

Series 548
High Performance Bi-fold Door



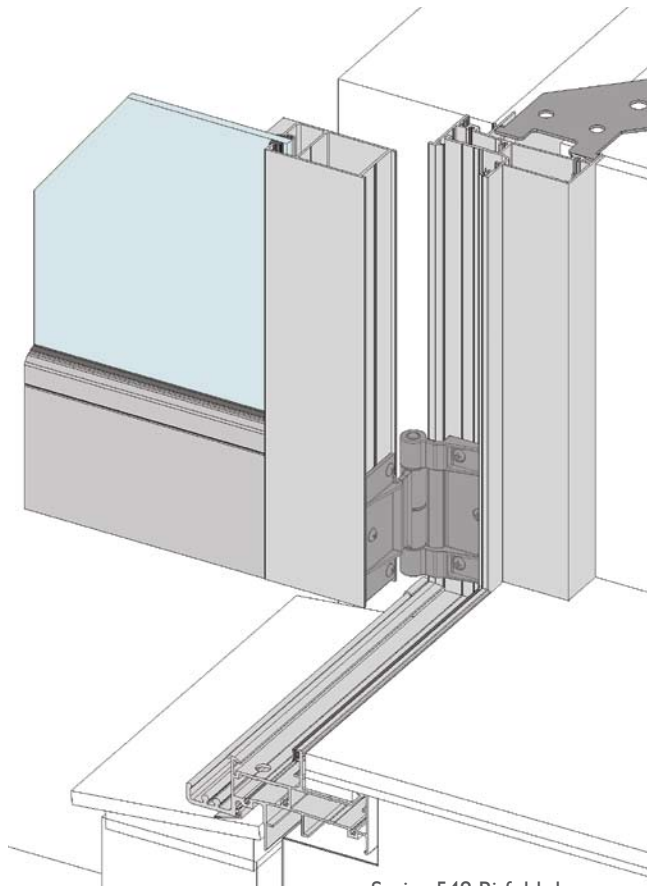
Photo courtesy of Superior Windows



Series 548 High Performance Bi-fold Door

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

KEY FEATURES / PERFORMANCE CHARACTERISTICS



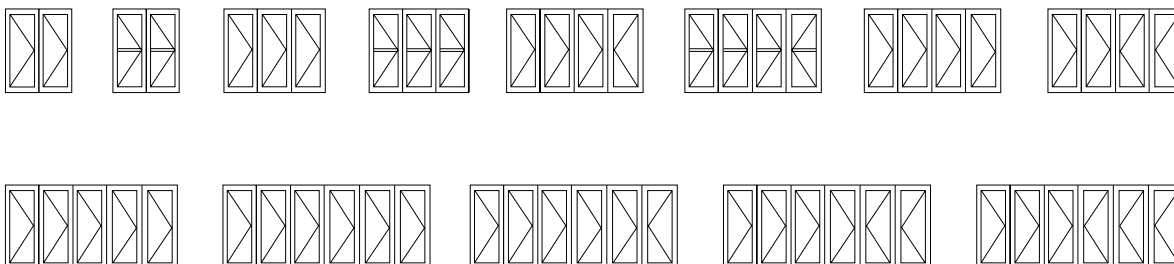
Series 548 Bi-fold door
internal view

- Bi-folds run on rollers at the sill ensuring they don't pull the door lintel down and therefore they work smoothly over the long haul.
- Top clearance allows up to 6mm of lintel movement.
- Series 548 Bi-fold transom has a narrow profile. This allows a designer to include 2100mm-high doors plus an overlight in a standard 2400mm-high opening. (Opening sashes as well as fixed overlights are available).
- Design means that bi-fold doors have a very deep water 'head' at the bottom. The bigger this measurement - from drainage hole to the inside leg - the more assured the water drainage in wet or stormy conditions.
- The Vantage Series 548 High Performance Bi-fold door features an unusual design embellishment - extra wide top and bottom rails that give the door the chunky appearance of traditional timber designs. This flies in the face of an economy - driven approach to joinery design.
- The centre hinge between door panels has built-in handle to allow home owner to easily pull the panels back into the closed position.
- Series 548 Bi-fold door can be fitted with Centor S1 retractable screen as illustrated later in this section.

Maximum Panel Height*	2600mm
Maximum Panel Width*	900mm
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 Bi-fold 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 Bi-fold 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 Bi-fold doors are the same. If you want your Bi-fold doors 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>Does the bi-fold door run on bottom rollers? Series 548 bottom rollers will run smoother longer. More clearance for lintel sag. Less chance of problems.</p>	YES	
<p>Will the Bi-fold door keep the water out - has it been tested? The Vantage Series 548 Bi-fold door system has been successfully tested to keep water out. Open out door will resist up to 300Pa of water. If sliding doors have to comply so should hinged and Bi-fold doors in our opinion.</p>	YES	
<p>Are the door jambs 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.</p>	YES	
<p>Can the frame have fixed highlights (overlights)? As the weight is carried at the sill Vantage offer a range of transom details.</p>	YES	
<p>Can the door panels and fixed sidelights/highlights 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. Fixed highlights and lowlights can also be glazed with 20mm IGU.</p>	YES	
<p>High quality hardware? Heavy duty custom hinges that are designed to suit the door & frame without having to fit shims. Centre hinge between folding door panels has built-in handle to allow easy panel closing. Quad bogey wheel carriage designed to carry the load. Folding panels locked in the closed position with heavy duty lever operated bolt activators, key locking option available on these activators. Hardware available in three proprietary designs ANDO™, MIRO™ and ICON™. Matching Lever locksets are available with standard or lever compression lock options. 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.</p>	YES	
<p>Can the Bi-fold doors be screened? We can fit Centor S1 retractable screens behind Series 548 Bi-fold doors</p>	YES	

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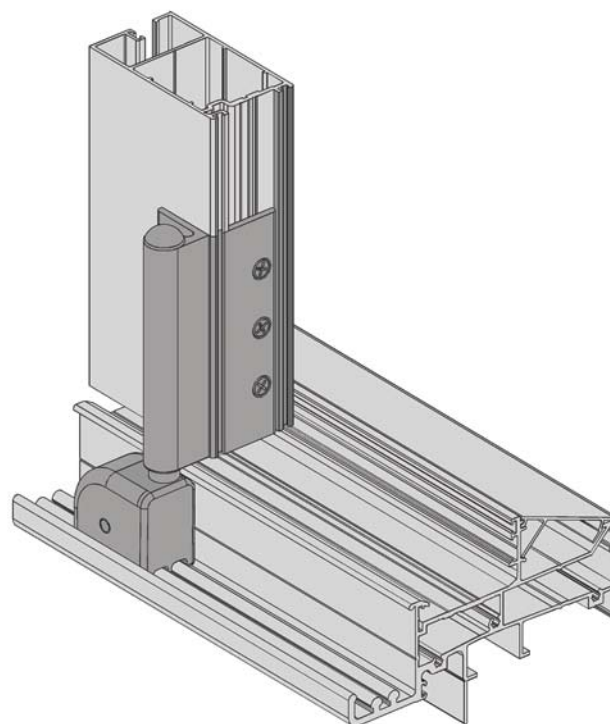
DESIGN FEATURES

Vantage Series 548 Bi-folding doors run smoothly because they carry all the weight on bottom rollers. In common with the best residential European systems, Series 548 has ruled out the use of top-hung doors.

1. **No Lintel Sag:** There's no worry about the doors jamming up. Bi-folds that run on rollers at the sill don't pull the door lintel down and therefore they work smoothly over the long haul.
2. **Robust & Forgiving:** Because Series 548 Bi-folds have good clearance at the top they can cope with up to 6mm of lintel movement without a problem. Top-hung systems have very little leeway, once they start 'playing up' they can be hard to fix.
3. **European Feature:** Virtually all recent, residential bi-fold door systems in Europe are bottom rolling for two reasons - to ensure that heavy panels (for example, with double-glazing) can operate easily, and to eliminate the need for wide bulky transoms above doors with overlights.
4. **No Bulky Transoms:** Where overlights are included above top-hung doors the transom needs to be large and deep to support the top track and the overlights. By contrast, the Series 548 Bi-fold transom has a narrow profile. This allows a designer to include 2100mm-high doors plus an overlight in a standard 2400mm-high opening. (Opening sashes as well as fixed overlights are available).
5. **Assured Water Drainage:** Series 548 sill design means that bi-fold doors have a very deep water 'head' at the bottom. The bigger this measurement - from drainage hole to the inside leg - the more assured the water drainage in wet or stormy conditions.
6. **Bi-fold Windows:** Are also available to match this door system, refer to Series 546
7. **Extra Wide Rails:** The Vantage Series 548 high performance Bi-fold door features an unusual design embellishment - extra wide top and bottom rails that give the door the chunky appearance of traditional timber designs. This flies in the face of an economy - driven approach to joinery design.

This strength of appearance is also backed up by true structural integrity. Vantage Series 548 doors feature a thoughtful but invisible innovation - 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.

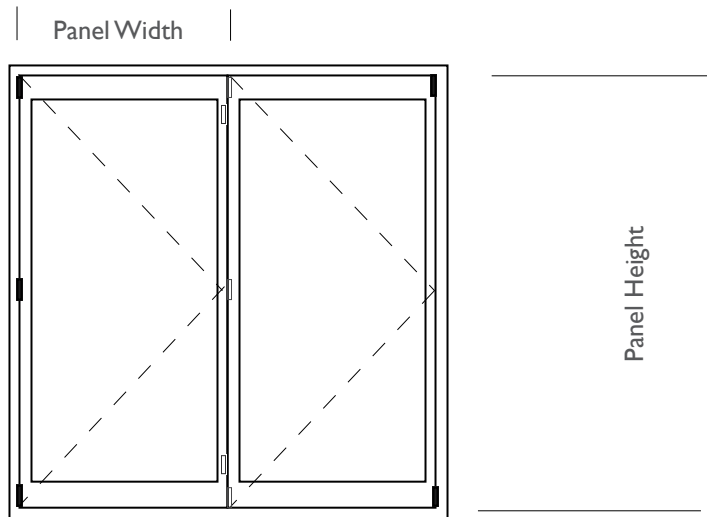
8. **Custom Hardware:** The centre hinge between door panels has built-in handle to allow home owner to easily pull the panels back into the closed position.
 The hinging panels are held in the closed position by heavy duty flush bolts top and bottom.
 No ugly shims and packers under the keeper and or hinges as we use custom injection moulded lock keepers, flush bolt blocks and flush bolt guides.
 Optional custom ANDO™, ICON™ or MIRO lever operated flushbolt or key operated bolts.
9. **Opening Panels:** Bi-fold panels can be fitted with ClearVENT™ sashless double-hung inserts.
10. **Hardware:** We offer three custom hardware options ANDO™, ICON™ or MIRO™, this hardware is available in lever furniture and bolt activators as shown later.



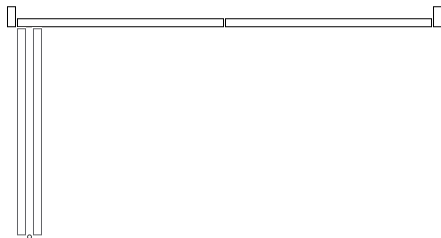
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LIMITATIONS



Typical two panel BFD2 illustrated.



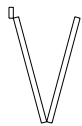
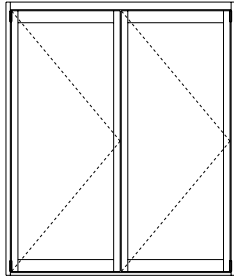
Maximum Bi-fold Door Panel Sizes

Maximum panel weight	60 kg per panel 45 kg per panel on type BFD2+2 and BFD4+2.
Maximum panel width	900mm
Maximum frame width	5450mm
Maximum panel height	2600mm Will vary depending on weight, design wind load and allowable metal deflection. Double glazed doors may be limited by the availability of large IGU panels Problems may be experienced with operating the locking gear and sliding the panels when panel height exceeds 2400mm.
Hinge quantity	3. hinges - height less than or equal to 2200mm 4. hinges - height greater than to 2200mm When using four hinges we recommend that both the central inner hinges have the pull handle.

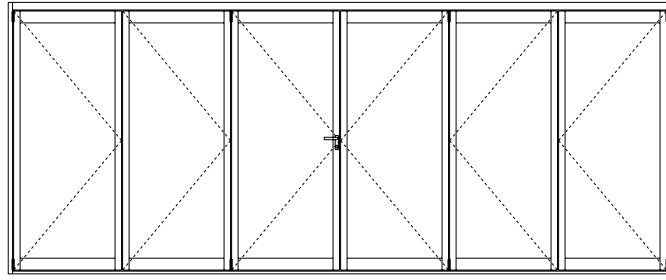
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TYPICAL CONFIGURATIONS



type. **BFD2**
Both doors fold to the left or right.



type. **BFD3 + 3**
Three doors fold to the left and three to the right.



Frame Height mm	Panel Width mm	Meeting Stiles	
		S	U
2100	500	2200	4500
2100	600	1879	4187
2100	700	1632	3629
2100	800	1450	3218
2100	900	1312	2903
2400	500	1458	3745
2400	600	1225	3143
2400	700	1061	2717
2400	900	846	2158
2700	500	1005	2921
2700	600	843	2448
2700	700	728	2112
2700	800	643	1863
2700	900	578	1670

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.

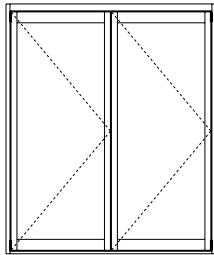
Wind Ratings (Pa) Meeting stiles.

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TYPICAL BI-FOLD DOOR CONFIGURATIONS

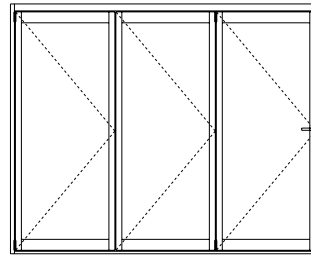
Width > 1123mm <= 1894mm



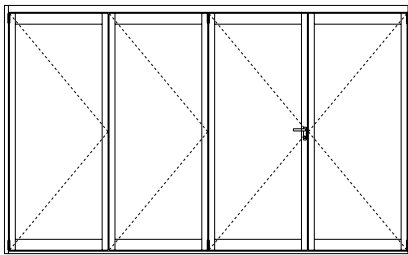
Height
<= 2700mm



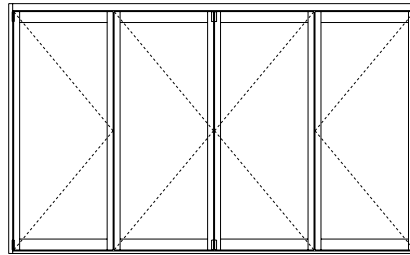
Width > 1615mm <= 2814mm



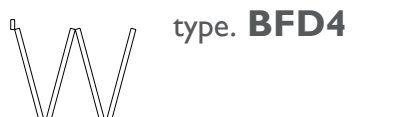
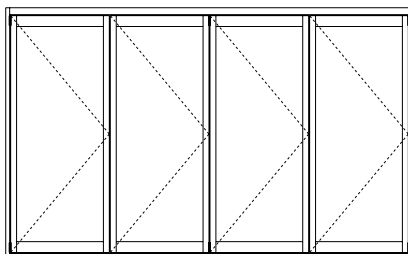
Width > 2121mm <= 3720mm



Width > 2151mm <= 3692mm

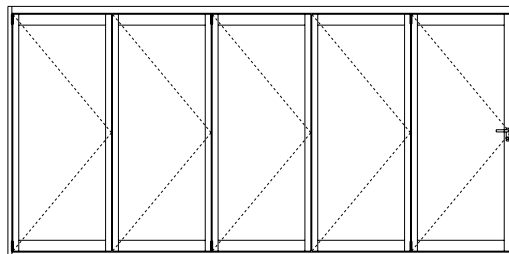


Width > 2139mm <= 3677mm



Internal operation only.

Width > 2631mm <= 4632mm



Opening Direction

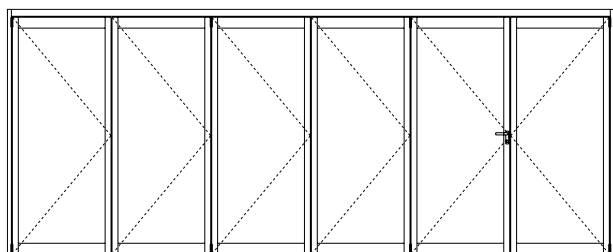
Even number panels like BFD4 can be opened and closed only from the inside.

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TYPICAL BI-FOLD DOOR CONFIGURATIONS

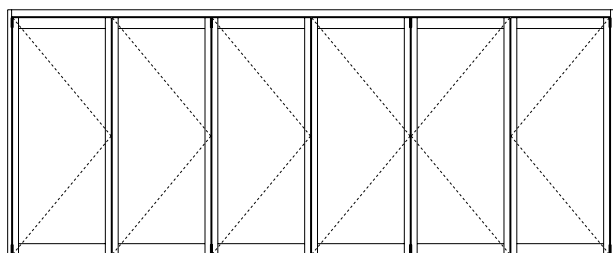
Width > 3140mm <= 5450mm



type. **BFD1+5**
BFD5+1 illustrated

BFD1+5 Indicates that there are a total of six panels, one hinged on the left side and the other five folding to the right. Always viewed from the outside.

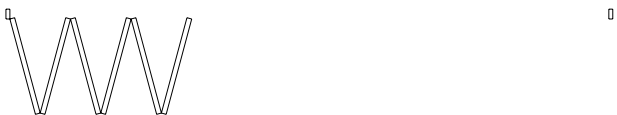
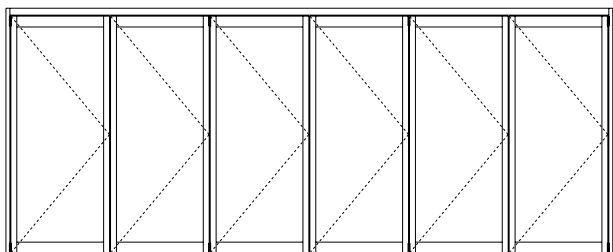
Width > 3167mm <= 5450mm



type. **BFD2+4**
BFD4+2 illustrated

Even number panels like BFD4+2 and BFD2+4 can be opened and closed only from the inside.

Width > 3155mm <= 5450mm



type. **BFD6**

Even number panels like BFD6 can be opened and closed only from the inside.

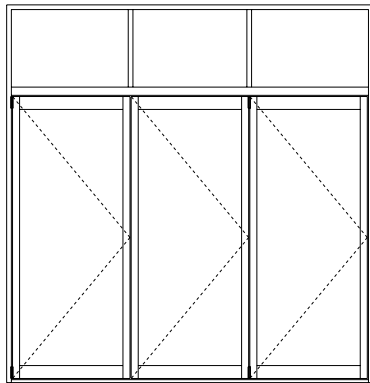
Chair rails

All hinged and Bi-folding doors can be fitted with 121mm or 68mm chair rails. Likewise the adjoining fixed sidelights can have chair rails to match.

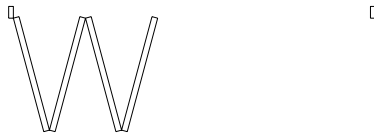
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TYPICAL BI-FOLD DOOR CONFIGURATIONS WITH OVERLIGHTS



51040
Transom



Bifold doors

with fixed highlights, jambs run through making the overall frame stronger and easier to transport to site.

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.

Ultimate strength rating has been limited to 4500 Pa.

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

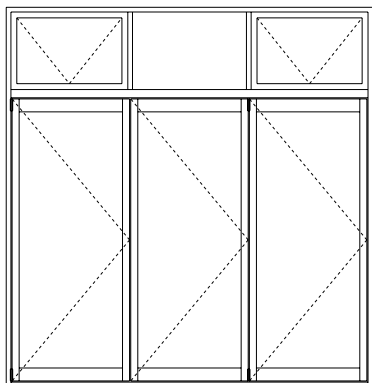
Blank Denotes rating under 500 Pa.

Important Note:

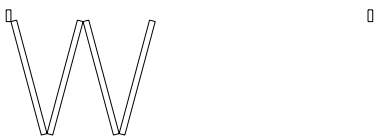
The Pascal Ratings listed below cover the strength of the transom only and in most cases this number will be reduced by the rating of the door meeting stiles. Cross section detail through this transom occurs later in these notes.

Frame Width mm	Heights		Transom Ratings (Pa)	
	Bi-fold mm	Highlight mm	S	U
3600	2100	600	891	1336
3900	2100	600	744	1117
4200	2100	600	632	948
4500	2100	600	543	815
4800	2100	600		
3600	2400	600	831	1246
3900	2400	600	690	1035
4200	2400	600	583	875
4500	2400	600	500	750
4800	2400	600		

Wind Ratings (Pa) Transom 51040.



51040
Transom



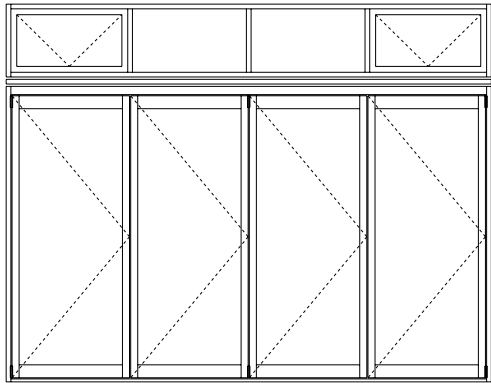
Bifold doors

with awning and fixed highlight combination, jambs run through making the overall frame stronger and easier to transport to site.

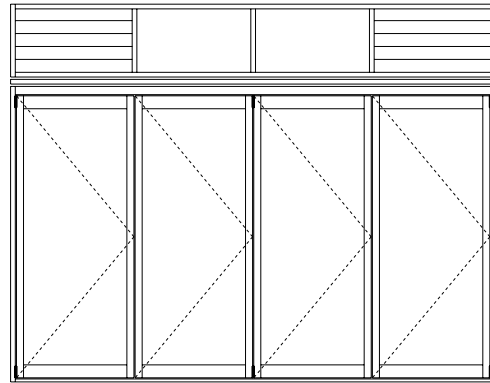
Series 548 High Performance Bi-fold Door

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TYPICAL BI-FOLD DOOR CONFIGURATIONS WITH OVERLIGHTS



42027 Transom



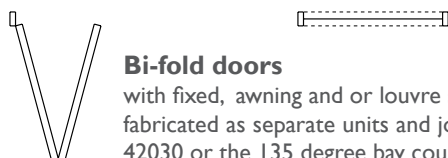
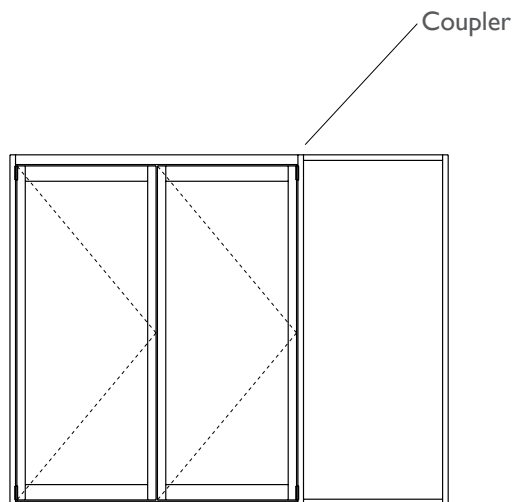
Bifold doors

with fixed, awning and or louvre highlights, fabricated as separate units and joined with the heavy duty transom coupler 42027.

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.
Ultimate strength rating has been limited to 4500 Pa.
2200 Serviceability ratings were restricted by the maximum water resistance (300Pa) achieved on this product.
Blank Denotes rating under 500 Pa.

Important Note:

The Pascal Ratings listed below cover the strength of the transom only and in most cases this number will be reduced by the rating of the door meeting stiles. Cross section detail through this transom occurs later in these notes.



Bi-fold doors

with fixed, awning and or louvre sidelights, fabricated as separate units and joined with coupler 42024, 42027, 42030 or the 135 degree bay coupler 42026.

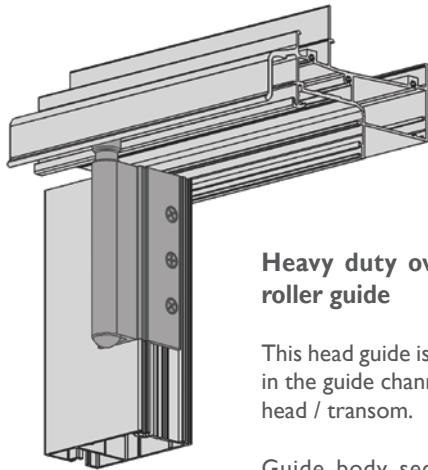
Frame Width mm	Heights		Transom Ratings (Pa)	
	Bi-fold mm	Highlight mm	S	U
3600	2100	600	891	1336
3900	2100	600	744	1117
4200	2100	600	632	948
4500	2100	600	543	815
4800	2100	600		
3600	2400	600	831	1246
3900	2400	600	690	1035
4200	2400	600	583	875
4500	2400	600	500	750
4800	2400	600		

Wind Ratings (Pa) Transom 42027.

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HARDWARE MAKES THE DIFFERENCE

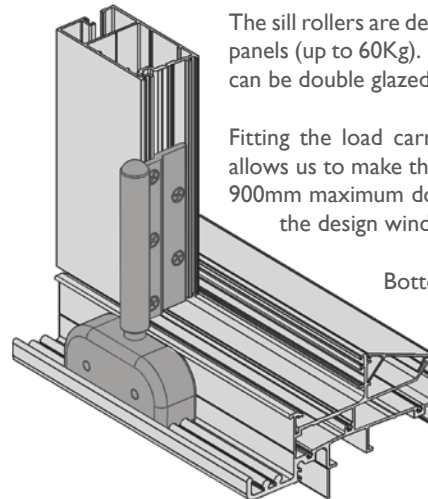


Heavy duty overhead roller guide

This head guide is retained in the guide channel in the head / transom.

Guide body secured to door stile with stainless steel screws.

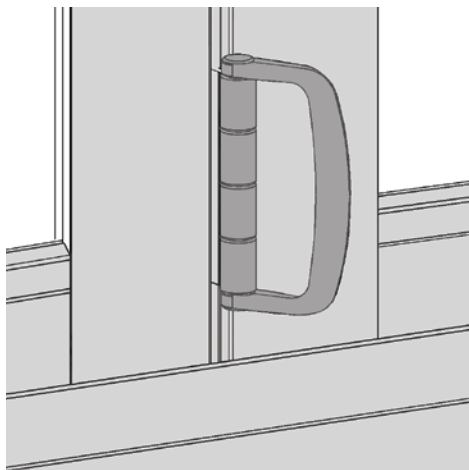
Heavy duty quad bogey sill roller



The sill rollers are designed to support heavy door panels (up to 60Kg). As the Vantage bi-fold doors can be double glazed the panels will get heavy.

Fitting the load carrying rollers on the bottom allows us to make the door panels bigger (2600 x 900mm maximum door panel size) depending on the design wind load.

Bottom rollers are more forgiving than top rollers in that we can cope with up to 6mm of lintel movement without a problem.

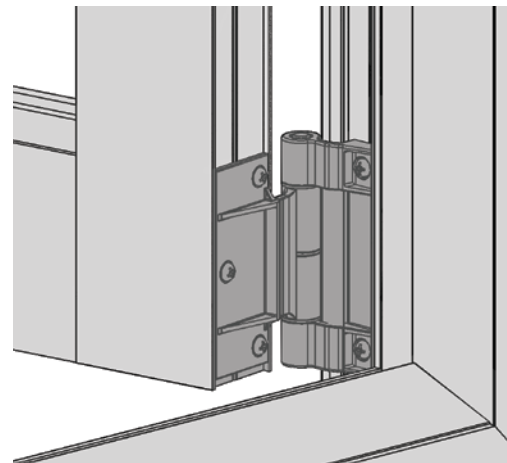


Handle Hinge

This hinge with inbuilt pull handle is located centrally between projecting, folding door stiles to enable these stiles to be pulled back to the frame (closed position).

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

The pull handle folds back flush with the panels when not in use.



Jamb 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 are maintained.

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HARDWARE MAKES THE DIFFERENCE



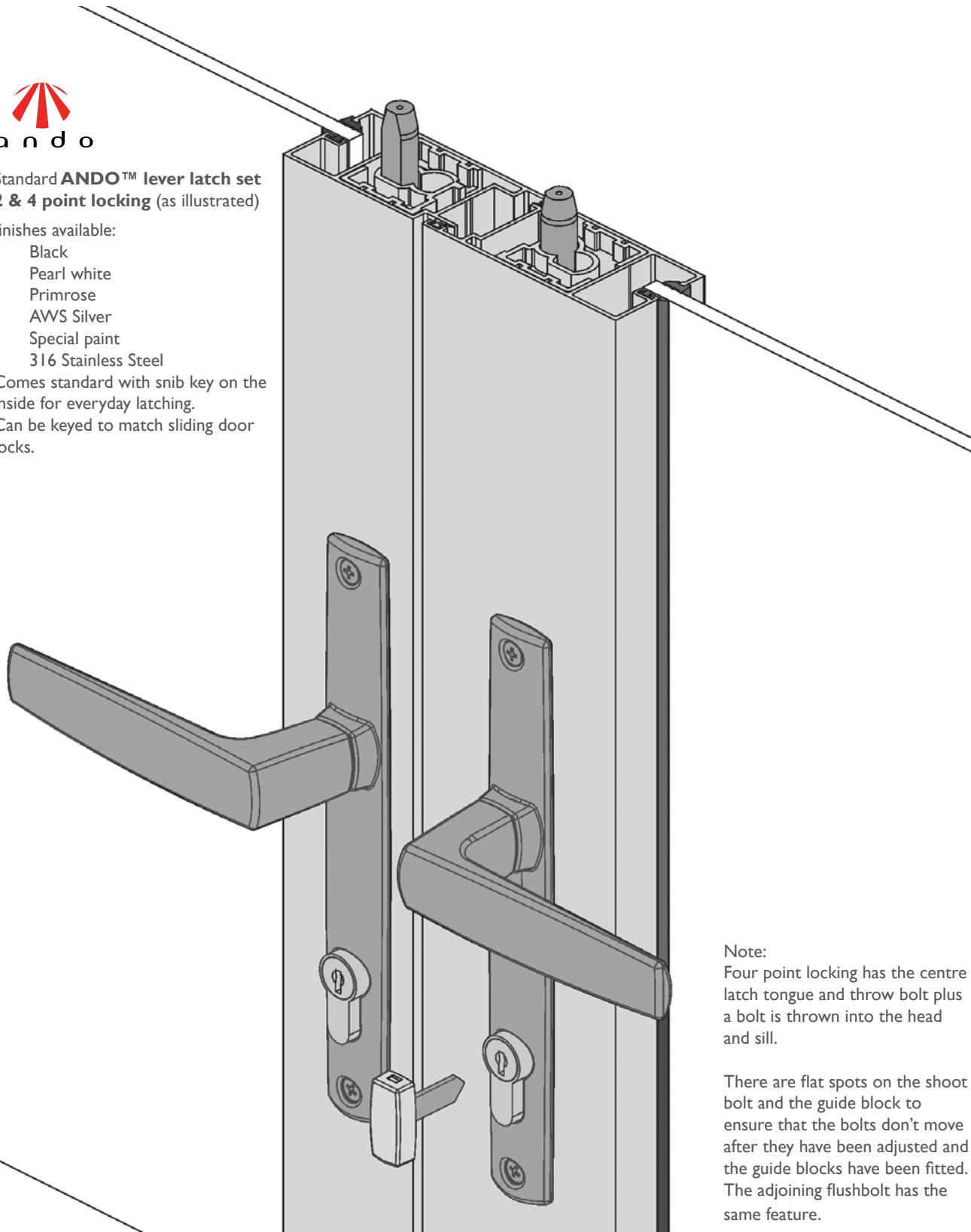
Standard **ANDO™** lever latch set
2 & 4 point locking (as illustrated)

finishes available:

- Black
- Pearl white
- Primrose
- AWS 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



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

finishes available:

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

ALTERNATIVE

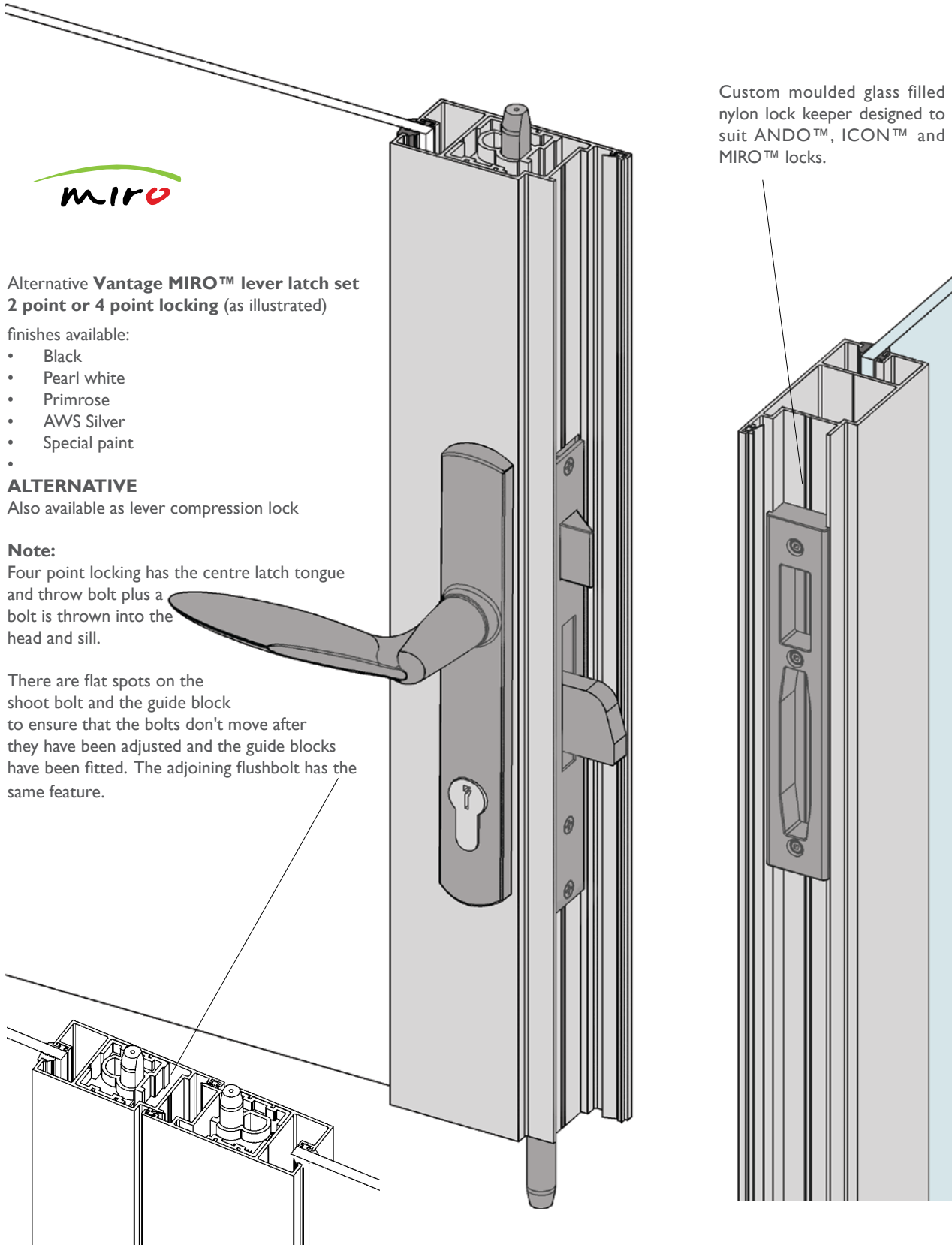
Also available as lever compression lock

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 ANDO™, ICON™ and MIRO™ locks.



Series 548 High Performance Bi-fold Door

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

HARDWARE MAKES THE DIFFERENCE



ICON™

Latch Set

finishes available:

- 316 Stainless steel

ALTERNATIVE

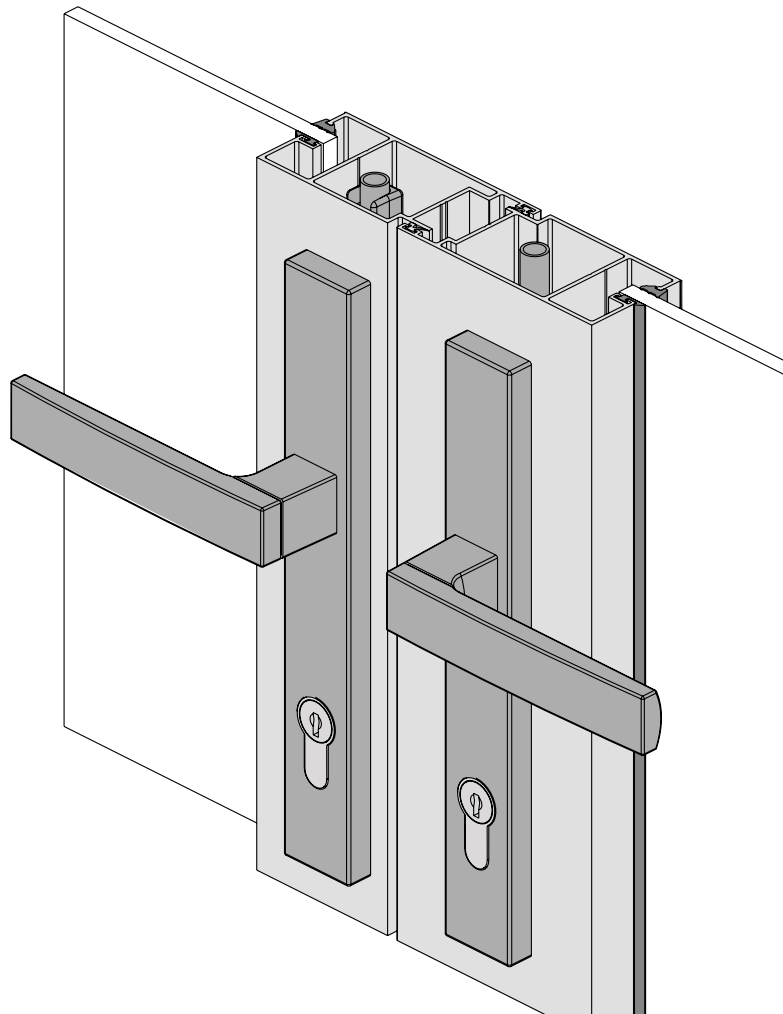
Also available as lever compression lock

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.



Finger operated flushbolts

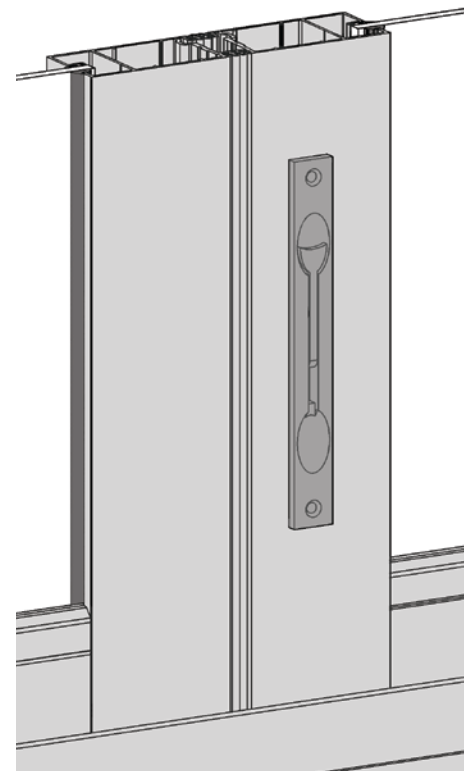
finishes available:

- Black
- Pearl white
- AWS Silver
- Special paint

Bi-fold doors can be fitted with finger operated flushbolts.

Bolts throw into custom nylon keeper.

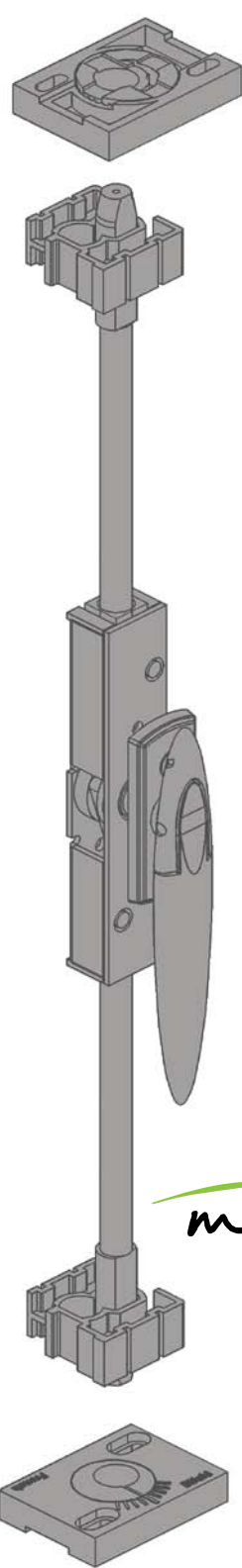
Alternative
ANDO™, ICON™ or MIRO™ lever operated
bolts shown on following page.
or
Key operated bolts shown on page after next.



Series 548 High Performance Bi-fold Door

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

HARDWARE MAKES THE DIFFERENCE



Lever operated shoot bolts

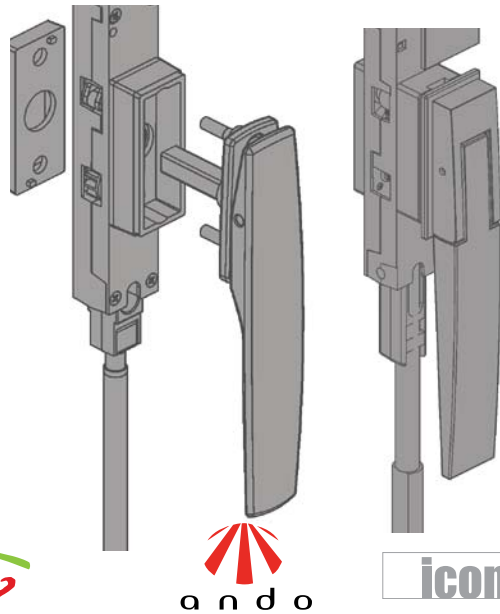
finishes available:

- Black
- Pearl white
- AWS Silver
- Special paint
- Stainless Steel (ANDO™ & ICON™ only)

With Vantage you have a choice of bi-fold activators - ANDO™, ICON™ or MIRO™

These lever operated bolt systems activate both top and bottom bolts by turning the lever handle 90°.

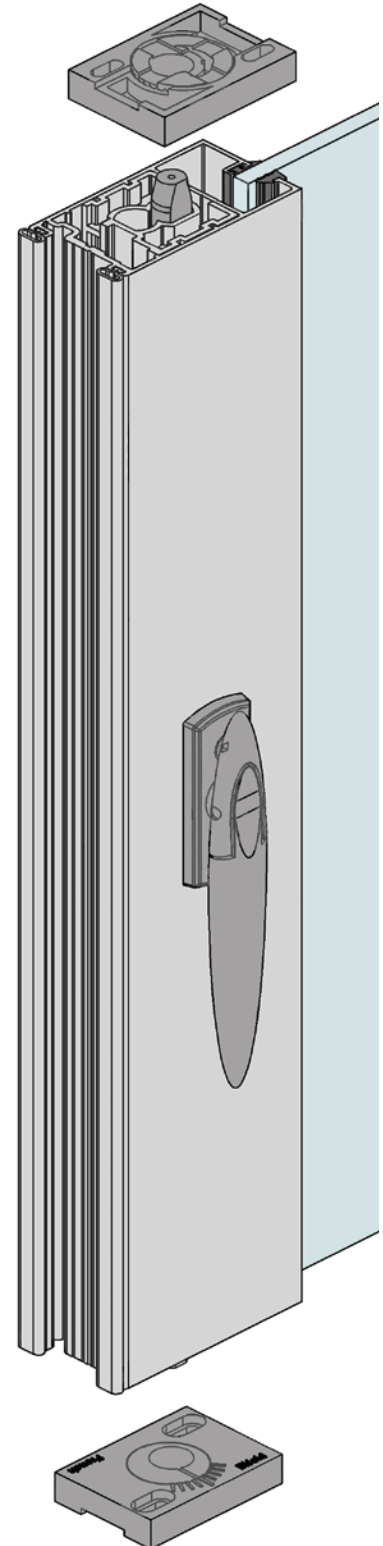
The lever handles have been designed to complement the custom hinged door lever latch sets (ANDO™, ICON™ & MIRO™) illustrated on the lock set pages.



miro

ando

icon



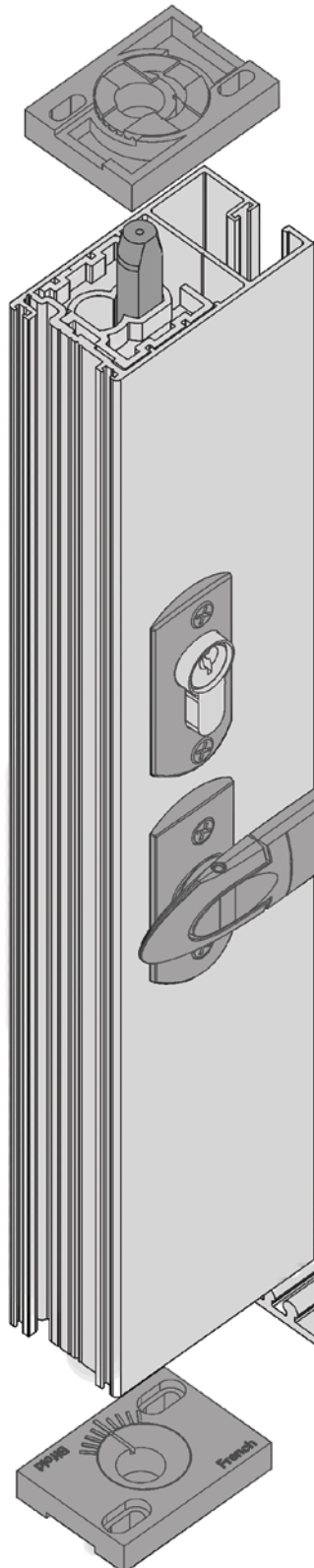
Moulded nylon bolt guide ensures that the shoot bolt sits snugly in the door stile and the flat spot on the bolt locks into the flat spot on the guide. This prevents the bolt from moving (dropping) after installation.

Moulded adjustable nylon bolt keeper. The centre core can be adjusted (turned) to lighten or loosen the joint between door panels and frame. This is important if you want to keep water and dust out.

Series 548 High Performance Bi-fold Door

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

HARDWARE MAKES THE DIFFERENCE



Key locking Shoot Bolt Activators

finishes available:

- Black
- Pearl white
- Special paint
- Stainless Steel (ANDO™ & ICON™ only)

With Vantage you have a choice of bi-fold activators - ANDO™, ICON™ or MIRO™

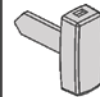
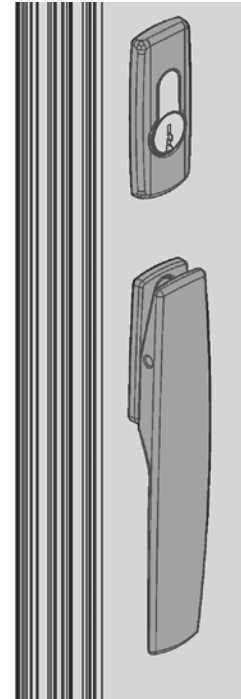
The lever operated bolt systems activate both top and bottom bolts by turning the lever handle 90°.

Bolts can be key locked in the closed position.

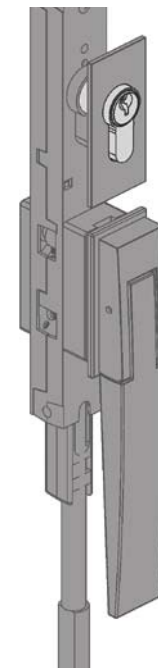
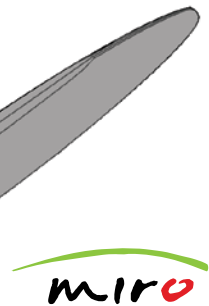
Moulded nylon bolt guide ensures that the shoot bolt sits snugly in the door stile and the flat spot on the bolt locks into the flat spot on the guide. This prevents the bolt from moving (dropping) after installation.

Moulded adjustable nylon bolt keeper.

The centre core can be adjusted (turned) to tighten or loosen the joint between door panels and frame. This is important if you want to keep water and dust out.



Snib key is standard on ANDO™ bolt activator

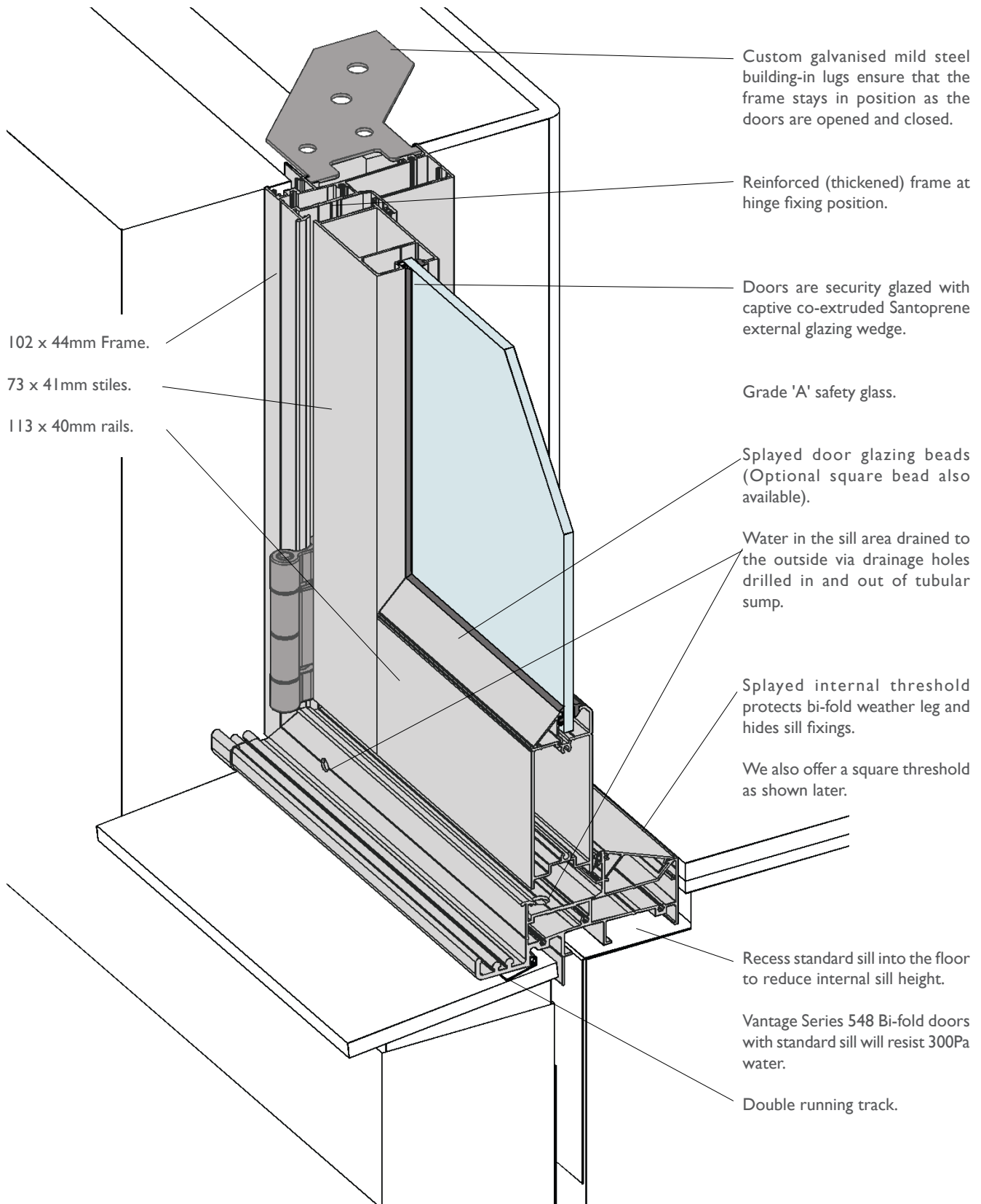


See the bi-fold activators open and close in full colour on our web site:
www.vantagealuminium.com.au

Series 548 High Performance Bi-fold Door

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

SINGLE GLAZED BI-FOLD DOOR SILL CORNER - CLOSED

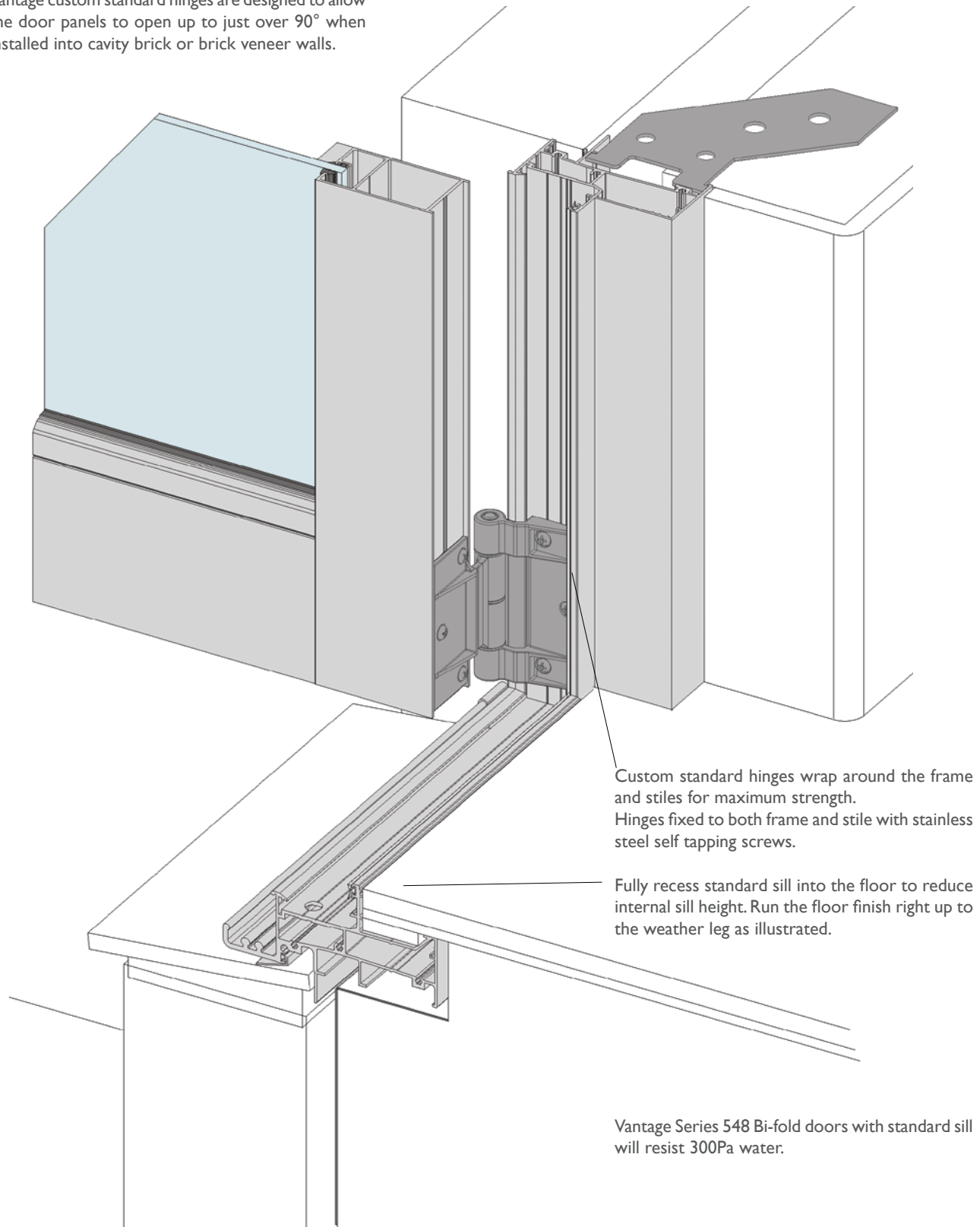


Series 548 High Performance Bi-fold Door

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

SINGLE GLAZED BI-FOLD DOOR SILL CORNER - OPEN

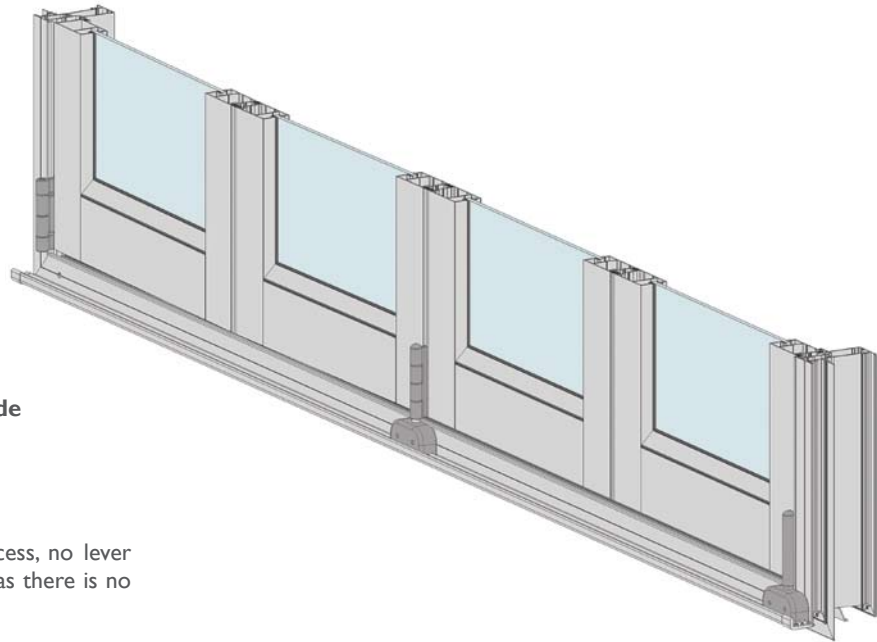
Vantage custom standard hinges are designed to allow the door panels to open up to just over 90° when installed into cavity brick or brick veneer walls.



Series 548 High Performance Bi-fold Door

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

FOUR PANEL BI-FOLD DOORS - TYPE BFD 4



Typical bi-fold door opening to one side

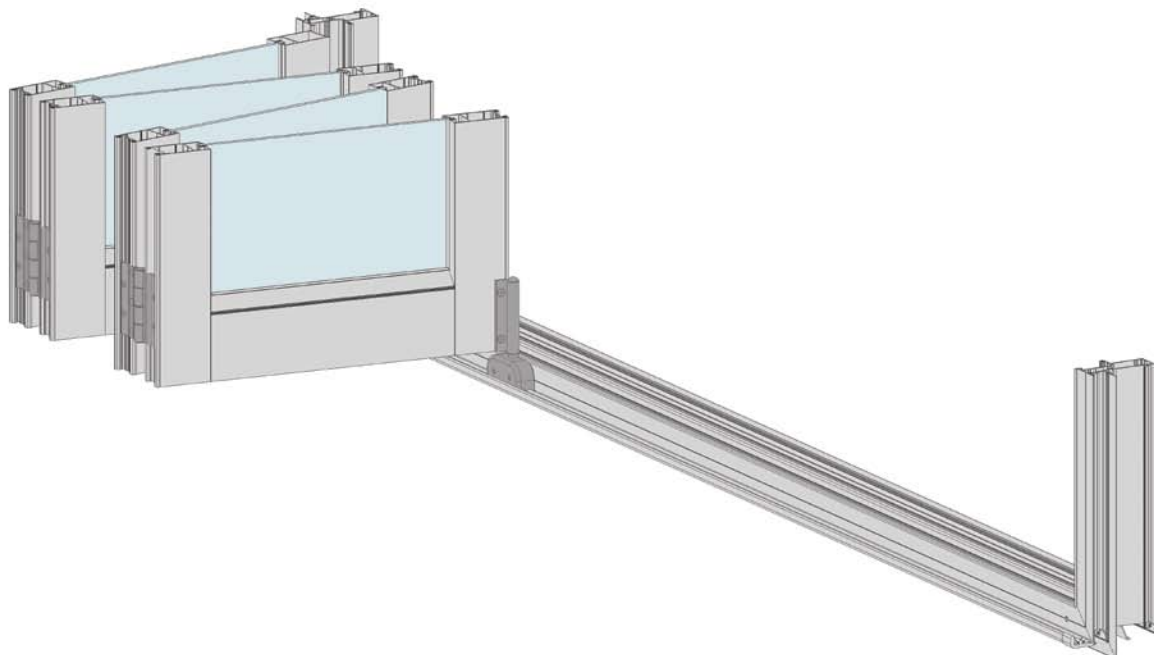
Doors can open to the left or right.
type BFD4 illustrated.

On this example there is no external access, no lever lock to open the doors from the outside as there is no loose leaf.

This door would be suitable for balcony applications.
Other doors that don't have external access (BFD2, BFD2+2, BFD6, BFD4+2 and BFD2+4).



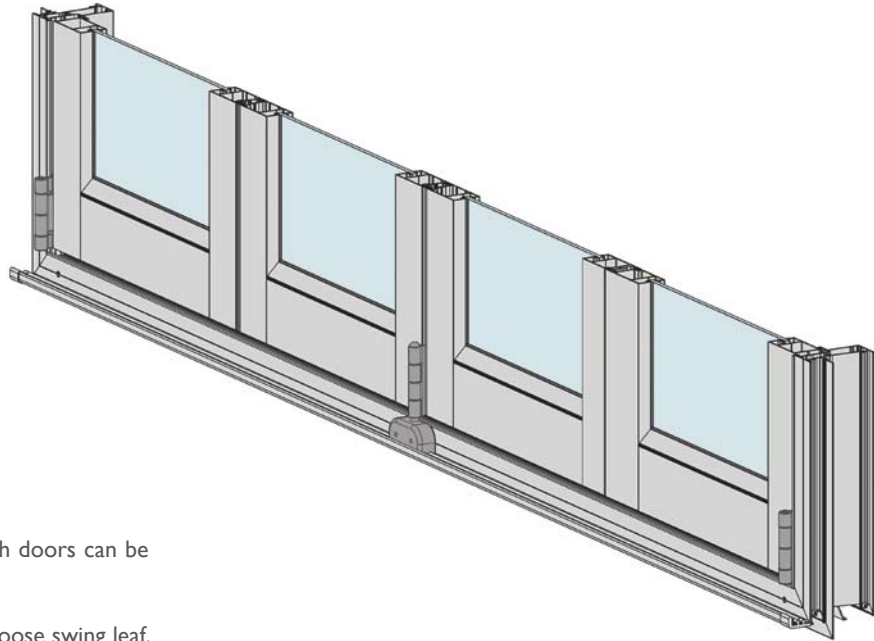
See the bi-fold doors open and close in full colour on our web site:
www.vantagealuminium.com.au



Series 548 High Performance Bi-fold Door

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

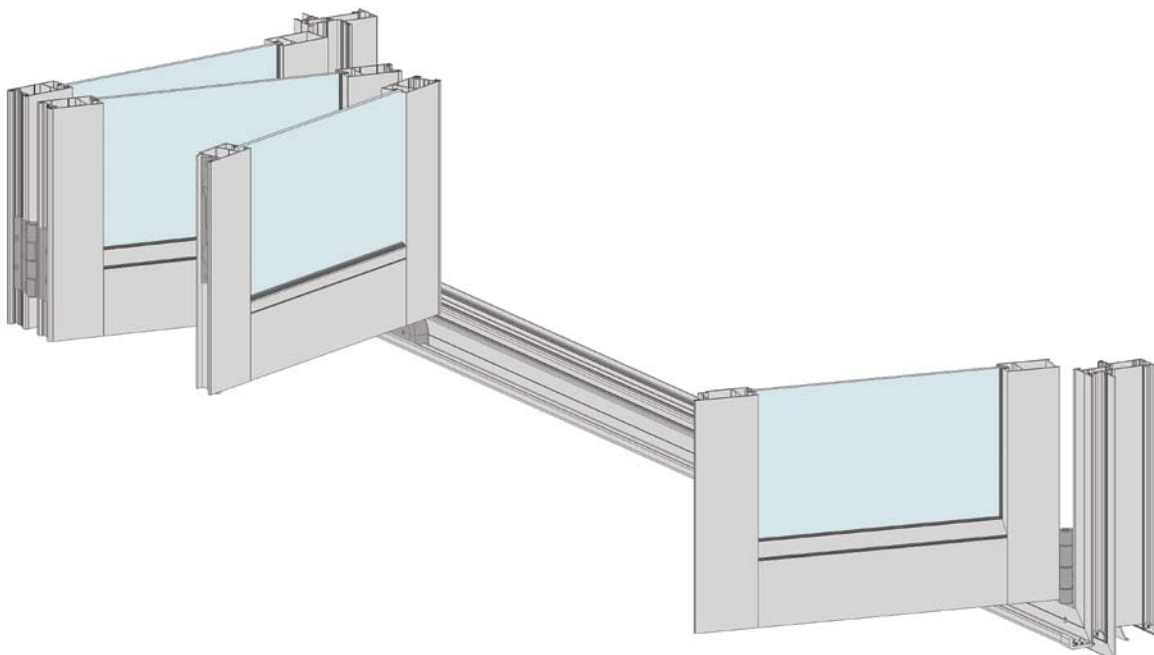
FOUR PANEL BI-FOLD DOORS - TYPE BFD 3+1



Typical bi-fold door with loose leaf

This example (BFD 3+1) shows how French doors can be incorporated into bi-fold doors.

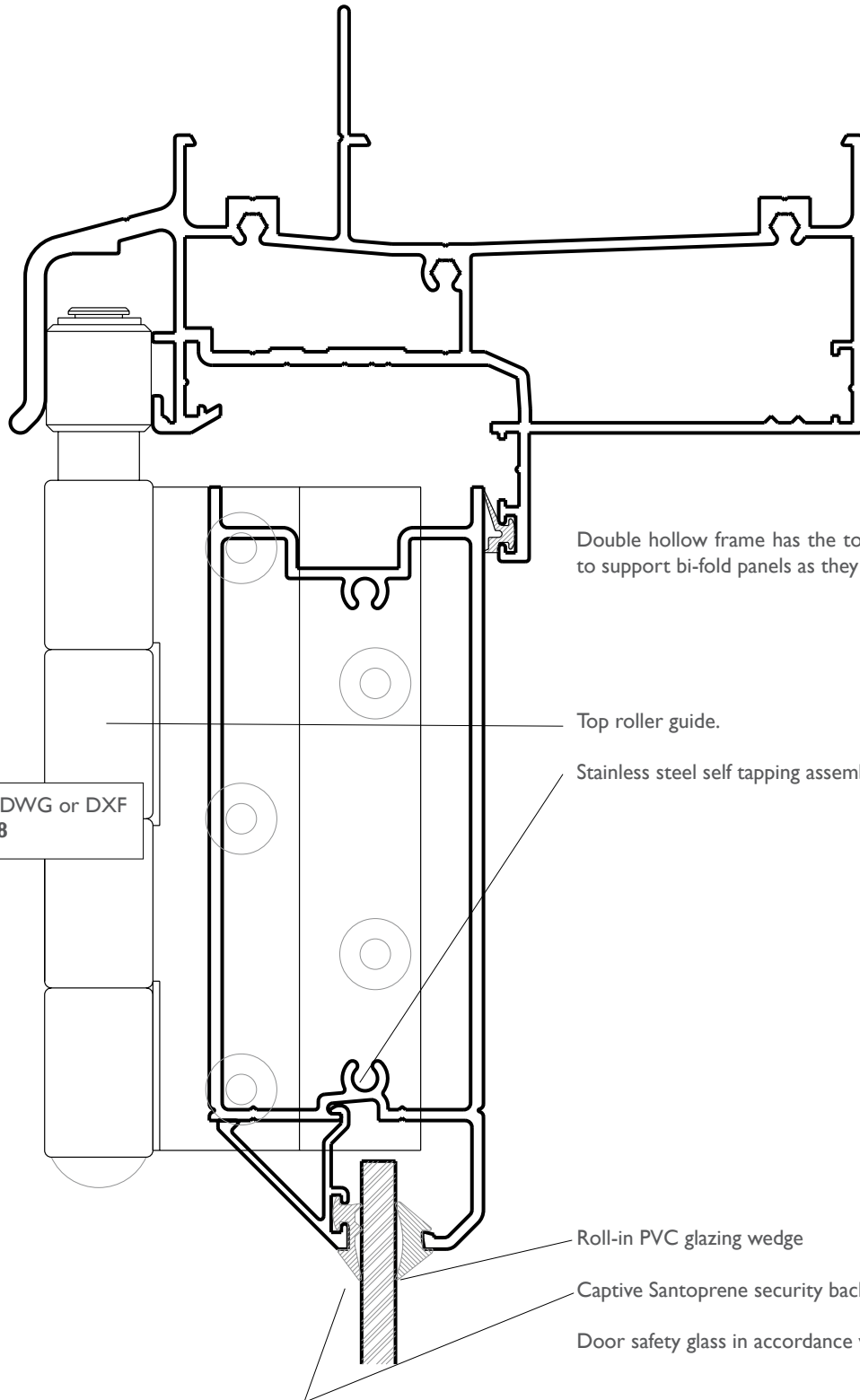
This type of door has a lever latch set in a loose swing leaf. Other doors that have a loose leaf (BFD3, BFD1+3, BFD5, BFD3+3, BFD5+1 and BFD1+5).



Series 548
 High Performance Bi-fold Door

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

VERTICAL SECTION THROUGH STANDARD HEAD - SINGLE GLAZED



Double hollow frame has the torsional strength to support bi-fold panels as they open and close.

Top roller guide.

Stainless steel self tapping assembly screws.

Roll-in PVC glazing wedge

Captive Santoprene security backing.

Door safety glass in accordance with AS 1288.

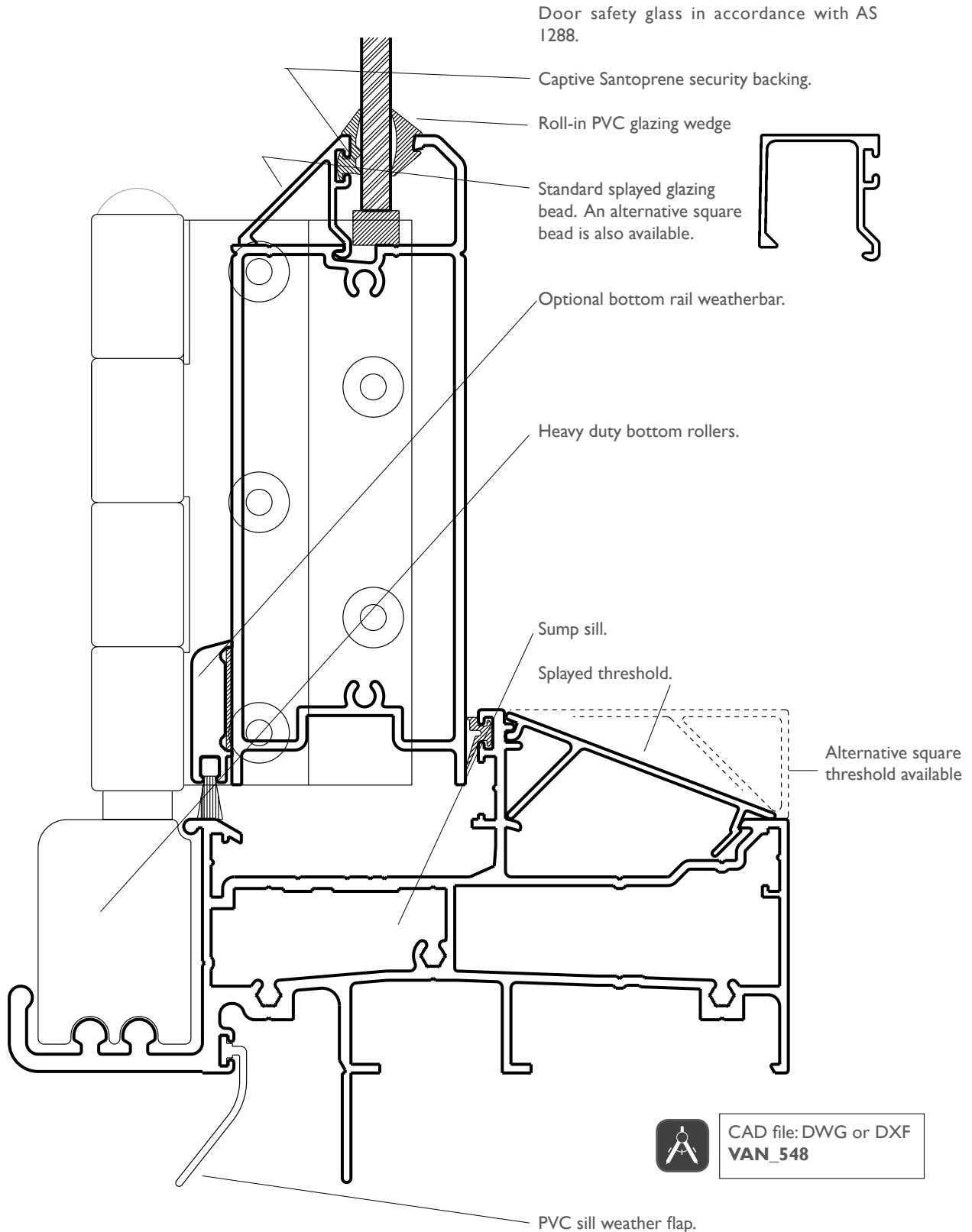


CAD file: DWG or DXF
VAN_548

Series 548 High Performance Bi-fold Door

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

VERTICAL SECTION THROUGH STANDARD SILL - SINGLE GLAZED

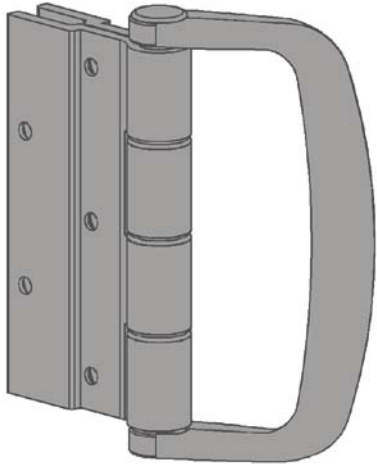


CAD file: DWG or DXF
VAN_548

Series 548 High Performance Bi-fold Door

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

HORIZONTAL SECTION THROUGH BI-FOLD MEETING STILES



The bi-fold door meeting stiles that fold are fitted with a pull handle fitted into the centre hinge to enable these doors to be pulled close.

If there are four hinges the handle will be on the lower of the central hinges.

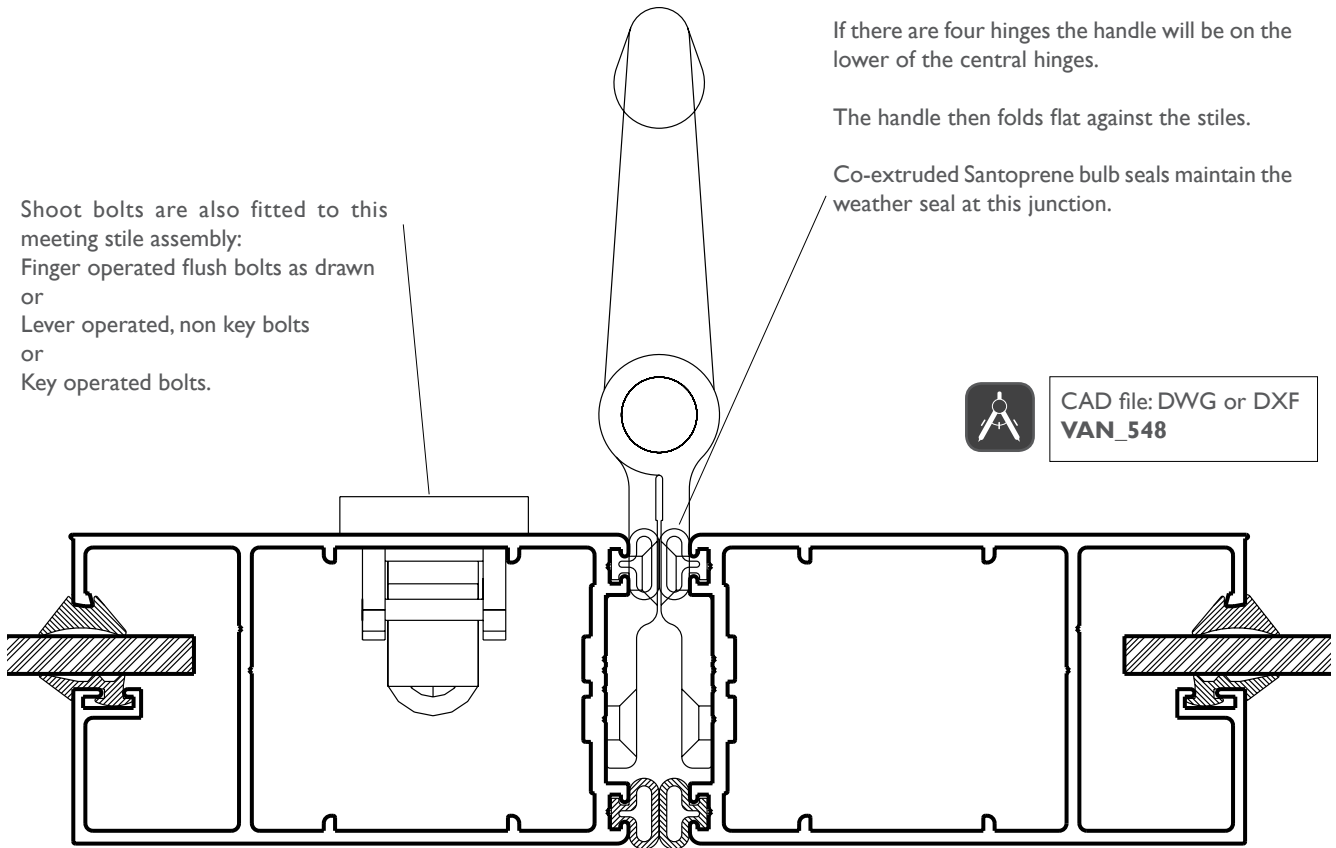
The handle then folds flat against the stiles.

Co-extruded Santoprene bulb seals maintain the weather seal at this junction.

Shoot bolts are also fitted to this meeting stile assembly:
Finger operated flush bolts as drawn
or
Lever operated, non key bolts
or
Key operated bolts.



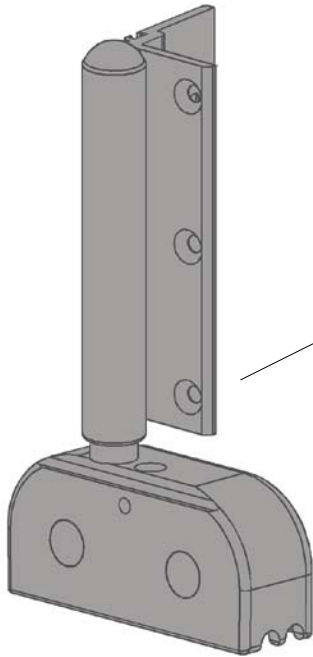
CAD file: DWG or DXF
VAN_548



Series 548 High Performance Bi-fold Door

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

HORIZONTAL SECTION THROUGH BI-FOLD JAMB

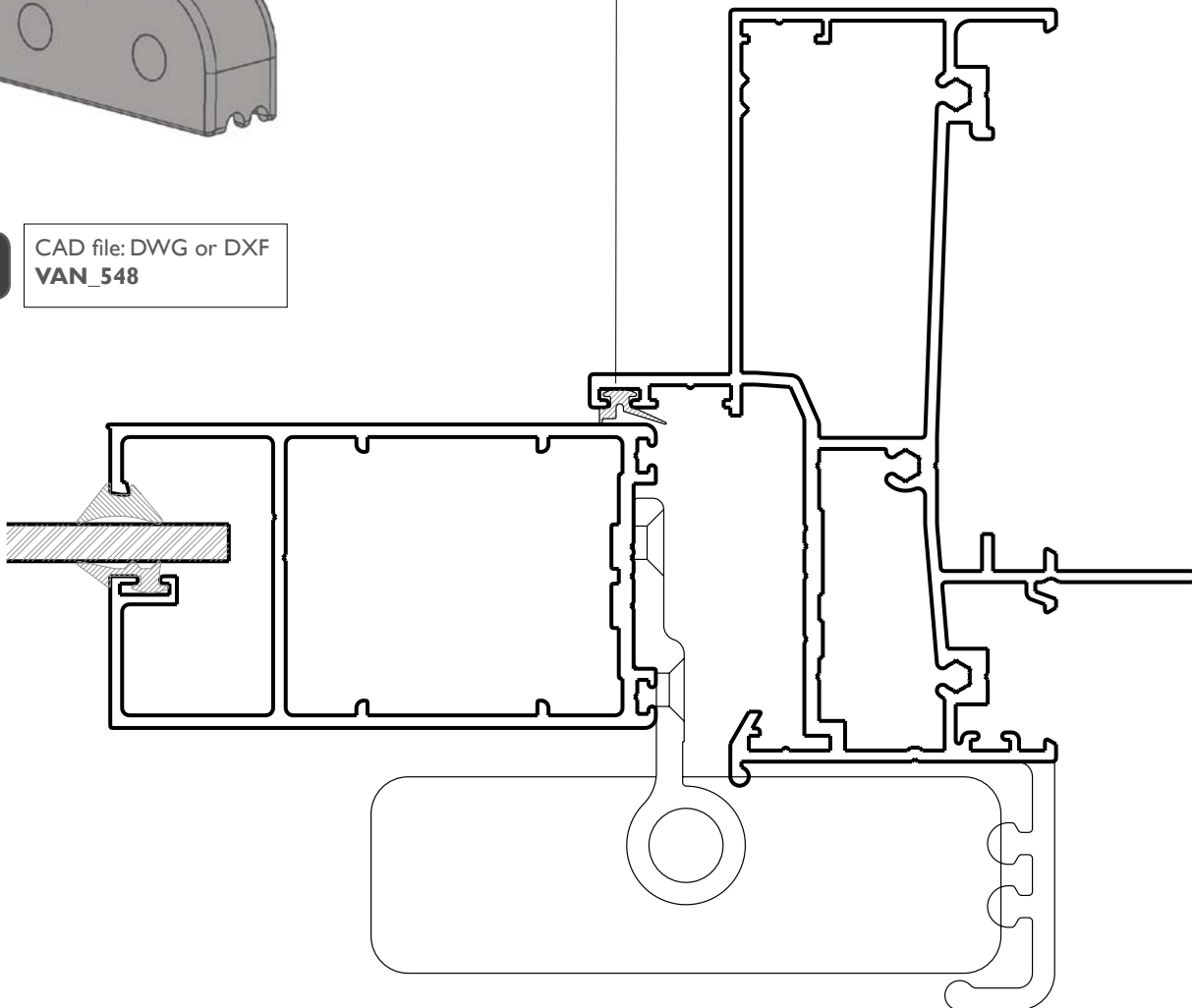


Typical bottom roller assembly secured to stile with countersunk stainless steel self tapping screws. Rollers can be colour matched to extrusion and 316 Stainless Steel cowling option exists for coastal applications.

Weatherpile fin seal.



CAD file: DWG or DXF
VAN_548



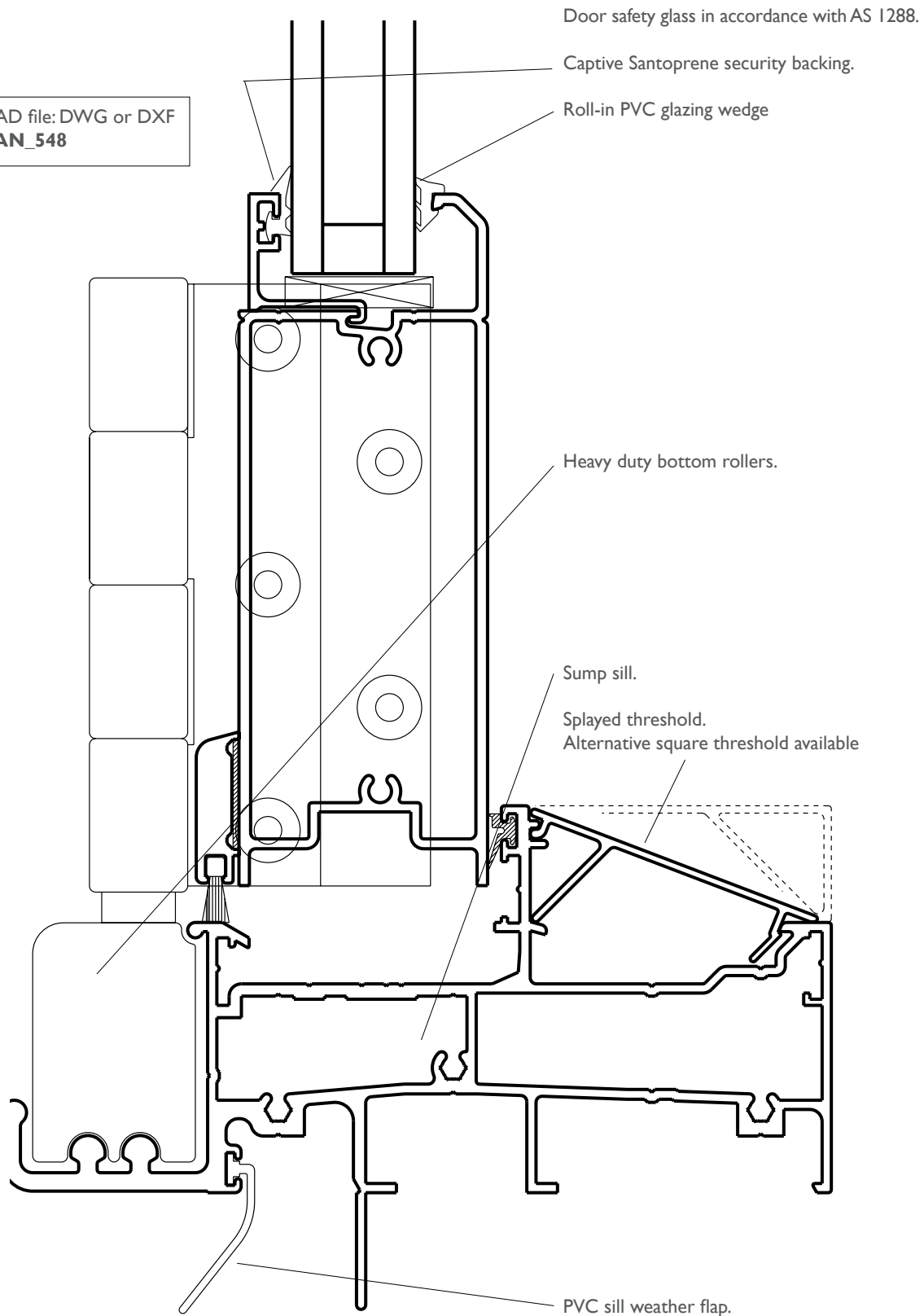
Series 548 High Performance Bi-fold Door

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

VERTICAL SECTION THROUGH STANDARD SILL - DOUBLE GLAZED



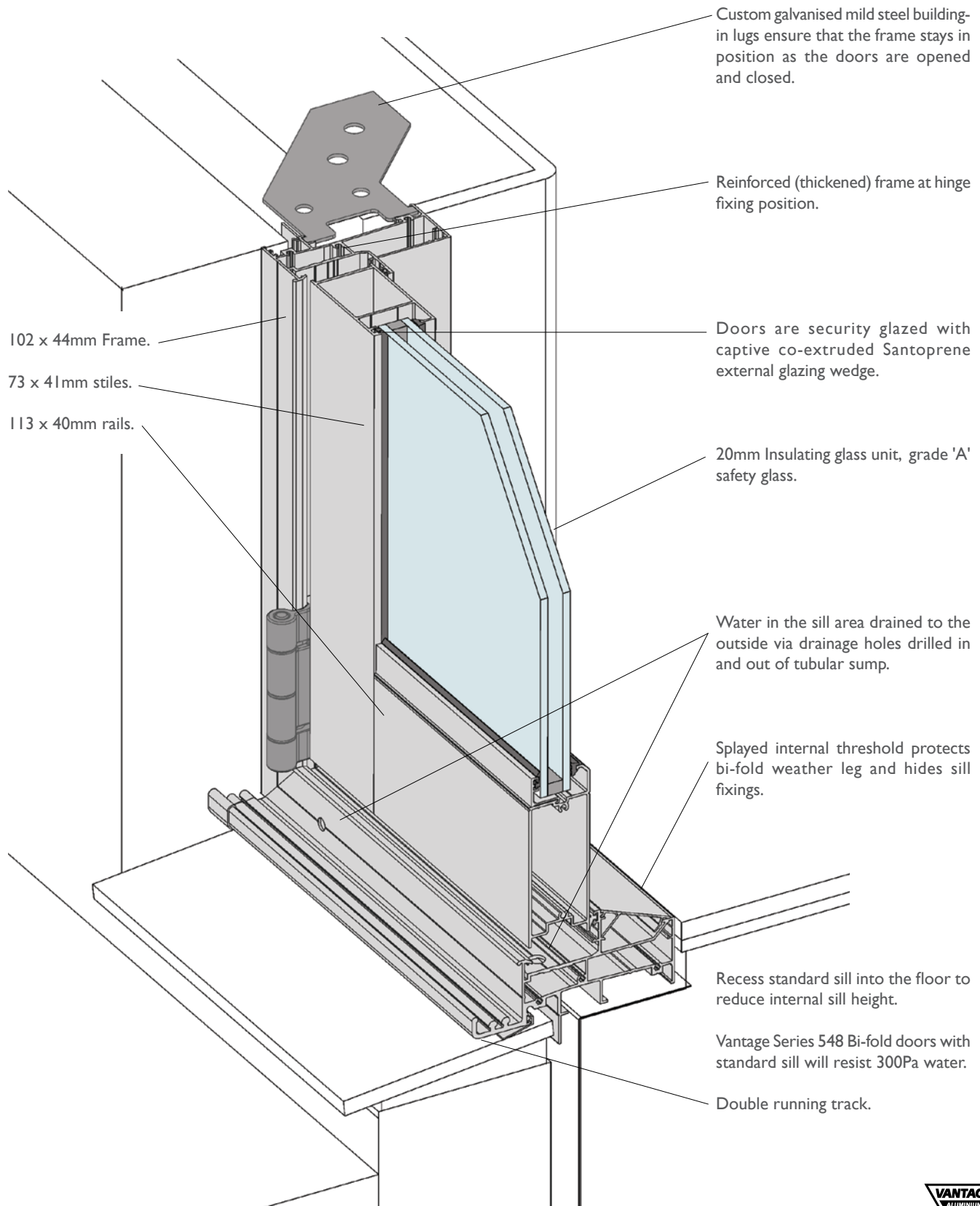
CAD file: DWG or DXF
VAN_548



Series 548 High Performance Bi-fold Door

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

DOUBLE GLAZED DOOR CORNER DETAIL



Series 548 High Performance Bi-fold Door

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

VERTICAL SECTION THROUGH OPTIONAL RECESSED SILL - SINGLE GLAZED



CAD file: DWG or DXF
VAN_548

This recessed track fitted with channel infill when doors are in the open position. This keeps high heels and rubbish out of the recess.

The size and location of the recess in concrete is critical to the correct positioning of the frame

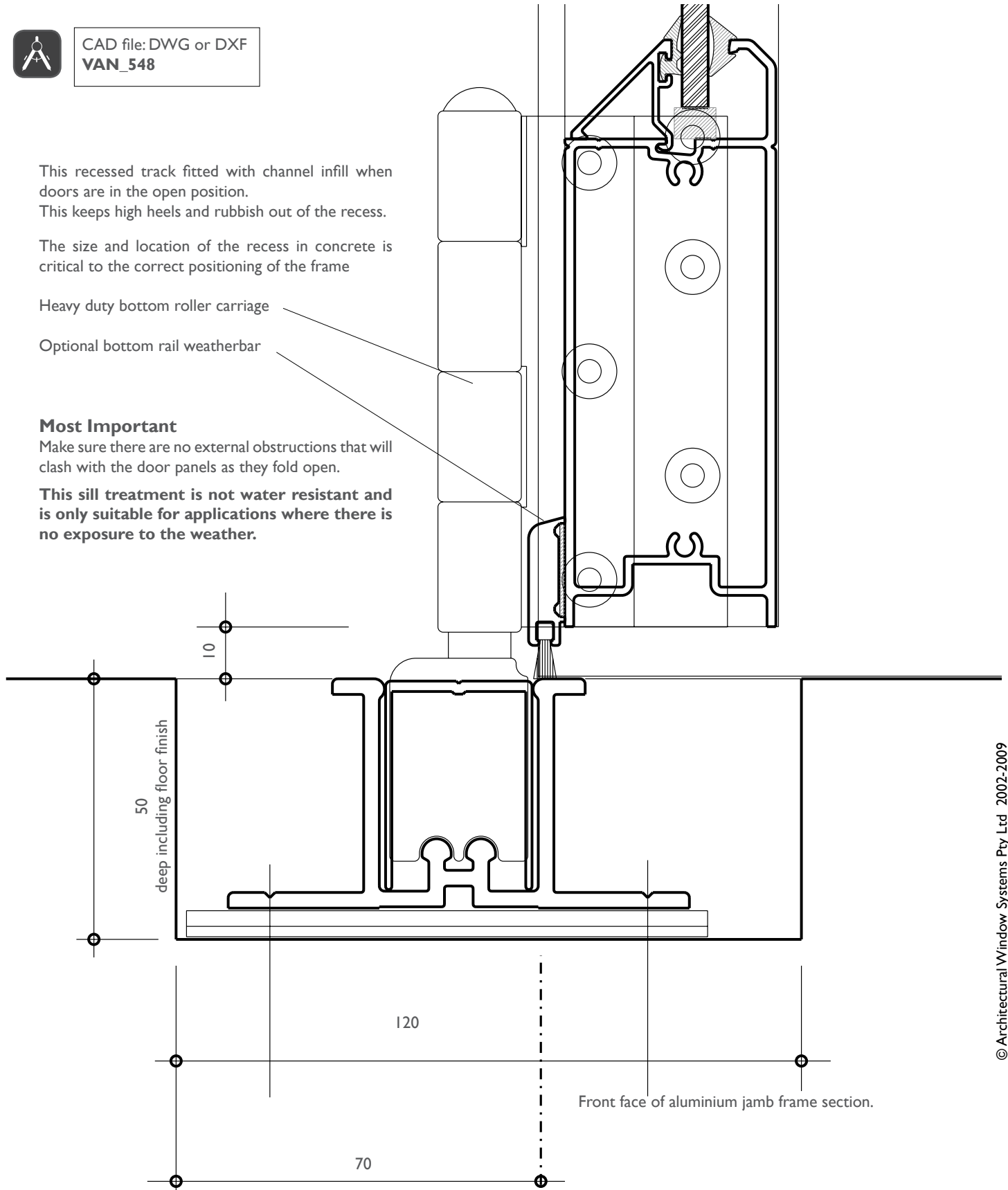
Heavy duty bottom roller carriage

Optional bottom rail weatherbar

Most Important

Make sure there are no external obstructions that will clash with the door panels as they fold open.

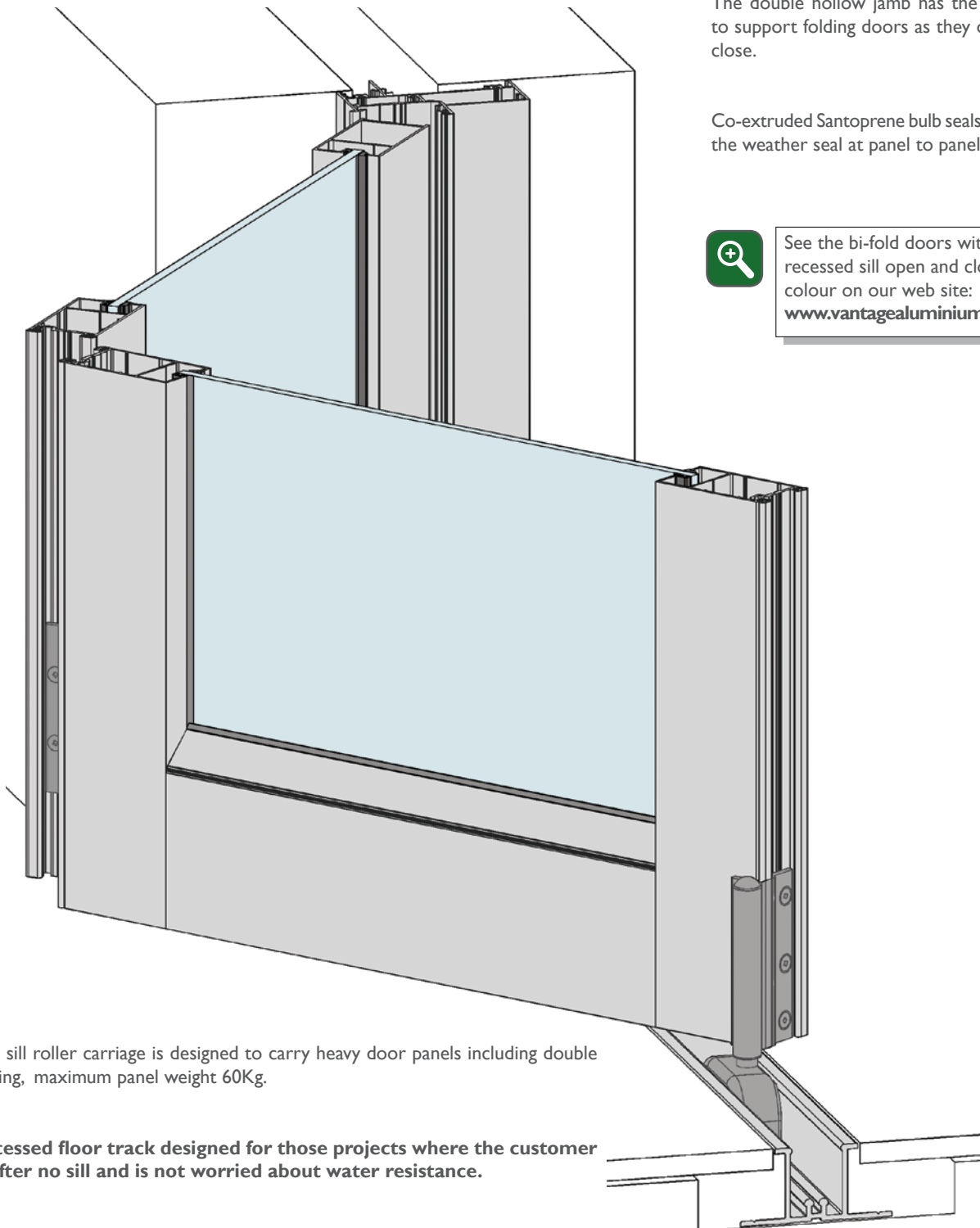
This sill treatment is not water resistant and is only suitable for applications where there is no exposure to the weather.



Series 548 High Performance Bi-fold Door

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

OPTIONAL RECESSED SILL CORNER DETAIL



The double hollow jamb has the strength to support folding doors as they open and close.

Co-extruded Santoprene bulb seals maintain the weather seal at panel to panel joints.



See the bi-fold doors with recessed sill open and close in full colour on our web site:
www.vantagealuminium.com.au

The sill roller carriage is designed to carry heavy door panels including double glazing, maximum panel weight 60Kg.

Recessed floor track designed for those projects where the customer is after no sill and is not worried about water resistance.

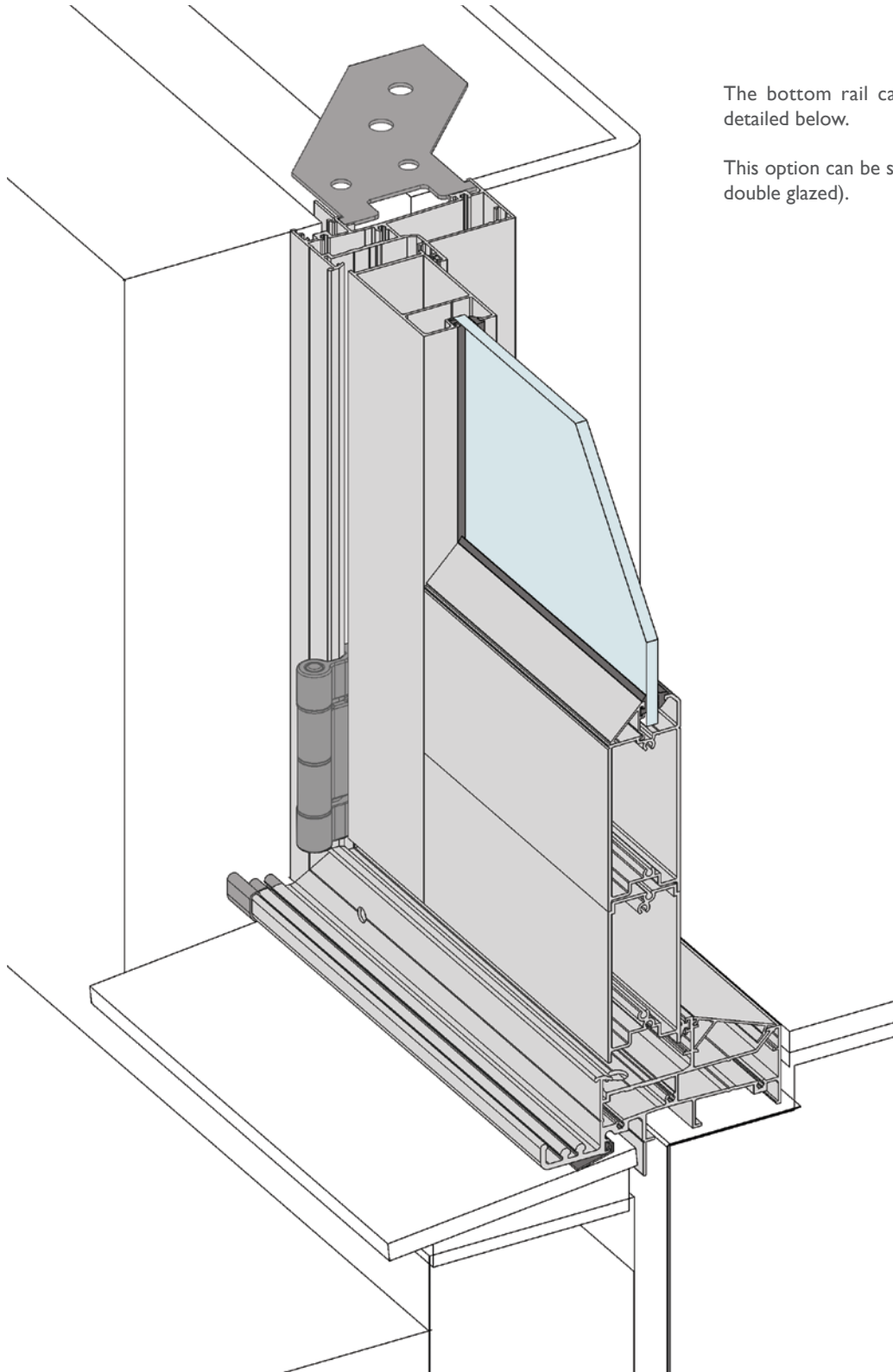
Builder to recess floor as detailed on previous page

Important Note: This sill detail has no water resistance rating.

Series 548 High Performance Bi-fold Door

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

OPTIONAL TALL BOTTOM RAIL



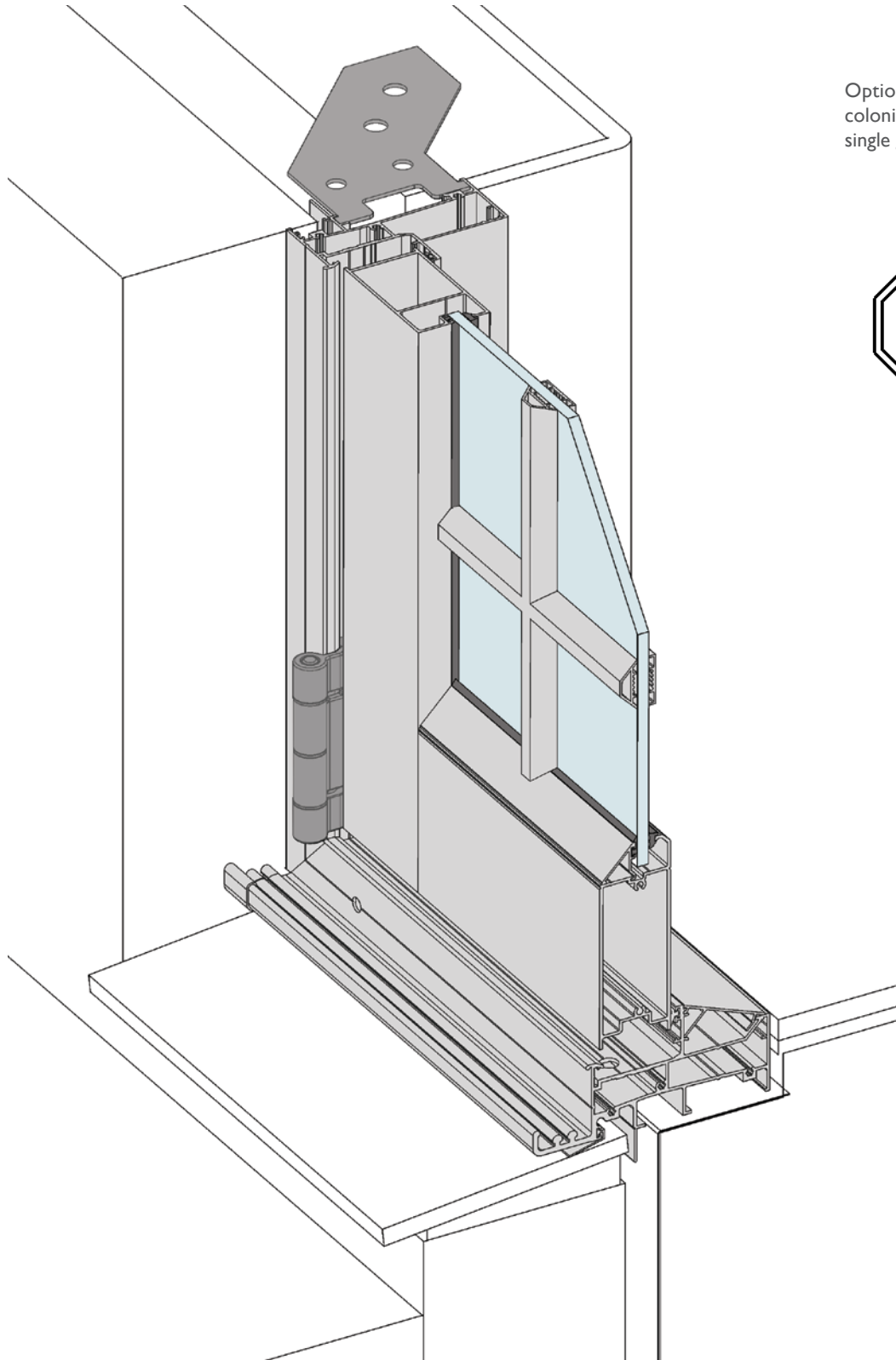
The bottom rail can be increased by 85mm as detailed below.

This option can be supplied on any door (single or double glazed).

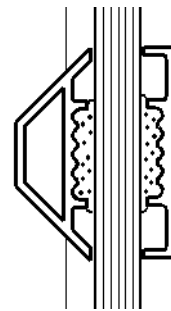
Series 548 High Performance Bi-fold Door

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

OPTIONAL APPLIED BOLD COLONIAL BARS



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



Full size

Series 548 High Performance Bi-fold Door

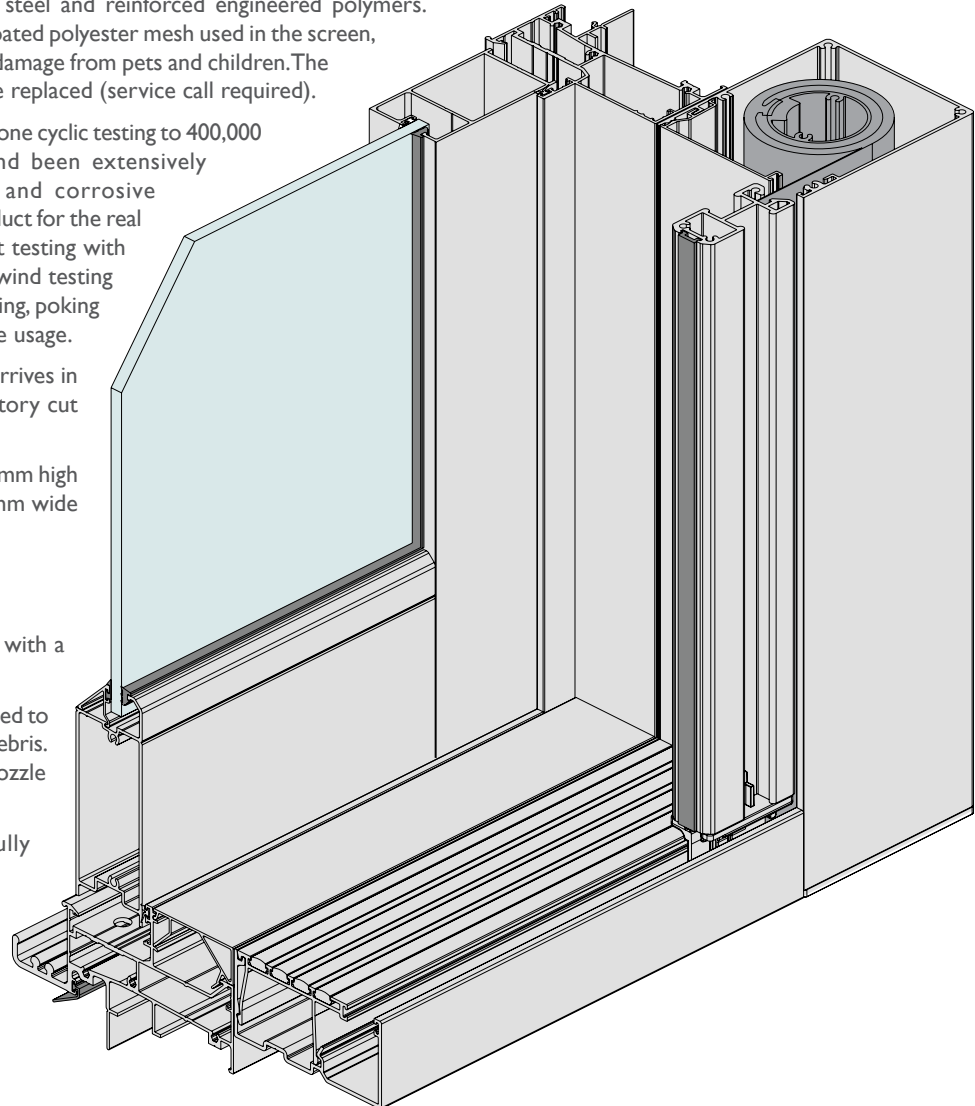
DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

DESIGN FEATURES - SI RETRACTABLE SCREEN

- By far the largest and most robust retractable screening system on the market. The detail in this section shows the screen fitted behind Series 548 bi-fold doors. The screen can be fitted to any of the bi-fold door configurations including the maximum opening.
- The SI screen frame can be coloured to match the bi-fold door frame.
- Load Balancing Technology™ (LBT™) (patent pending) allows for the sort of effortless fingertip control. With no spring-loading to fight against, the screen's lead-stile remains firmly in any chosen position until further pressure is applied. Load-balancing also means far greater mesh tension across the screen, eliminating any tendency to sag.
- Tight Technology™ manufacturing techniques ensure control of the horizontal edges of the screen so they remain straight and tight across the widest spans.
- A shock absorption system allows visitors taken in by the screen's unobtrusiveness and near invisibility to walk away with no more than a surprise - and no system damage.
- Should strong winds blow the screen out of the top or bottom channels the mesh will self-feed back onto the roll as it is rolled away.
- SI is manufactured in stainless steel and reinforced engineered polymers. PetScreen Lite, the tough PVC coated polyester mesh used in the screen, is hard wearing and resistant to damage from pets and children. The mesh is easy to clean and can be replaced (service call required).
- The SI screen system has undergone cyclic testing to 400,000 operations in a laboratory and been extensively exposed to dust, mud, sand and corrosive atmosphere to ensure it is a product for the real world. It has stood up to impact testing with a 17kg punching bag 100 times, wind testing to 20kph and considerable pushing, poking and prodding to simulate real life usage.
- Easy to install as the screen kit arrives in cardboard boxes after being factory cut to the finished sizes.
- Large size screens available 3000mm high x 3700mm wide single or 7400mm wide double bi-parting screens.

Screen Maintenance

- Screen fabric should be cleaned with a soft brush or a damp soft cloth.
- Tracking should be regularly cleaned to prevent the build-up of dirt and debris. A vacuum cleaner fitted with a nozzle is effective.
- Operating mechanisms are fully contained and do not require maintenance other than keeping clear of dirt and debris.

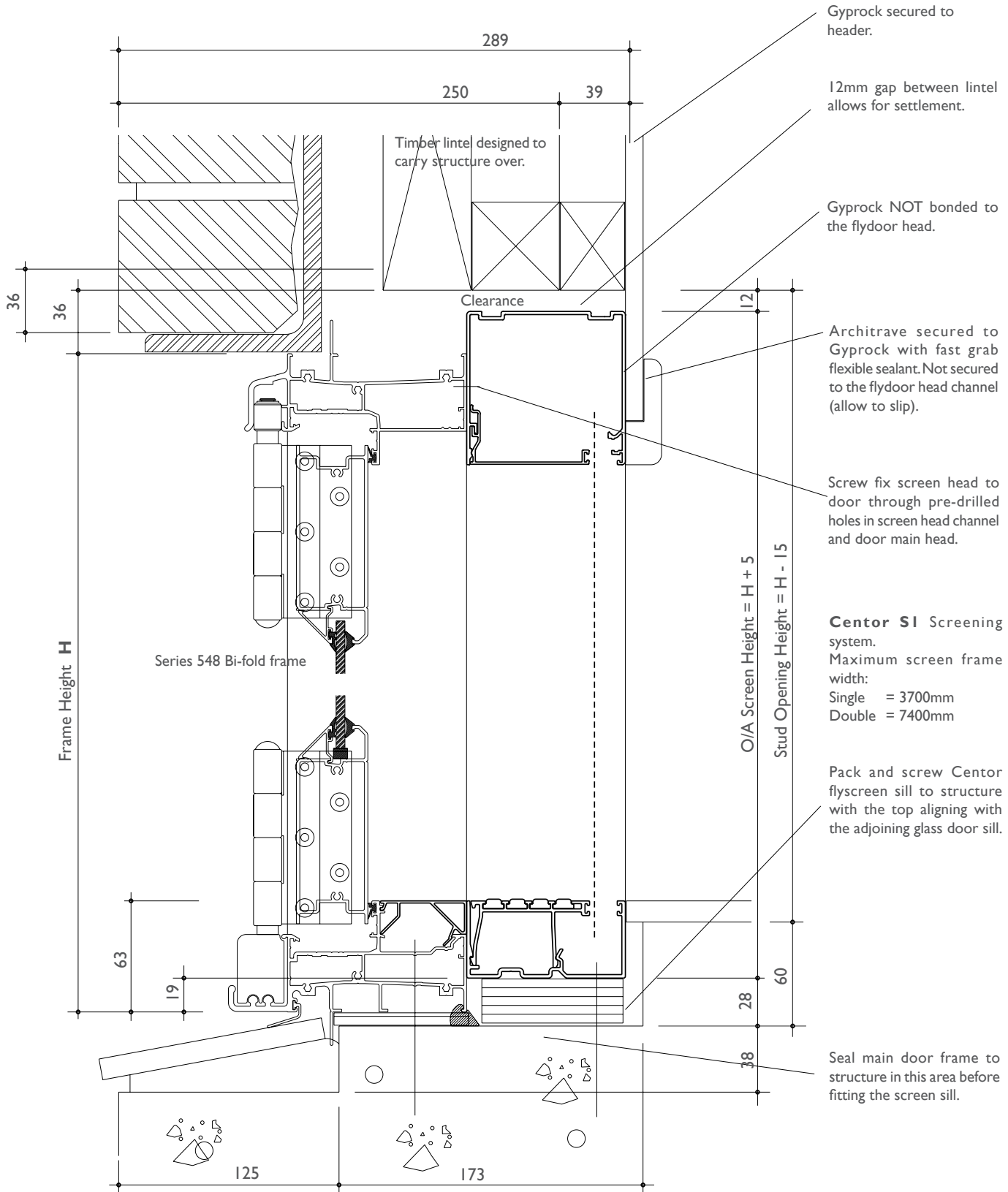


Series 548 High Performance Bi-fold Door

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

TYPICAL VERTICAL CROSS SECTION - SI RETRACTABLE SCREEN

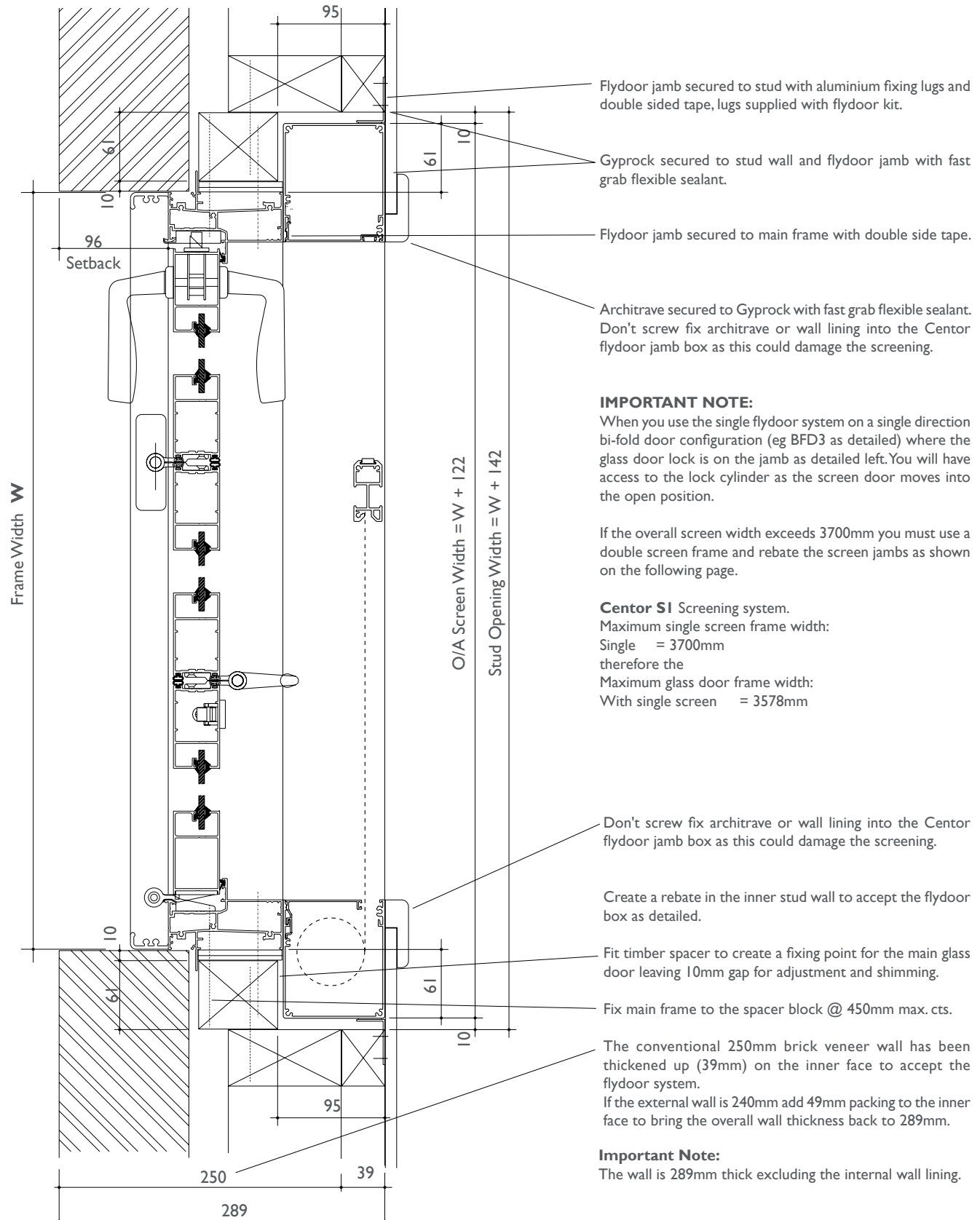
Recessed Sill Detail



Series 548 High Performance Bi-fold Door

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

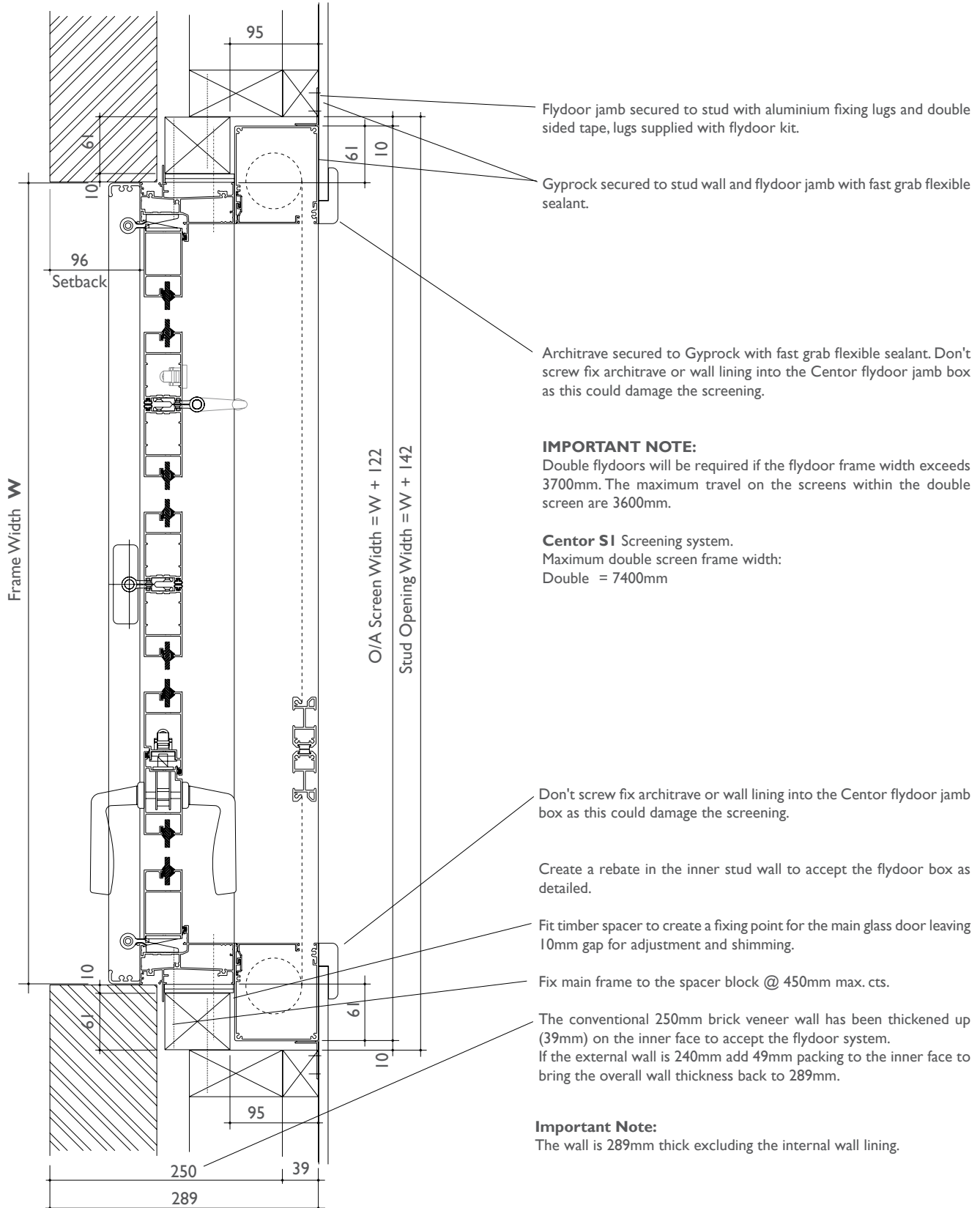
TYPE BFD3 BI-FOLD DOORS WITH SI RETRACTABLE SCREEN



Series 548 High Performance Bi-fold Door

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

TYPE BFD3+I BI-FOLD DOORS WITH SI RETRACTABLE SCREENS



Series 548 High Performance Bi-fold Door

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

HIGHLIGHTS OVER BI-FOLD DOORS

Splayed glazing bead sheds water and dust off the transom.

Single glazed fixed highlights.

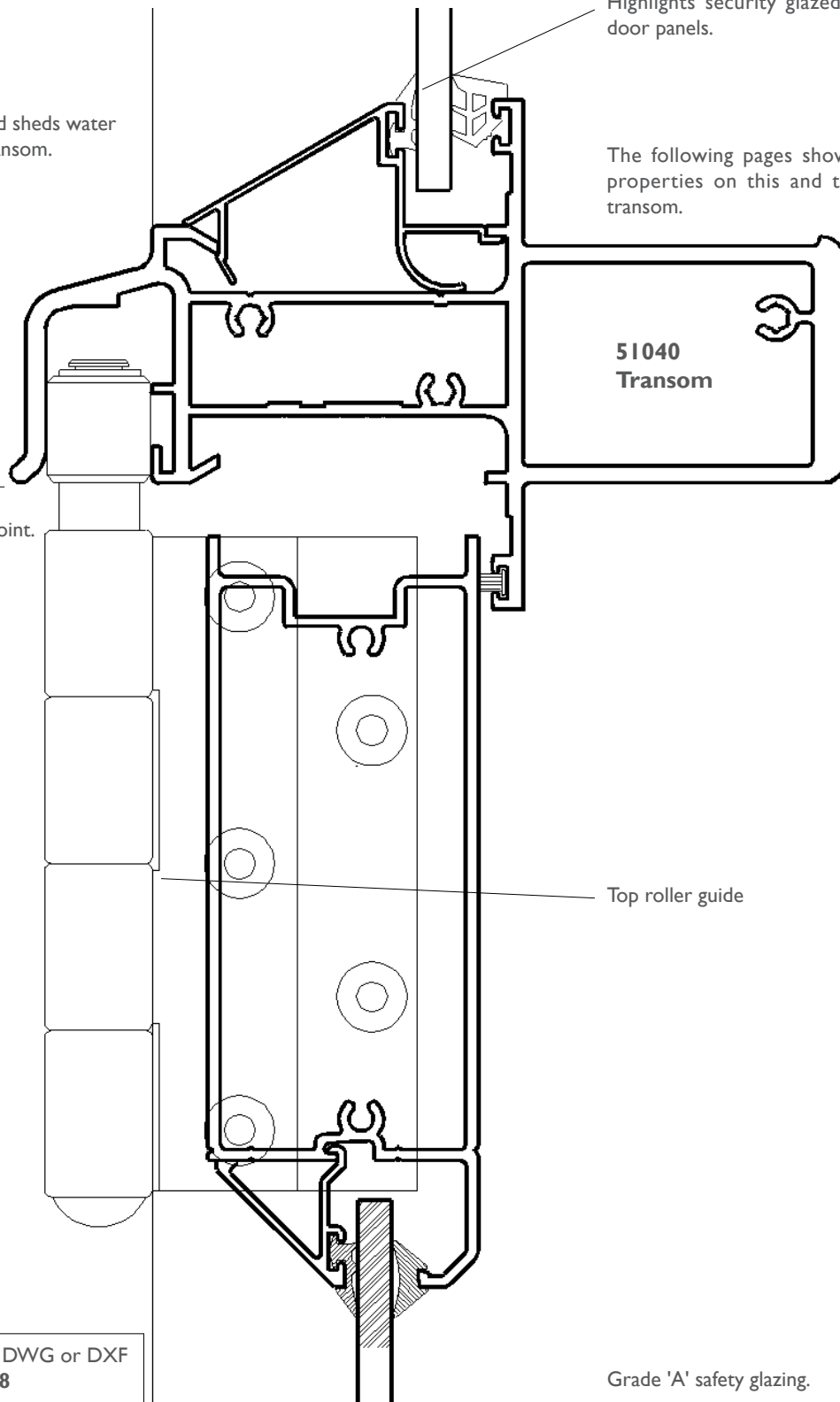
Highlights security glazed to match the door panels.

The following pages show the strength properties on this and the heavy duty transom.

Transom height measured to this point.

Top roller guide

Grade 'A' safety glazing.

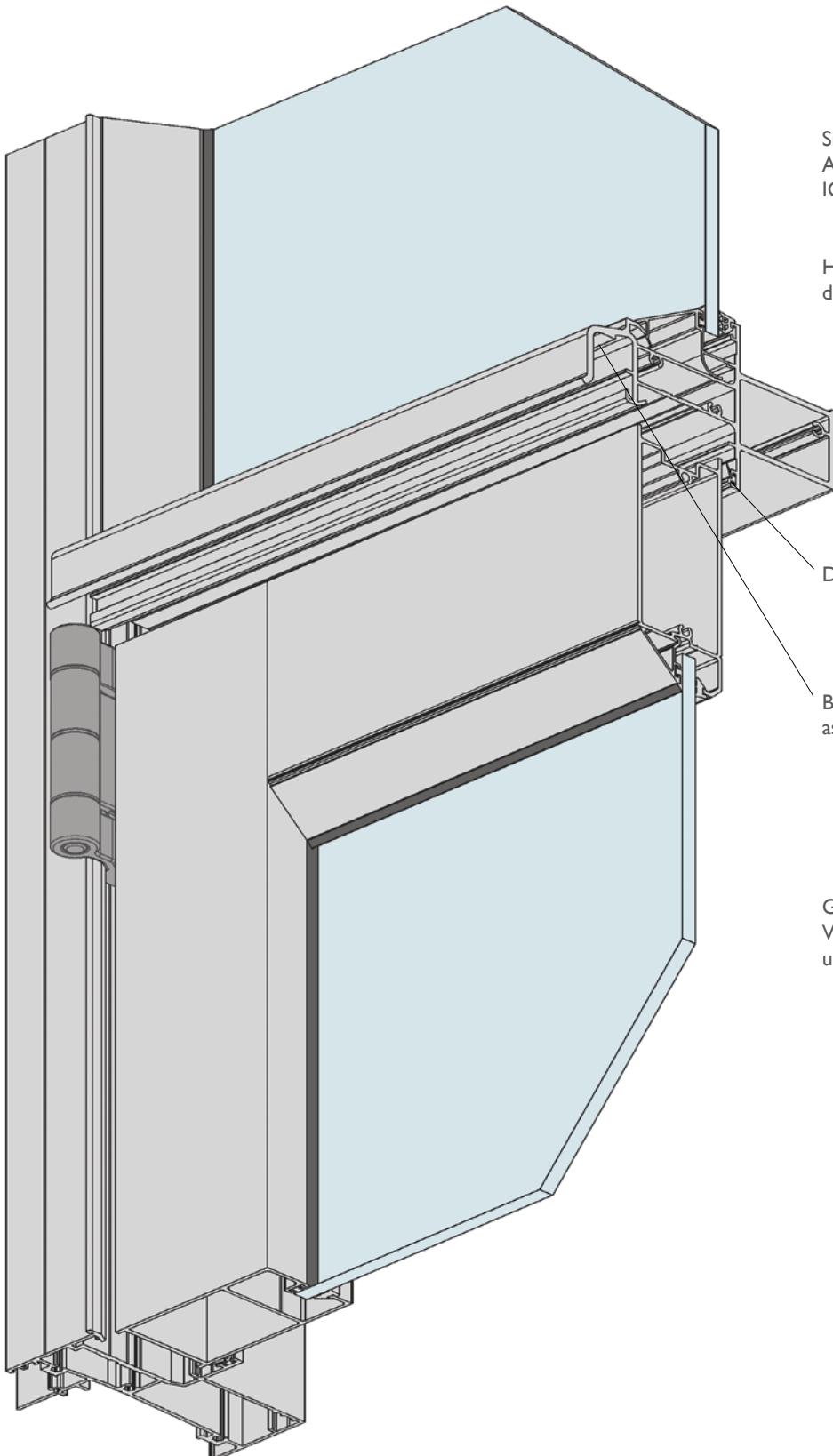


CAD file: DWG or DXF
VAN_548

Series 548 High Performance Bi-fold Door

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

HIGHLIGHTS OVER BI-FOLD DOORS



Single glazed fixed highlights illustrated. Also available as double glazed (20mm IGU).

Highlights security glazed to match the door panels.

Door seal

Bi-fold transom roller guide doubles as drip mould.

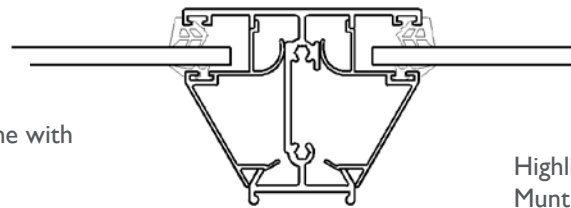
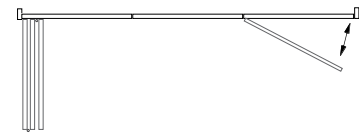
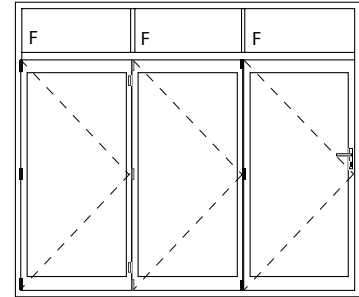
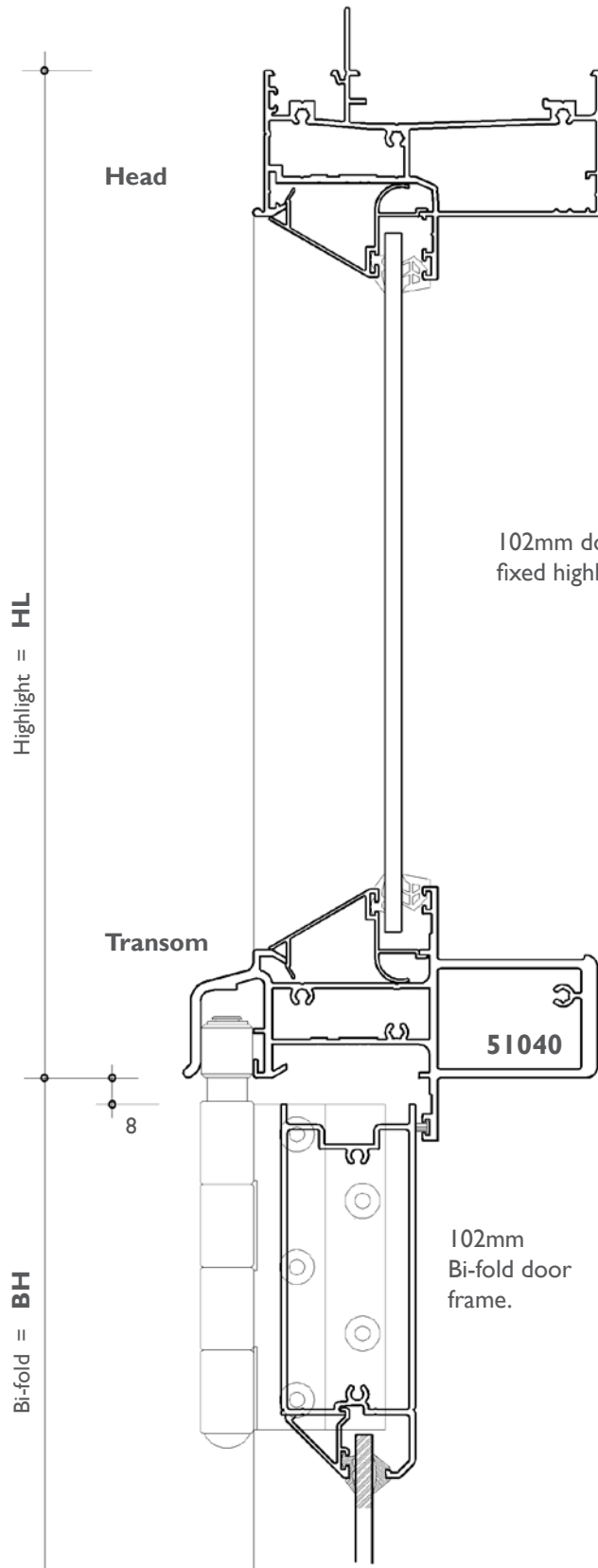
Grade 'A' safety glazing. Vantage doors will accept glass thickness up to 20mm insulating glass.

Series 548 High Performance Bi-fold Door

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

HIGHLIGHTS OVER BI-FOLD DOORS

Jambs run through making the overall frame stronger and easier to transport to site.



102mm door frame with fixed highlights.

Highlight Muntin

Frame Width mm	Heights		Transom Ratings (Pa)	
	Bi-fold mm	Highlight mm	S	U
3600	2100	600	891	1336
3900	2100	600	744	1117
4200	2100	600	632	948
4500	2100	600	543	815
4800	2100	600		
3600	2400	600	831	1246
3900	2400	600	690	1035
4200	2400	600	583	875
4500	2400	600	500	750
4800	2400	600		

Wind Ratings (Pa) Transom 51040.

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. Ultimate strength rating has been limited to 4500 Pa.

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

Blank Denotes rating under 500 Pa.

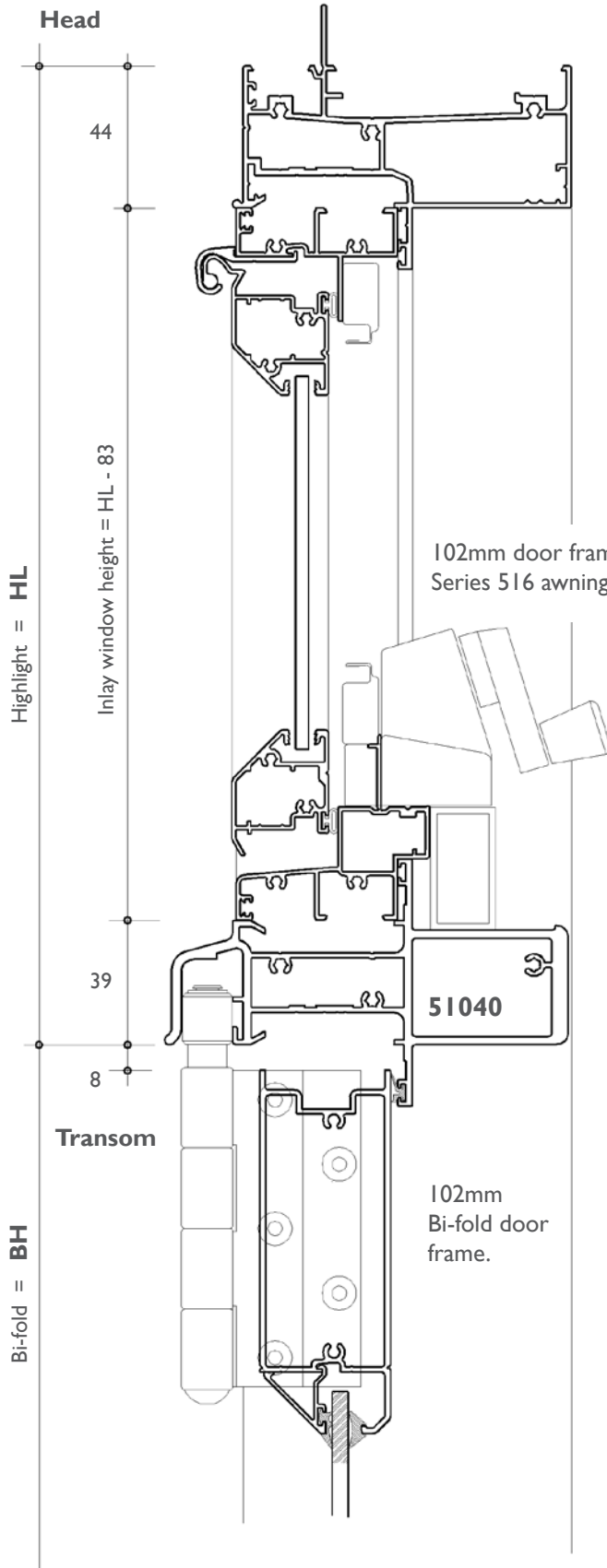
Important Note:

The Pascal Ratings listed above cover the strength of the transom only and in most cases this number will be reduced by the rating of the door meeting stiles.

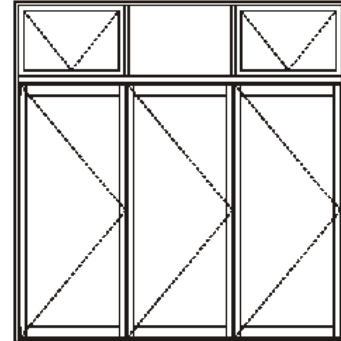
Series 548 High Performance Bi-fold Door

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

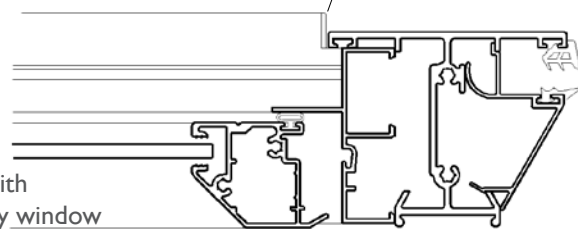
HIGHLIGHTS OVER BI-FOLD DOORS



Highlight can be one or multiple awning sashes.



Notch the winder support tube back 6mm as drawn.



Highlight Muntin

Notes

This transom allows the jambs to run through, but is not suitable for wide doors in high wind load areas as shown on the Pascal rating table below.

The transom 51040 illustrated suits Bifold doors.

For highlights over 102mm internal or external swing hinged doors use 51033 transom or alternatively 51040 can also be used over external swing doors.

Frame Width mm	Heights		Transom Ratings (Pa)	
	Bi-fold mm	Highlight mm	S	U
3600	2100	600	891	1336
3900	2100	600	744	1117
4200	2100	600	632	948
4500	2100	600	543	815
4800	2100	600		
3600	2400	600	831	1246
3900	2400	600	690	1035
4200	2400	600	583	875
4500	2400	600	500	750
4800	2400	600		

Wind Ratings (Pa) Transom 51040.

Series 548 High Performance Bi-fold Door

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

OPTIONAL CHAIR RAILS

