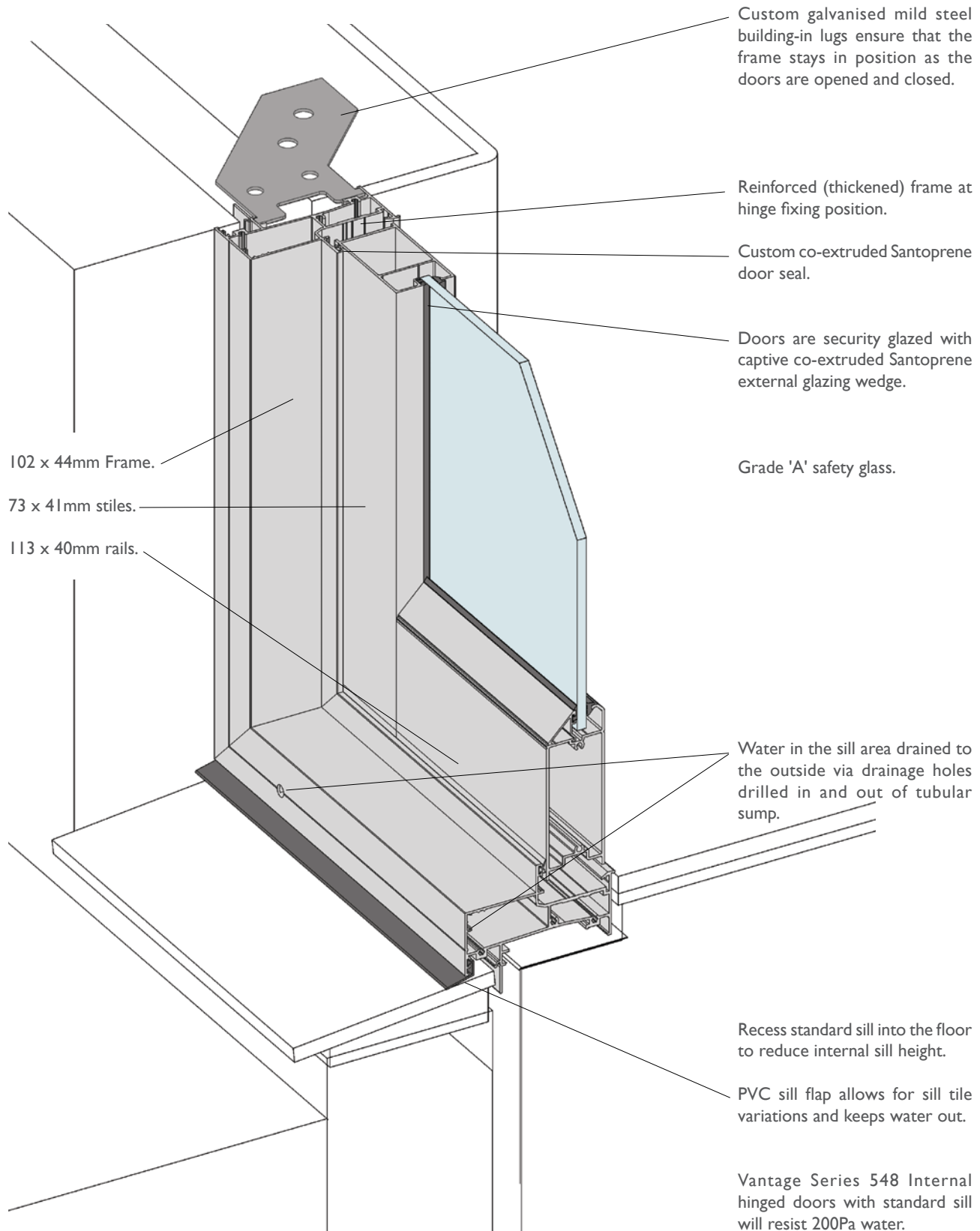
CAD file: DWG or DXF
VAN_548



Series 548 High Performance Hinged Door

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SINGLE GLAZED INTERNAL HINGED DOOR SILL CORNER



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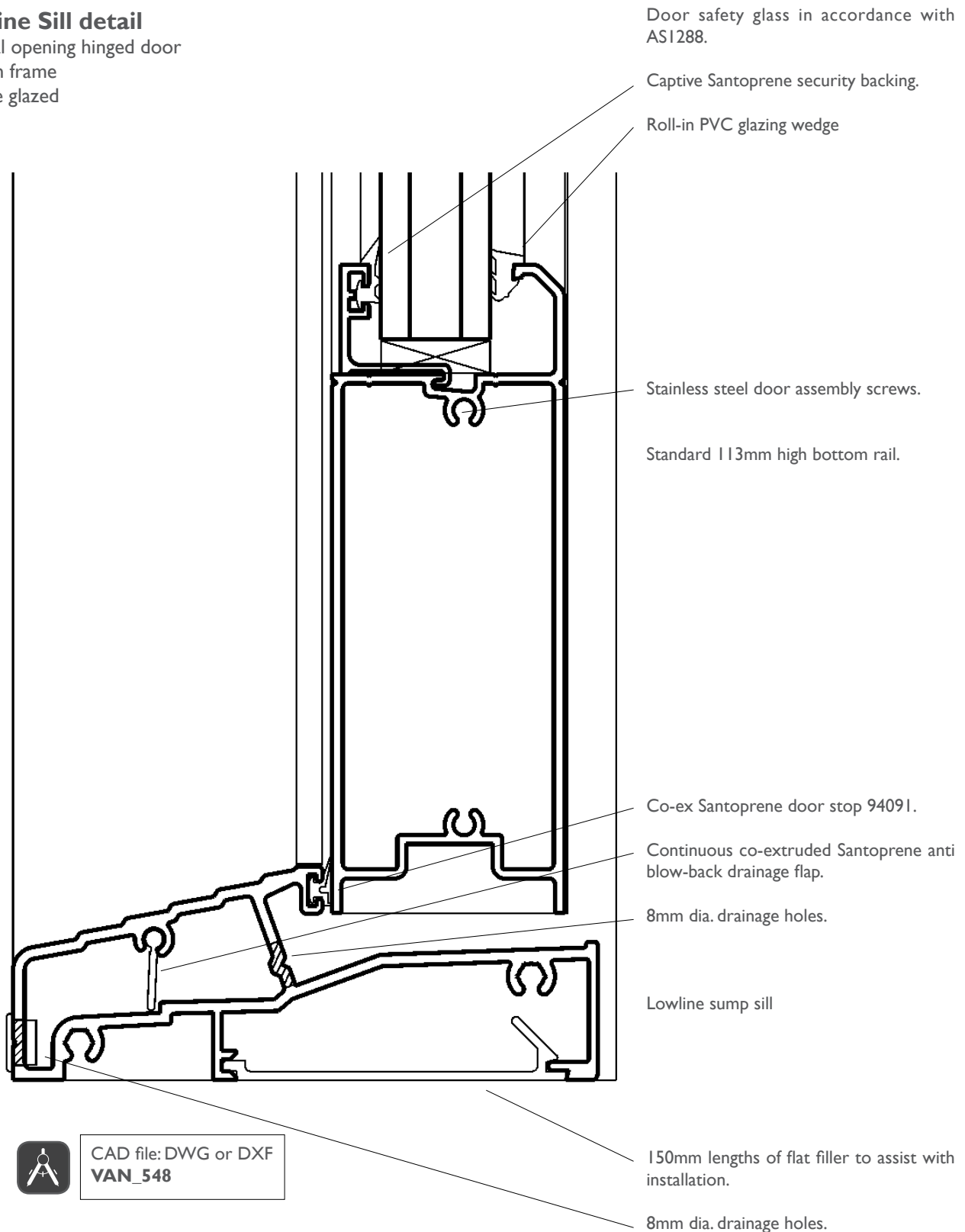
Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

VERTICAL SECTION THROUGH ALTERNATIVE LOWLINE SILL

Lowline Sill detail

Internal opening hinged door
102mm frame
Double glazed

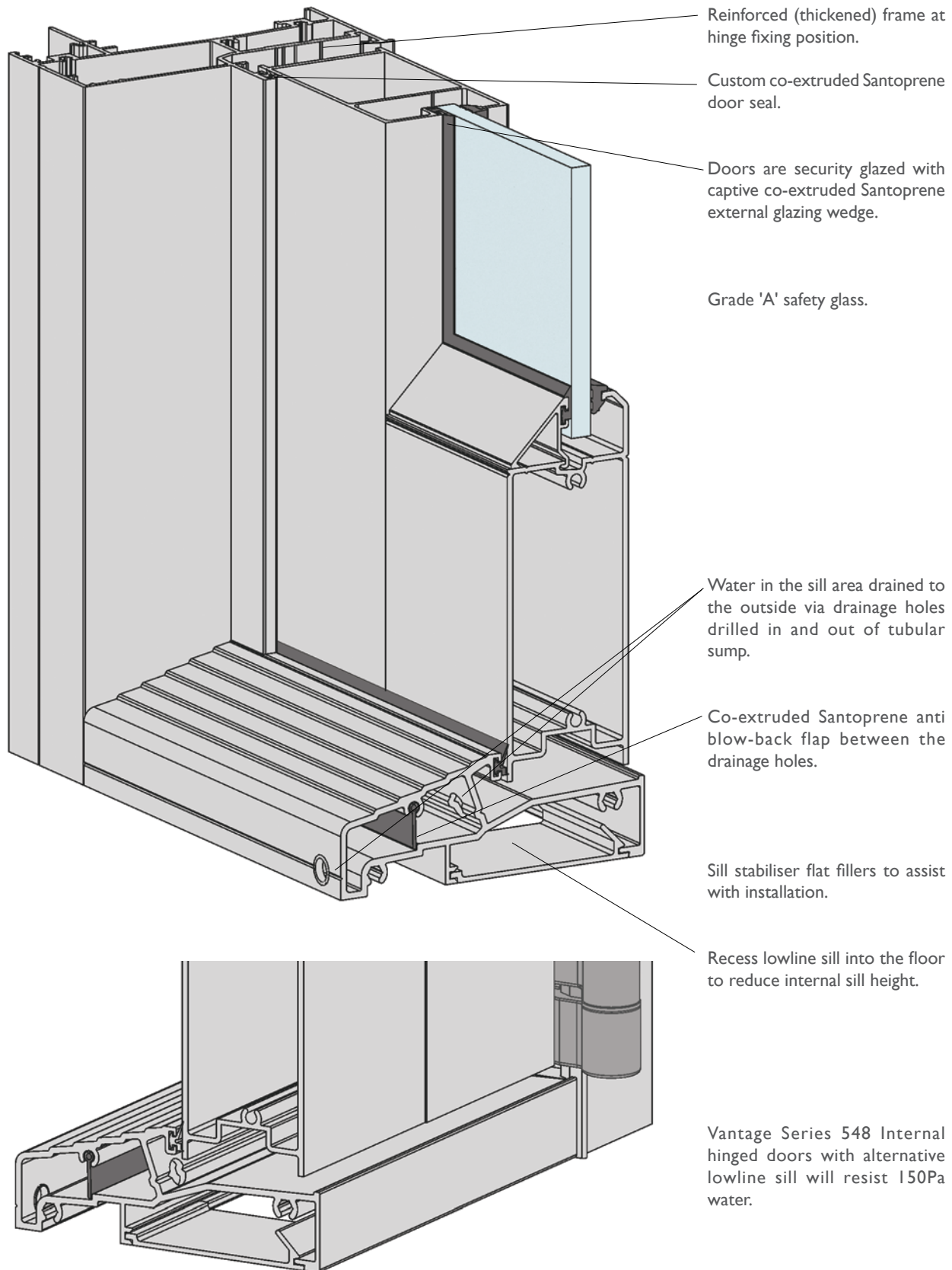


CAD file: DWG or DXF
VAN_548

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ALTERNATIVE LOWLINE HINGED DOOR SILL CORNER - SINGLE GLAZED



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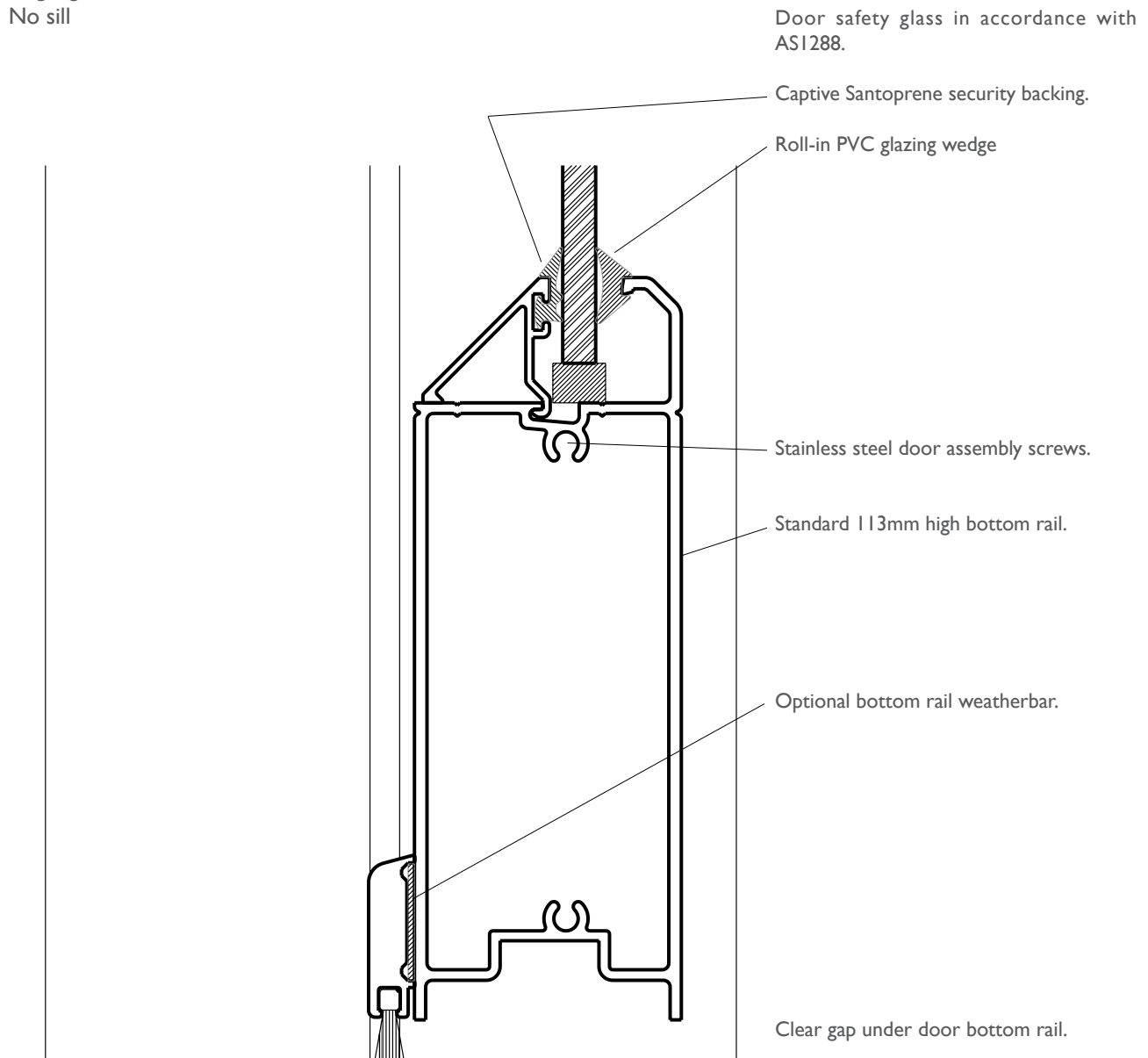
Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

VERTICAL SECTION THROUGH NO SILL - SINGLE GLAZED

Sill detail

Internal opening hinged door
102mm frame
Single glazed
No sill

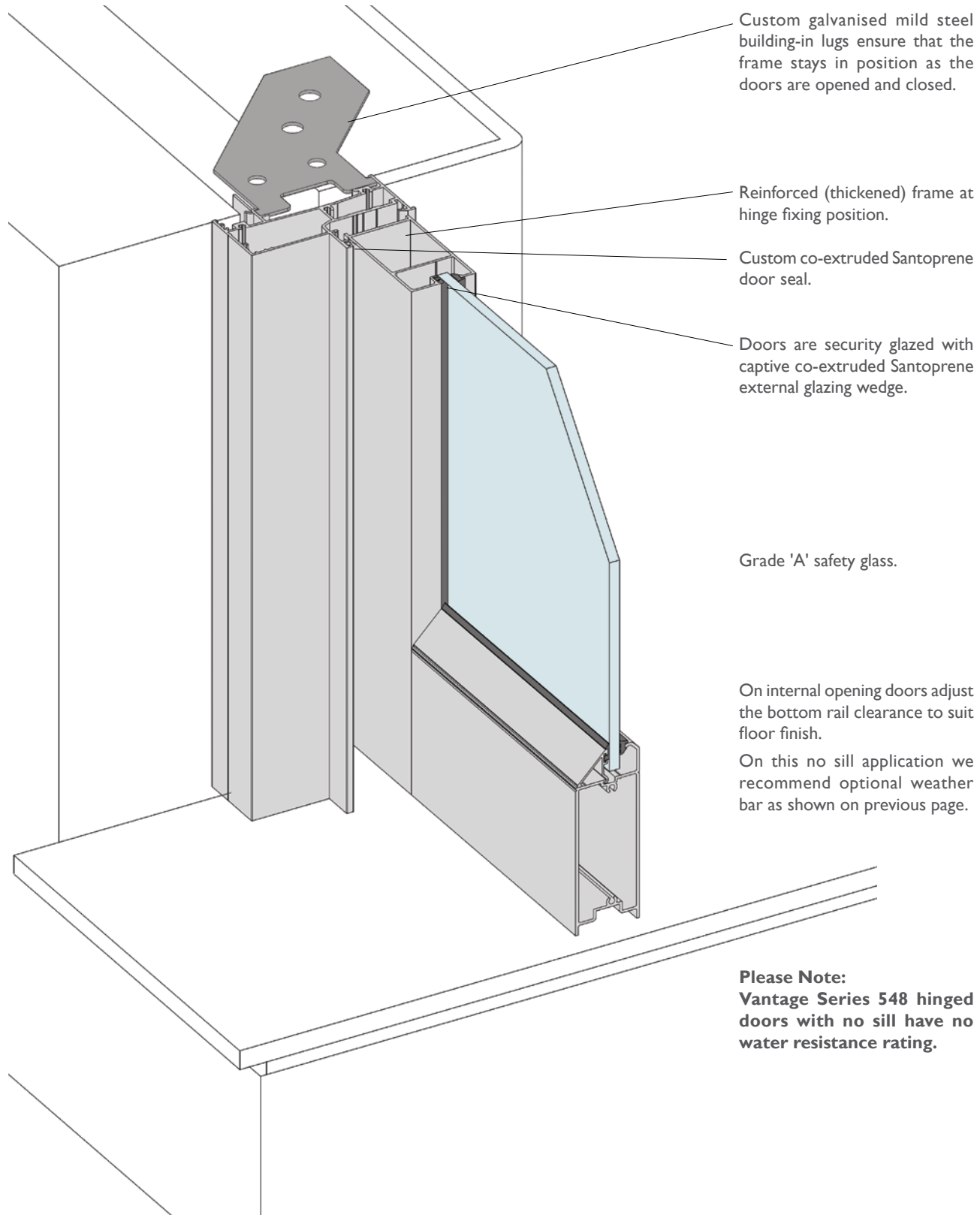


Note:
This detail has no water resistance rating.

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

SINGLE GLAZED INTERNAL HINGED DOOR NO SILL CORNER



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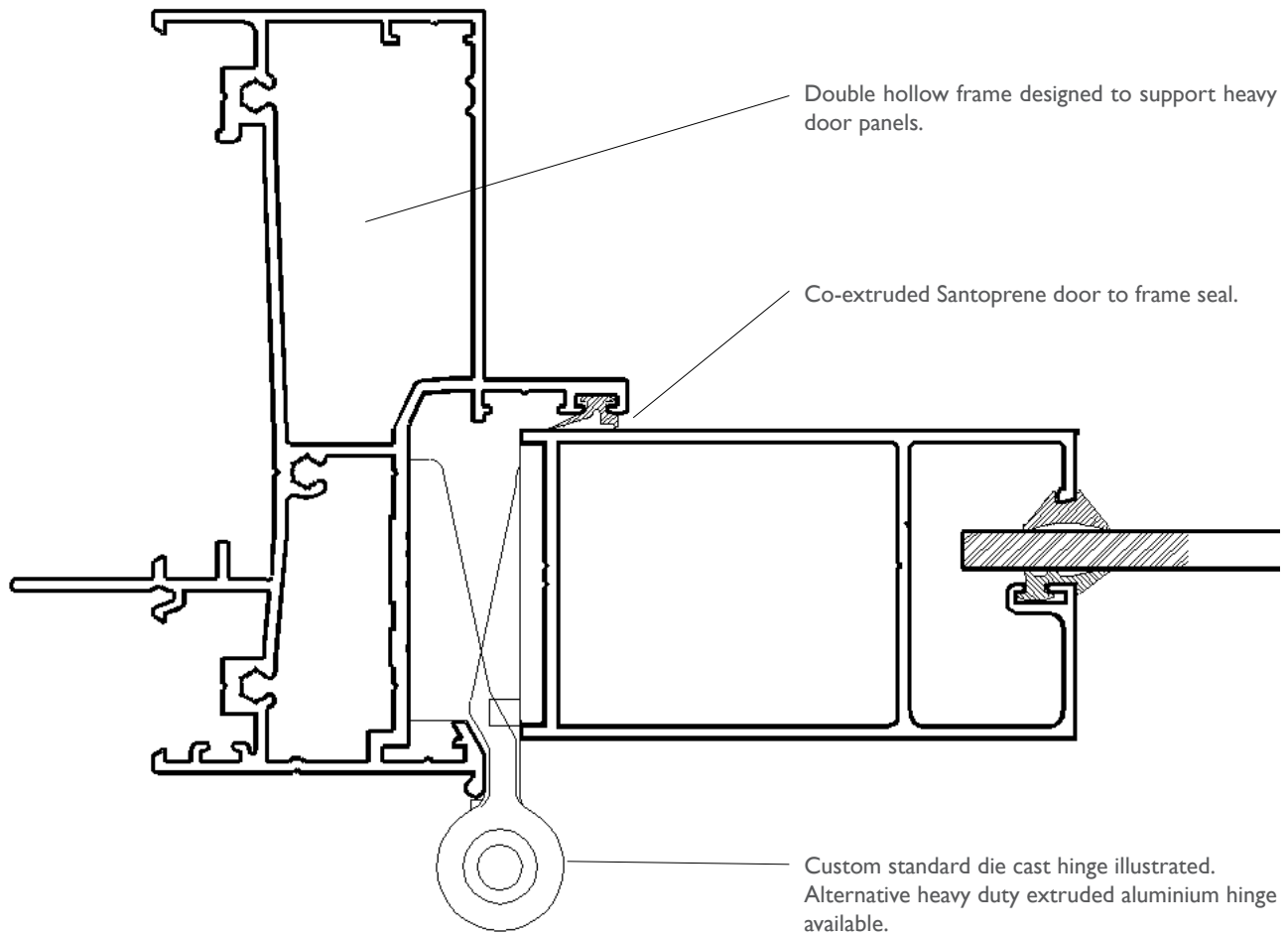
Series 548 High Performance Hinged Door

DATE: NOV 09
 REPLACES: AUG 03
 SCALE: FULL SIZE

HORIZONTAL SECTION THROUGH JAMB

Jamb detail

External opening hinged door
 102mm frame
 Single glazed



CAD file: DWG or DXF
VAN_548

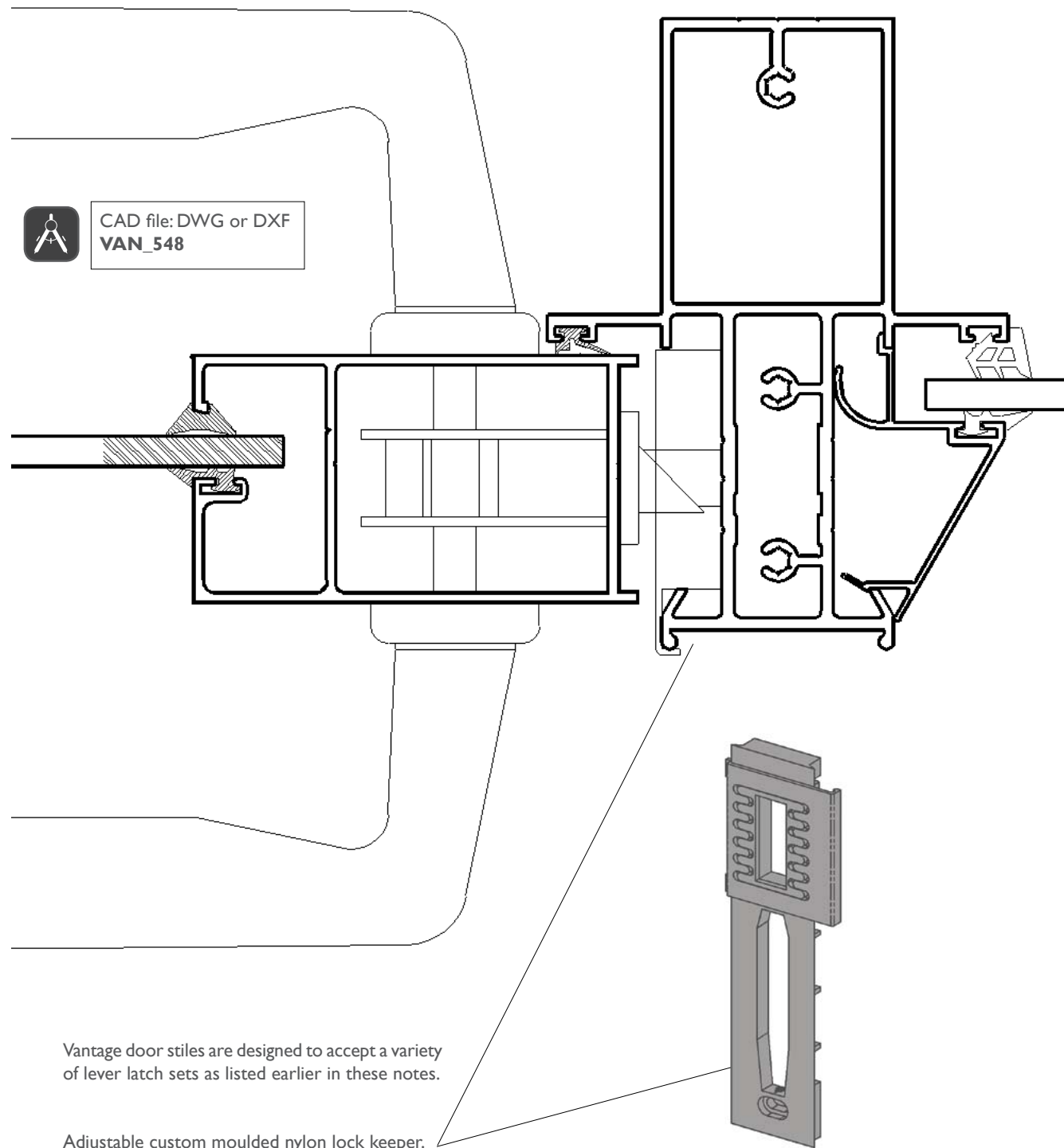
Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

HORIZONTAL SECTION THROUGH MULLION

Mullion detail

External opening hinged door
102mm frame
Single glazed



Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

HORIZONTAL SECTION THROUGH MEETING STILES

Meeting Stile Detail

Single glazed

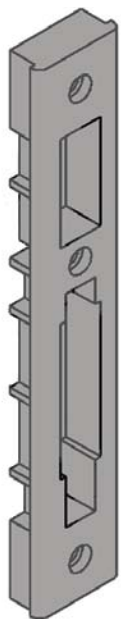
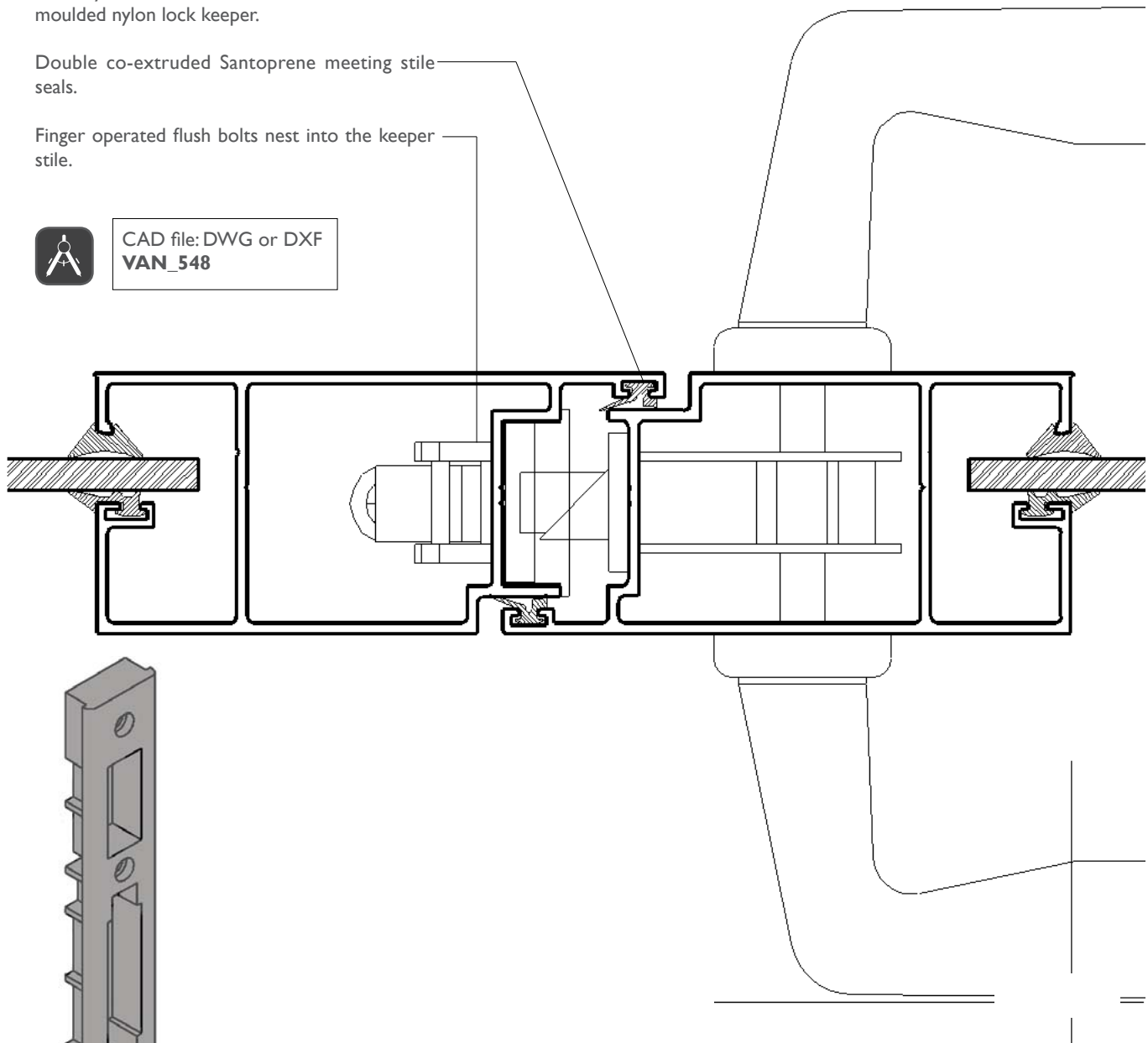
Vantage door meeting stiles are designed to accept not only the lever latch sets but also the custom moulded nylon lock keeper.

Double co-extruded Santoprene meeting stile seals.

Finger operated flush bolts nest into the keeper stile.



CAD file: DWG or DXF
VAN_548



Custom moulded nylon lock keeper.

Series 548 High Performance Hinged Door

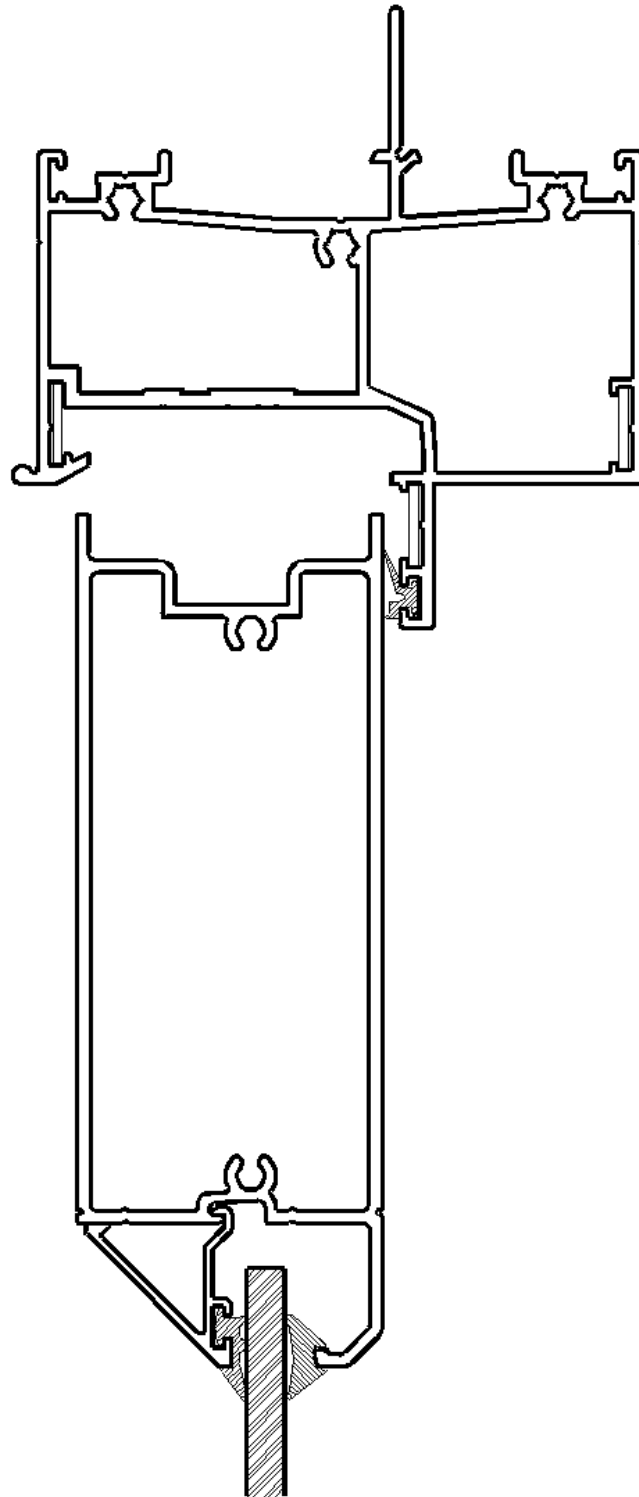
DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

ALTERNATIVE 80MM UNIVERSAL FRAME

Head detail

External opening hinged door
80mm frame
Single glazed

The 80mm Universal frame is designed primarily for French doors that will be fitted with Parliament hinges (as detailed later in these notes).



CAD file: DWG or DXF
VAN_548

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

VERTICAL SECTION THROUGH HIGHLIGHT TRANSOM

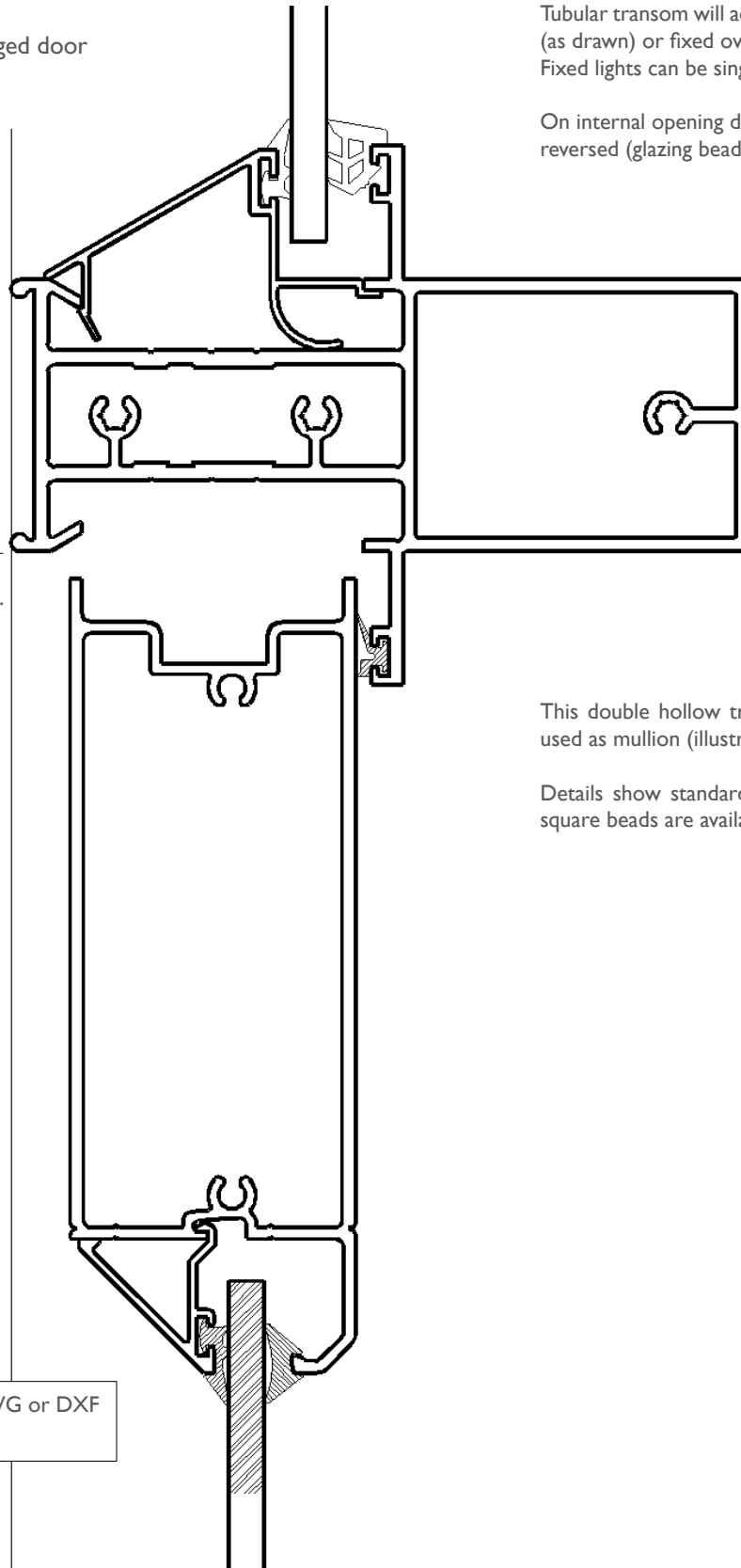
Transom detail

External opening hinged door
102mm frame
Single glazed

Tubular transom will accept fixed lights over doors (as drawn) or fixed over fixed. Fixed lights can be single or double glazed.

On internal opening doors this transom would be reversed (glazing bead on the inside).

Transom height measured to this point.



This double hollow transom section can also be used as mullion (illustrated earlier in these notes).

Details show standard splayed beads. Alternative square beads are available.

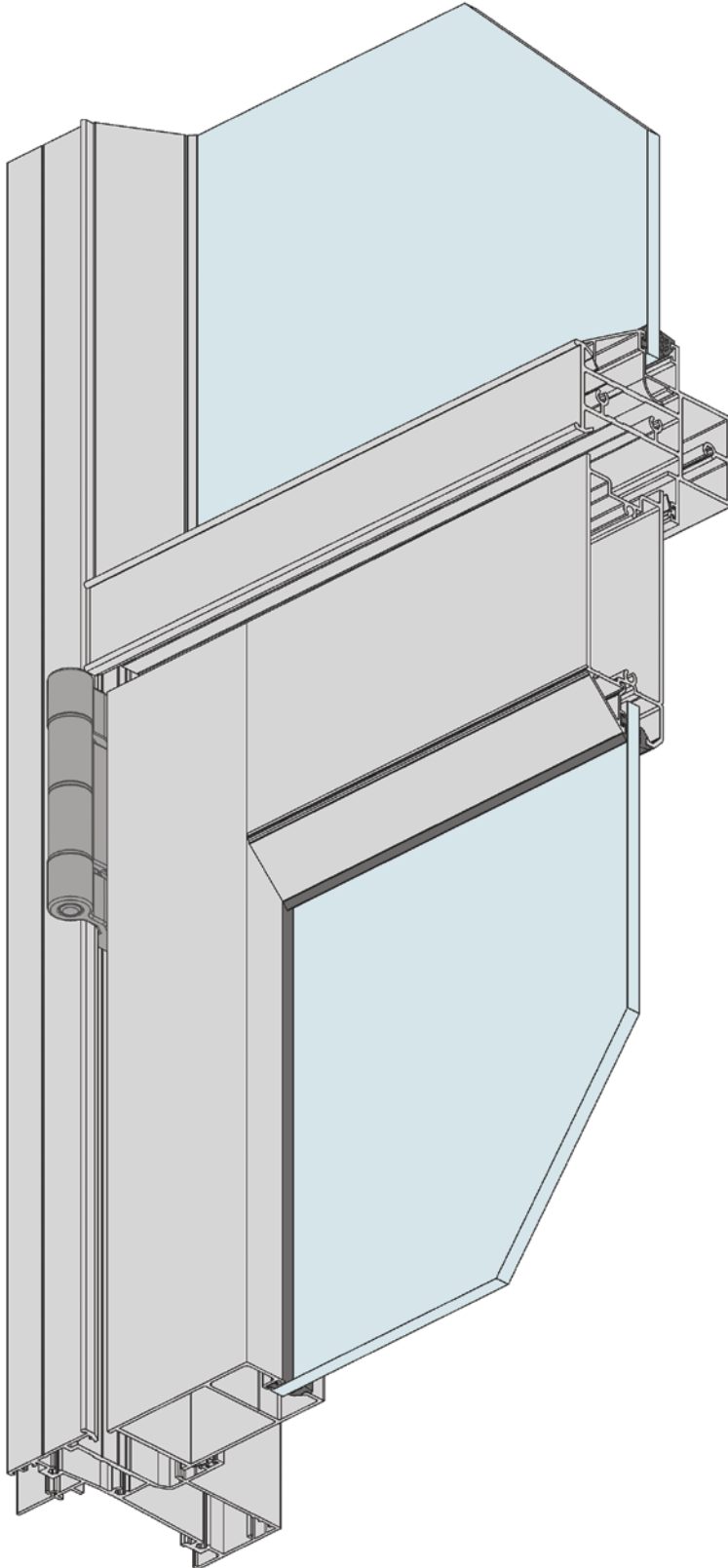


CAD file: DWG or DXF
VAN_548

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

HIGHLIGHT TRANSOM CORNER



Splayed glazing beads keep water and dust from building up.

Highlights are security glazed to match the doors.

As the highlights can be glazed into the door frame this allows us to fabricate the assembly with run through jambs.

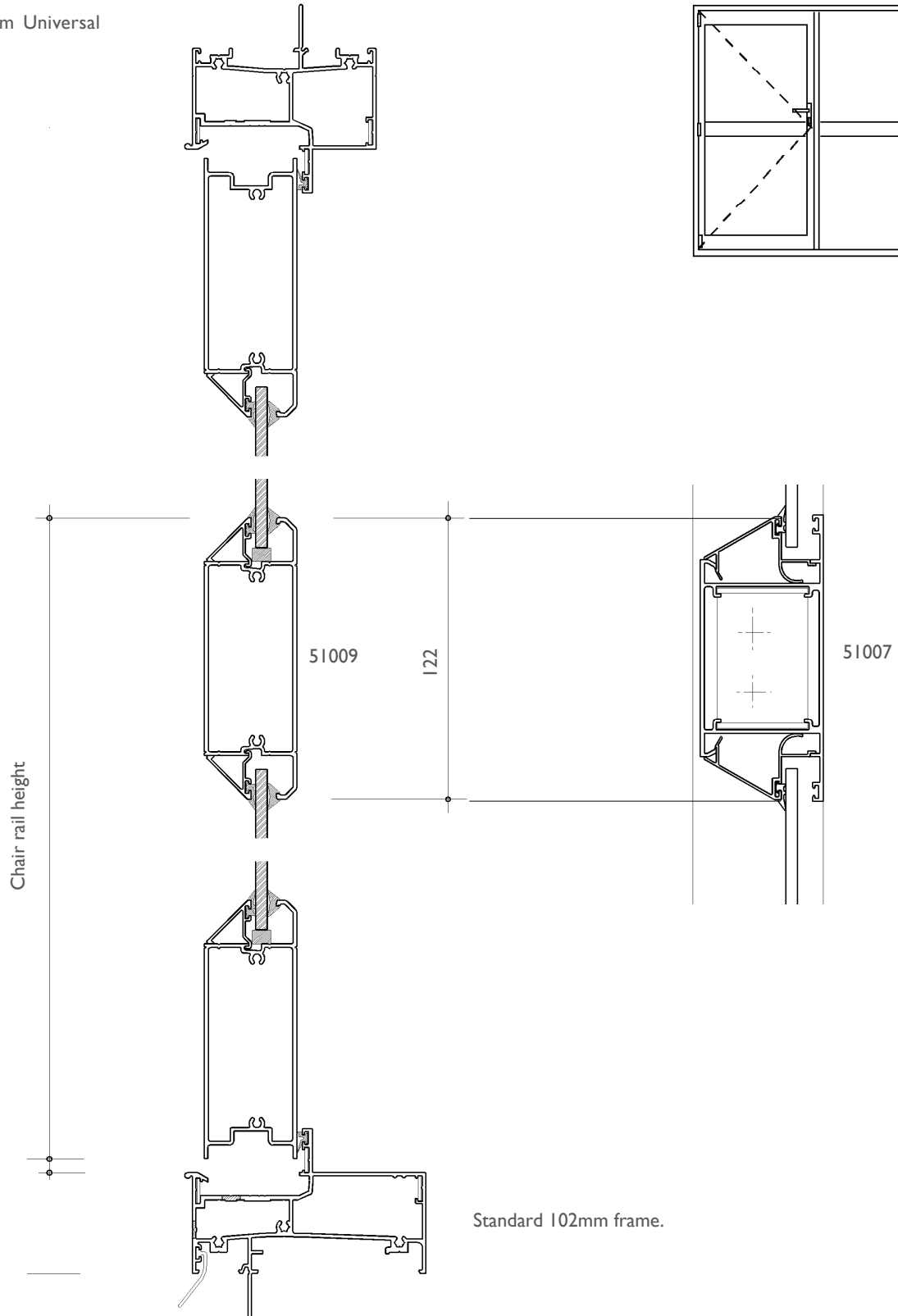
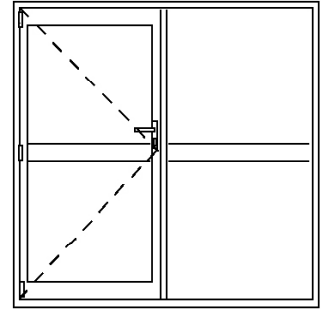
This significantly improves strength and water resistance.

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

OPTIONAL 122mm CHAIR RAILS

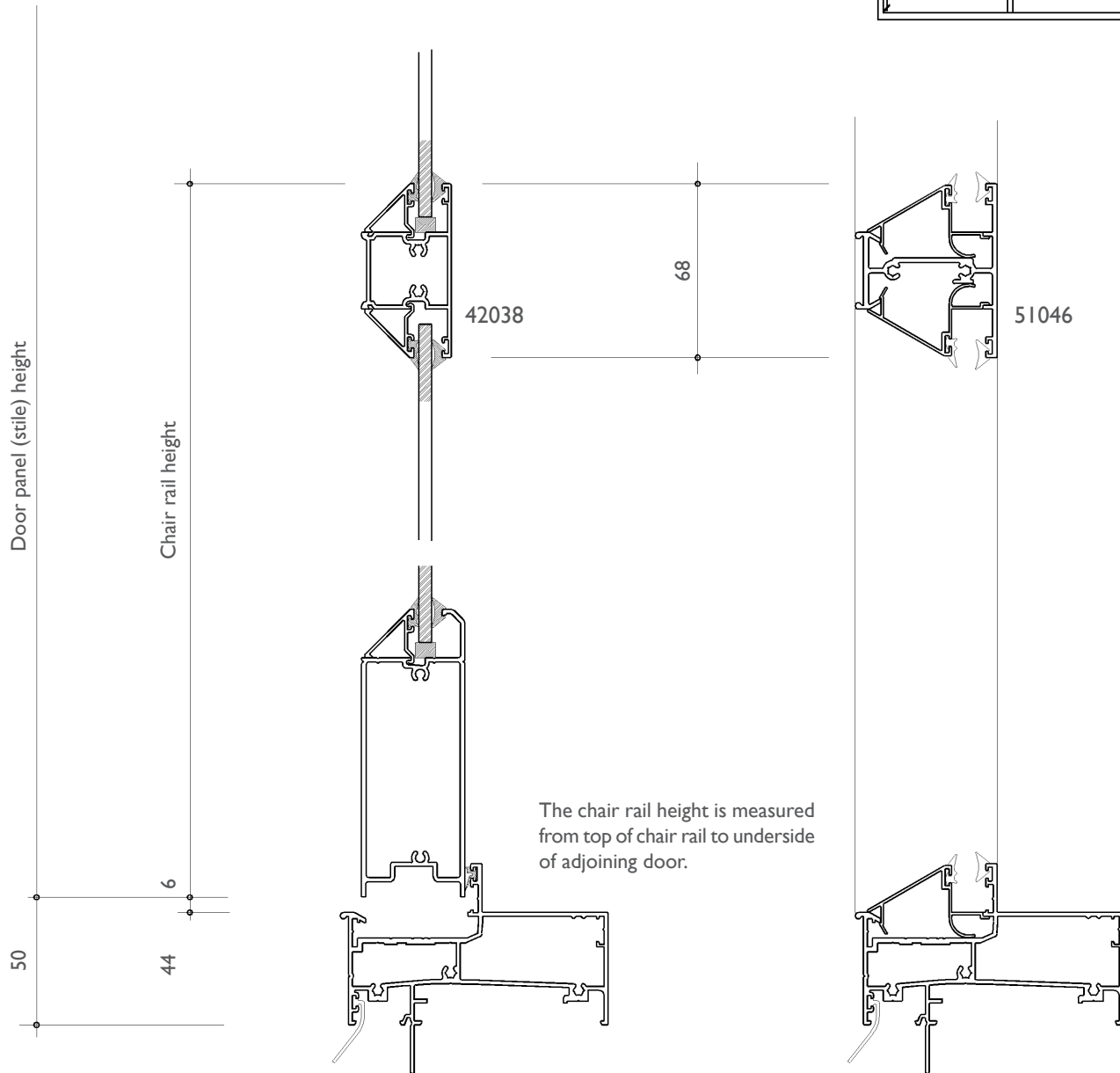
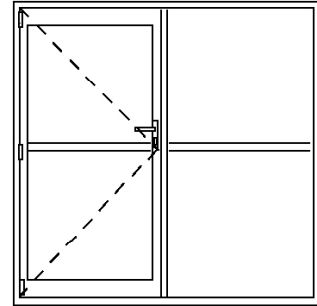
Alternative 80mm Universal frame.



Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

OPTIONAL 68MM CHAIR RAILS



Series 548 High Performance Hinged Door

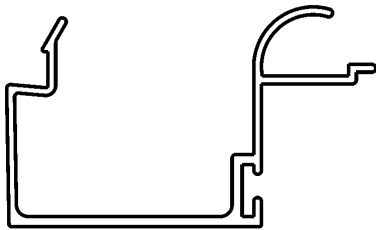
DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

VERTICAL SECTION THROUGH FIXED FRAME

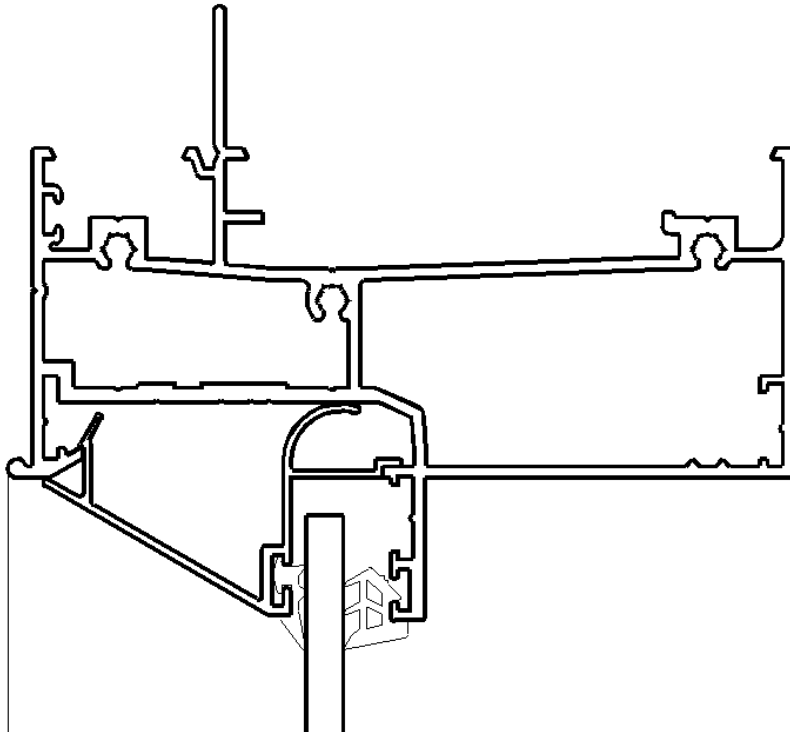
Head detail

Single glazed fixed
102mm frame

The double hollow door frames can be glazed as detailed on this page.



The standard single glazed bead is splayed as shown right, an alternative square bead as shown above is also available.



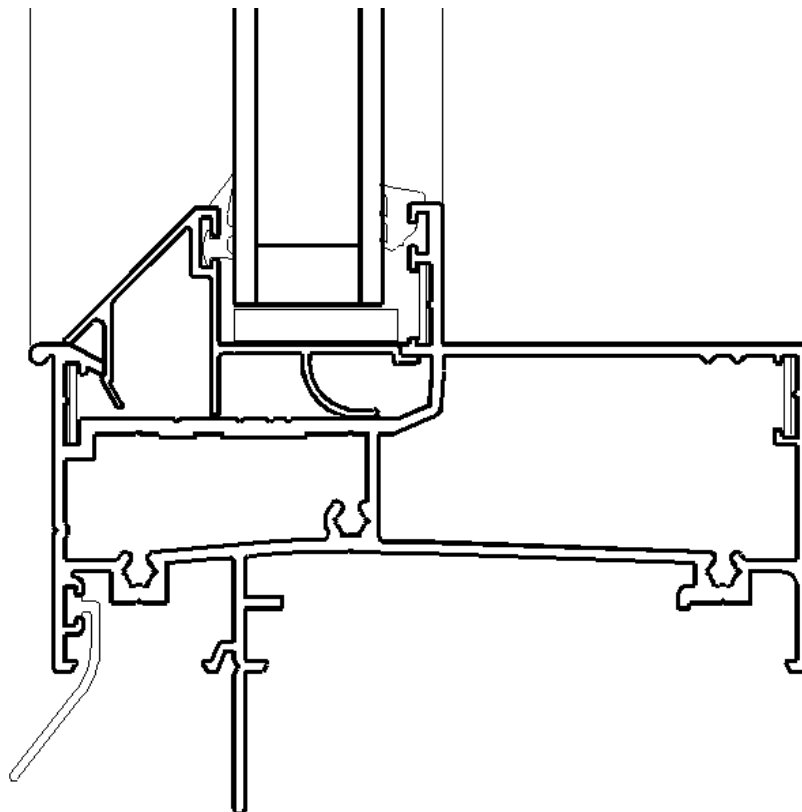
Single glazed.



CAD file: DWG or DXF
VAN_548

Double glazed - 20mm Insulating glass units.

Note:
No square bead available for double glazed fixed lights in Series 548.



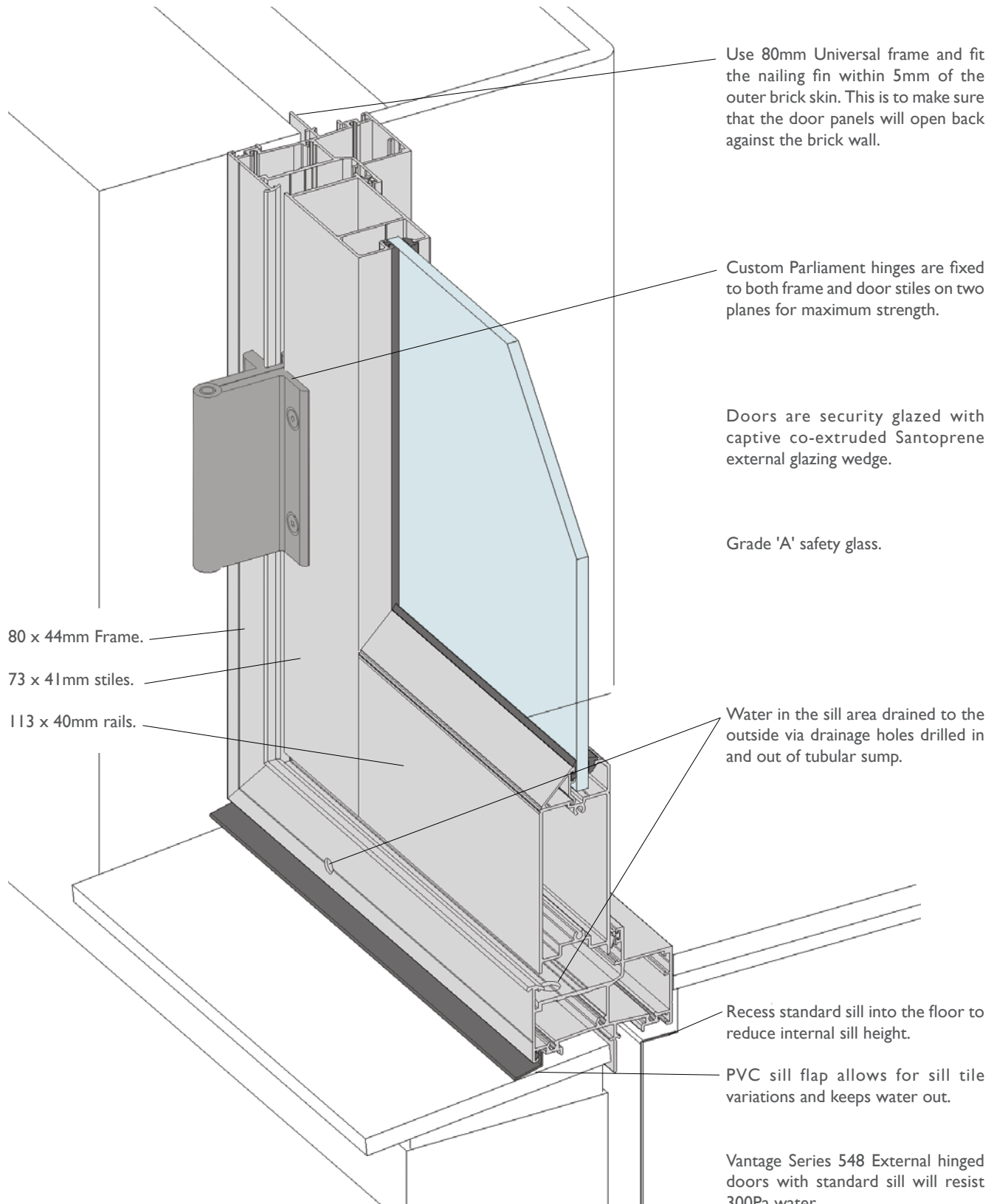
Sill detail

Double glazed fixed
102mm frame

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

HINGED DOOR FITTED WITH PARLIAMENT HINGES - CLOSED

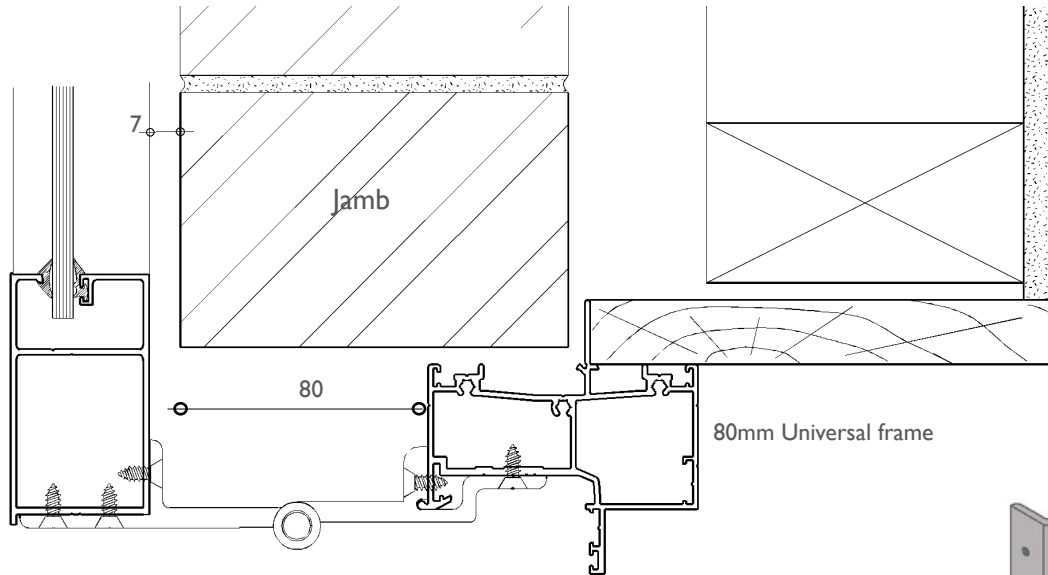


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Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

EXTERNAL SWING DOOR WITH PARLIAMENT HINGE



Parliament hinge

The heavy duty parliament hinge has been designed to securely support the door leaf when it's opened back against the wall as shown above.

Important Note

This parliament hinge has been designed to be used with the 80mm universal frame detailed above.

Door Stops

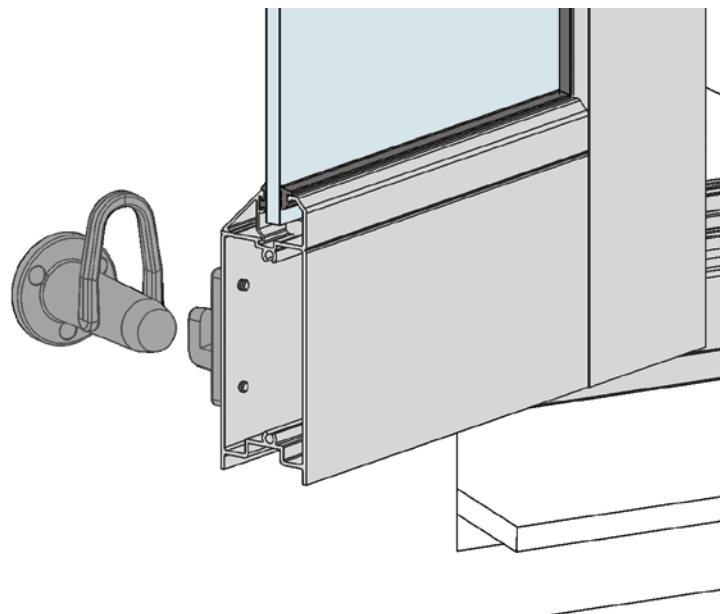
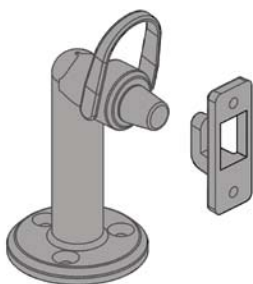
Vantage offer several types of door stops/retainers.

Wall stop illustrated right is ideal for doors fitted with Parliament hinges, as you don't want the doors to clash with external wall.

We also offer a floor mounted door stop/retainer as illustrated below.

Finish matt silver.

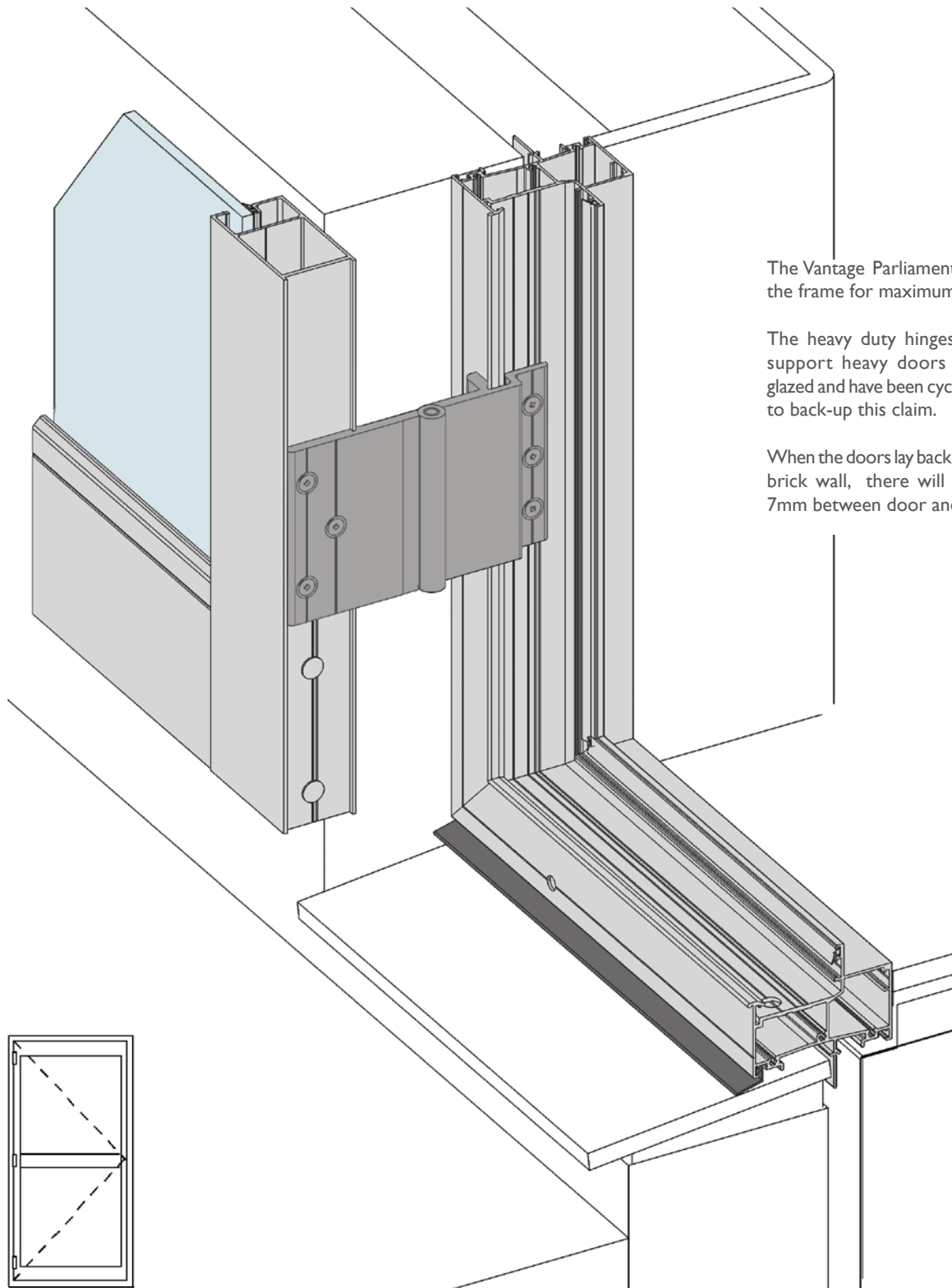
We also offer a range of magnetic latch backs.



Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

HINGED DOOR FITTED WITH PARLIAMENT HINGES - OPEN



The Vantage Parliament hinge nests into the frame for maximum support.

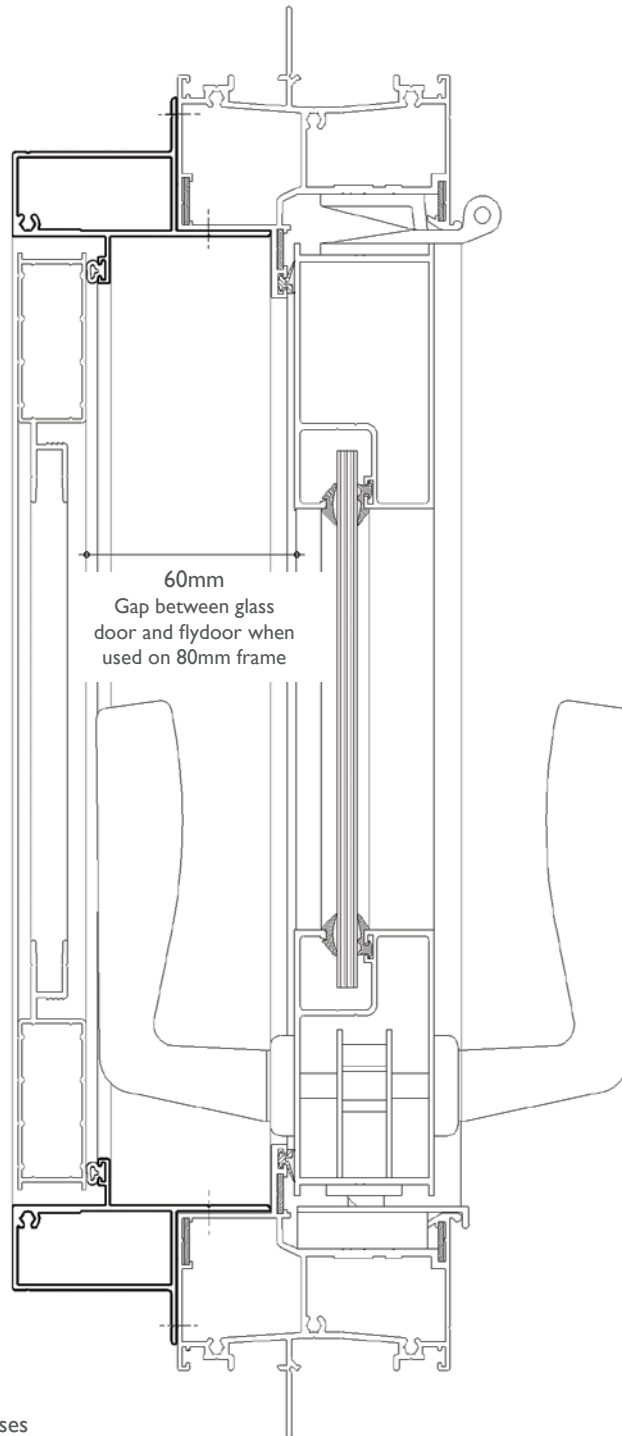
The heavy duty hinges are designed to support heavy doors including double glazed and have been cycle tested (120,000) to back-up this claim.

When the doors lay back against the 115mm brick wall, there will be approximately 7mm between door and wall.

Series 548
 High Performance Hinged Door

DATE: NOV 09
 REPLACES: AUG 03
 SCALE: HALF FULL SIZE

FLYDOOR FITTING DETAILS - 80MM FRAME ILLUSTRATED



Flydoor frame fixed to main frame.

Fit bulb seal door stop.

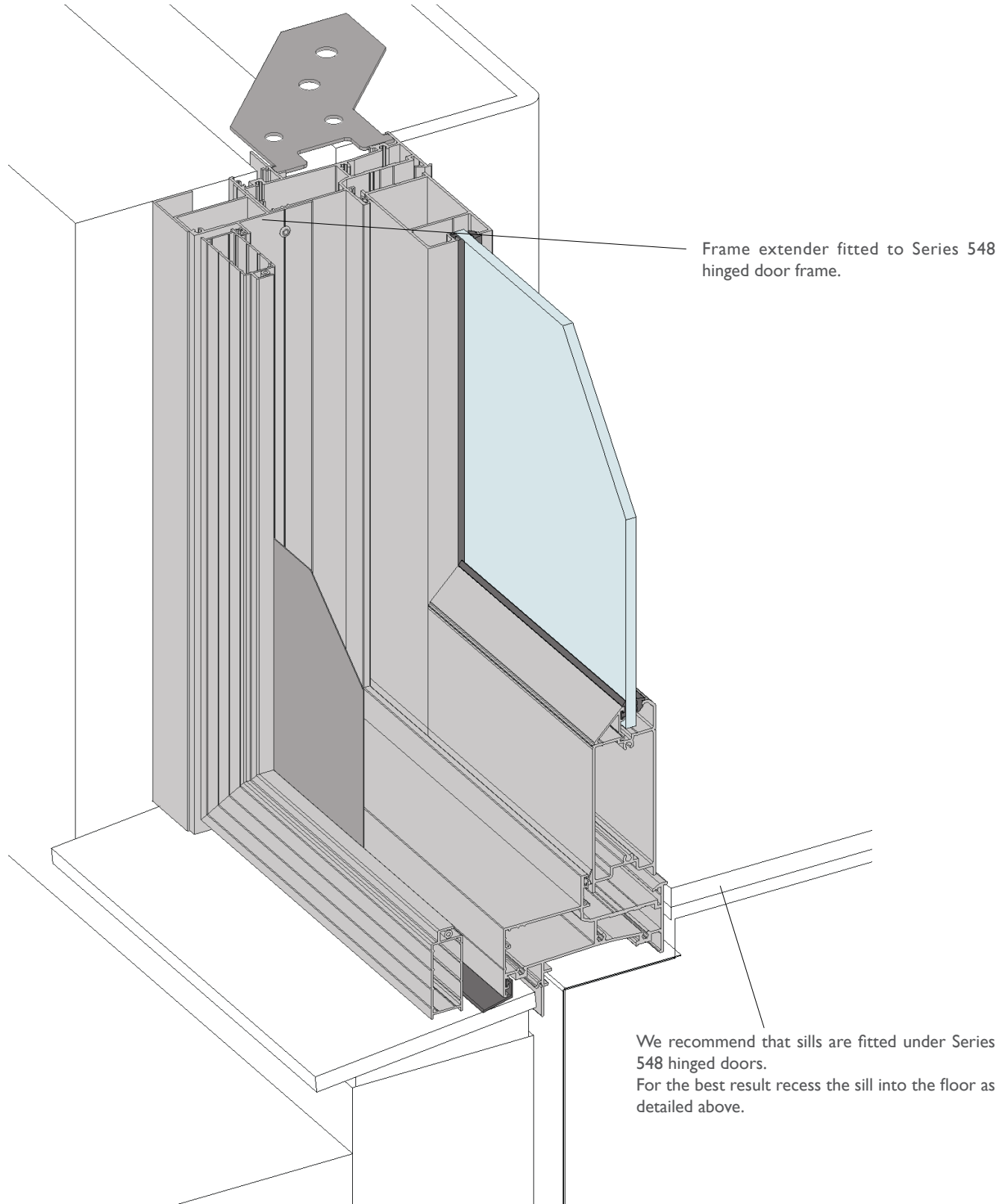
Flydoor frame designed to support screen door.

Note: this gap increases to over 80mm when fitting screen adaptor to a 102mm frame

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

FLYDOOR CORNER DETAIL



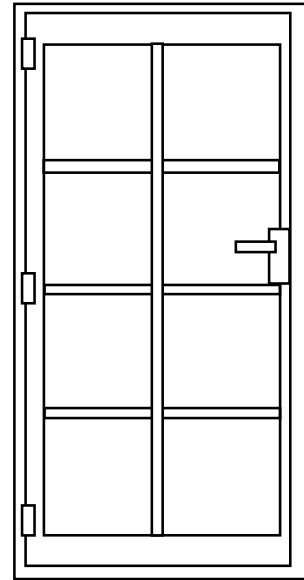
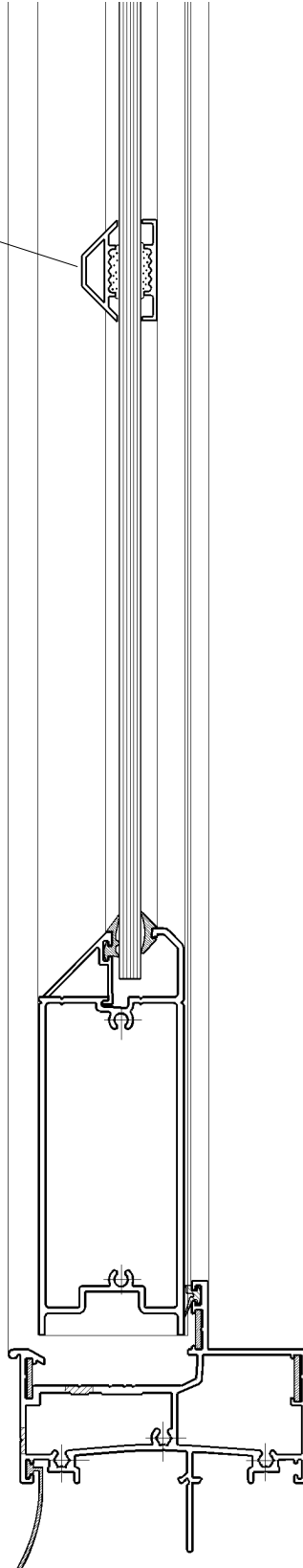
Series 548 High Performance Hinged Door

DATE: NOV 09
 REPLACES: AUG 03
 SCALE: HALF FULL SIZE

OPTIONAL APPLIED COLONIAL BARS

28mm Wide by 10mm high splayed adhesive colonial bars can be fitted to both doors and fixed sidelights.

The single sheet of glass in the door panels allow us to use the glass as a brace with setting blocks and adjustable setting screws.

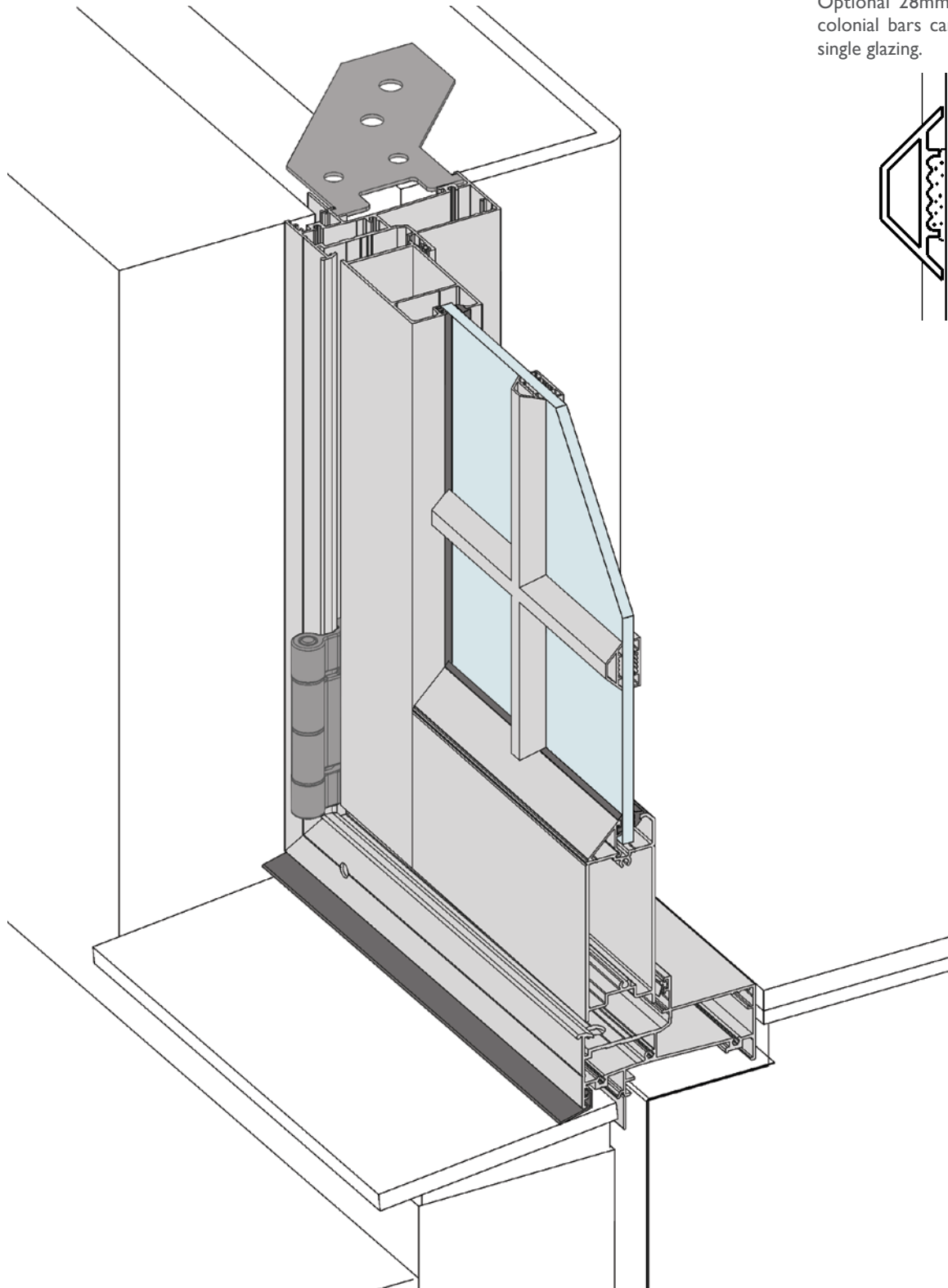


Typical bar layout

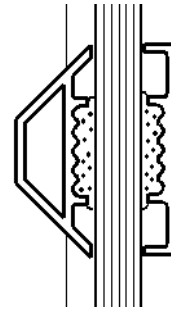
Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

CORNER DETAIL SHOWING OPTIONAL BOLD COLONIAL BARS



Optional 28mm bold applied colonial bars can be fitted to single glazing.



Full size

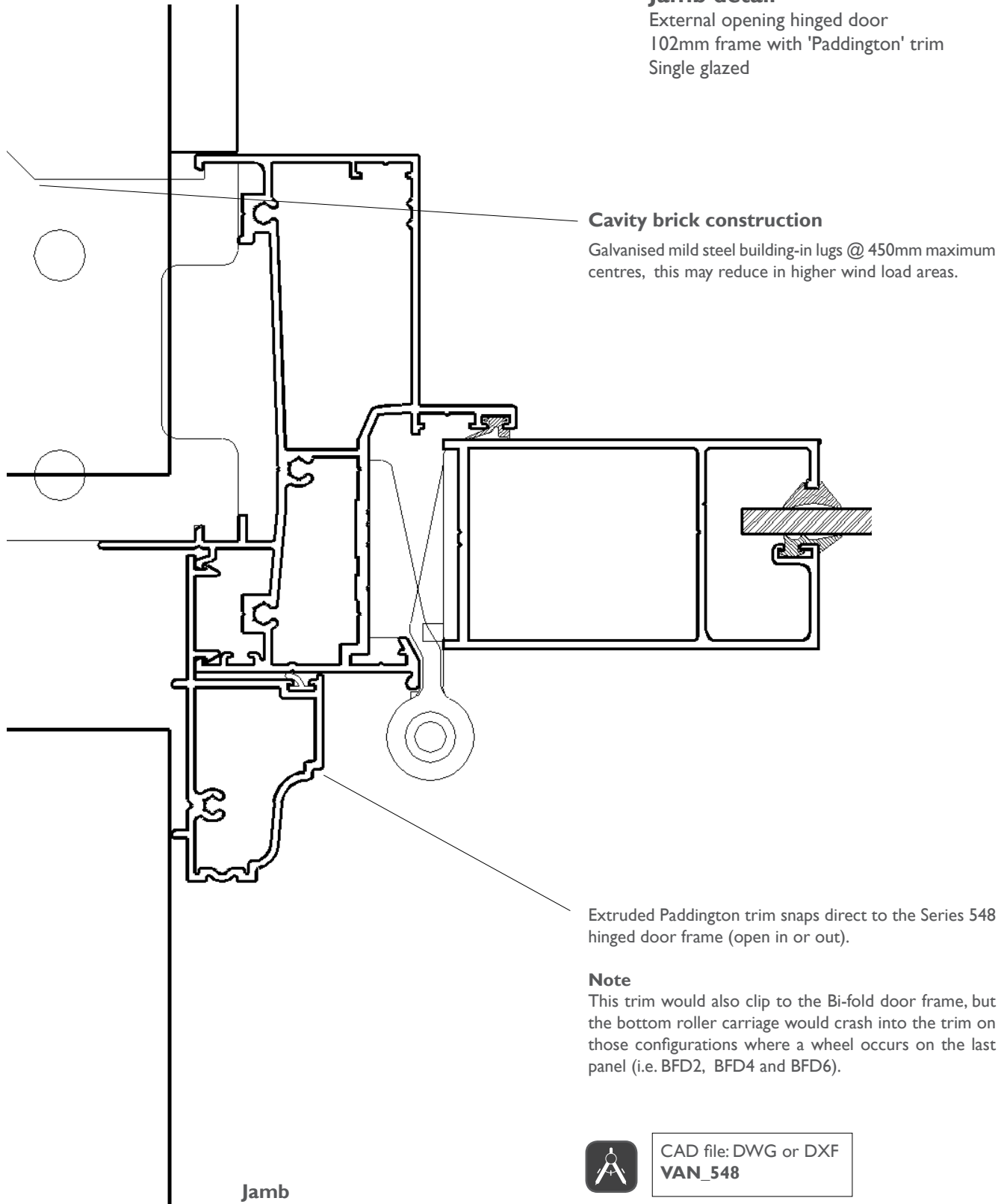
Series 548 High Performance Hinged Door

DATE: NOV 09
 REPLACES: AUG 03
 SCALE: NOT TO SCALE

OPTIONAL 'PADDINGTON TRIM'

Jamb detail

External opening hinged door
 102mm frame with 'Paddington' trim
 Single glazed

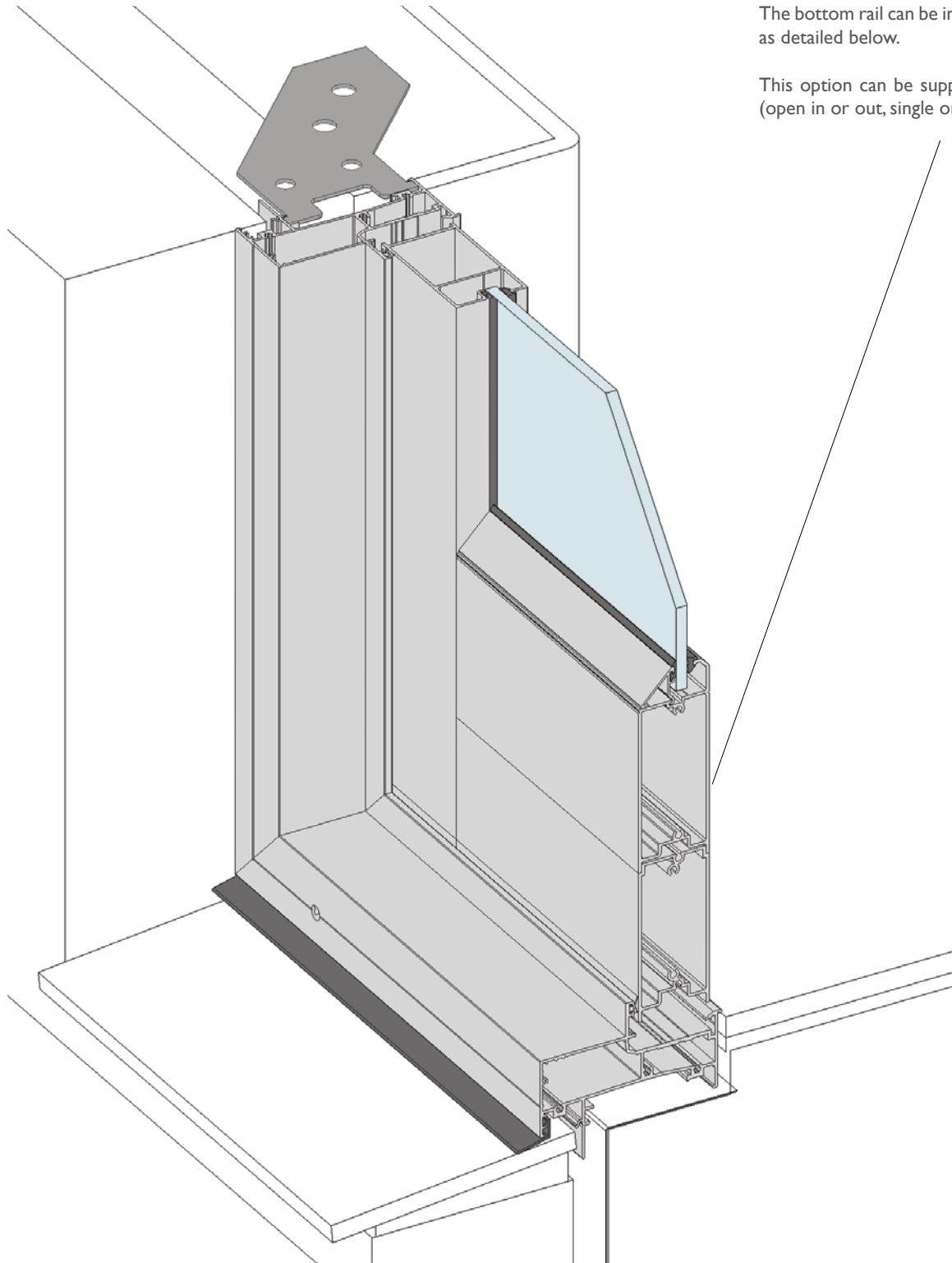


CAD file: DWG or DXF
VAN_548

Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

OPTIONAL TALL BOTTOM RAIL



The bottom rail can be increased by 85mm as detailed below.

This option can be supplied on any door (open in or out, single or double glazed).

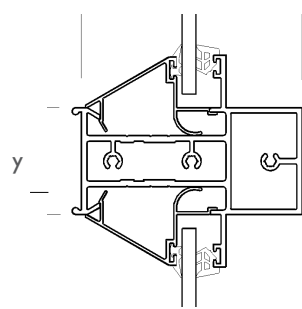
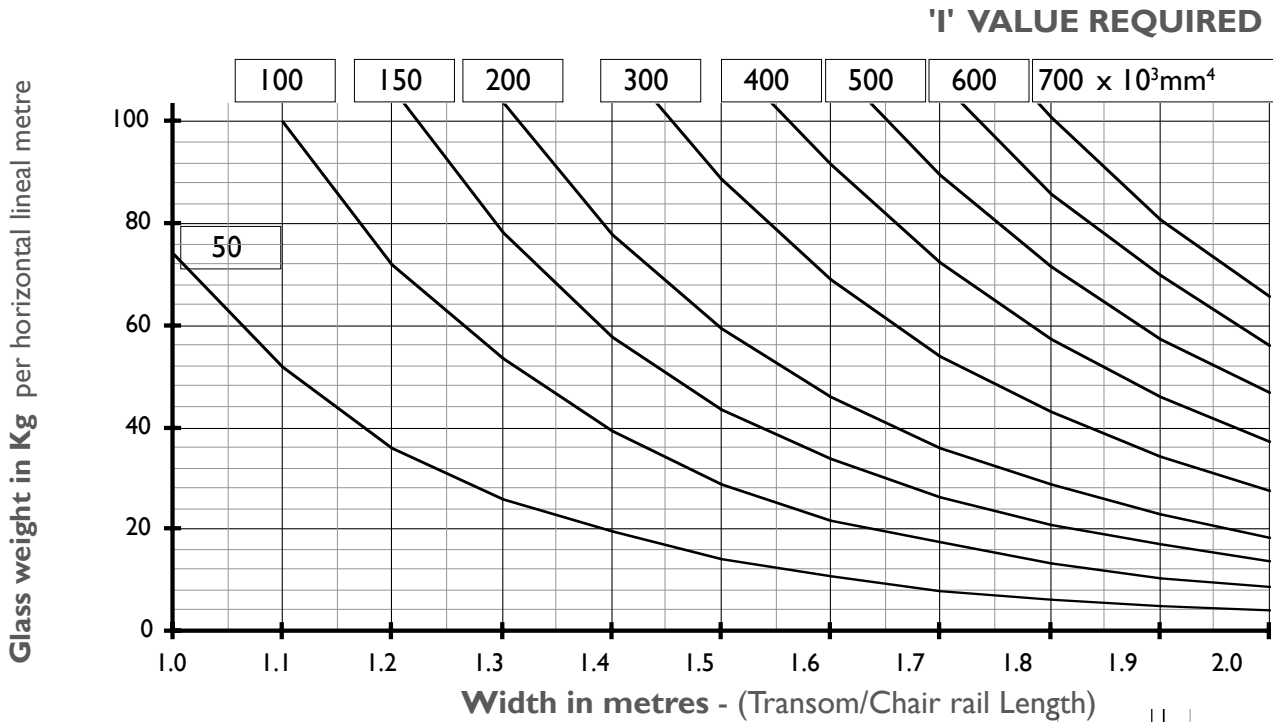
Series 548 High Performance Hinged Door

DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

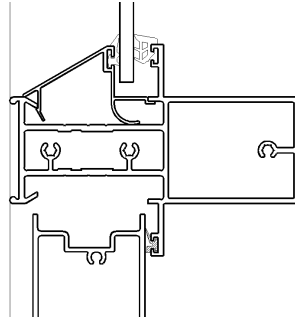
TRANSOM & CHAIR RAIL DEAD LOAD GRAPH

This graph can be used to check the transom and chair rail strength required to support the glass mass.

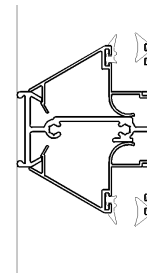
Based on a deflection of 3mm with the glass supported at quarter points. The deflection can be reduced by increasing the 'I' value required (e.g. To halve the deflection to 1.50mm double the 'I' value).



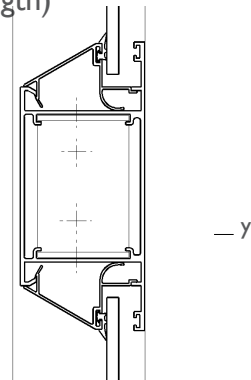
80mm Transom
51002
I_{yy} = 170 × 10³ mm⁴



102mm Transoms
51033 = 196 × 10³ mm⁴
51040 = 228 × 10³ mm⁴



68mm Chair rail
51046
I_{yy} = 79 × 10³ mm⁴



122mm Chair rail
5102007
I_{yy} = 622 × 10³ mm⁴

Glass thickness	Glass weight per square metre
3mm	7.50 Kg
4mm	10.00 Kg
5mm	12.50 Kg
6mm	15.00 Kg
8mm	20.00 Kg
10mm	25.00 Kg

How to use the graph:

- Multiply glass weight per square metre by the glass panel height to arrive at glass weight per horizontal lineal metre.
- After calculating the glass weight per horizontal lineal metre plot up from the Width (Transom/Chair rail Length) and read off the appropriate 'I' value required.
- The transom and chair rail combinations have been illustrated above.

Typical Example:

- Fixed unit with 6mm glass, 1.80m wide by 1.10m high.
- Glass weight per horizontal lineal metre = 16.50 (15Kg × 1.10m high)
- Plotting lines up from the 1.80m base and across from 16.50Kg = **120 × 10³mm⁴**