Installation

Door Building In Details

Photo courtesy of Rowe Aluminium

Installation

Door Building in Details

DATE: NOV 09
REPLACES:
SCALE: NOT TO SCALE

VANTAGE SNAP-ON COUPLERS AND TRIMS

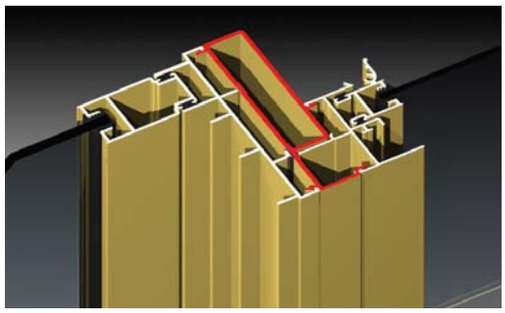
Vantage offer a wide range of snap-on couplers and trims to deliver tidy integration between products. Often aluminium windows and doors are joined together with pressed metal covers that are secured to window and door with visible blind rivets or screws. Pressed metal covers usually have raw edges and are deformed at fixing points and do not provide a high quality finishing solution.

Vantage snap-on couplers and trims are sealed to the main frame at the nailing fin position. This may not sound like much but it makes sure the joint is waterproof and keeps untidy caulking away from the face of the window/door.

The data and illustrations on the following pages highlight some of our couplers and trims and their basic features:

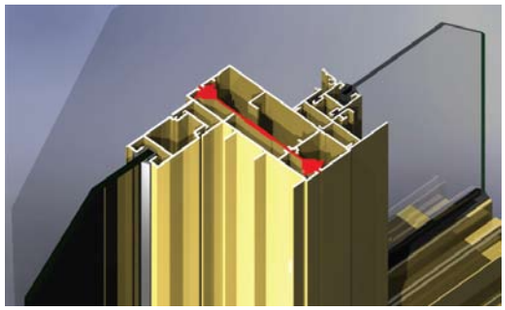
VERTICAL WINDOW TO DOOR COUPLER (42024)

- This non-load bearing coupler allows us to join 50mm windows to any 102mm door frame while maintaining the weather resistance line.
- The illustration right shows Series 504 sliding window coupled to Series 541 sliding door.



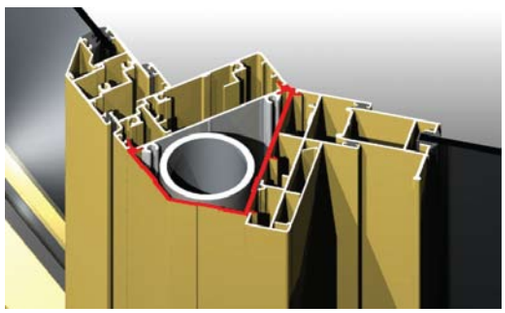
VERTICAL 'I' COUPLER (42030)

- This non-load bearing coupler allows us to join 102mm windows and doors together.
- The illustration right shows Series 504 sliding window with 'Longreach' frame extender coupled to Series 541 sliding door.



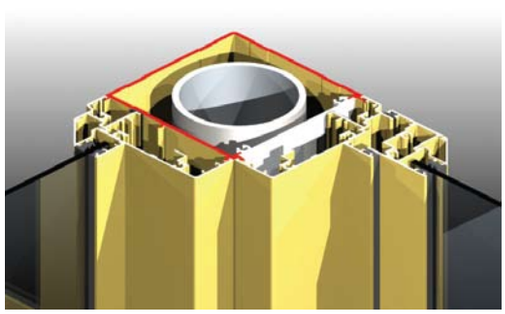
135° BAY CORNER COUPLER (42026)

- This wrap around coupler can be used to join 50mm windows to 102mm door frames.
- The coupler can also be used to join 102mm window and door frames together.
- Cover will wrap around 51mm steel column.
- The illustration right shows Series 616 awning window coupled to Series 542 sliding door.



90° BOX CORNER COUPLER (42022)

- This wrap around coupler can be used to join 50mm windows to 102mm door frames.
- The coupler can also be used to join 102mm window and door frames together.
- Cover will wrap around 76mm steel column.
- The illustration right shows Series 616 awning window coupled to Series 616 fixed window.



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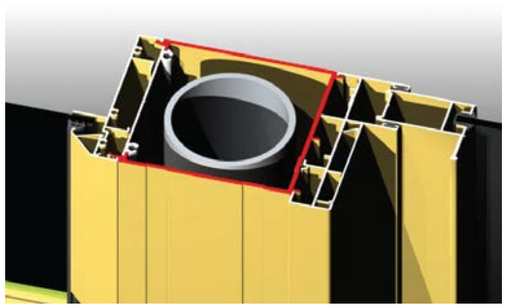
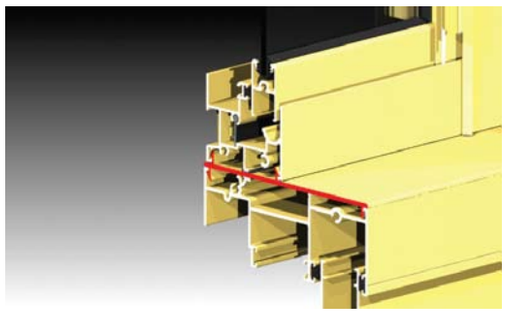
180° FLAT COUPLER (42066)

- This wrap around coupler can be used to join 50mm windows to 102mm door frames.
- The coupler can also be used to join 102mm window and door frames together.
- Cover will wrap around 76mm steel column.
- The illustration right shows Series 517 fixed window coupled to Series 542 sliding door.



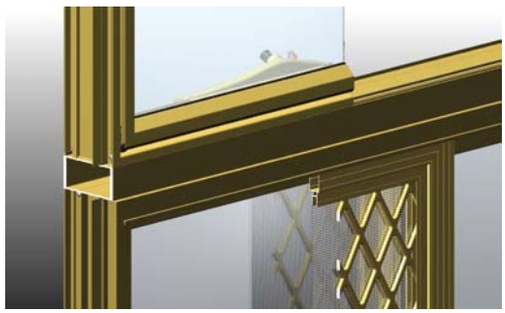
HORIZONTAL WINDOW TO DOOR COUPLER (42025)

- This light transom coupler allows us to join 50mm windows over 102mm door frame while maintaining the weather resistance line.
- The illustration right shows Series 504 sliding window coupled to Series 541 sliding door.



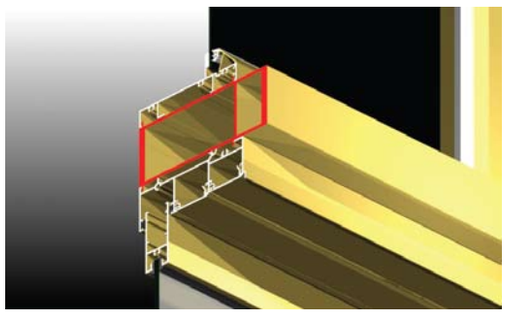
HEAVY DUTY TRANSOM COUPLER (42027)

- This 102mm x 50mm snap fit box transom coupler allows us to join 102mm windows over 102mm door frames.
- Heavy wall thickness front and back allows us to span wider openings.
- The illustration right shows Series 517 awning window coupled to Series 541 sliding door.



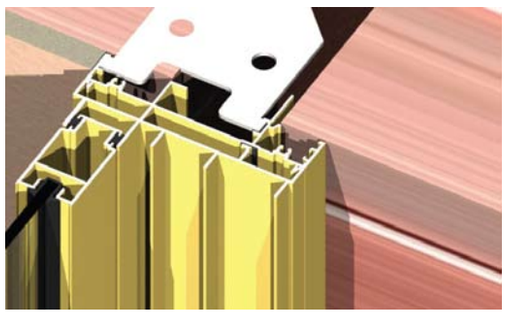
EXTRA HEAVY DUTY TRANSOM COUPLER (42346)

- This 133mm x 50mm snap fit box transom coupler allows us to join 102mm windows over 102mm door frames and the wider 133mm Magnum™ sliding door frame.
- Heavy wall thickness front and back allows us to span very wide openings.
- The illustration right shows Series 517 awning window coupled to Series 542 sliding door.



LONGREACH FRAME EXTENDERS (16114)

- This extrusion snaps to Series 541 sliding door frame and is used to beef up the standard 10mm frame from 102mm x 10mm to 102mm x 27mm.
- The extender frame sections maintain the weather line, has a nailing fin and will accept building-in lugs and trims.
- The detail right shows the extended window frame on Series 541 installed into cavity brick wall using height adjustable galvanised building in lugs.



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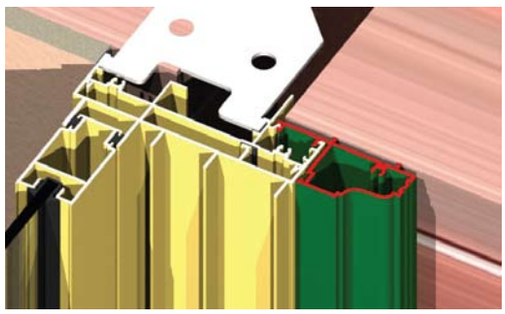
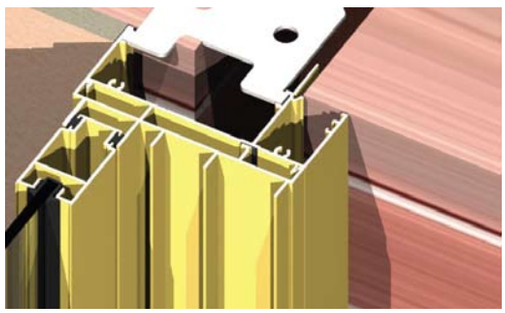
PADDINGTON FEDERATION TRIMS (10214)

- These federation trims can be clipped to the 102mm 'Longreach' frame extender or the 'Homebush' extender shown below.
- The illustration right shows Paddington trim clipped to Series 541 sliding door fitted with 'Longreach' frame extender.



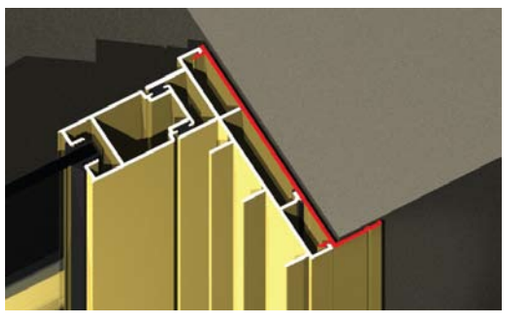
HOMEBUSH FRAME EXTENDERS (16115)

- This extrusion snaps to Series 541 sliding door frame and is used to beef up the frame from 102mm x 10mm to 102mm x 45mm.
- The extender frame sections maintain the weather line, has a nailing fin and will accept building-in lugs and trims.
- The detail right shows the Series 541 standard 10mm jamb with 'Homebush' extender installed into cavity brick wall.



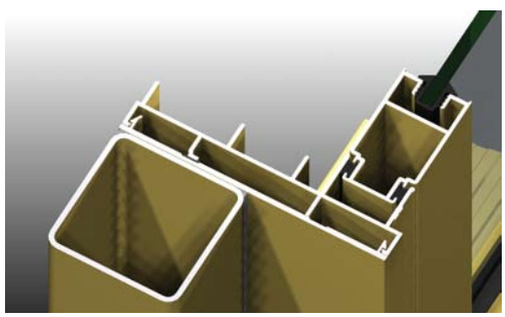
EXTERNAL FLANGE (EF) TRIMS (42062)

- This external flange trim can be clipped to any of the Vantage 102mm door or window frames.
- This can be useful on replacement doors.



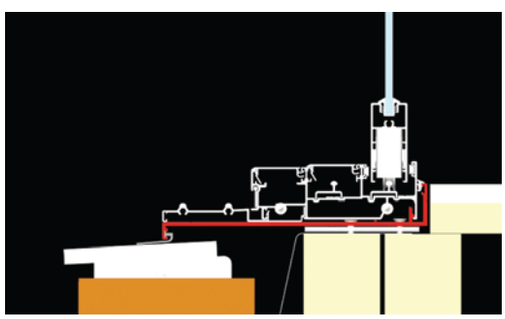
FLAT FRAME CLOSER (42057)

- This jamb closer will clip to any of the Vantage 102mm door or window frames.
- Makes installation into patio room enclosures easier and cleaner as the flat face caters for the radius on the patio posts and closes off the unwanted recess as shown right.



SILL FLASHING TRAY (42350)

- This flashing tray is designed to go under Series 542 and 618 sliding doors where they are installed into first floor situations.
- The purpose of the tray is to guide any water that should get past the sill area back to the outside.
- The sill detail should be fitted with damp course flashing by the builder as detailed right. But this tray would be a major benefit if the builder should forget to fit the damp course flashing.



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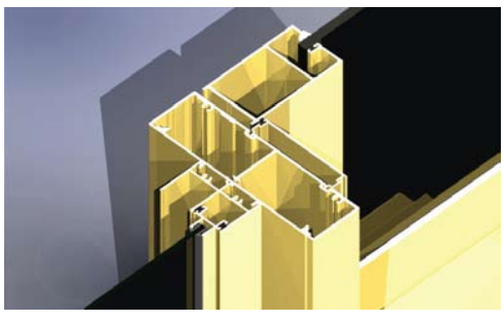
ENTRY DOOR COUPLERS (51315 and 51321)

- We have snap fit couplers that allow us to join any Vantage 50mm or 102mm window frame to Series 549 entry door frame.
- The illustration right shows Series 514 (50mm frame) double-hung window clipped to Series 549 using 51315 coupler.

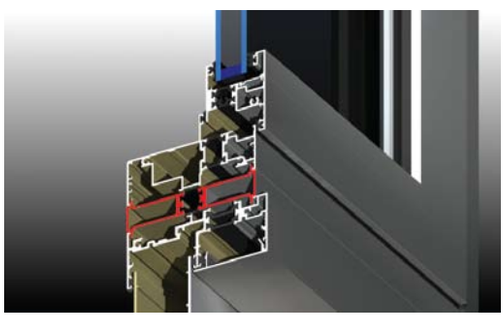


ENTRY DOOR FRAME CLOSER (51316)

- For entry doors going into clad walls we offer a half closer that removes the unsightly external frame recess.

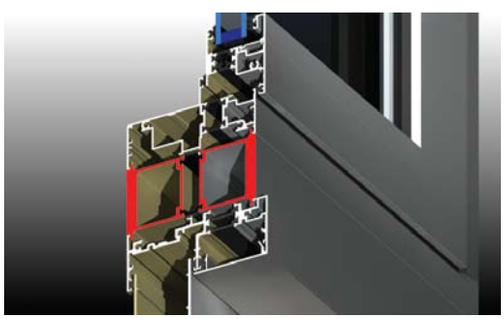
THERMAL HEART™ TRANSOM COUPLER (72240)

- This 100mm x 20mm snap fit double box transom coupler allows us to join 100mm windows over hinged, bi-fold or sliding doors.
- The thermal break and dual colour option is maintained through the coupler.
- The illustration right shows Series 726 awning window coupled to Series 731 sliding door.



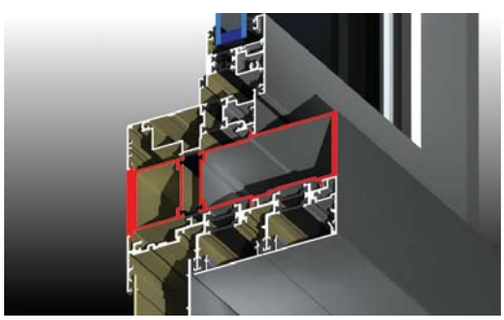
THERMAL HEART™ HEAVY TRANSOM COUPLER (72241)

- This 100mm x 50mm snap fit double box transom coupler allows us to join 100mm windows over hinged, bi-fold or sliding doors. The stronger coupler allows us to offer wider transom that are required on bi-fold and sliding doors.
- The thermal break and dual colour option is maintained through the coupler.
- The illustration right shows Series 726 awning window coupled to Series 731 sliding door.



THERMAL HEART™ EXTRA HEAVY TRANSOM COUPLER (72242)

- This 163mm x 50mm snap fit double box transom coupler allows us to join 100mm windows over bi-fold or sliding doors. This extra stronger coupler allows us to offer very wide transoms that are required on bi-fold and sliding doors.
- The thermal break and dual colour option is maintained through the coupler.
- The illustration right shows Series 726 awning window coupled to Series 731 stacking sliding door.



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Door Building in Details

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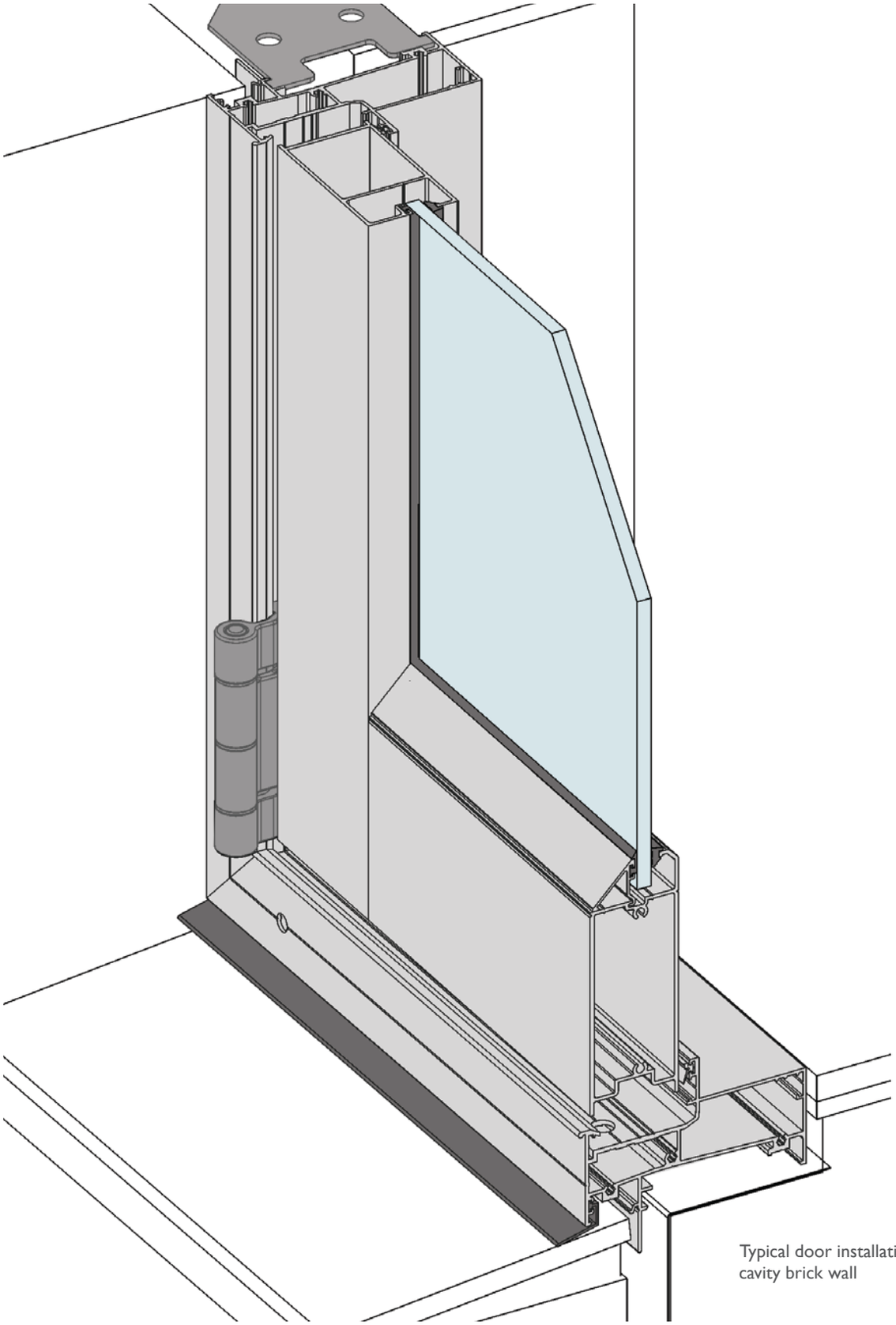
REPLACES:
SCALE: NOT TO SCALE



Typical door installation into 280mm cavity brick wall

Installation

Door Building in Details

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

RECOMMENDED INSTALLATION INSTRUCTIONS FOR ALUMINIUM SLIDING DOORS

The following pages show a number of typical door building-in details and coupling arrangements, if the information you require is not covered in these pages contact your local Vantage fabricator.

Fix the door to structure with steel building-in lugs or nails, shim as indicated.

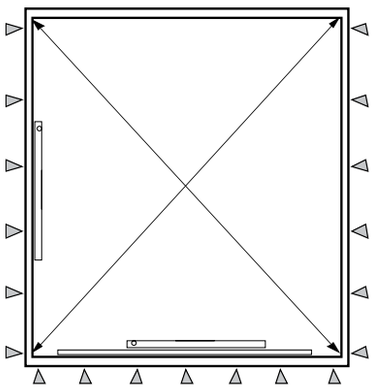
Installation of sliding doors to be in accordance with Australian Standard AS 2047.

Suggested installation steps:

1. If flashing is required fit the flashing to sill.
2. Fit shims on sill plate / slab on meeting stile centre line and at 300mm maximum centres.
   Make sure these shims are level.
3. Install the frame into the opening.
4. Fit shims on jambs making sure that frame is plumb and square, measure frame across diagonals to check for square.
5. Fix the frame to structure by nailing through timber reveals, Make sure that frame is not twisted.
   Alternative - On solid brick construction fit galvanised M.S. building-in lugs at 450mm maximum centres.
6. Take care that head, sill and/or jamb are not dished or bowed during installation.
7. Sliding door sills are not strong enough to carry wheel barrows. Protect the sill with timber ramps to protect them from damage during construction.
8. Cement mortar droppings can permanently damage aluminium. Remove cement as soon as possible.
9. Leave at least 10mm gap between sill brick and frame to allow for possible future building settlement.
10. On brick veneer construction there should be at least a 12mm gap between timber header and aluminium frame.
11. Aluminium door frames are not designed to support eaves linings.

Important Note:
If you install door frames and/or panels out or square or without sufficient shims the doors won't perform correctly.

Installing Frame



Check measure diagonals during installation

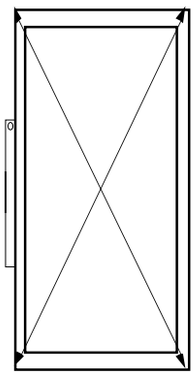
Building-in lugs at approx. 450mm maximum centres

Locate one lug at lock keeper position

It's critical that sill is installed level. Use spirit level on straight edge

Shim sill as required to obtain level at 300mm approx. centres

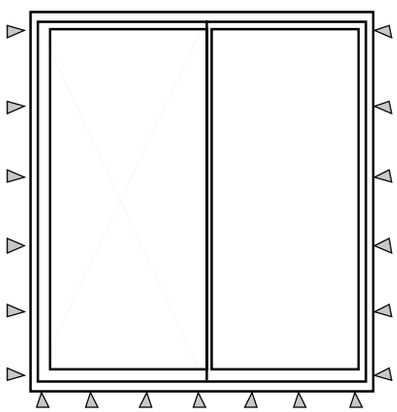
Check Door Panels



Check measure diagonals before installing door panels into the frame.

Check that door panel stiles are plumb and level before installing panels into frame.

Install Panels into Frame

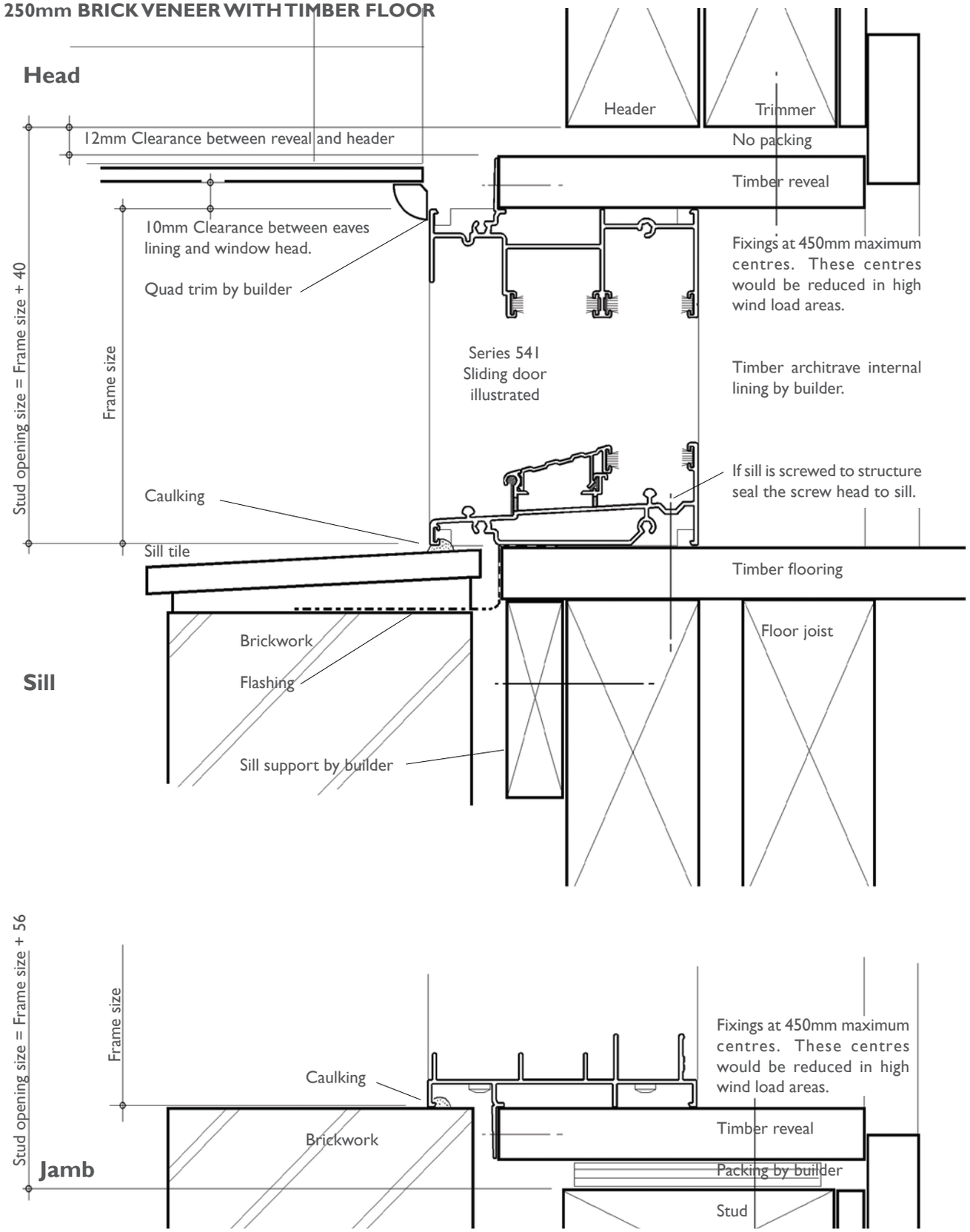


Installation

Door Building in Details

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

250mm BRICK VENEER WITH TIMBER FLOOR

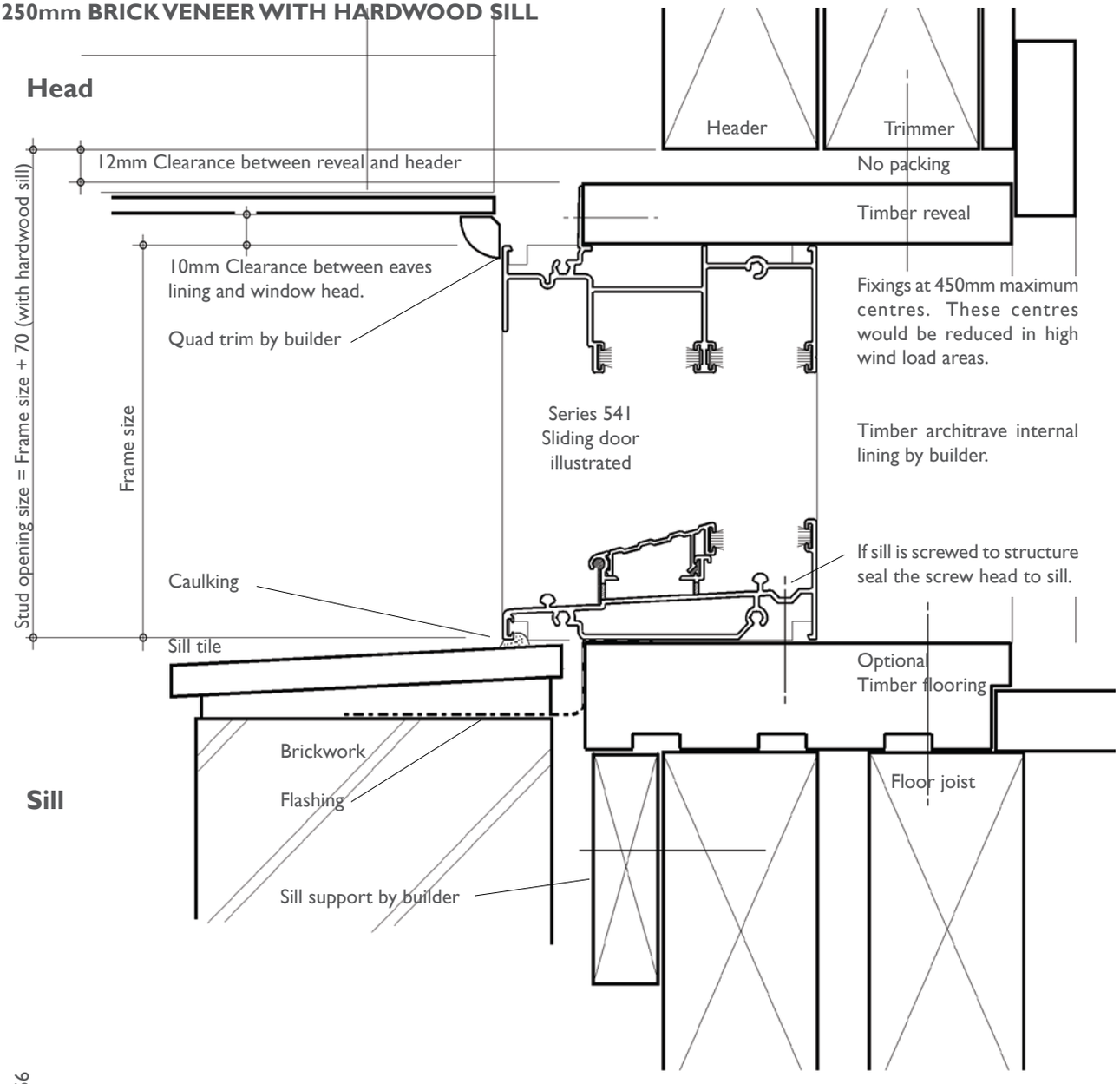


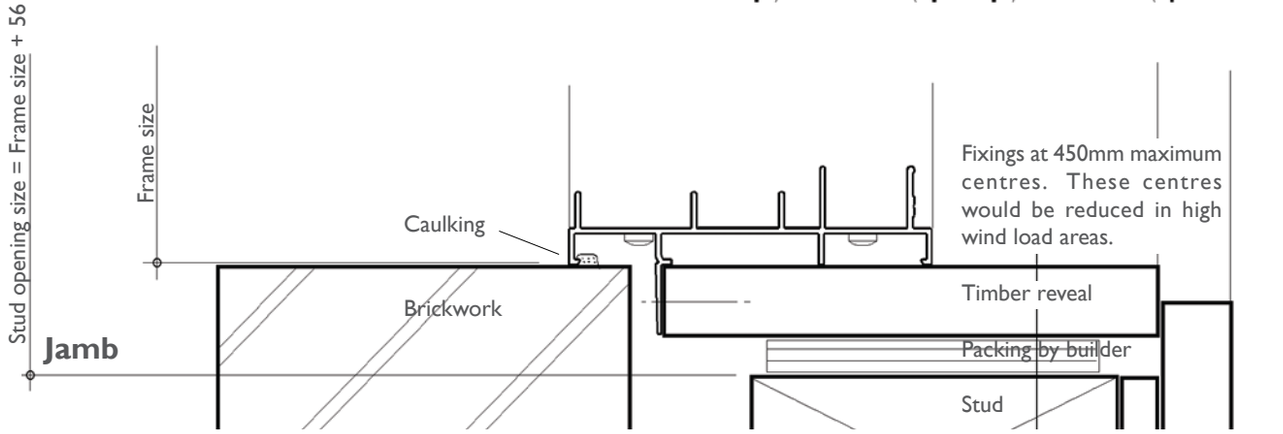
Installation

Door Building in Details

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

250mm BRICK VENEER WITH HARDWOOD SILL



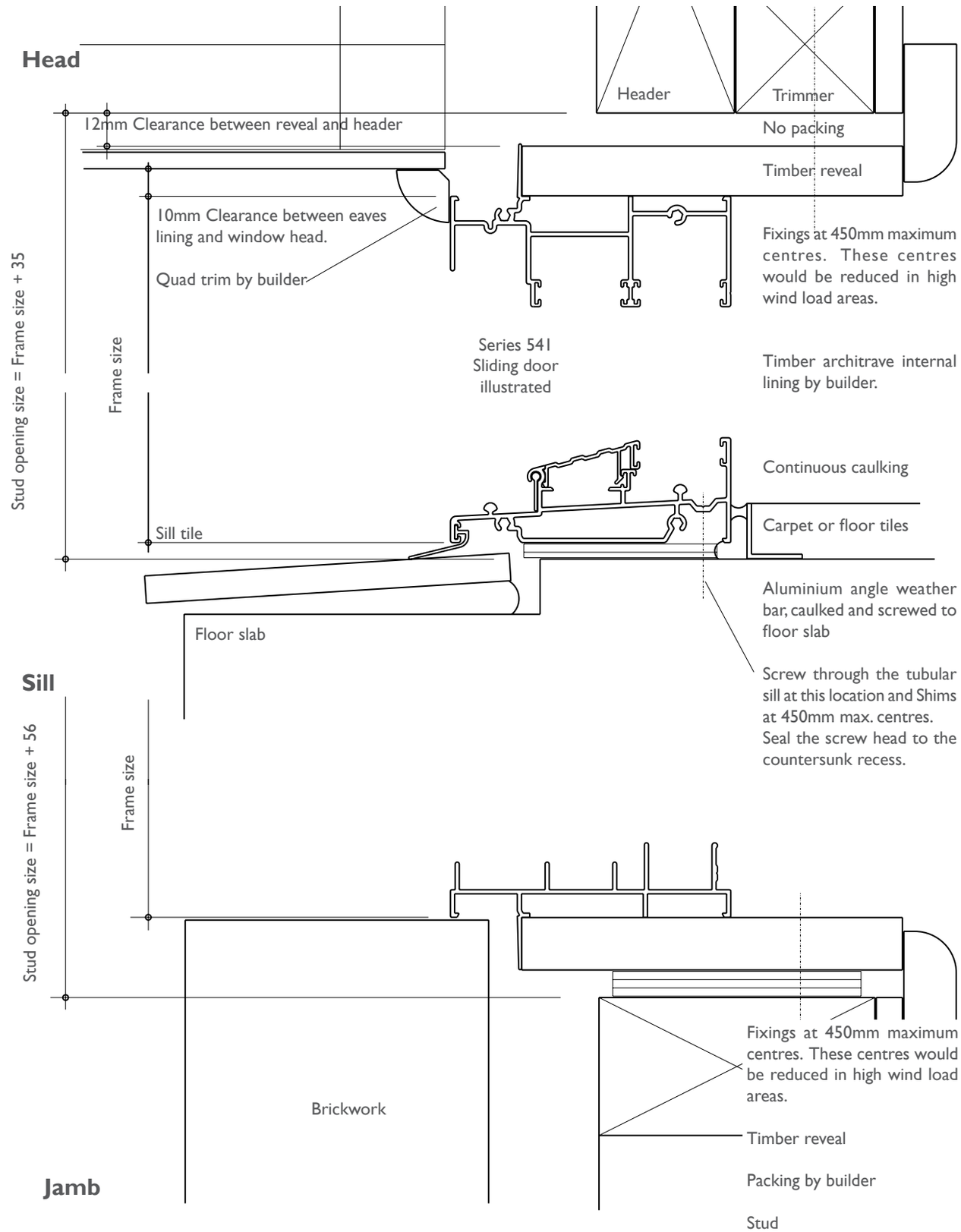


Installation

Door Building in Details

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

250mm BRICK VENEER WITH CONCRETE FLOOR SLAB

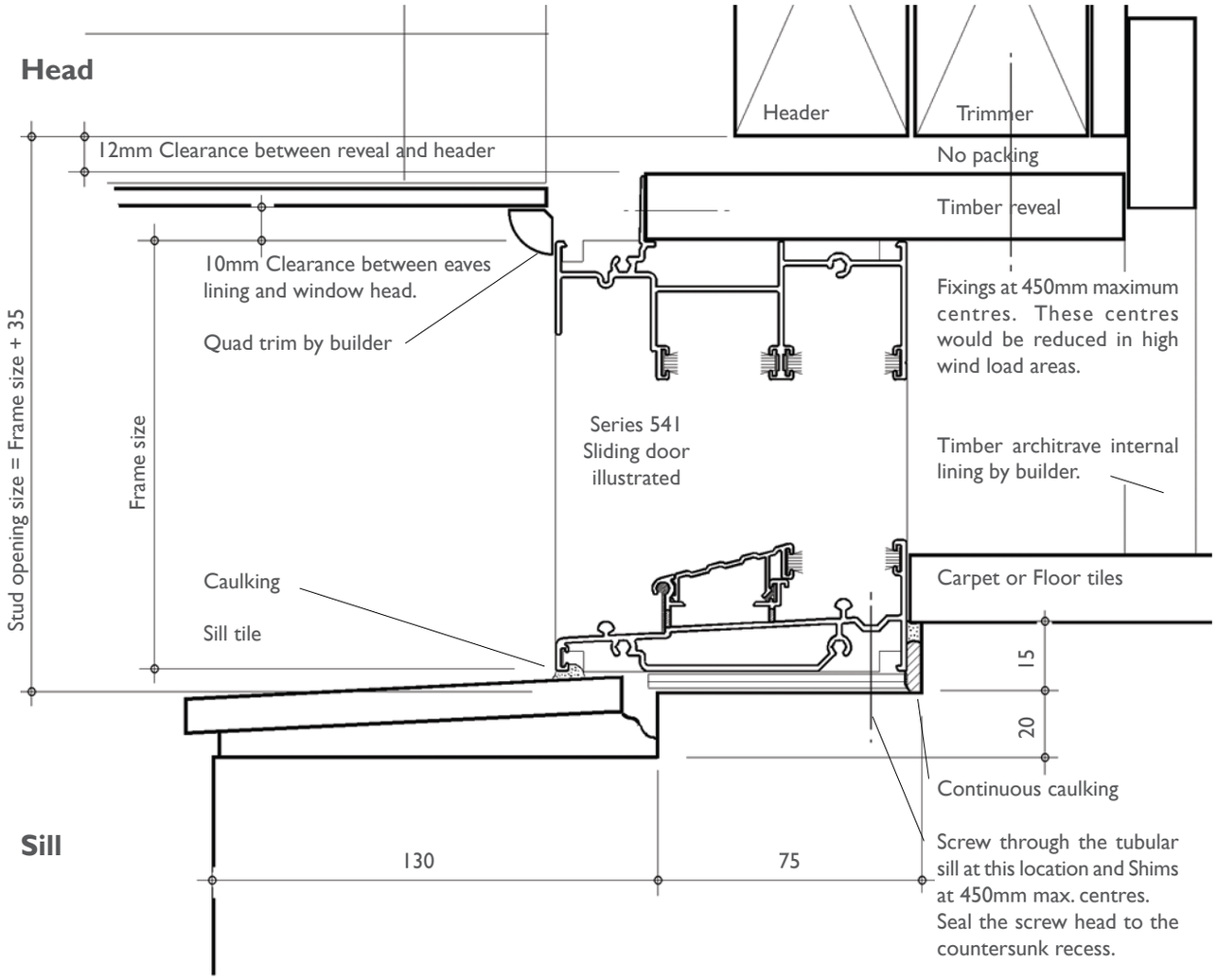


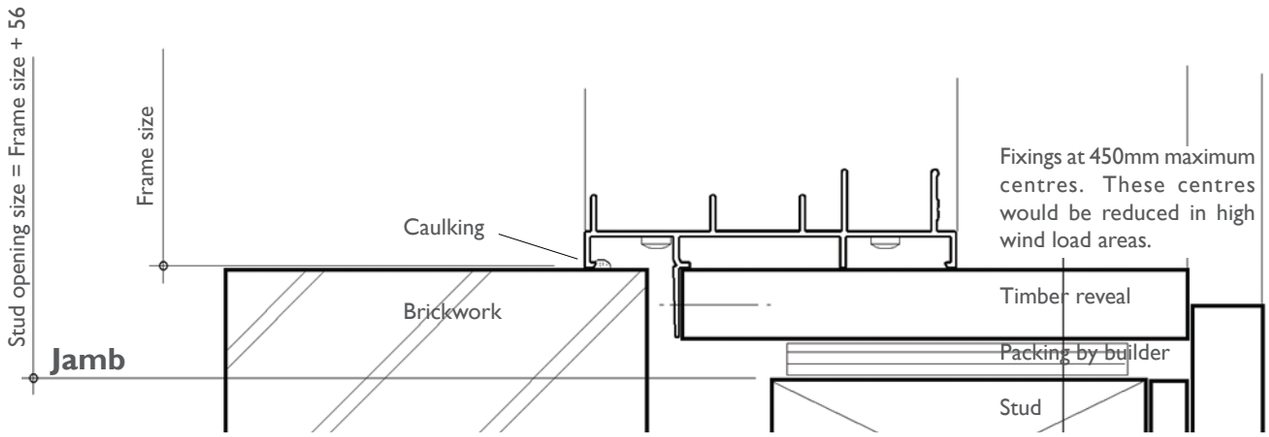
Installation

Door Building in Details

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

250mm BRICK VENEER WITH REBATED CONCRETE FLOOR SLAB





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Door Building in Details

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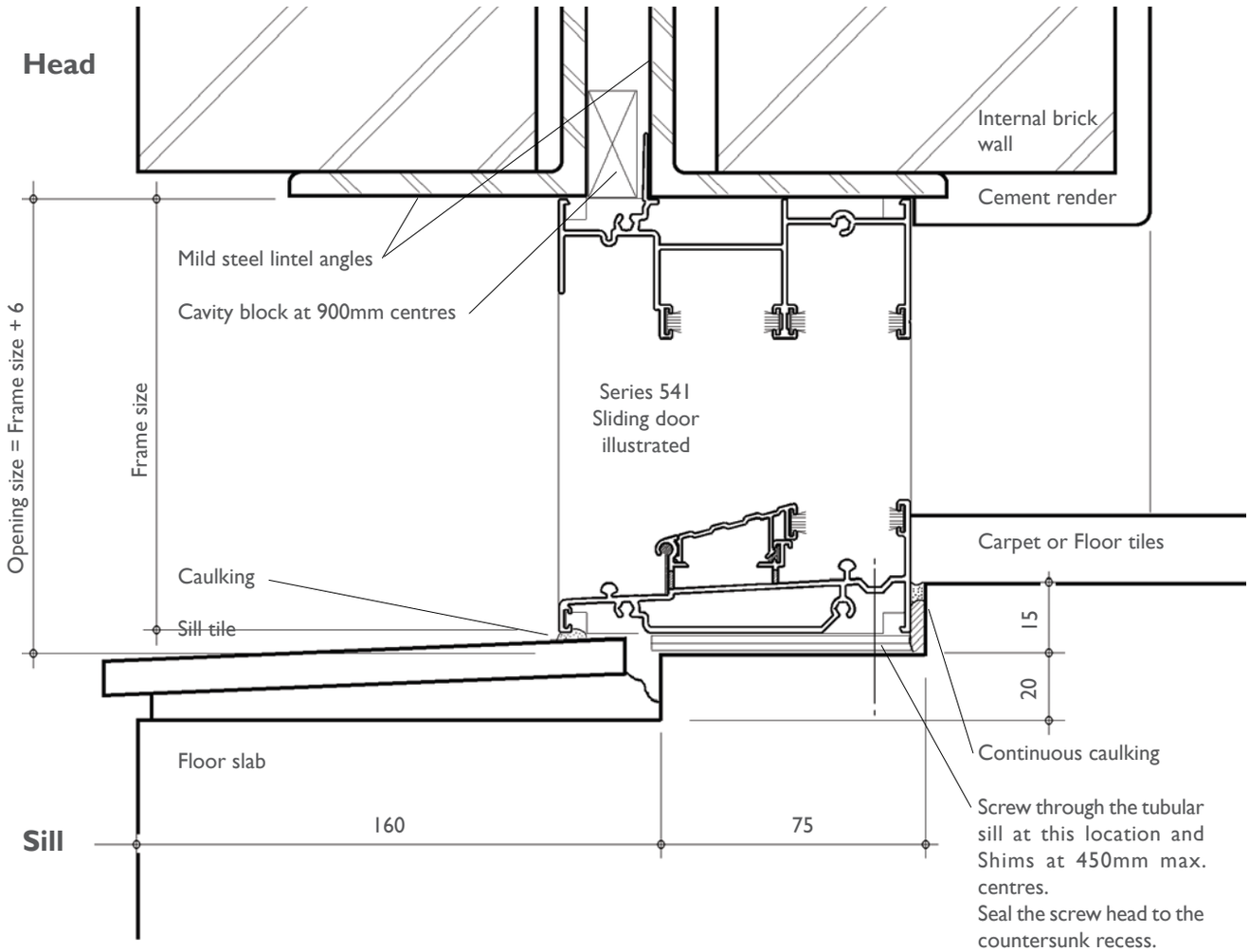
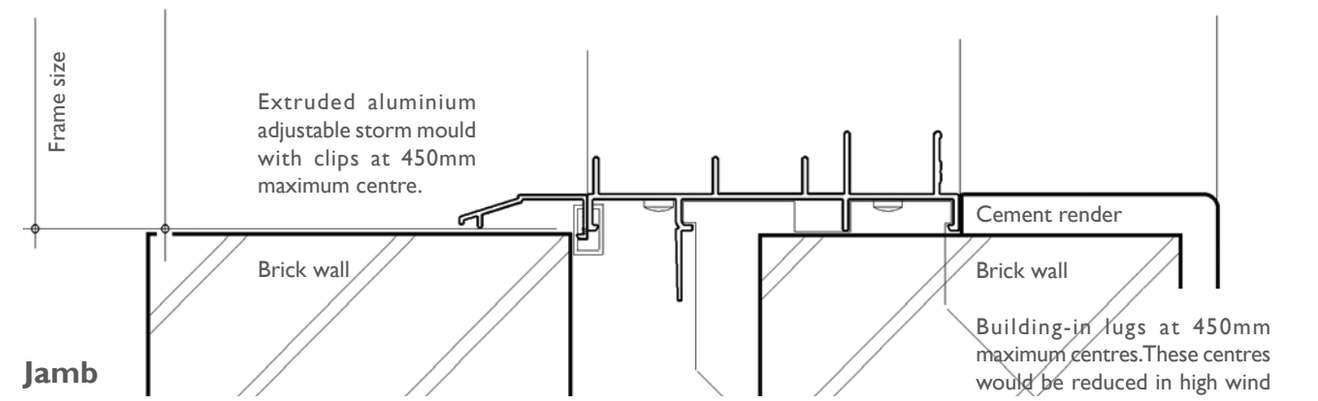
SCALE: HALF FULL SIZE

280mm CAVITY BRICK WITH REBATED CONCRETE FLOOR SLAB





Installation

Door Building in Details

DATE: NOV 09
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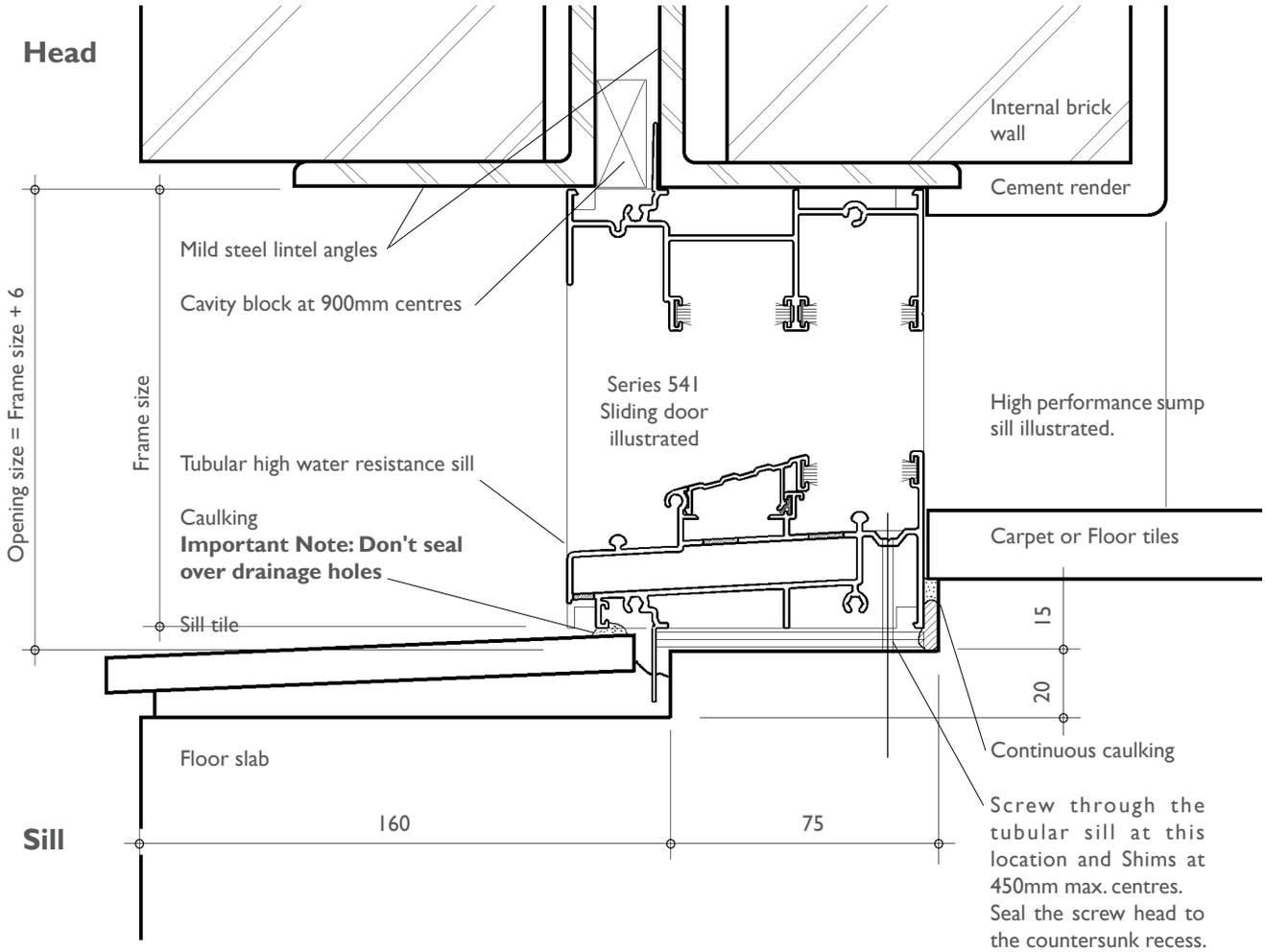
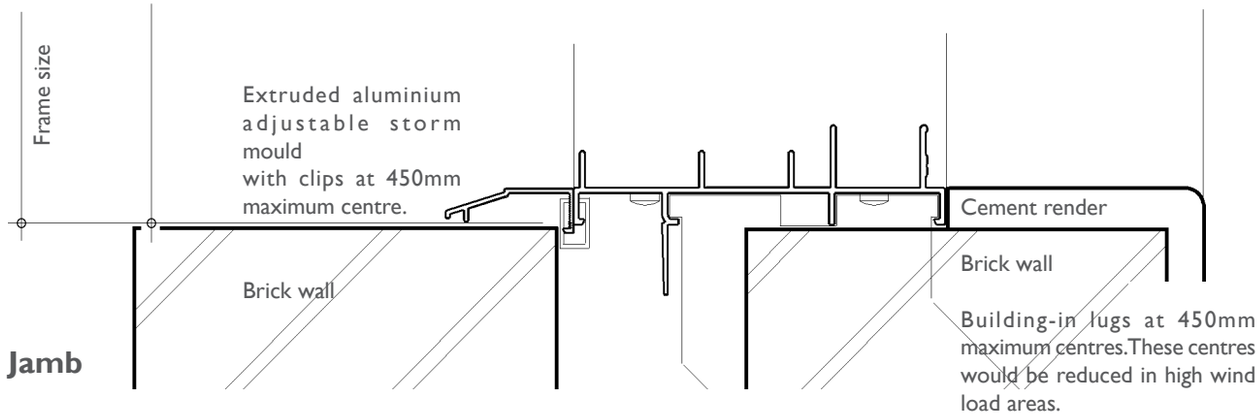
SCALE: HALF FULL SIZE

280mm CAVITY BRICK WITH REBATED CONCRETE FLOOR SLAB





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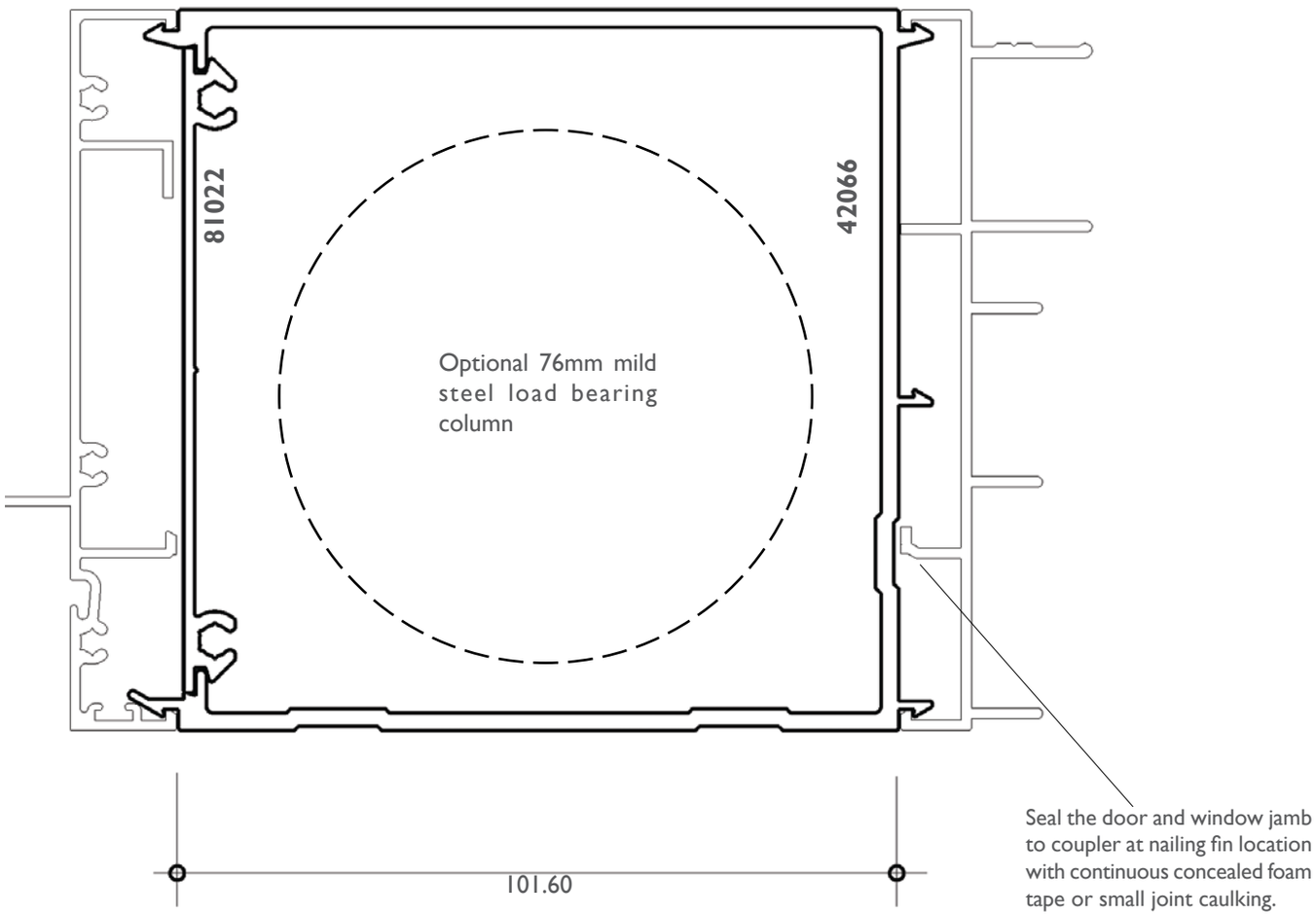
SCALE: FULL SIZE

LOAD BEARING MULLION

Any 50mm Vantage window
- Series 501-504 Sliding window
- Series 514 Double-hung window
- Series 516 Awnings/Fixed

Any 102mm Vantage frame
- Series 541 Sliding door.
- Series 542 DStacker™ door.
- Series 618 MAGNUM™ Sliding Door
- Series 517 Awnings/Fixed.
- Series 548 Hinged door/Bi-fold door/Fixed.
- Series 525 Louvres.



Note:
Load bearing 76mm diameter mild steel column can be fitted inside the aluminium coupler, the strength of the steel column would depend on the load it has to carry and would be specified by the structural engineer.

Adjoining windows still have to comply with Section 5 of AS1288 and will require grade 'A' safety glass if they fall within 300mm of the door opening.

CAD file: DWG or DXF
VAN_COUPLERS

CAD drawings in DXF and DWG format can be found on the WEB. In this case the file name is VAN_COUPLERS.

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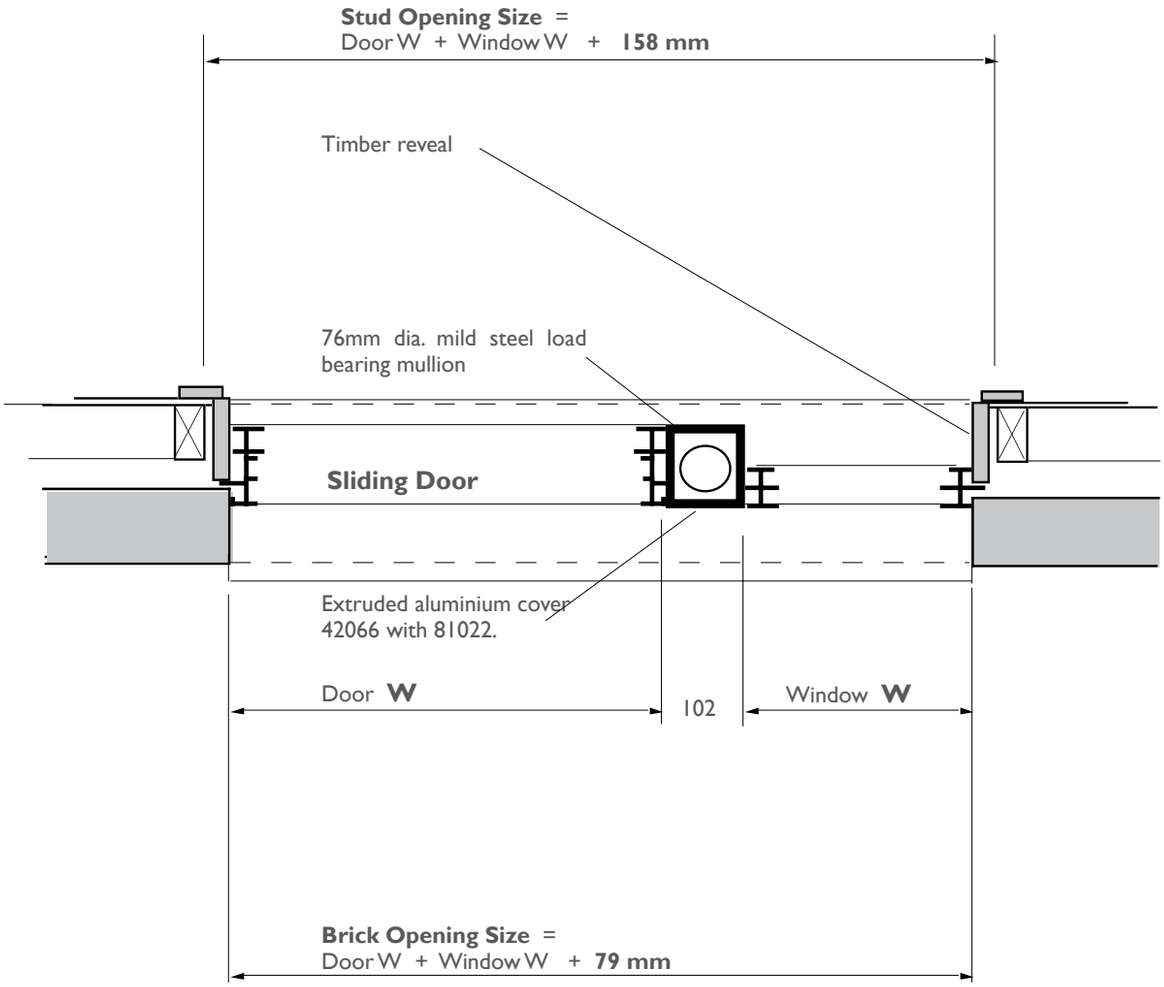
LOAD BEARING MULLION

180° Load Bearing Door to Door or Door to Window Coupler into Brick Veneer Wall - Layout Detail



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DOOR TO WINDOW 135° VERTICAL COUPLER

102mm 135° Bay Coupler

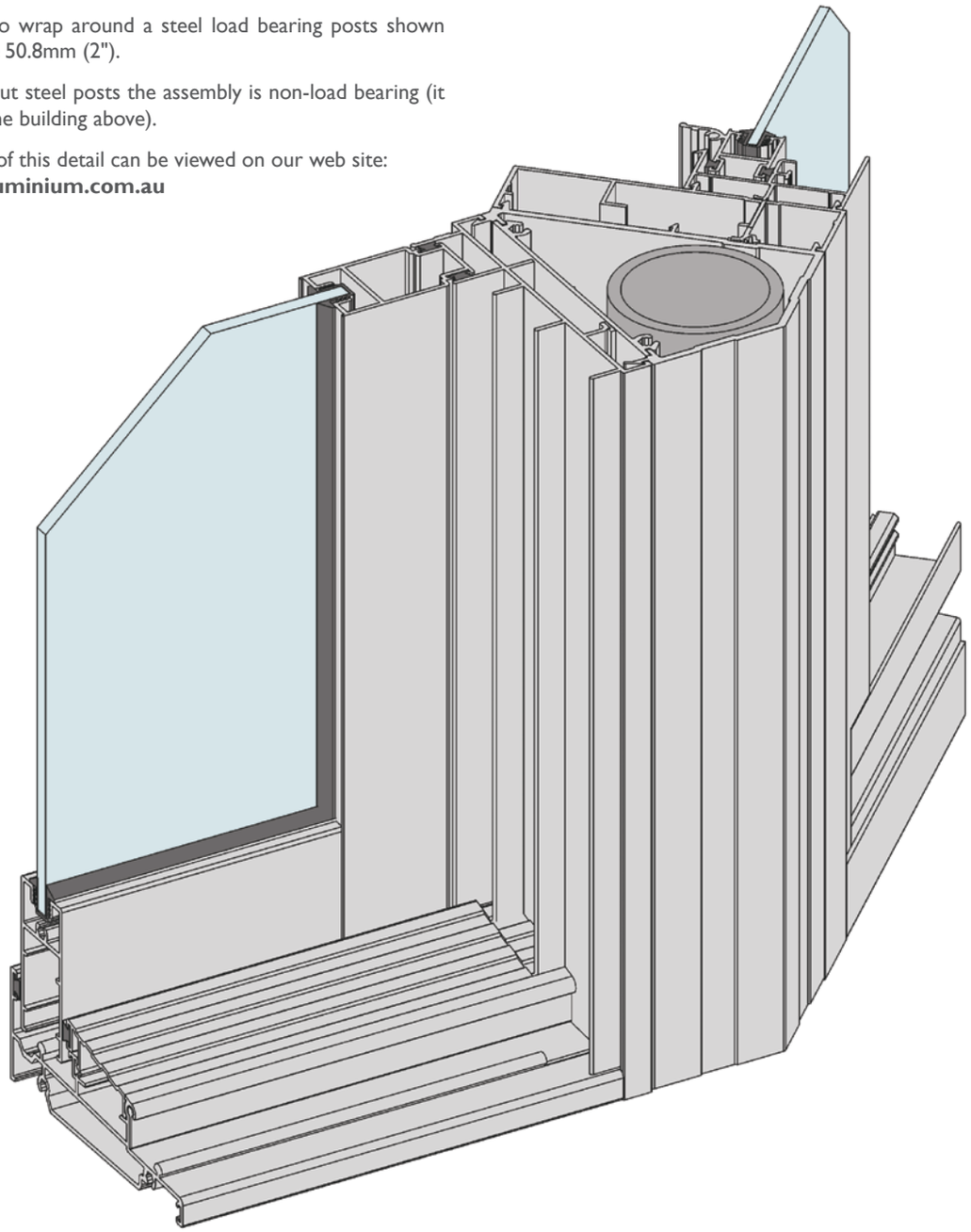
This coupler has been designed to join together 102mm windows and doors or 102mm door on one face and a 50mm window on the other without screws or rivets. Both of these details are shown in full size on the next couple of pages.

When you are laying out the bay arrangement remember to allow the 45mm at the corners for the couplers.

This coupler is designed to wrap around a steel load bearing posts shown below. Maximum post size 50.8mm (2").

If the bay is installed without steel posts the assembly is non-load bearing (it can't be used to support the building above).

Coloured images of this detail can be viewed on our web site:
www.vantagealuminium.com.au



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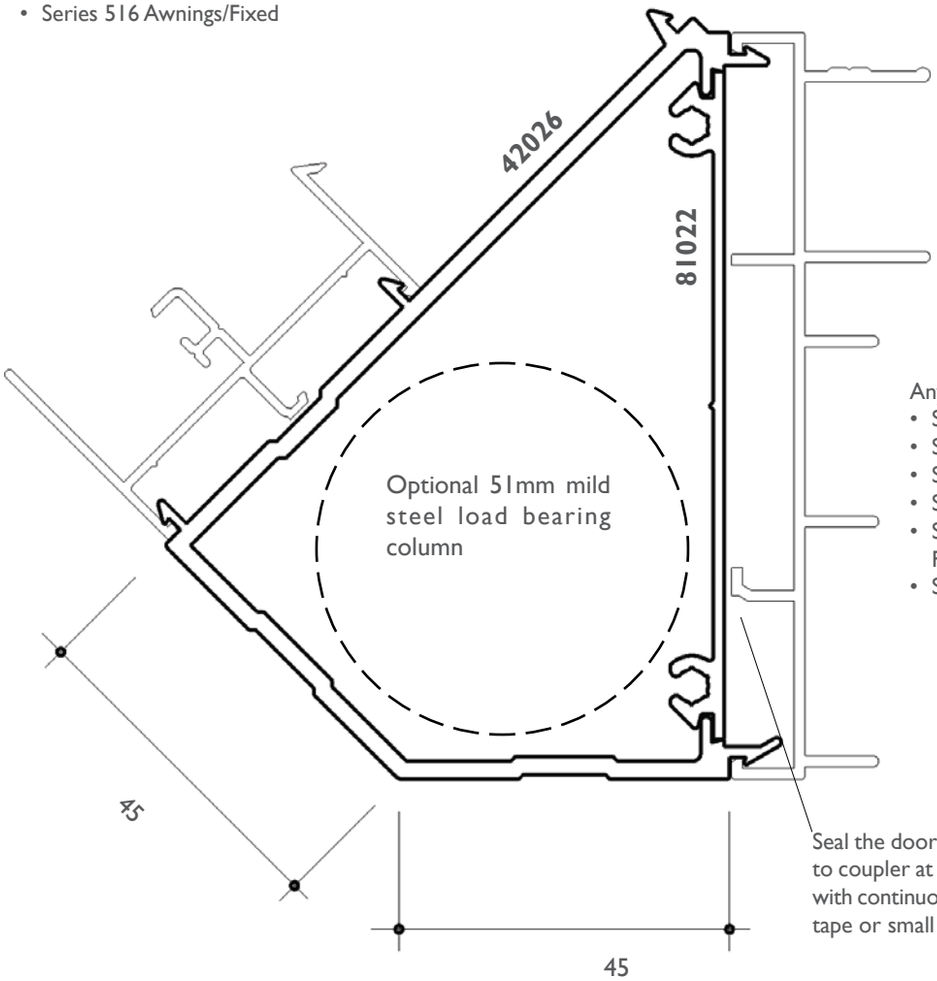
SCALE: FULL SIZE

DOOR TO WINDOW 135° VERTICAL COUPLER

Any 50mm Vantage window
- Series 501-504 Sliding window
- Series 514 Double-hung window
- Series 516 Awnings/Fixed



Any 102mm Vantage frame
- Series 541 Sliding door.
- Series 542 DStacker™ door.
- Series 618 MAGNUM™ Sliding Door
- Series 517 Awnings/Fixed.
- Series 548 Hinged door/Bi-fold door/ Fixed.
- Series 525 Louvres.

Seal the door and window jamb to coupler at nailing fin location with continuous concealed foam tape or small joint caulking.

CAD file: DWG or DXF
VAN_COUPLERS

CAD drawings in DXF and DWG format can be found on the WEB. In this case the file name is VAN_COUPLERS.

Note:
Load bearing 51mm diameter mild steel column can be fitted inside the aluminium coupler, the strength of the steel column would depend on the load it has to carry and would be specified by the structural engineer.

Installation

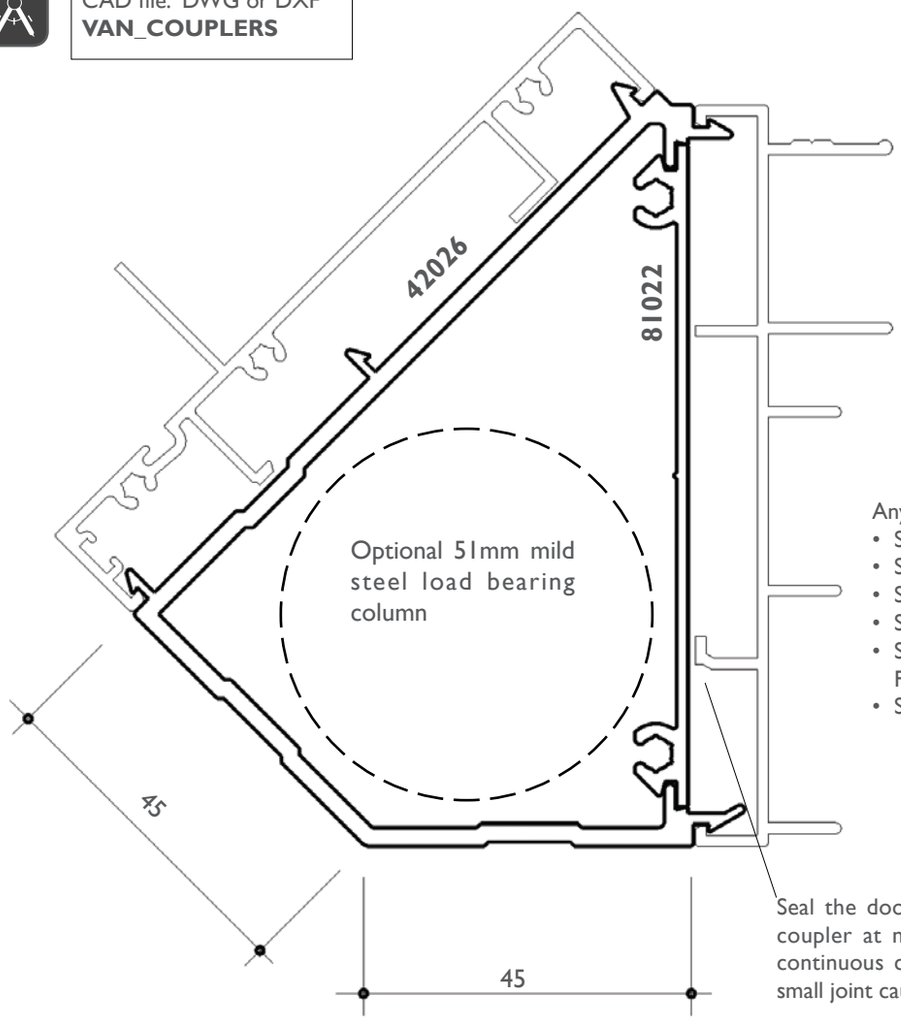
Door Building in Details

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

DOOR TO WINDOW 135° VERTICAL COUPLER

Any 102mm Vantage window
- Series 517 Awnings/Fixed
- Series 548 Hinged door/Fixed

CAD file: DWG or DXF
VAN_COUPLERS



Any 102mm Vantage frame
- Series 541 Sliding door.
- Series 542 DStacker™ door.
- Series 618 MAGNUM™ Sliding Door
- Series 517 Awnings/Fixed.
- Series 548 Hinged door/Bi-fold door/ Fixed.
- Series 525 Louvres.

Seal the door and window jamb to coupler at nailing fin location with continuous concealed foam tape or small joint caulking.

Note:
Load bearing 51mm diameter mild steel column can be fitted inside the aluminium coupler, the strength of the steel column would depend on the load it has to carry and would be specified by the building engineer.

Adjoining windows still have to comply with Section 5 of AS1288 and will require grade 'A' safety glass if they fall within 300mm of the door opening.

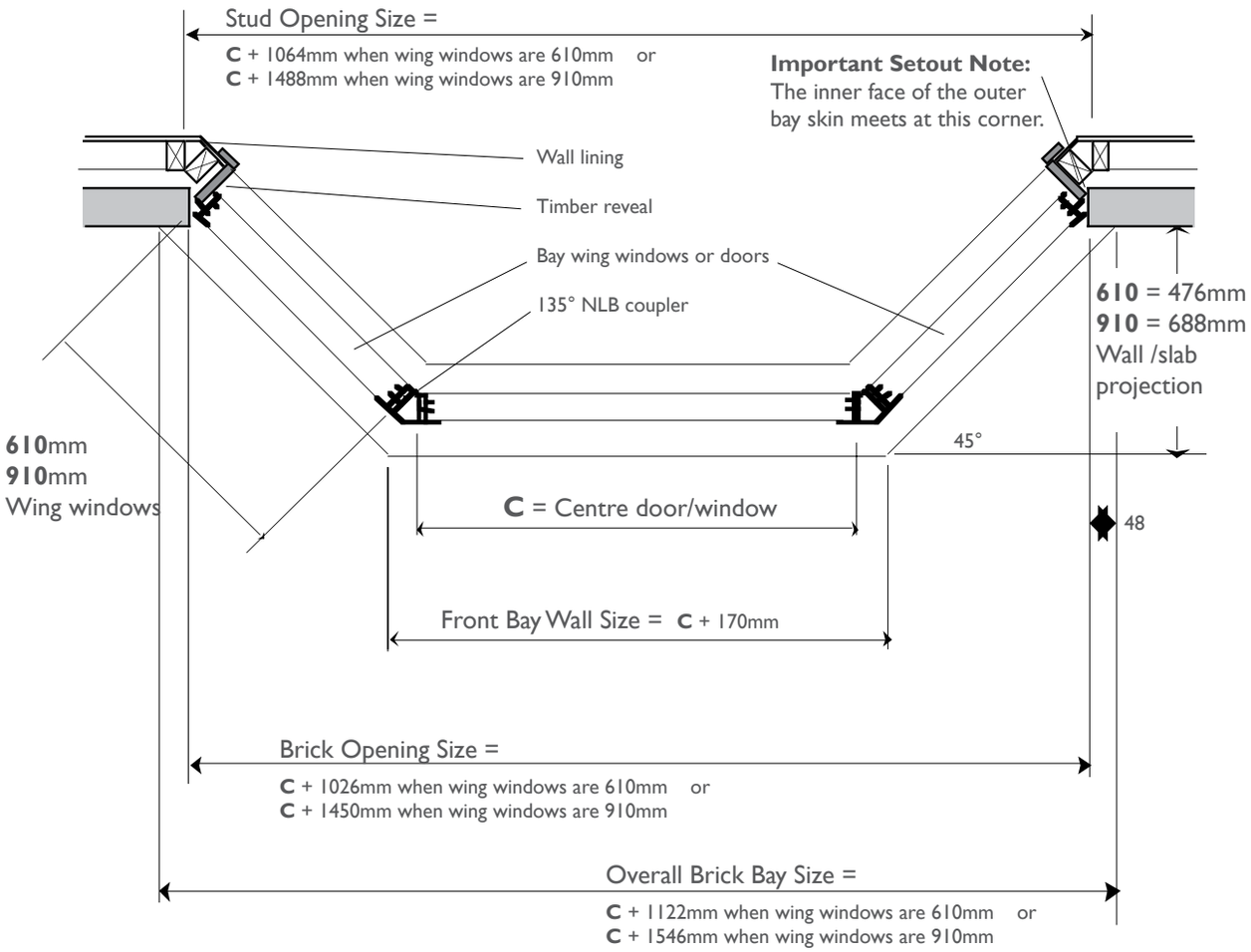
Installation

Door Building in Details

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

DOOR TO WINDOW 135° VERTICAL COUPLER

Typical bay layout (using the 102mm couplers 42026)



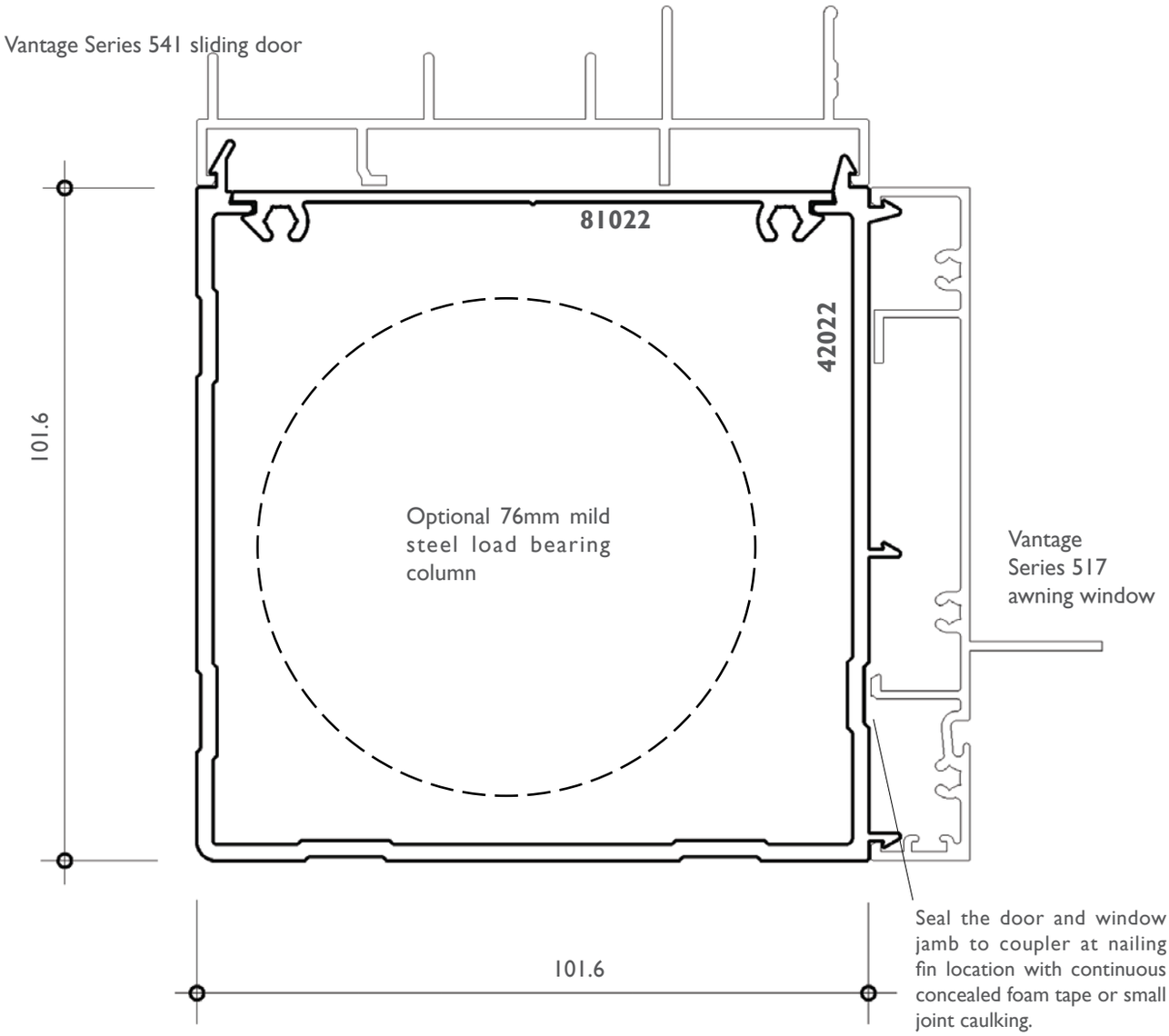
Note:
The above layout suits the 102mm bay coupler (42026) with 102mm windows or doors on the front and any of the 102mm windows or doors on the wings.

Installation

Door Building in Details

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

DOOR TO WINDOW 90° VERTICAL COUPLER



Note:
Load bearing 76mm diameter mild steel column can be fitted inside the aluminium coupler, the strength of the steel column would depend on the load it has to carry and would be specified by the structural engineer.

Adjoining windows still have to comply with Section 5 of AS1288 and will require grade 'A' safety glass if they fall within 300mm of the door opening.

CAD file: DWG or DXF
VAN_COUPLERS

CAD drawings in DXF and DWG format can be found on the WEB. In this case the file name is VAN_COUPLERS.

Installation

Door Building in Details

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

DOOR TO WINDOW 90° VERTICAL COUPLER

102mm to 102mm 90° Coupler

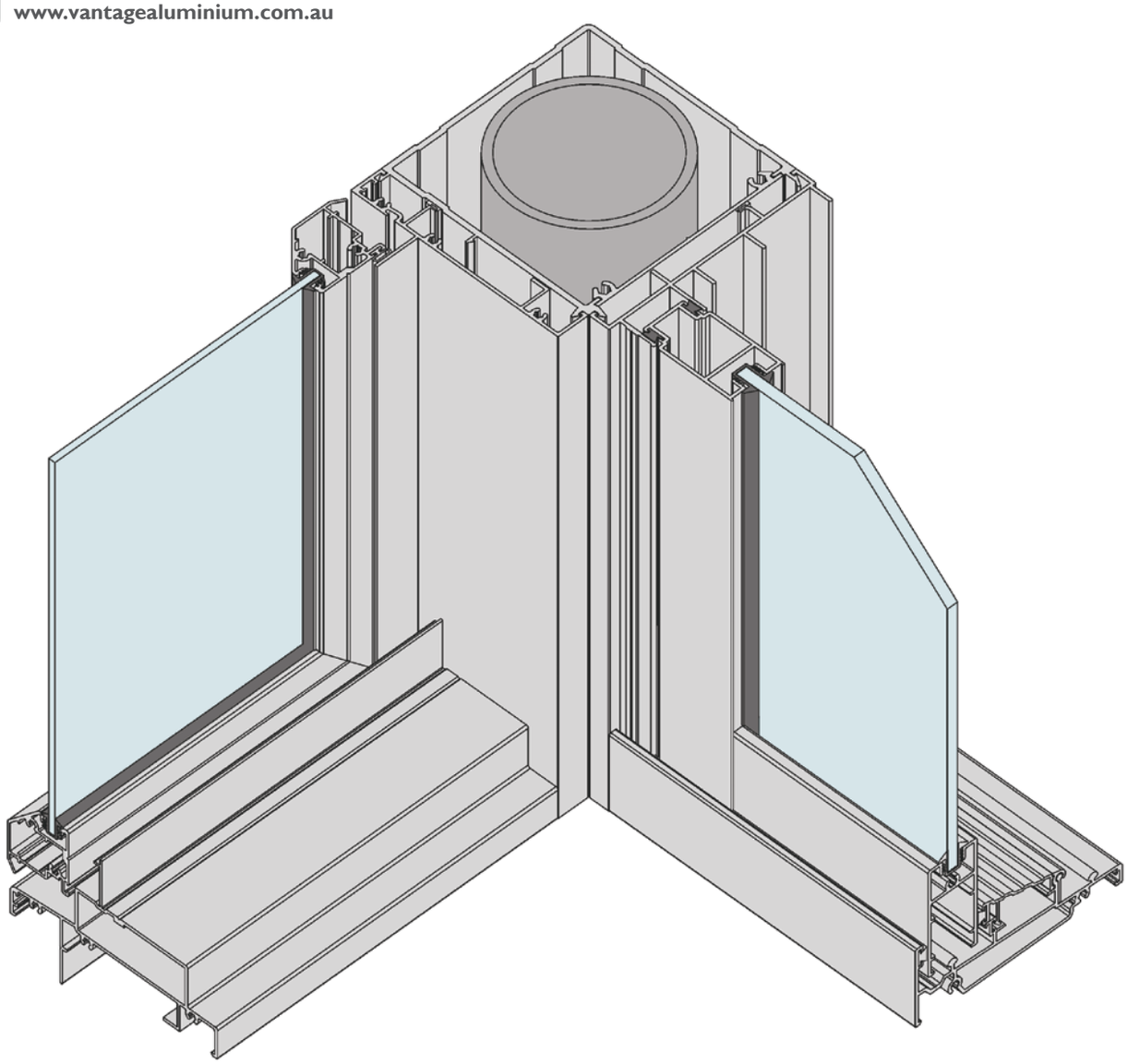
This coupler has been designed to couple together 102mm windows and doors or 102mm door on one face and a 50mm window on the other without screws or rivets. This detail is shown in full size on the previous page.

When you are laying out the bay arrangement remember to allow the 102mm at the corners for the couplers.

This coupler is designed to wrap around a steel load bearing posts shown below. Maximum post size 76.2mm (3").

If the corner is installed without steel posts the assembly is non-load bearing (it can't be used to support the building above).

Coloured images of this detail can be viewed on our web site:
www.vantagealuminium.com.au



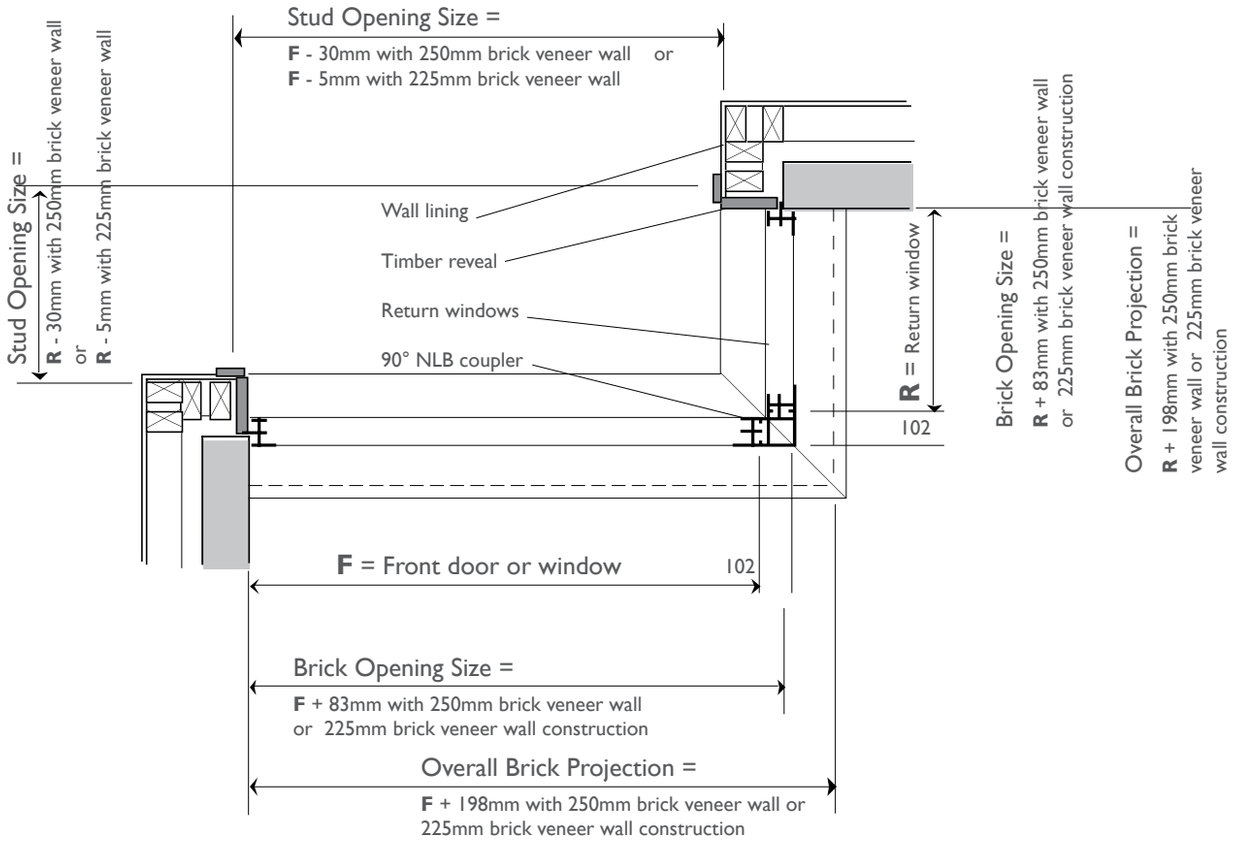
Installation

Door Building in Details

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

SLIDING DOOR TO WINDOW 90° VERTICAL COUPLER

Typical 90° Corner layout (using the 102mm couplers 42022)



Note:
The above layout suits the 102mm bay 90° (42022) with 102mm windows or doors on the front and any of the 50mm windows or 102mm windows or doors on the wings.

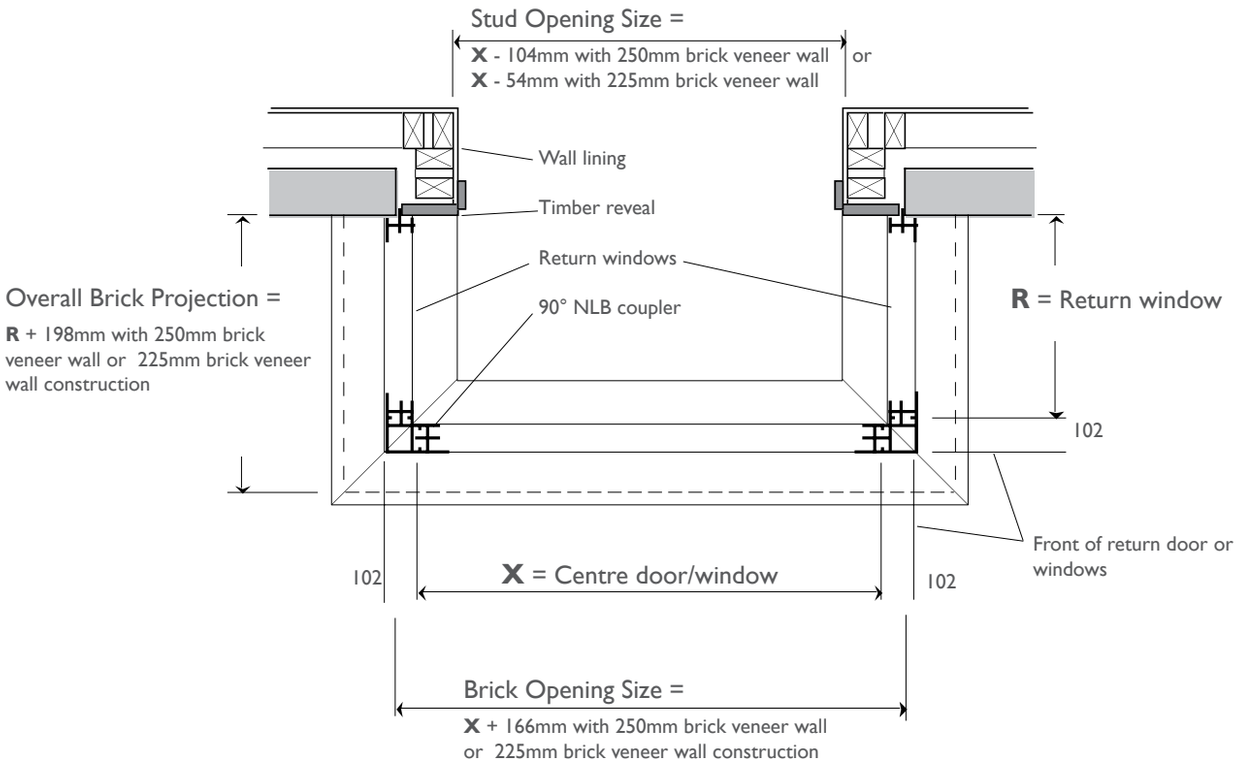
Installation

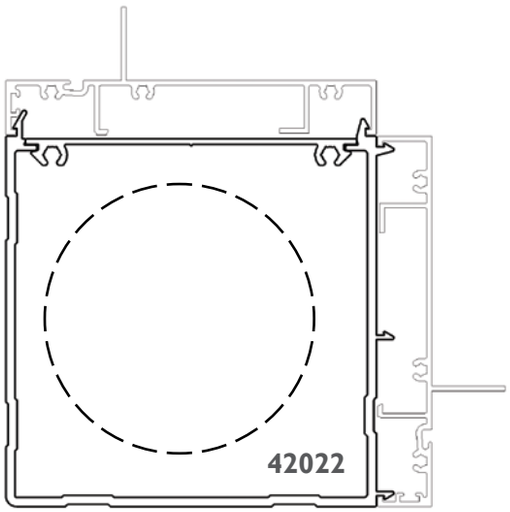
Door Building in Details

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

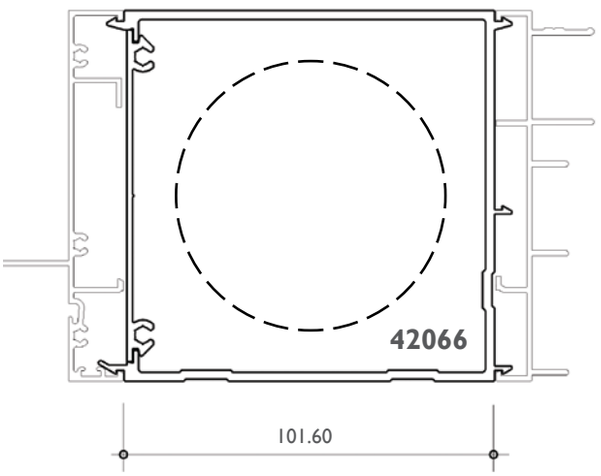
DOOR TO WINDOW 90° VERTICAL COUPLER

Typical 90° Double Corner layout (using the 102mm couplers 42022)





Also available:
We can offer a 180° coupler that will wrap around steel columns as shown below.



Note:
If the corner coupler is used without a steel load bearing column the assembly won't be load bearing.

This detail above left shows how these couplers can be used to join 102mm windows to each other.

Installation

Door Building in Details

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

102mm HEAVY DUTY 'T' COUPLER

Frame Height	Widths		Mullion Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
2100	1510	1810	2082	3122
2100	1810	1810	1996	2994
2100	2110	1810	1968	2952
2100	1510	2110	2051	3077
2100	1810	2110	1968	2952
2100	2110	2110	1941	2912
2100	1510	2410	2051	3077
2100	1810	2410	1968	2952
2100	2110	2410	1941	2912
2400	1510	1810	1498	2248
2400	1810	1810	1419	2128
2400	2110	1810	1372	2058
2400	1510	2110	1447	2170
2400	1810	2110	1372	2058
2400	2110	2110	1329	1993
2400	1510	2410	1430	2145
2400	1810	2410	1357	2036
2400	2110	2410	1314	1972

Wind Ratings (Pa) Mullion coupler 42030 with awning jamb 16111 and door jamb 42005.

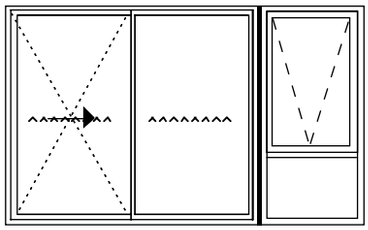
Mullion Ratings (Pa)

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

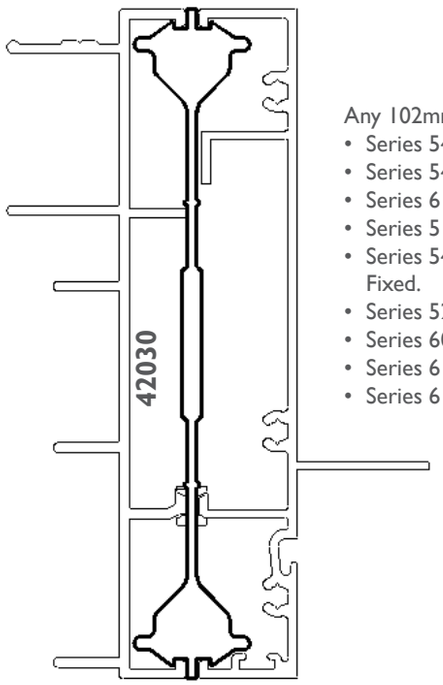
These tables have been calculated using nominal section properties.

Ultimate strength rating has been limited to 4500 Pa.

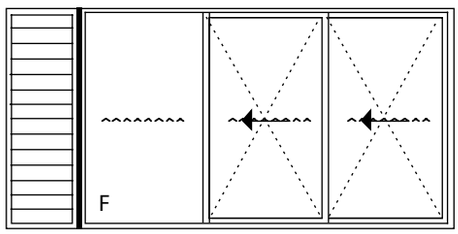
CAD file: DWG or DXF
VAN_COUPLERS



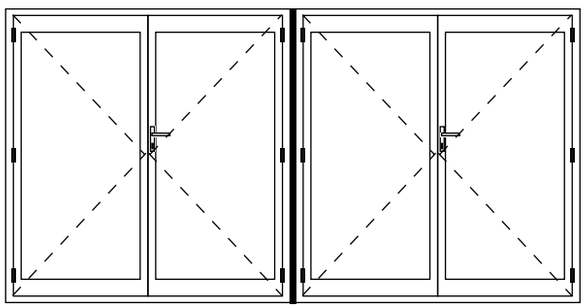
Series 541, 542 or 618 sliding doors coupled to Series 517 or 616 awnings.



Any 102mm Vantage frame
- Series 541 Sliding door.
- Series 542 DStacker™ door.
- Series 618 MAGNUM™ Sliding door
- Series 517 Awnings/Fixed.
- Series 548 Hinged door/Bi-fold door/ Fixed.
- Series 525 Louvres.
- Series 601 sliders.
- Series 613 double-hung
- Series 616 awnings



This coupler will also join Series 525 Louvres to Series 541, 542 or 618 sliding doors sliding doors as illustrated above.



Series 548 Hinged door frame coupled to another Series 548 frame.

Installation

Door Building in Details

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

102mm HEAVY DUTY 'I' COUPLER

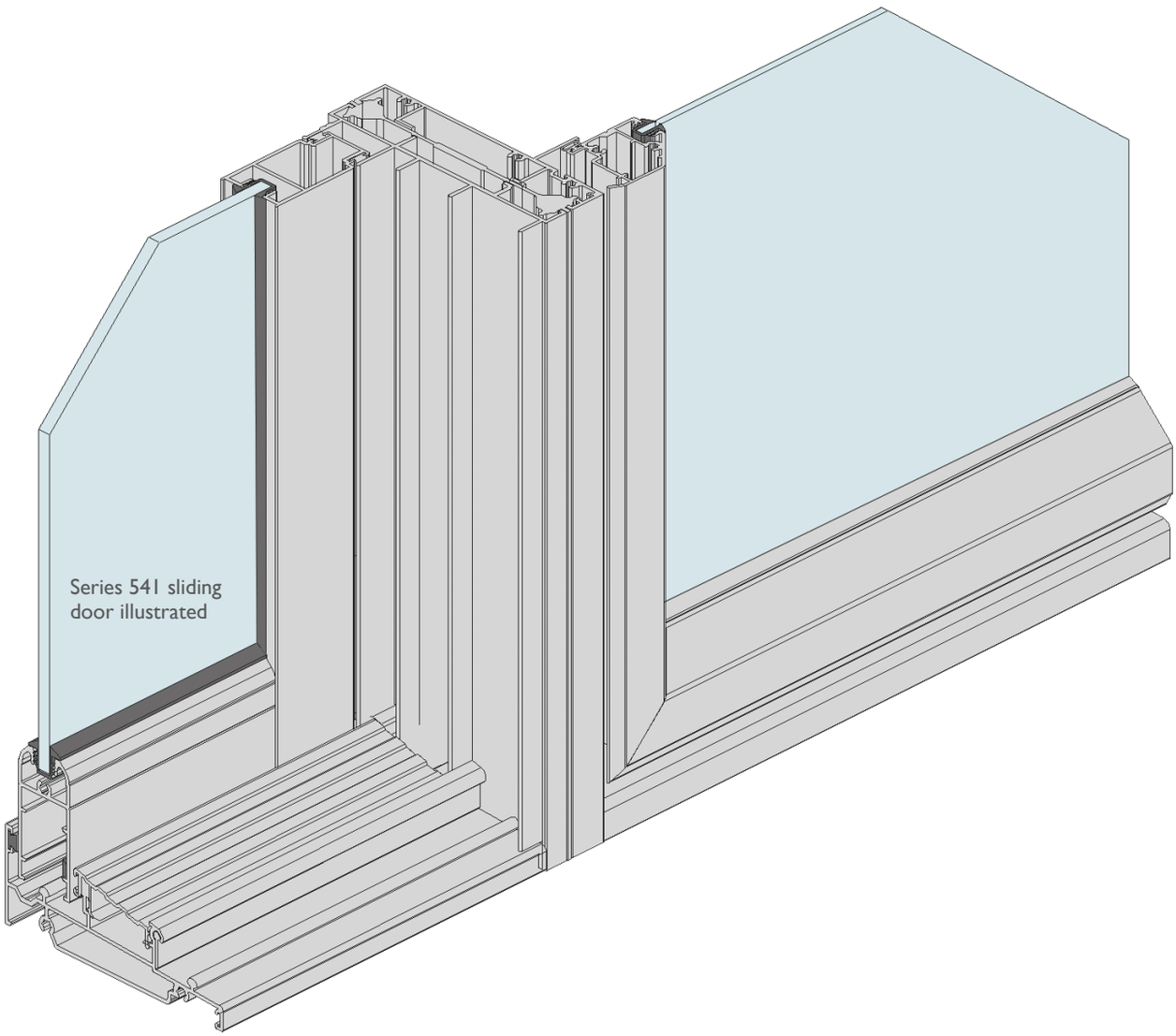
102mm to 102mm 180° Coupler

This coupler has been designed to join together 102mm windows and doors without screws or rivets. A full size detail of the assembly is shown on the previous page. This coupler won't clip 102mm frames to 50mm frames (use 42024).

When you are calculating the window/door sizes remember to allow the 2mm for the couplers.

This assembly is non-load bearing (it can't be used to support the building above).

Coloured images of this detail can be viewed on our web site:
www.vantagealuminium.com.au



Installation

Door Building in Details

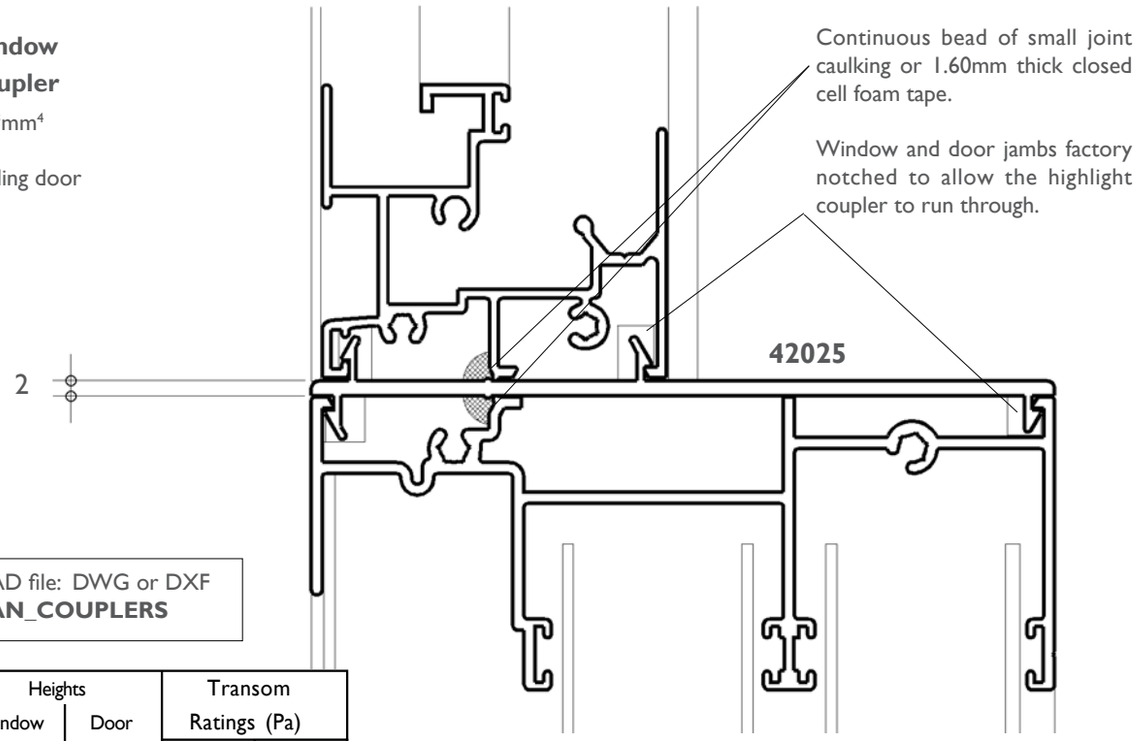
DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

DOOR TO WINDOW TRANSOM COUPLER

Door to Window highlight coupler

Ixx = 775 x 10^3mm^4

Fixed over sliding door



CAD file: DWG or DXF
VAN_COUPLERS

Frame Width	Heights		Transom Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
1810	300	2100	2200	4500
2110	300	2100	2145	3218
2410	300	2100	1501	2252
2725	300	2100	1106	1658
3175	300	2100	772	1157
3589	300	2100	558	878
3625	300	2100	541	859
1810	600	2100	2200	4294
2110	600	2100	1837	2756
2410	600	2100	1300	1950
2725	600	2100	964	1446
3175	600	2100	677	1015
3589	600	2100		
3625	600	2100		
1810	900	2100	2200	3758
2110	900	2100	1624	2436
2410	900	2100	1155	1733
2725	900	2100	859	1289
3175	900	2100	605	907
3589	900	2100		
3625	900	2100		

Wind Ratings (Pa) Transom coupler 42025 with slider sill 10002 and door head 42001.

Transom Ratings (Pa)

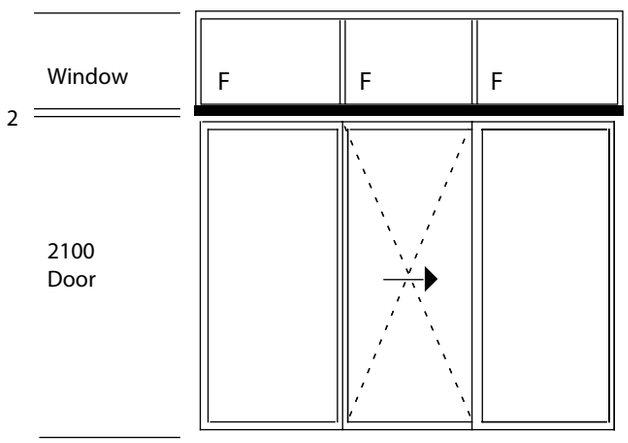
S = Serviceability limit state (deflection = L/150).
U = Ultimate strength limit state (factored yield strength = 104 MPa).

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 the Series 541 sliding door.

Blank Denotes rating under 500 Pa.



Installation

Door Building in Details

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

DOOR TO WINDOW TRANSOM COUPLER

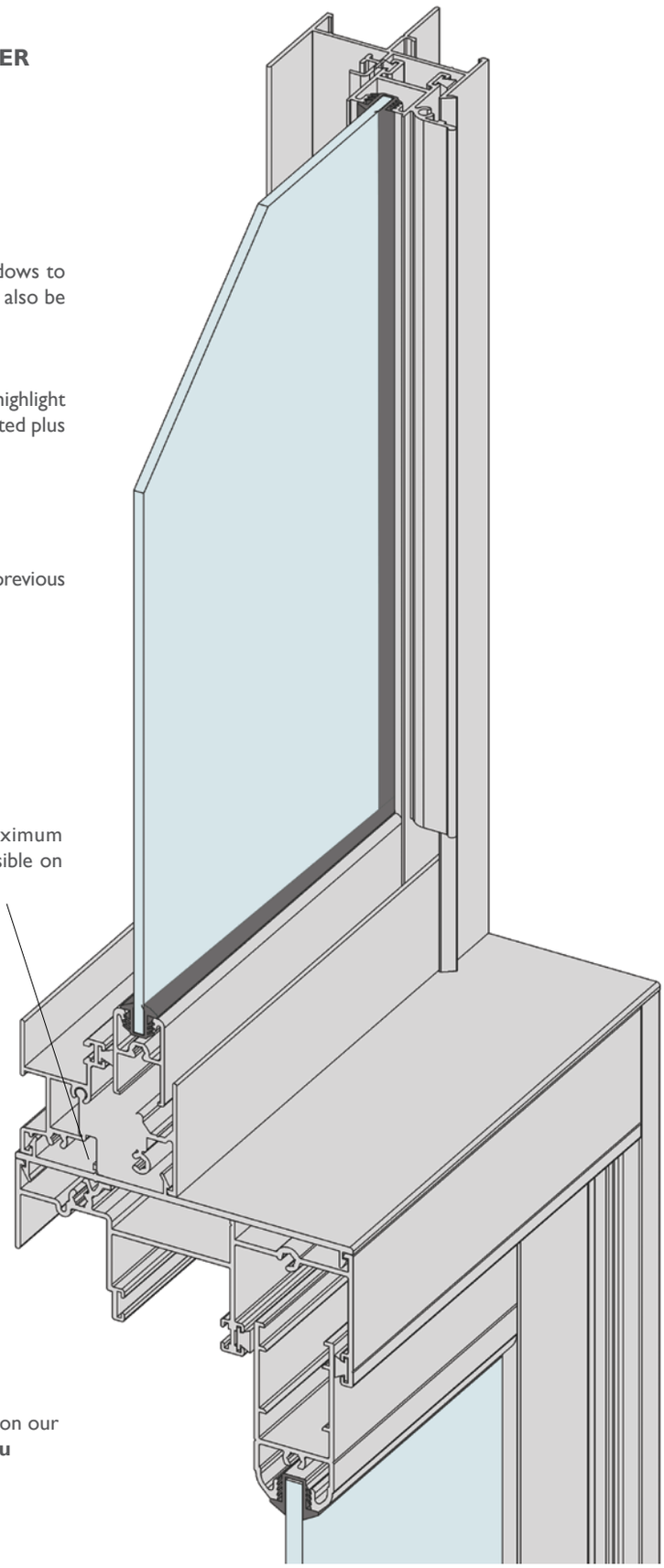
42025 Highlight Coupler

This coupler will allow any of the Vantage 50mm windows to be coupled over Series 541or 542 sliding doors. It can also be used over Series 548 French and hinged doors.

This option allows the 50mm frame to be used as a highlight over doors. This includes the sliding window as illustrated plus awning, casement and fixed windows.

There are limitations on the strength, refer table on the previous page.

Transom is sealed on the nailing fin line for maximum weatherproofing and there is no unsightly caulking visible on external or internal faces.



For full height high performance sliding doors consider using MAGNUM™ Series 618 Sliding Doors

Series 541 sliding door illustrated

Coloured images of this detail can be viewed on our web site: **www.vantagealuminium.com.au**

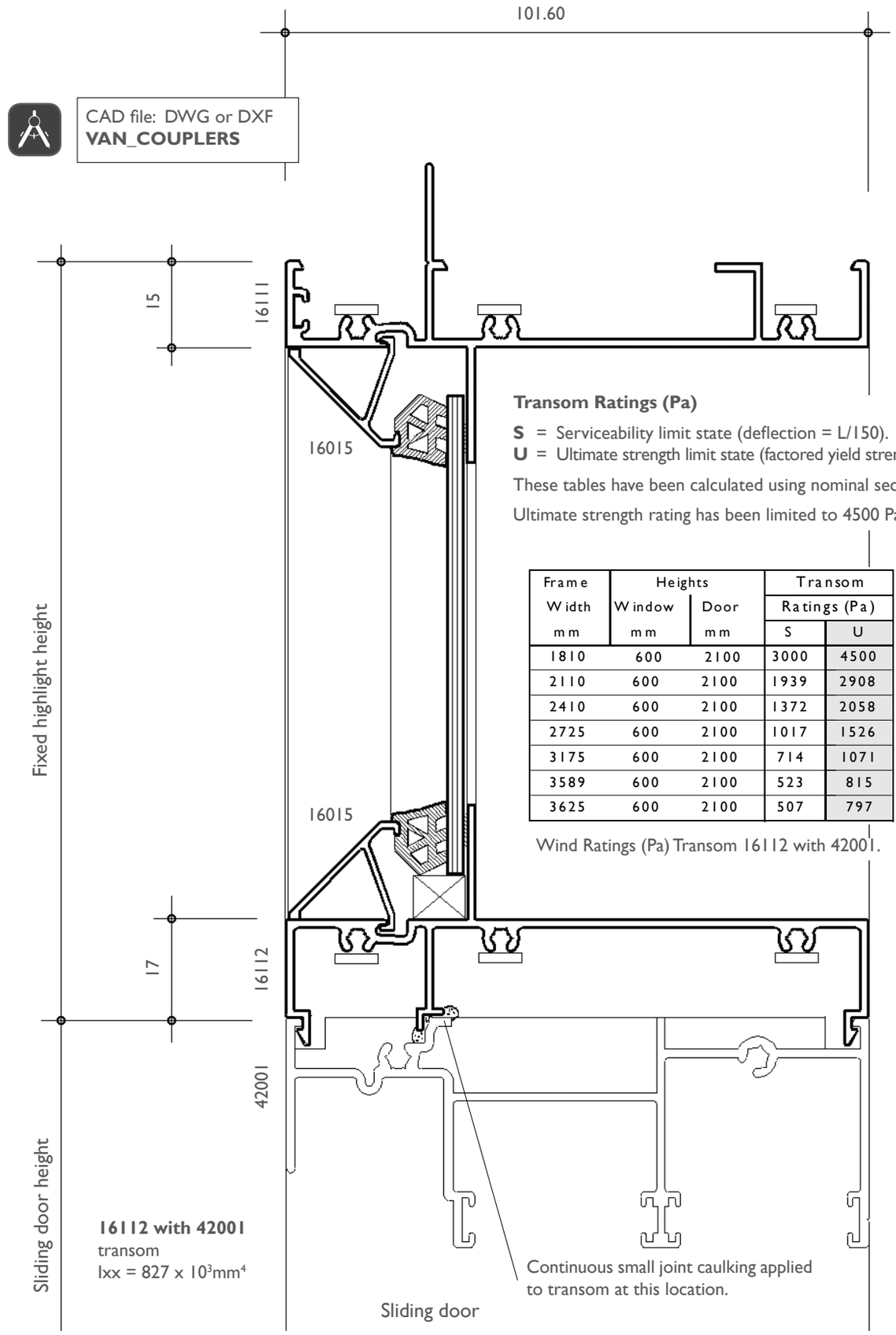
Internal view

Installation

Door Building in Details

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

DOOR TO WINDOW TRANSOM COUPLER



Transom Ratings (Pa)

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.

Frame Width	Heights		Transom Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
1810	600	2100	3000	4500
2110	600	2100	1939	2908
2410	600	2100	1372	2058
2725	600	2100	1017	1526
3175	600	2100	714	1071
3589	600	2100	523	815
3625	600	2100	507	797

Wind Ratings (Pa) Transom 16112 with 42001.

Installation

Door Building in Details

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

DOOR TO WINDOW TRANSOM COUPLER

16112 Highlight Coupler

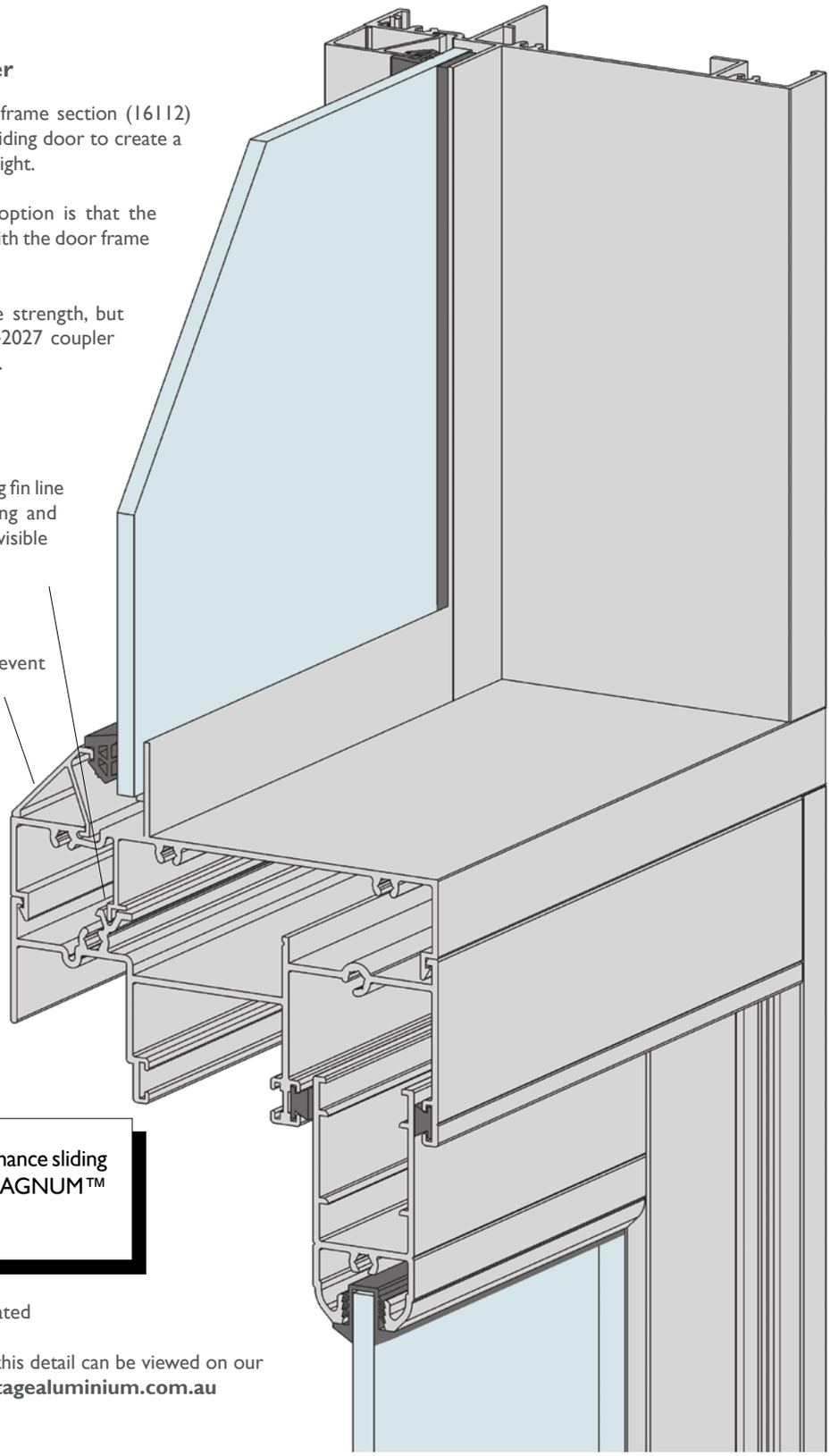
The Series 517 awning male frame section (16112) snaps directly to Series 541 sliding door to create a highlight window as detailed right.

The main feature with this option is that the 102mm frame lines through with the door frame under.

There are limitations on the strength, but if this is a problem use the 42027 coupler shown on the following pages.

Transom is sealed on the nailing fin line for maximum weatherproofing and there is no unsightly caulking visible on external or internal faces.

Splayed fixed light beads prevent water/dust build-up.



For full height high performance sliding doors consider using MAGNUM™ Series 618 Sliding Doors

Series 541 sliding door illustrated

Coloured images of this detail can be viewed on our web site: **www.vantagealuminium.com.au**

Internal view

Installation

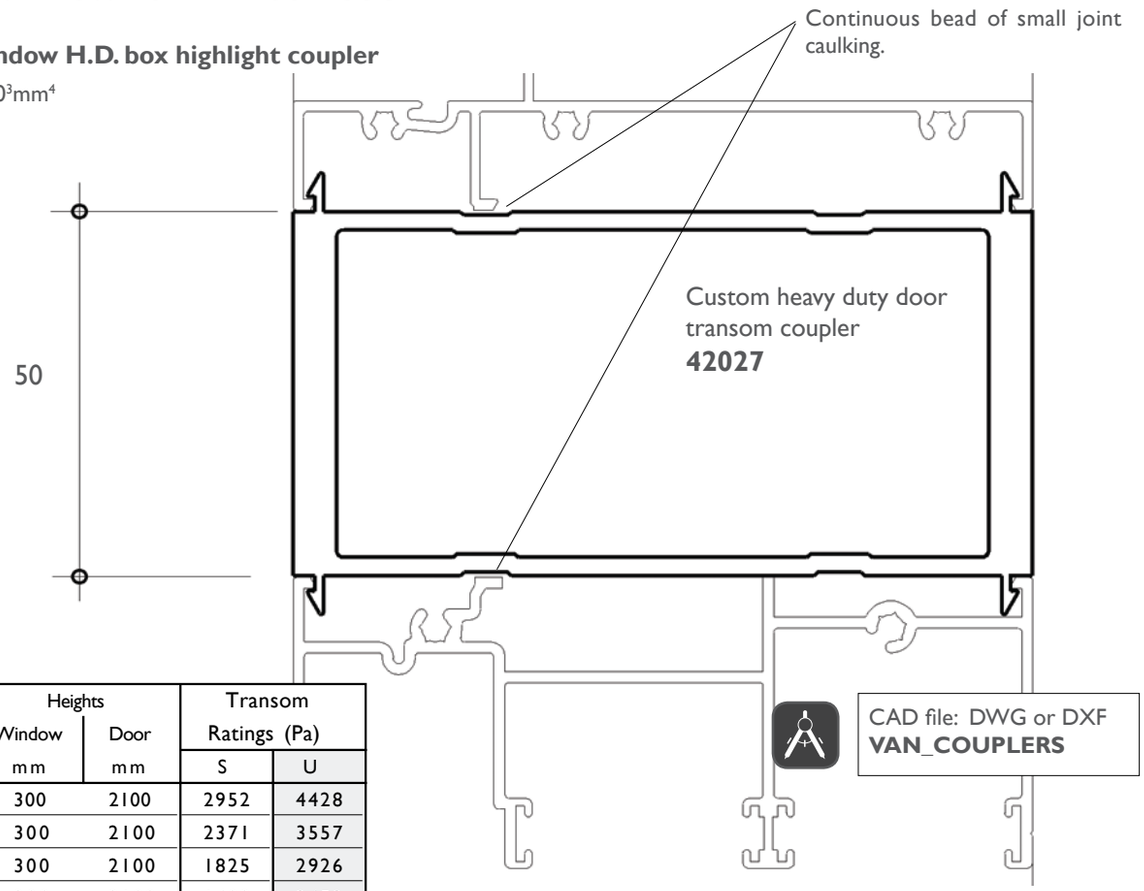
Door Building in Details

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

DOOR TO WINDOW BOX TRANSOM COUPLER

Door to Window H.D. box highlight coupler

Ixx = 2558 x 10^3mm^4



Frame Width	Heights		Transom Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
3000	300	2100	2952	4428
3300	300	2100	2371	3557
3600	300	2100	1825	2926
3900	300	2100	1409	2453
4200	300	2100	1112	2088
4500	300	2100	893	1801
4800	300	2100	729	1570
3000	600	2100	2584	3876
3300	600	2100	2082	3122
3600	600	2100	1603	2574
3900	600	2100	1240	2162
4200	600	2100	980	1843
4500	600	2100	788	1591
4800	600	2100	644	1388
3000	900	2100	2308	3462
3300	900	2100	1862	2793
3600	900	2100	1434	2305
3900	900	2100	1110	1937
4200	900	2100	878	1652
4500	900	2100	707	1427
4800	900	2100	578	1246

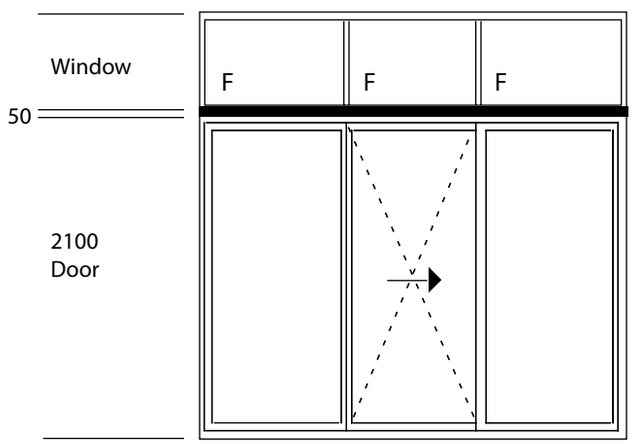
Wind Ratings (Pa) Transom coupler 42027 with fixed sill 16111 and door head 42001.

Transom Ratings (Pa)

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

Ultimate strength rating has been limited to 4500 Pa.

These tables have been calculated using nominal section properties.



Installation

Door Building in Details

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

DOOR TO WINDOW BOX TRANSOM COUPLER

42027 Heavy Duty Highlight Coupler

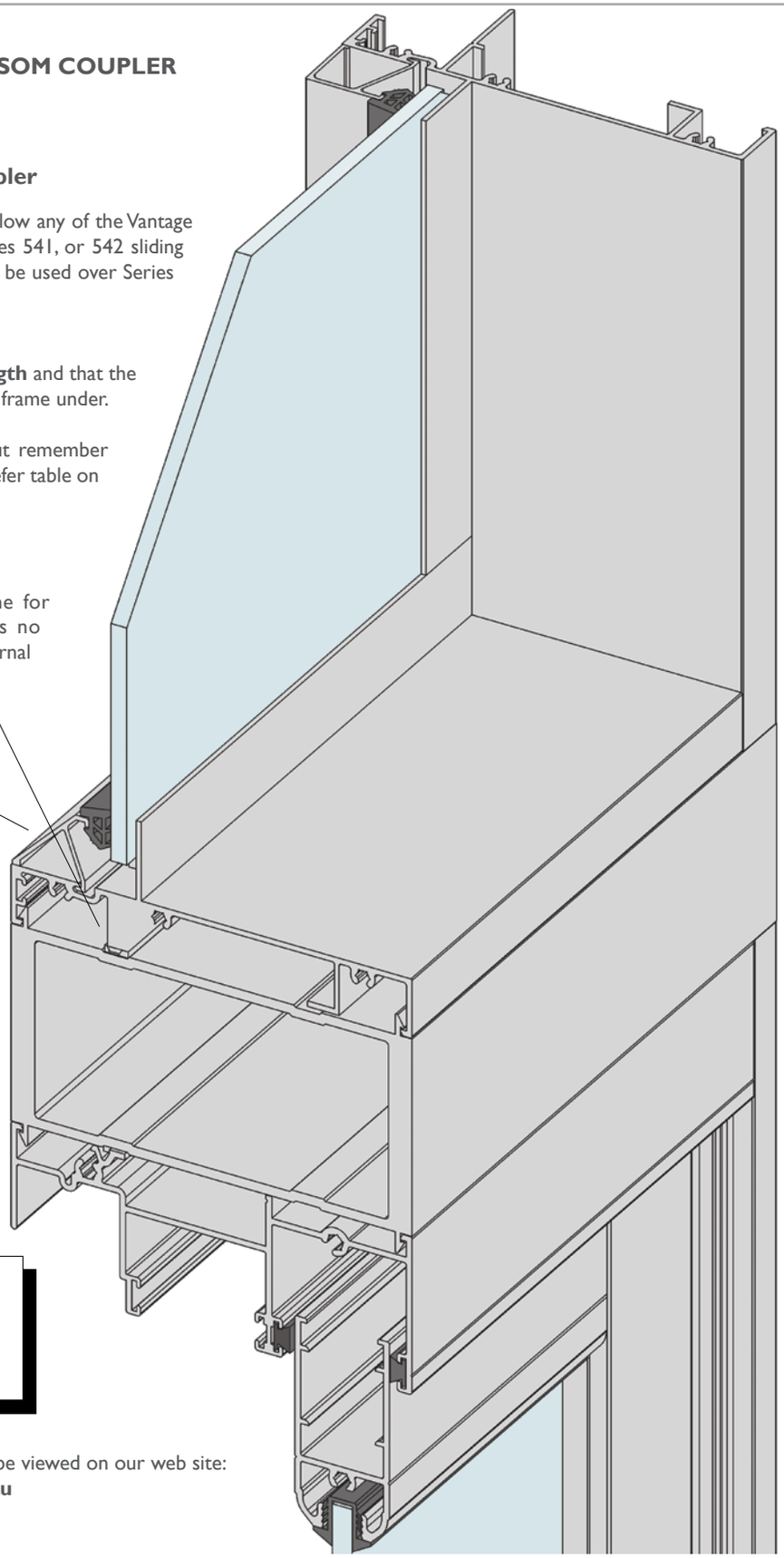
This heavy duty tubular box section will allow any of the Vantage 102mm windows to be coupled over Series 541, or 542 sliding doors without screws or rivets. It can also be used over Series 548 French and hinged doors.

The main feature with this option is **strength** and that the 102mm frame lines through with the door frame under.

This is a very strong transom coupler but remember there are still limitations on the strength, refer table on the previous page.

Transom is sealed on the nailing fin line for maximum weatherproofing and there is no unsightly caulking visible on external or internal faces.

Splayed fixed light beads prevent water/ dust build-up.



Internal view

Series 541 sliding door illustrated

For full height high performance sliding doors consider using MAGNUM™ Series 618 Sliding Doors

Coloured images of this detail can be viewed on our web site:
www.vantagealuminium.com.au

Installation

Door Building in Details

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

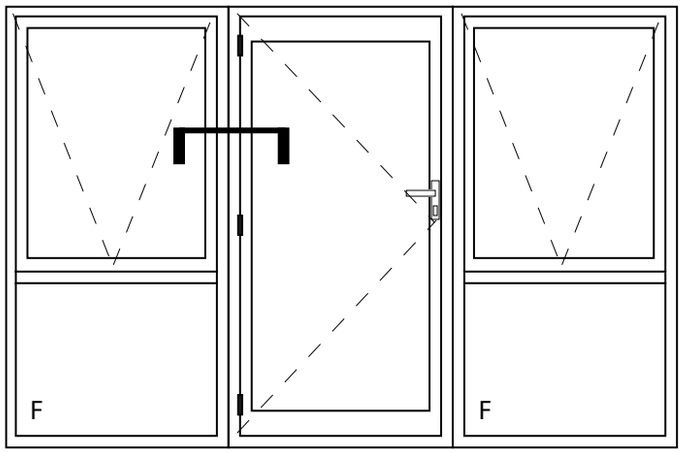
SERIES 517 WINDOW CLIPPED TO HINGED DOOR

Mullion Ratings (Pa)

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.

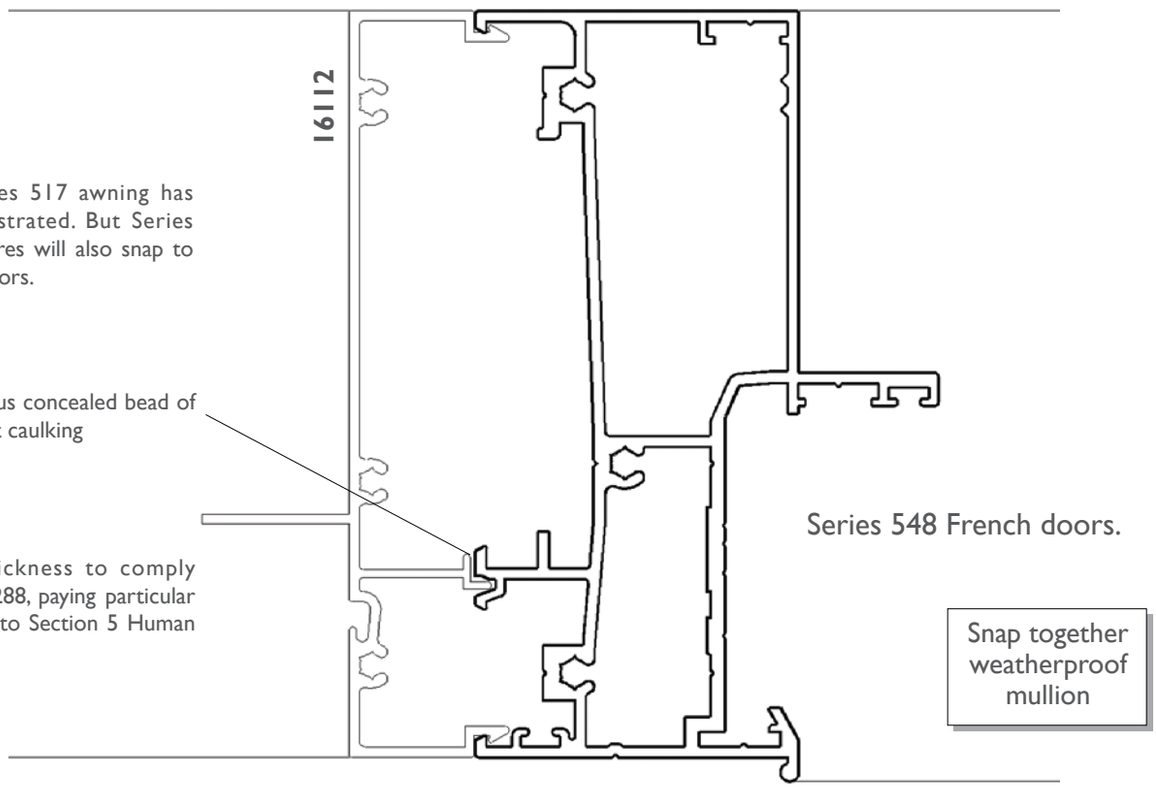
Ultimate strength rating has been limited to 4500 Pa.



Hinged door to Window non-load bearing coupler

Frame Height	Widths		Mullion Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
2100	1510	910	2468	3702
2100	1810	910	2343	3515
2100	2110	910	2303	3455
2100	1510	1710	2010	3015
2100	1810	1710	1926	2890
2100	2110	1710	1899	2849
2400	1510	910	1825	2737
2400	1810	910	1703	2554
2400	2110	910	1633	2450
2400	1510	1710	1455	2182
2400	1810	1710	1376	2064
2400	2110	1710	1330	1995

Wind Ratings (Pa) Mullion coupler 16112 snapped to hinged door jamb 51039.



The Series 517 awning has been illustrated. But Series 525 Louvres will also snap to hinged doors.

Continuous concealed bead of small joint caulking

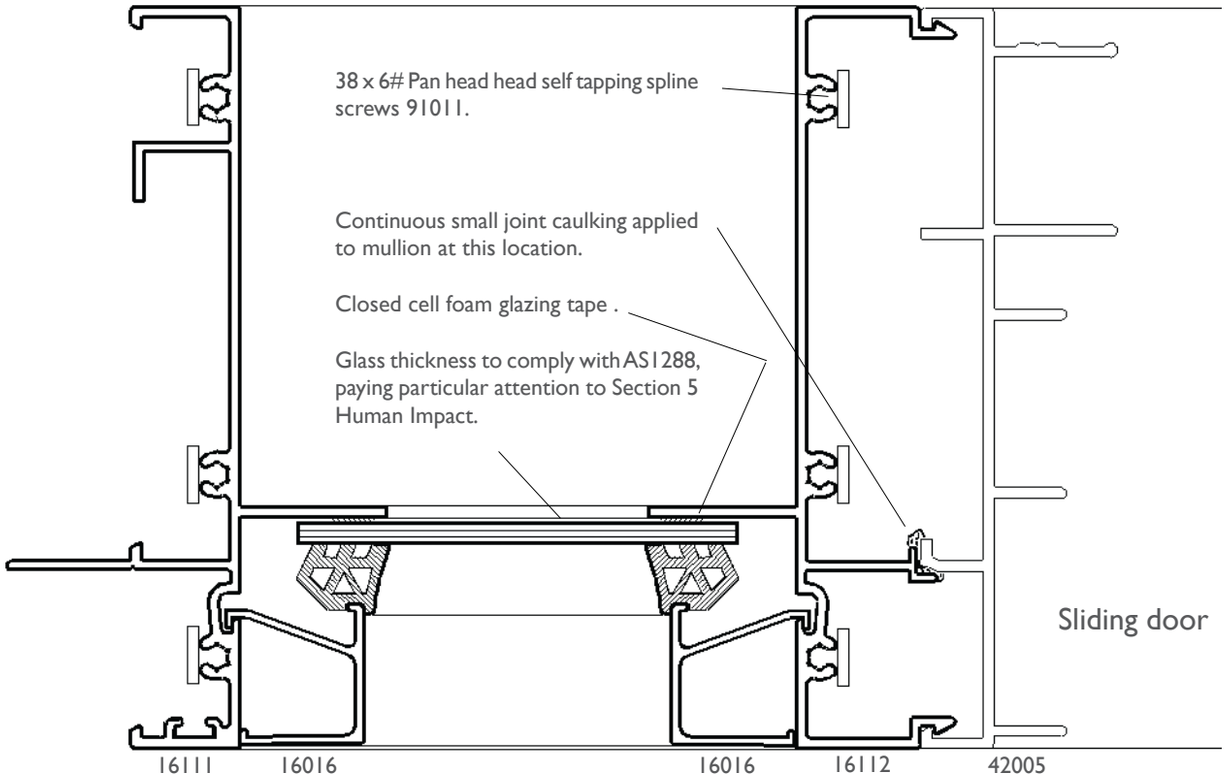
Glass thickness to comply with AS1288, paying particular attention to Section 5 Human Impact.

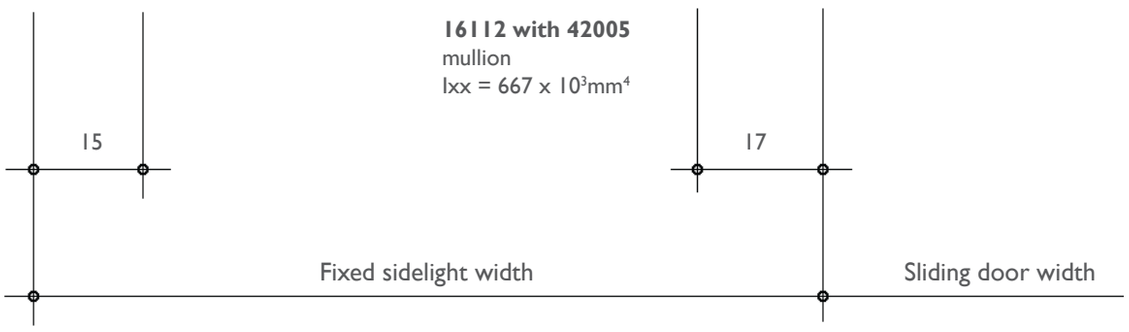
Installation

Door Building in Details

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

SERIES 517 WINDOW CLIPPED TO SLIDING DOOR





Transom Ratings (Pa)

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.

Frame Height	Widths		Mullion Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
2100	600	1810	1546	2319
2100	600	2110	1516	2274
2100	600	2410	1516	2274
2100	900	1810	1363	2044
2100	900	2110	1340	2010
2100	900	2410	1340	2010

Wind Ratings (Pa) Mullion 16112 with 42005.

Installation

Door Building in Details

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

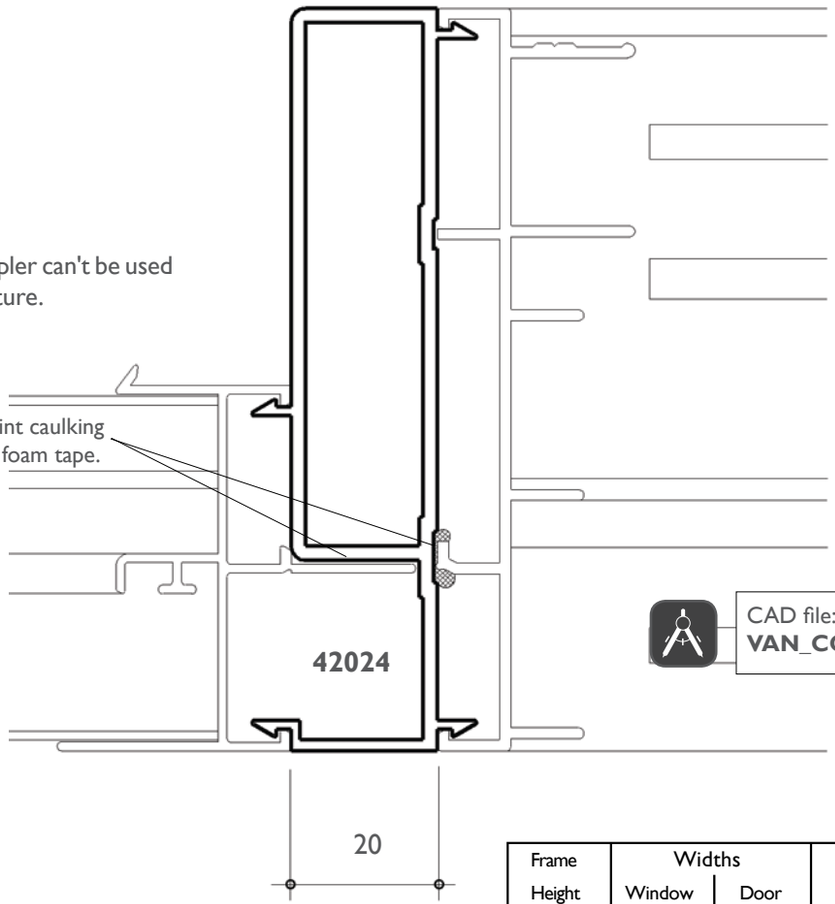
SLIDING DOOR TO WINDOW COUPLER

Door to Window

Ixx = 865 x 10^3mm^4

Important Note:
This non-load bearing coupler can't be used to support building structure.

Continuous bead of small joint caulking or 1.60mm thick closed cell foam tape.



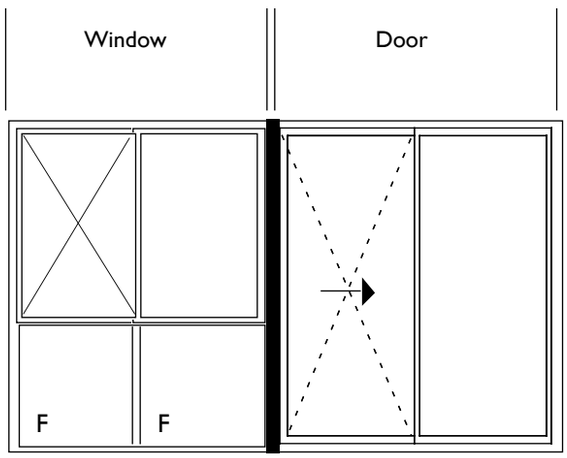
CAD file: DWG or DXF
VAN_COUPLERS

Mullion Ratings (Pa)

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.



Frame Height	Widths		Mullion Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
2100	1510	1810	1581	2371
2100	1810	1810	1516	2274
2100	2110	1810	1495	2242
2100	1510	2110	1558	2337
2100	1810	2110	1495	2242
2100	2110	2110	1474	2212
2100	1510	2410	1558	2337
2100	1810	2410	1495	2242
2100	2110	2410	1474	2212
2400	1510	1810	1138	1707
2400	1810	1810	1077	1616
2400	2110	1810	1042	1563
2400	1510	2110	1099	1648
2400	1810	2110	1042	1563
2400	2110	2110	1009	1513
2400	1510	2410	1086	1629
2400	1810	2410	1031	1546
2400	2110	2410	998	1497

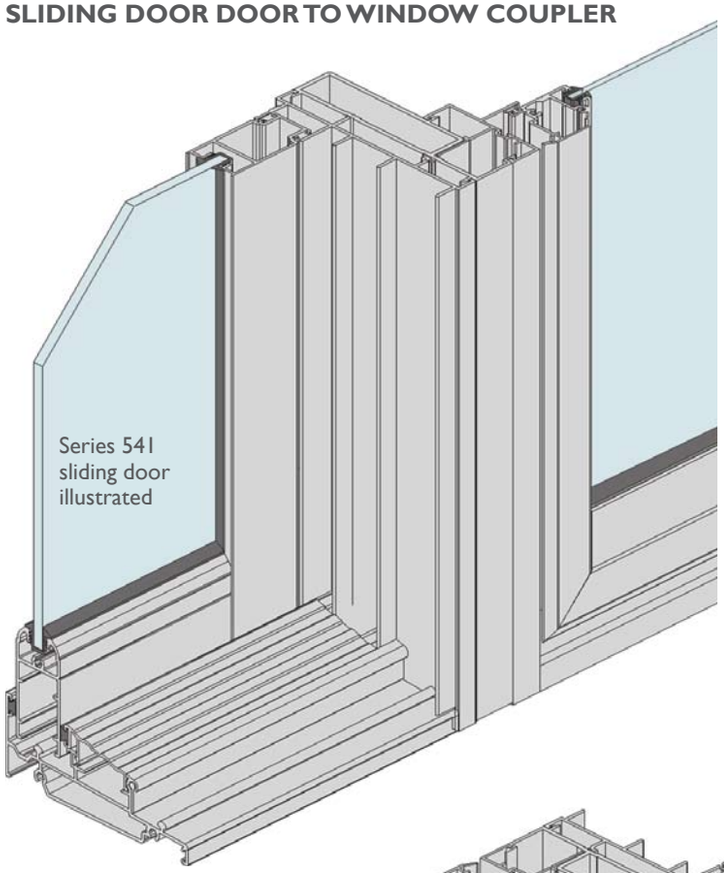
Wind Ratings (Pa) Mullion coupler 42024 with slider jamb 10015 and door jamb 42005.

Installation

Door Building in Details

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

SLIDING DOOR DOOR TO WINDOW COUPLER



External view

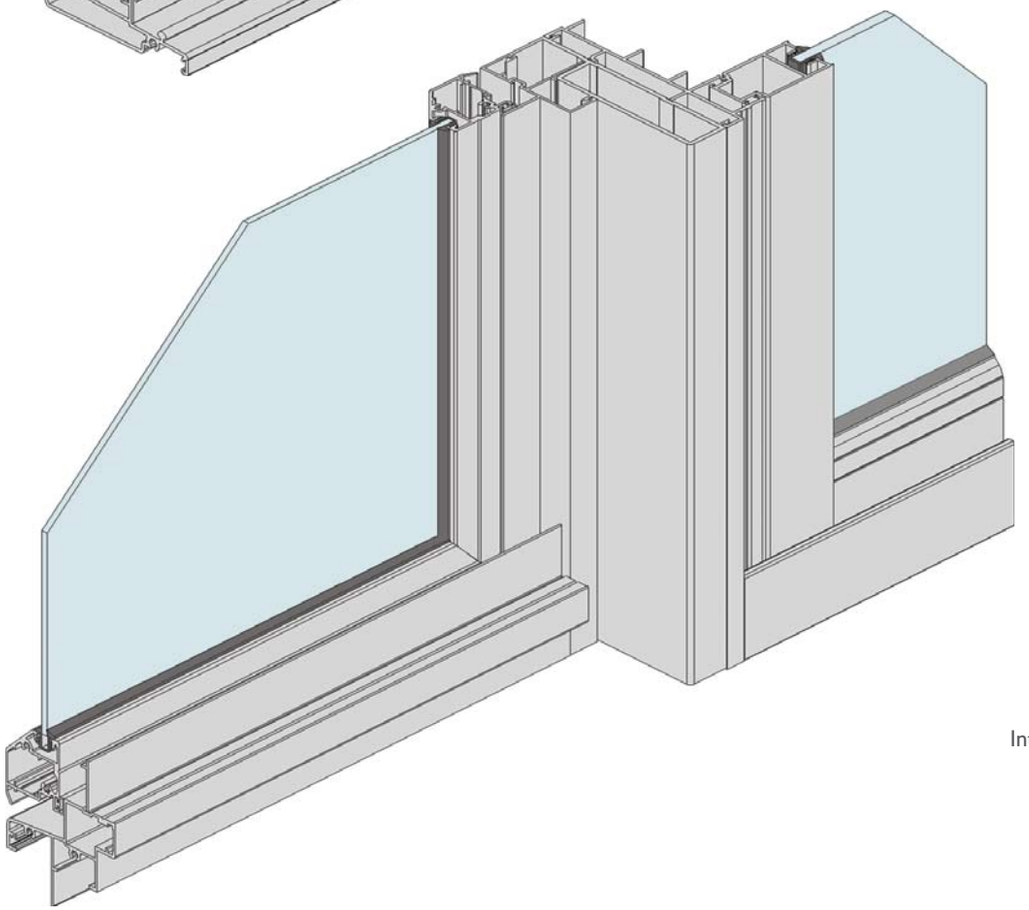
102mm to 50mm 180° Coupler

This coupler has been designed to join 102mm doors to 50mm windows without screws or rivets. A full size detail of the assembly is shown on the previous page.

When you are calculating the window/door sizes remember to allow the 20mm for the couplers.

This assembly is non-load bearing (it can't be used to support the building above).

Coloured images of this detail can be viewed on our web site:
www.vantagealuminium.com.au



Series 541 sliding door illustrated

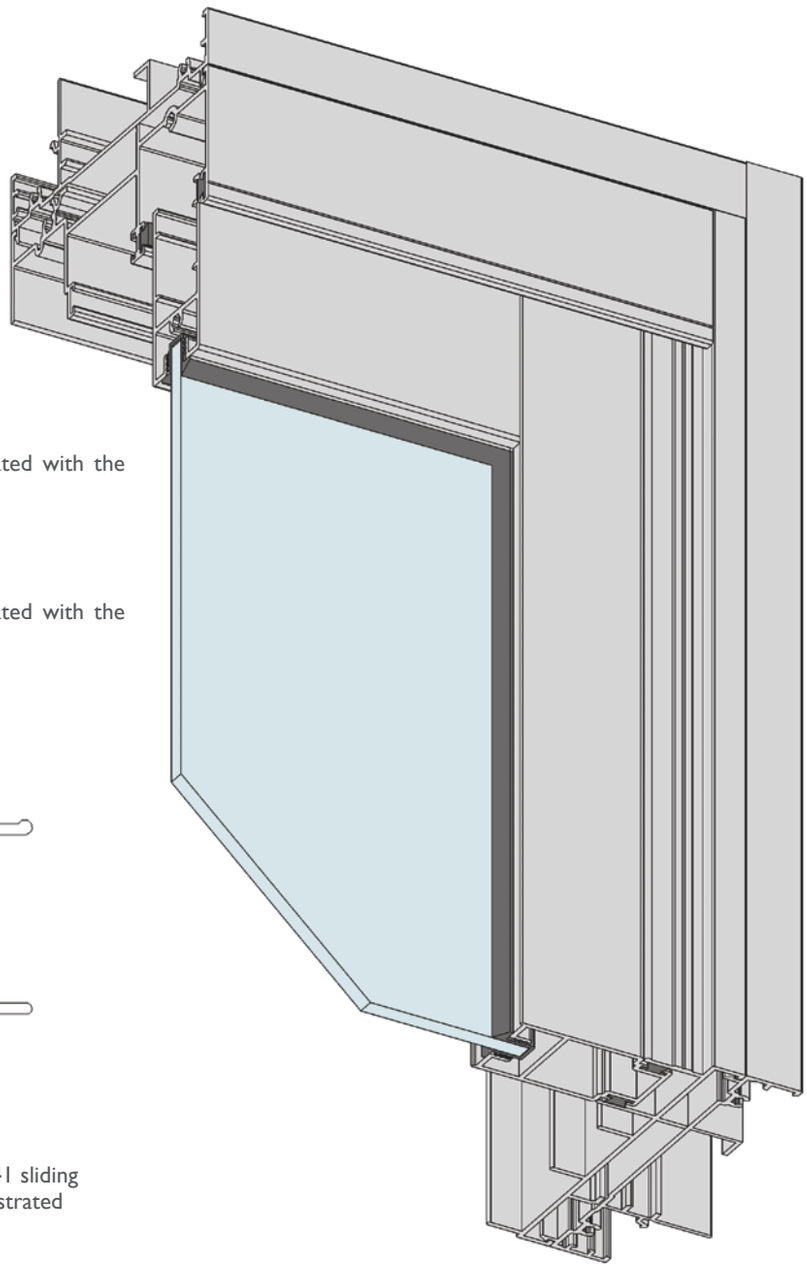
Internal view

Installation

Door Building in Details

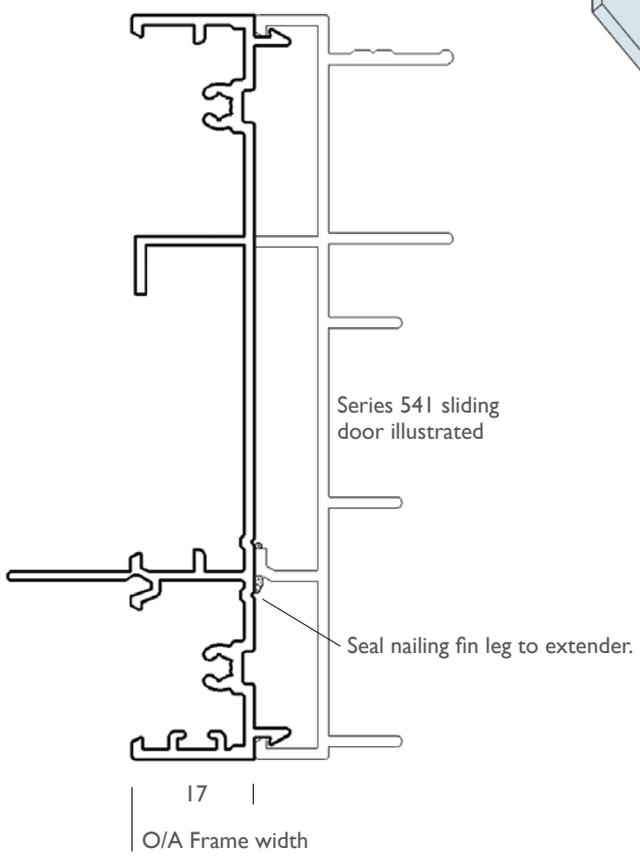
DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

LONGREACH FRAME EXTENDERS



X2 Frame Extender on sides only
Series 541 sliding door frames can be fabricated with the adaptor on both sides.

X3 Frame Extender on sides & head
Series 541 sliding door frames can be fabricated with the adaptor on both sides and the head.

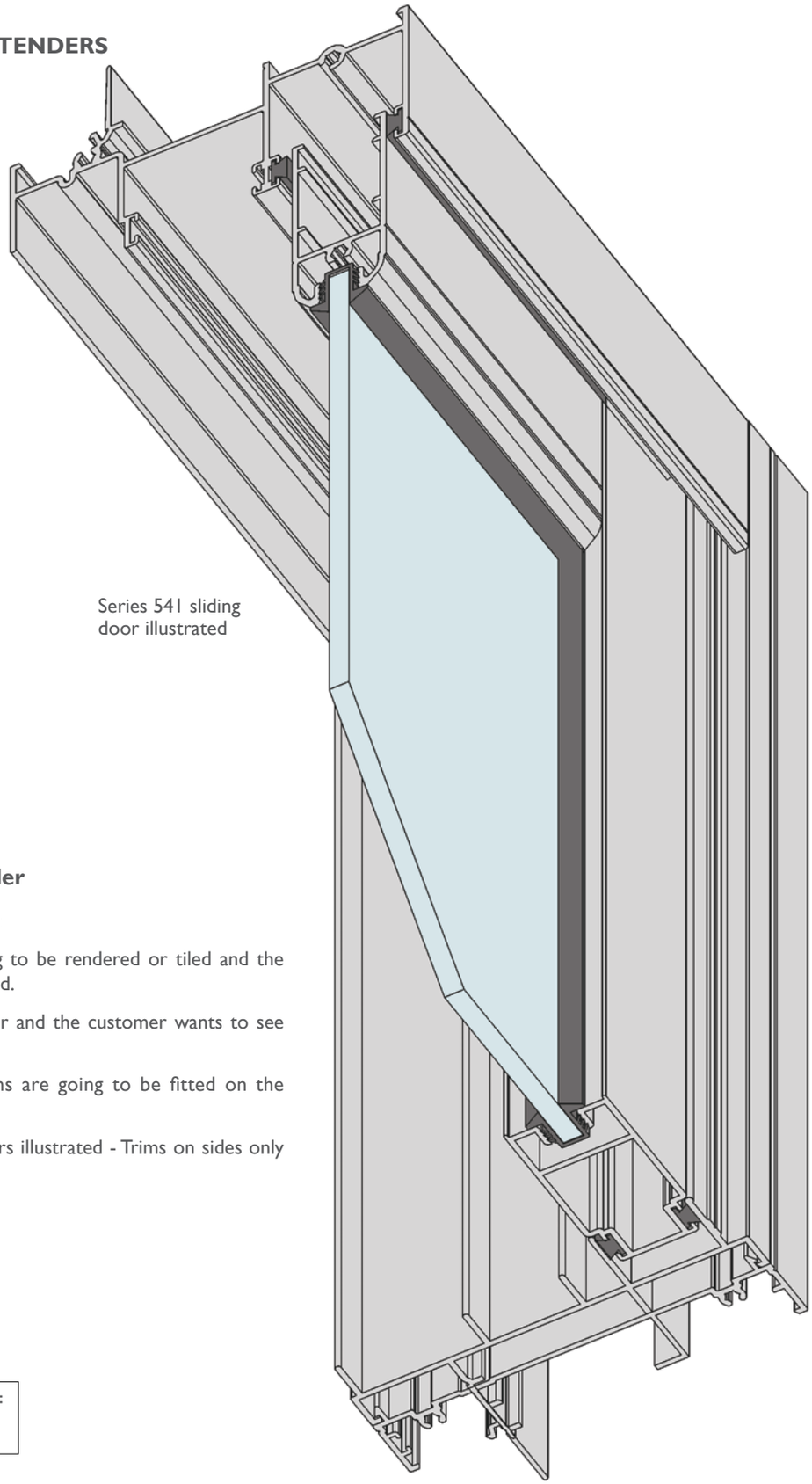


Installation

Door Building in Details

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

LONGREACH FRAME EXTENDERS



Series 541 sliding door illustrated

'Longreach' Frame Extender

You may want to fit a wider jamb:

- When the inner wall is going to be rendered or tiled and the standard jamb would be buried.
- You are using a special colour and the customer wants to see what they are paying for.
- 'Paddington' Federation trims are going to be fitted on the outside.
- Type 'X2 Longreach' extenders illustrated - Trims on sides only (no trims on head).

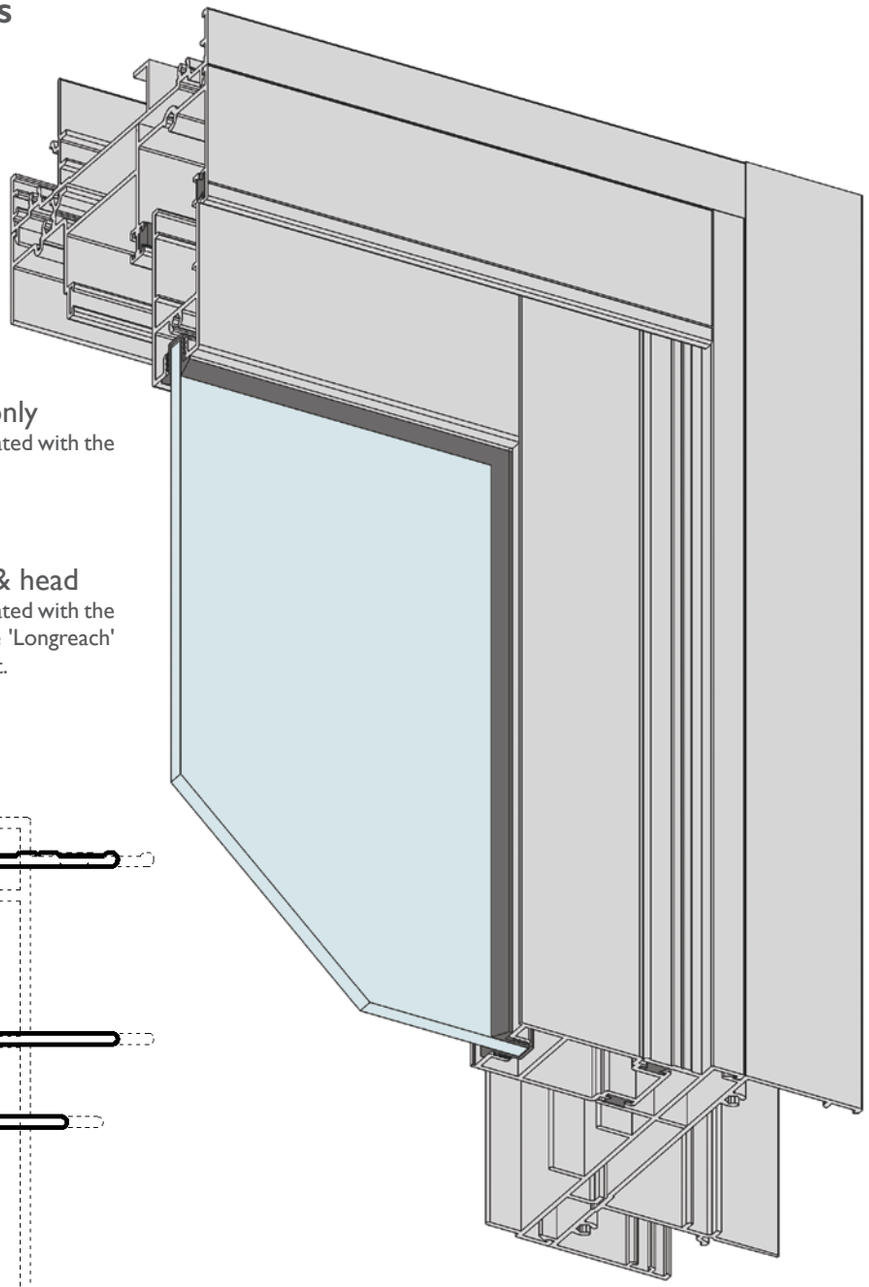
CAD file: DWG or DXF
VAN_541

Installation

Door Building in Details

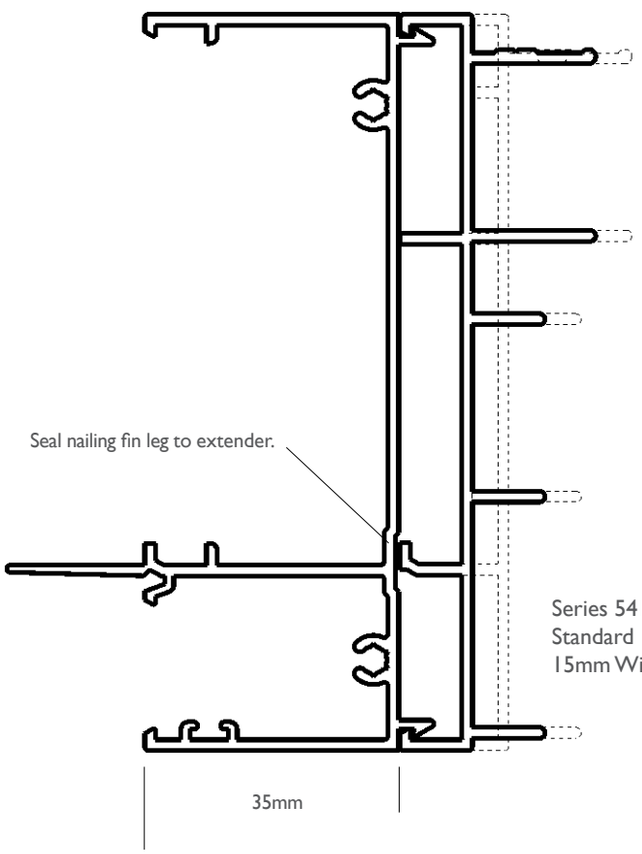
DATE: NOV 09
REPLACES: AUG 03
SCALE: FULL SIZE

HOMEBUSH FRAME EXTENDERS



H2 Frame Extender on sides only
Series 541 sliding door frames can be fabricated with the adaptor on both sides.

HL3 Frame Extender on sides & head
Series 541 sliding door frames can be fabricated with the 'Homebush' adaptor on both sides and the 'Longreach' adaptor on the head, as illustrated top right.



Series 541 Sliding door
Standard 10mm frame and Special 15mm Wide jamb shown dotted

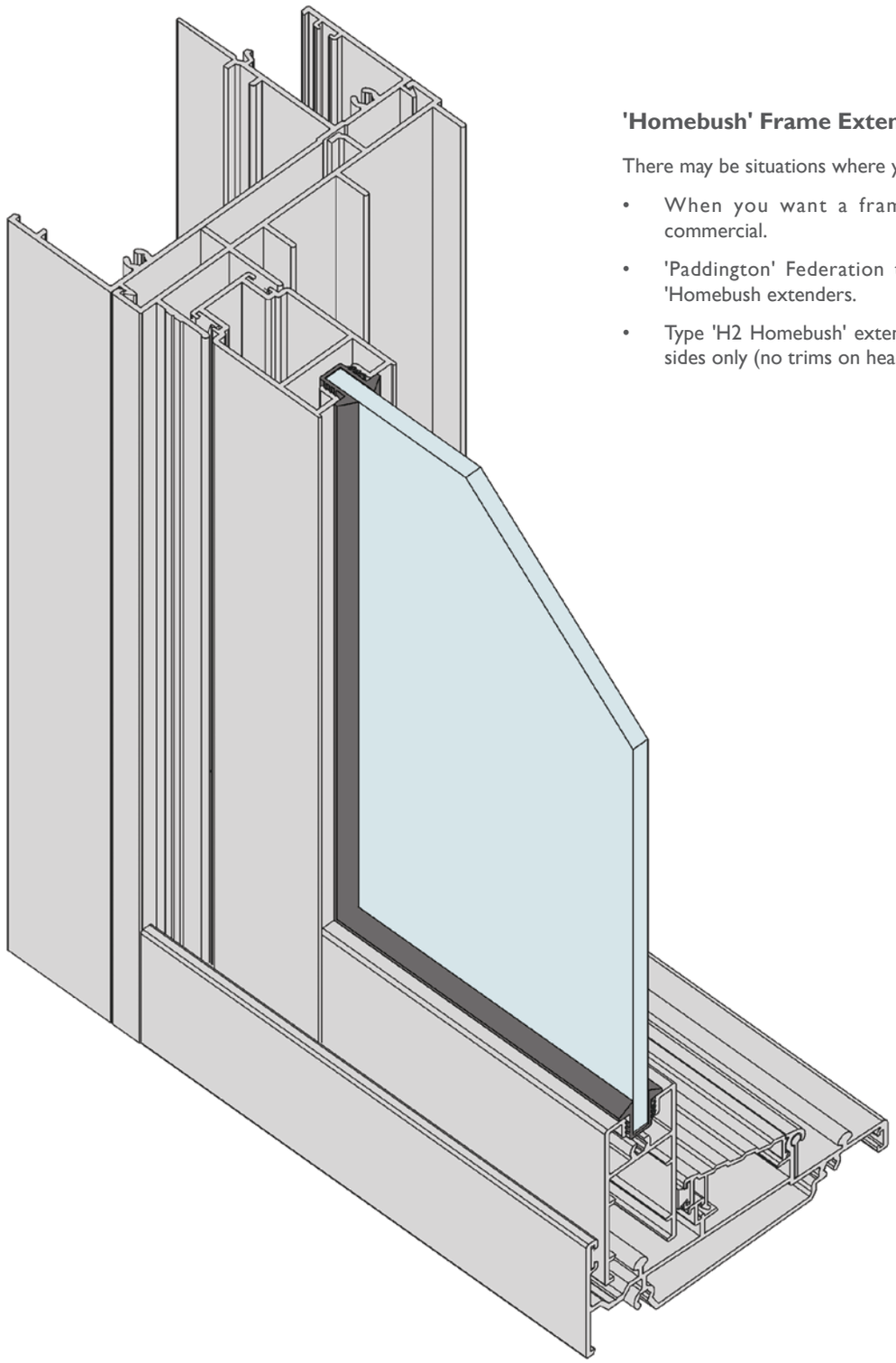
CAD file: DWG or DXF
VAN_541

Installation

Door Building in Details

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

HOMEBUSH FRAME EXTENDERS



'Homebush' Frame Extender

There may be situations where you want very wide frames:

- When you want a frame basically the size of commercial.
- 'Paddington' Federation trims can be snapped to 'Homebush extenders.
- Type 'H2 Homebush' extenders illustrated - Trims on sides only (no trims on head).

Installation

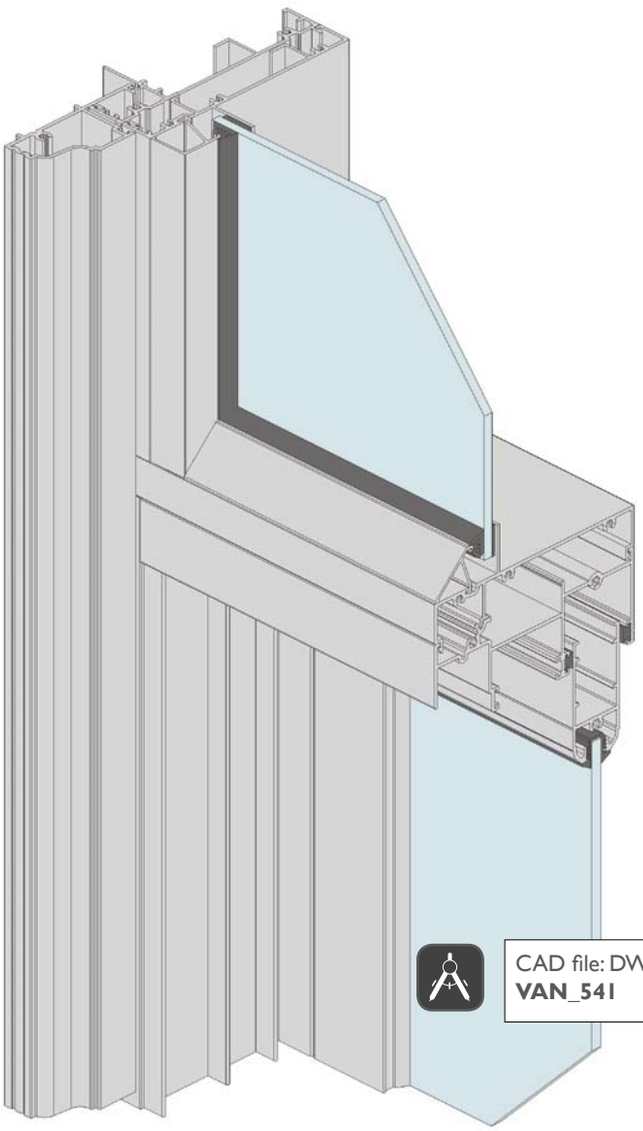
Door Building in Details

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

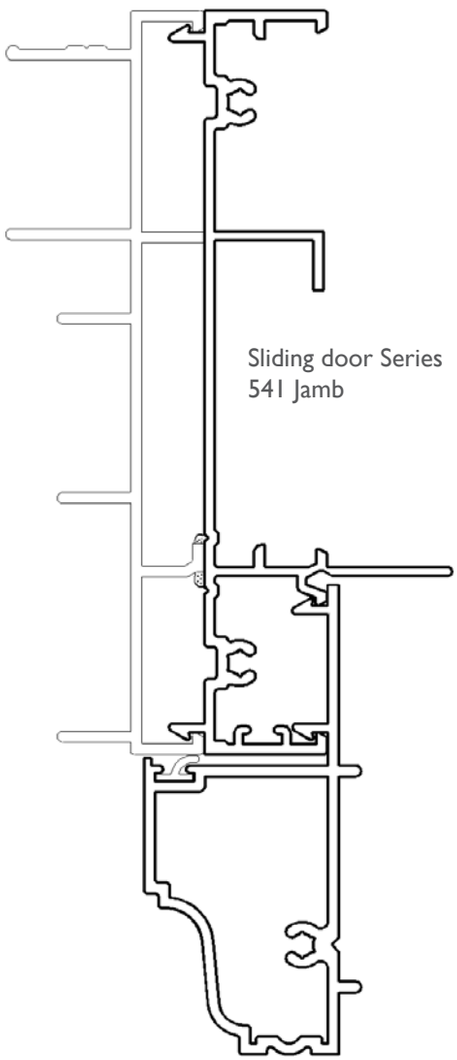
'PADDINGTON' FRAME FEDERATION TRIMS

X2P 'Paddington' trims and frame Extender on sides only
Series 541 sliding door frames can be fabricated with the adaptor and trims on both sides.

X3P 'Paddington' trims and frame Extender on sides & head
Series 541 sliding door frames can be fabricated with the adaptor and trims on both sides and head



CAD file: DWG or DXF
VAN_541



Installation

Door Building in Details

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

'PADDINGTON' FRAME FEDERATION TRIMS

'Paddington' Trim

This Federation external trim can be clipped to the sliding doors as detailed.

- The trim clips to the 'Longreach' frame extender which snaps to the door.
- Trims can be painted to match the frame or another colour as a contrast.
- 'Paddington' trims can also be fitted to most of the other Vantage products.

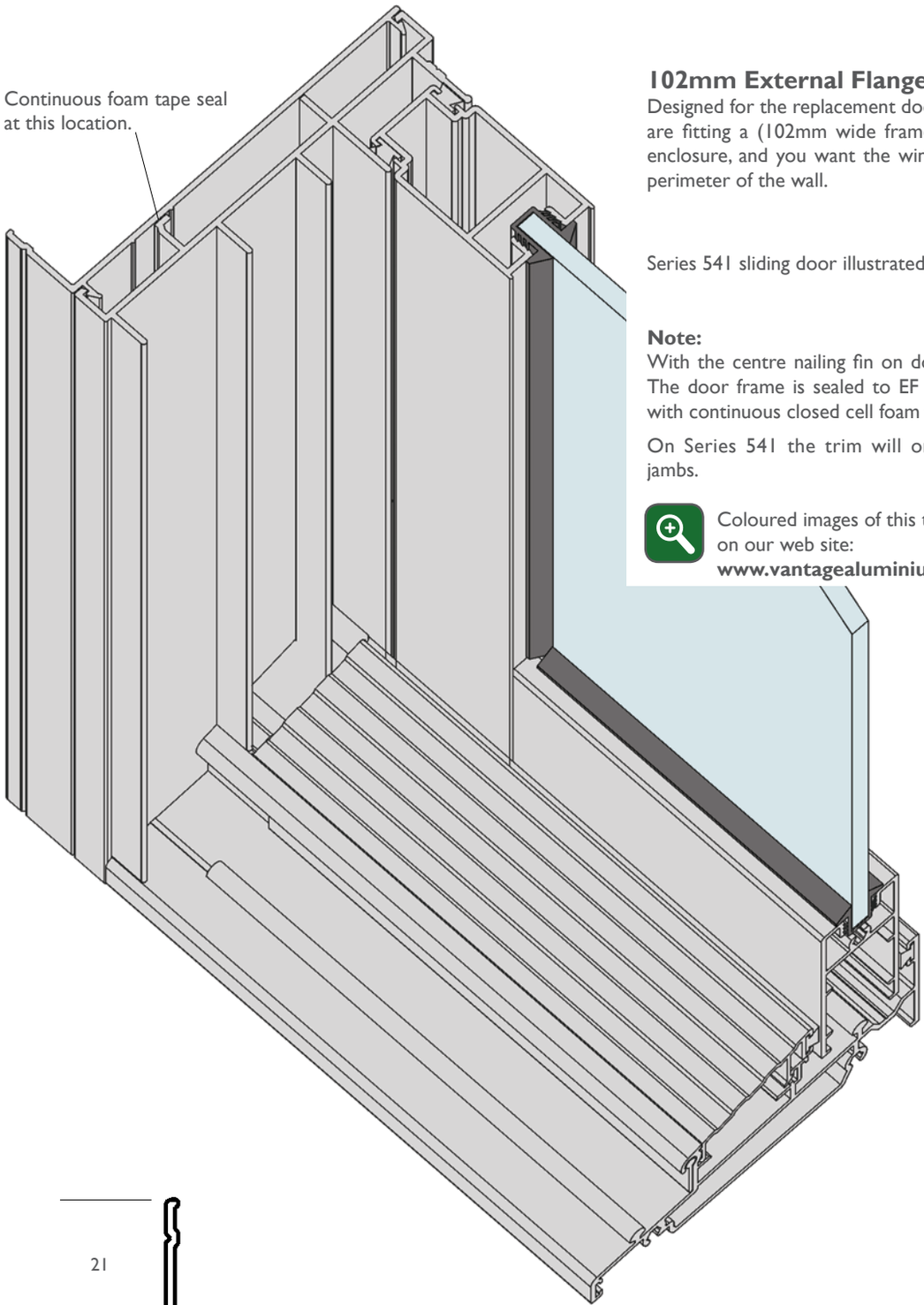
Coloured images of this detail can be viewed on our web site:
www.vantagealuminium.com.au

Installation

Door Building in Details

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

102mm EXTERNAL FLANGE ADAPTOR



102mm External Flange (EF) Trims

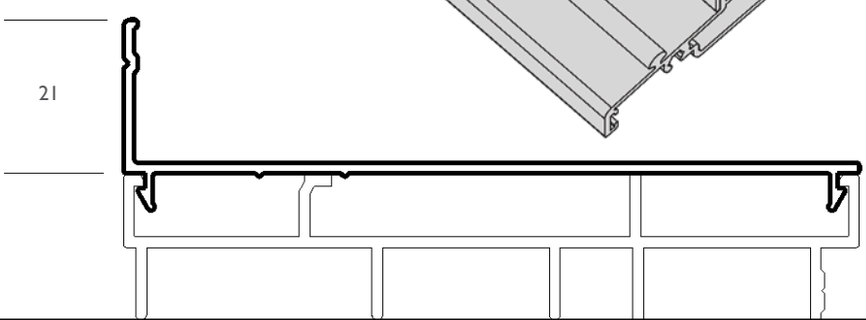
Designed for the replacement door market. When you are fitting a (102mm wide frame) door into a room enclosure, and you want the window on the external perimeter of the wall.

Series 541 sliding door illustrated.

Note:
With the centre nailing fin on door frame broken off. The door frame is sealed to EF trims at this location with continuous closed cell foam tape.

On Series 541 the trim will only clip to head and jambs.

Coloured images of this trim can be viewed on our web site:
www.vantagealuminium.com.au

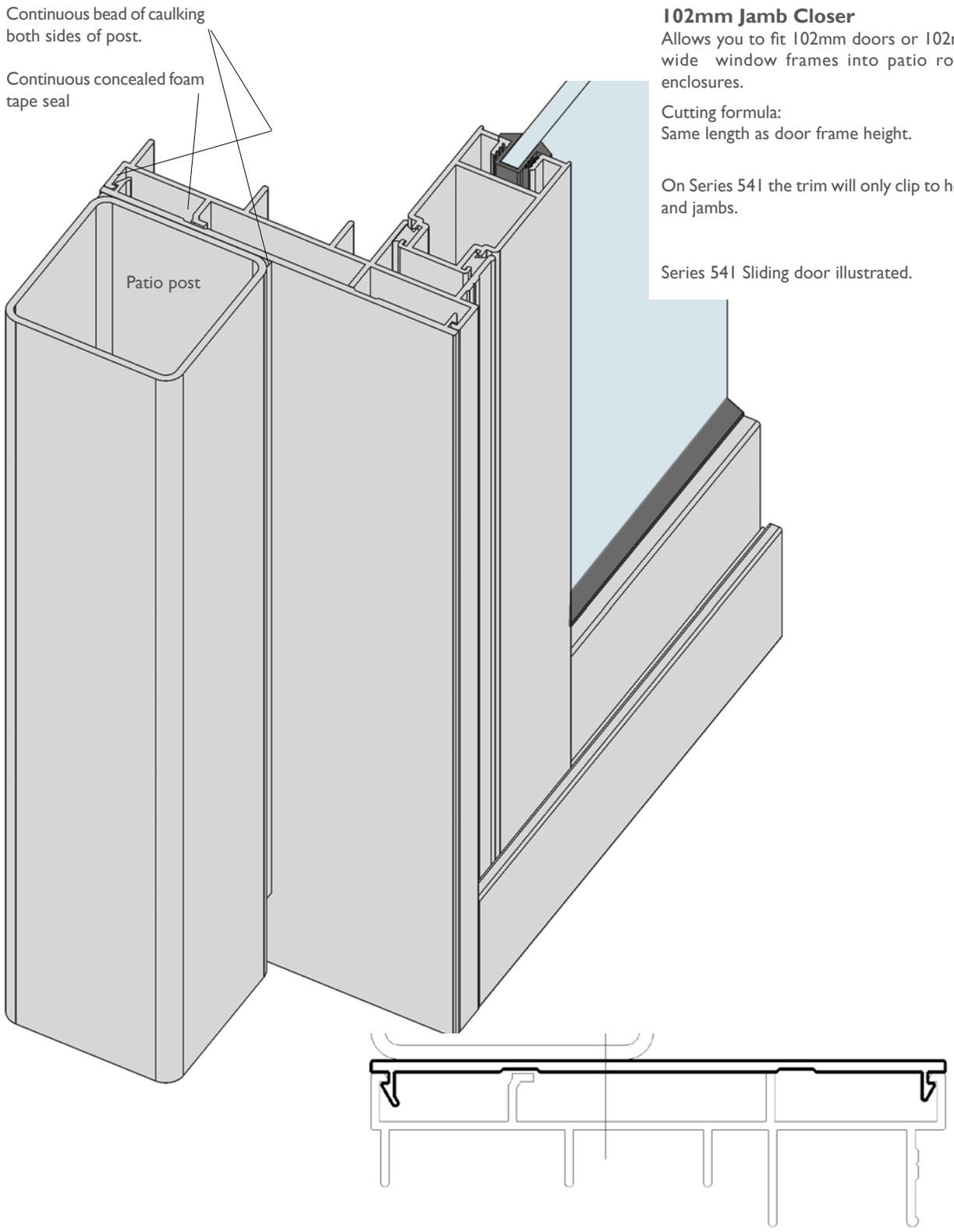


Installation

Door Building in Details

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

102mm FLAT JAMB CLOSER



102mm Jamb Closer

Allows you to fit 102mm doors or 102mm wide window frames into patio room enclosures.

Cutting formula:
Same length as door frame height.

On Series 541 the trim will only clip to head and jambs.

Series 541 Sliding door illustrated.

Installation

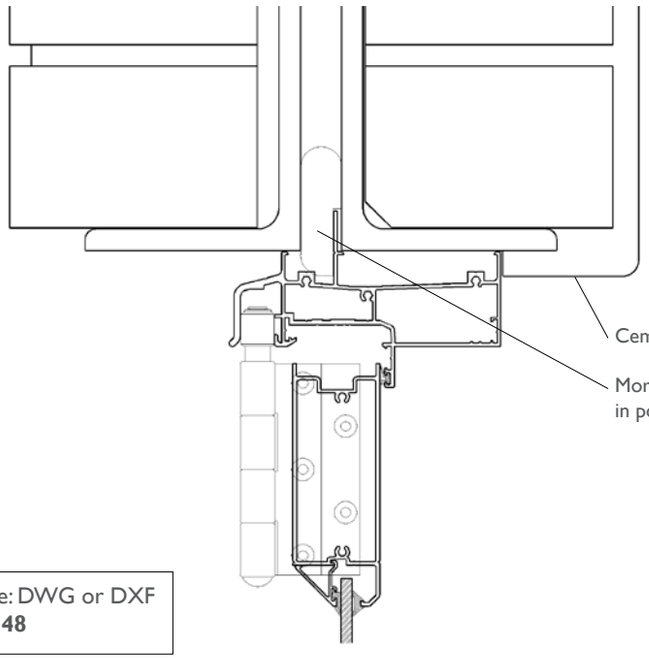
Door Building in Details

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

VERTICAL SECTION THROUGH CAVITY BRICK & CONCRETE SLAB

Bi-Fold Door

Head



Cement render

Mortar key @ 900mm approximate centres keeps the head in position.

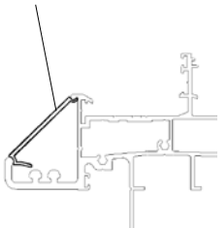
CAD file: DWG or DXF
VAN_548

Optional chair rails, 68mm or 122mm as drawn.

Alternative square internal threshold available.

Note
Ensure that there is no external obstruction that will clash with the opening of the door panels.

Fit rigid PVC sill protector over running rails during construction.



Snap-in splayed aluminium threshold fitted after the sill is screwed to slab, apply protective tape to threshold which will be removed by builder just before hand over.

Drain holes in and out of tube sill.

Screw sill to slab @ 900mm maximum centres. Shims should be fitted @ 450mm max. centres or closer on heavy double glazed doors to prevent the sill from dishing under roller load.

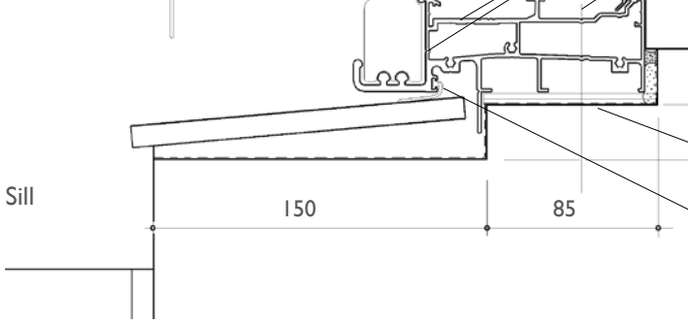
Floor finish carpet or tiles

Recess in concrete floor slab to allow the sill to be recessed as drawn.

Waterproof membrane with turned up ends applied by builder.

PVC sill flap

Sill

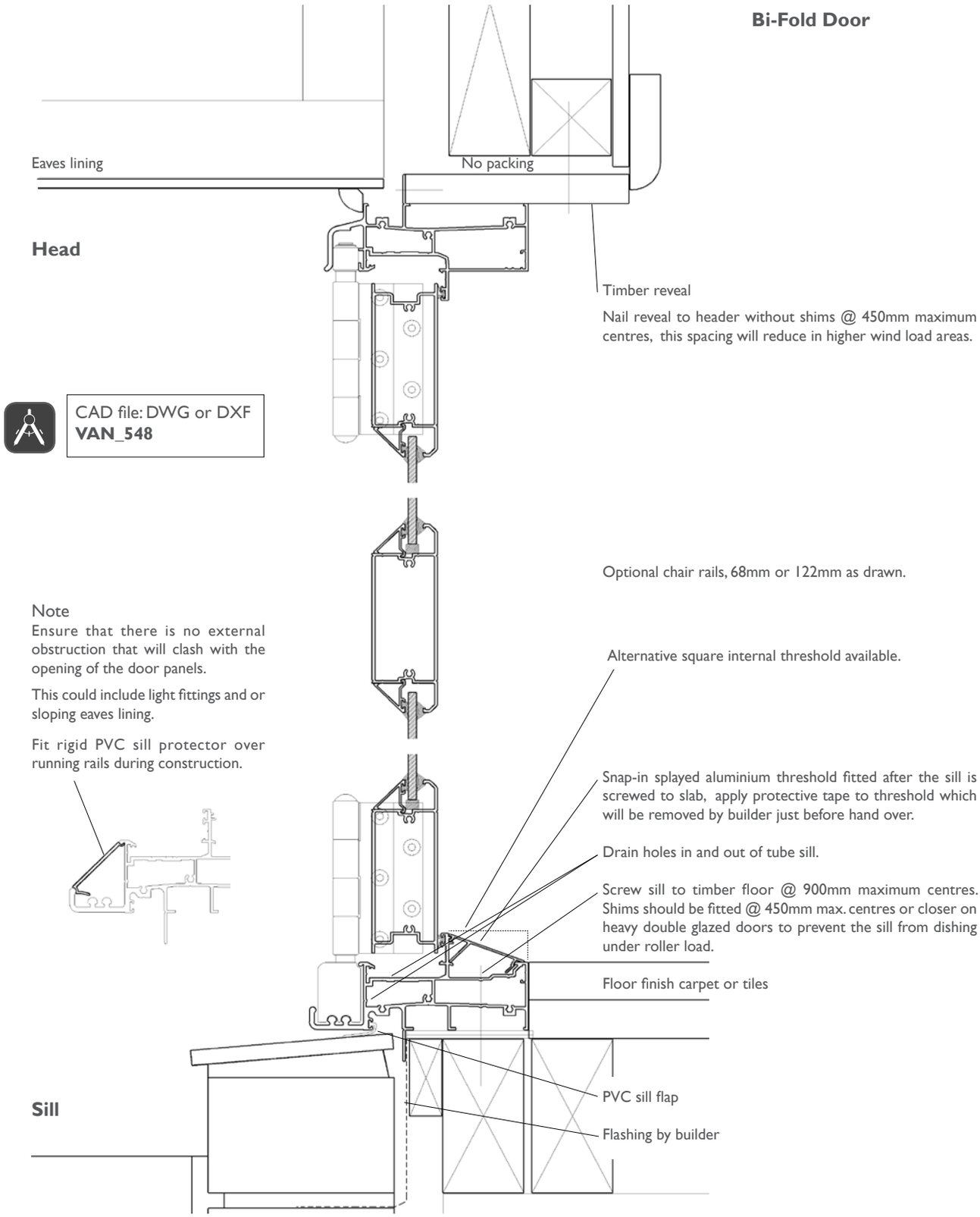


Installation

Door Building in Details

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

VERTICAL SECTION THROUGH BRICK VENEER & TIMBER FLOOR



Installation

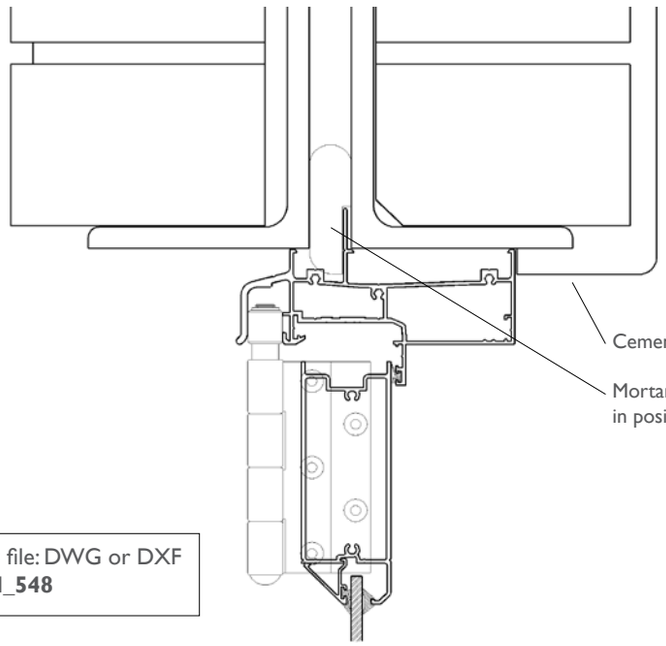
Door Building in Details

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

VERTICAL SECTION THROUGH CAVITY BRICK & CONCRETE SLAB

Bi-Fold Door

Head



Cement render

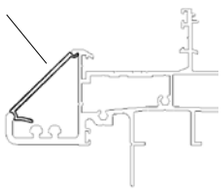
Mortar key @ 900mm approximate centres keeps the head in position.

CAD file: DWG or DXF
VAN_548

Optional chair rails, 68mm or 122mm as drawn.

Note
Ensure that there is no external obstruction that will clash with the opening of the door panels.

Fit rigid PVC sill protector over running rails during construction.



Run floor finish over sill and up to the weather leg.

Drain holes in and out of tube sill.

Screw sill to slab @ 900mm maximum centres. Shims should be fitted @ 450mm max. centres or closer on heavy double glazed doors to prevent the sill from dishing under roller load.

Floor finish carpet or tiles (19mm maximum thickness).

50

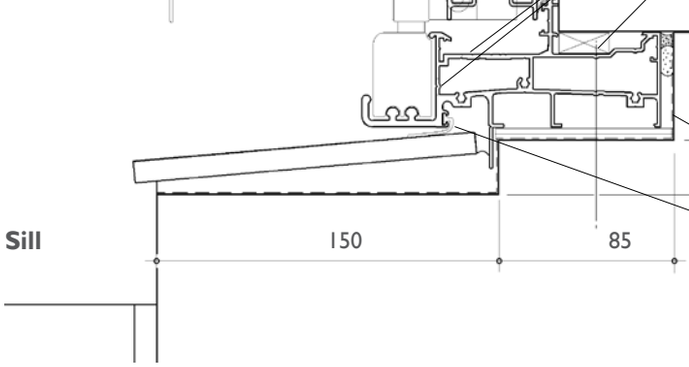
Recess in concrete floor slab to allow the sill to be recessed as drawn.

25

Waterproof membrane with turned up ends. Applied by builder.

PVC sill flap

Sill



Installation

Door Building in Details

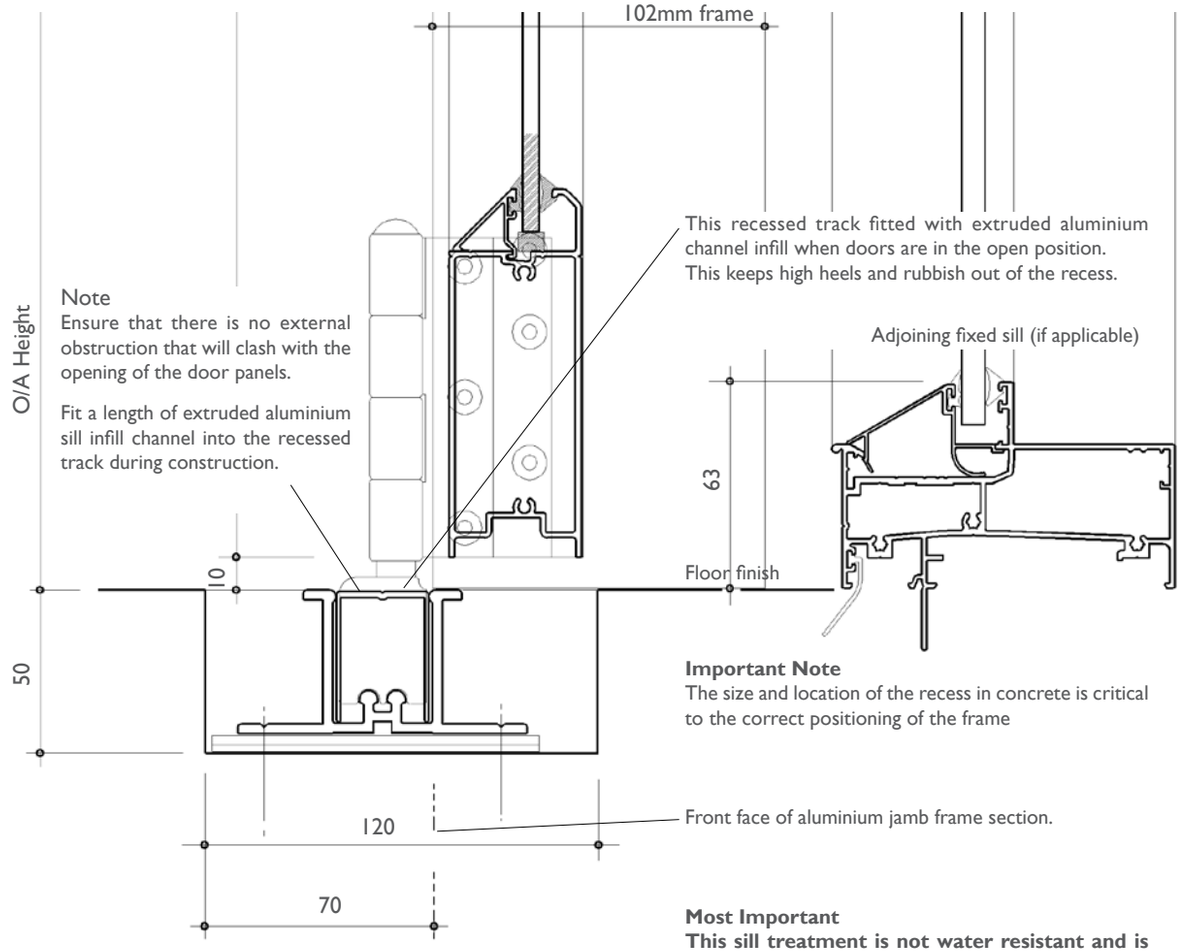
DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

VERTICAL SECTION THROUGH RECESSED FLOOR TRACK

Bi-Fold Door Restaurant Sill designed for high traffic areas

When the doors are opened there is an optional filler channel to close the roller cavity.

CAD file: DWG or DXF
VAN_548



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

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

Sill

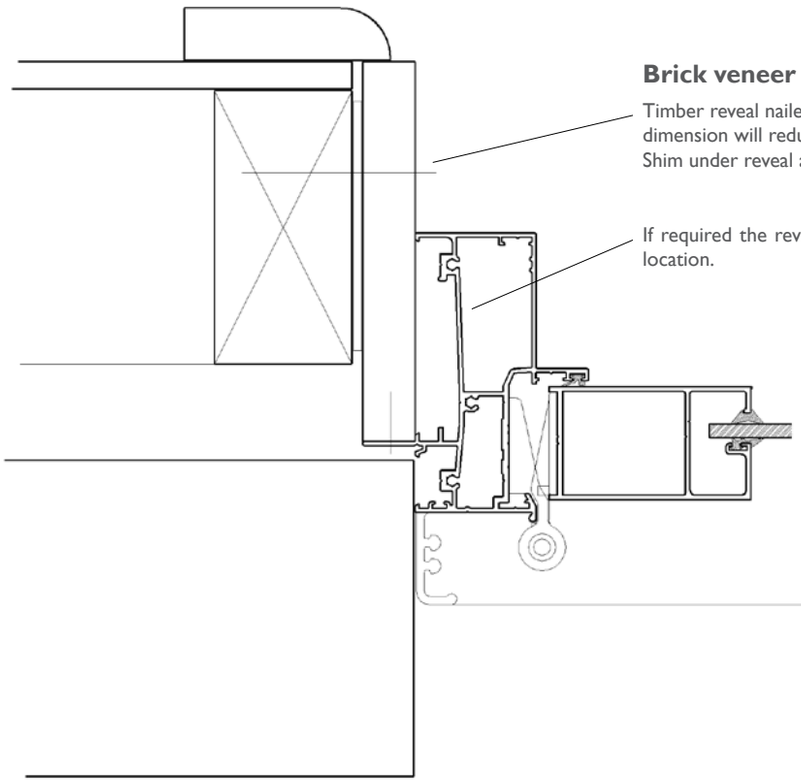
Installation

Door Building in Details

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

HORIZONTAL SECTION THROUGH JAMB FIXING DETAILS

Bi-Fold Door



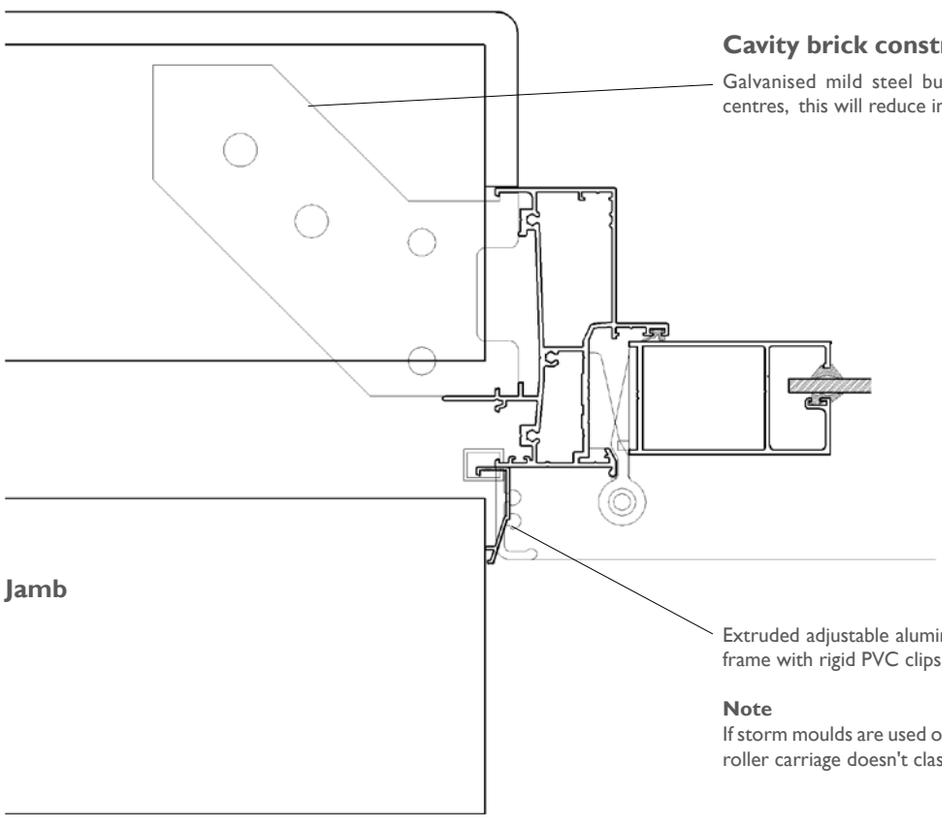
Brick veneer construction

Timber reveal nailed to stud @ 450mm maximum centres, this dimension will reduce in higher wind load areas.
Shim under reveal at fixing points.

If required the reveal can be double screwed to frame in this location.

CAD file: DWG or DXF
VAN_548

Jamb



Cavity brick construction

Galvanised mild steel building-in lugs @ 450mm maximum centres, this will reduce in higher wind load areas.

Jamb

Extruded adjustable aluminium storm mould 10036 secured to frame with rigid PVC clips @ 450mm maximum centres.

Note
If storm moulds are used on Bi-fold doors make sure the bottom roller carriage doesn't clash with the trim.

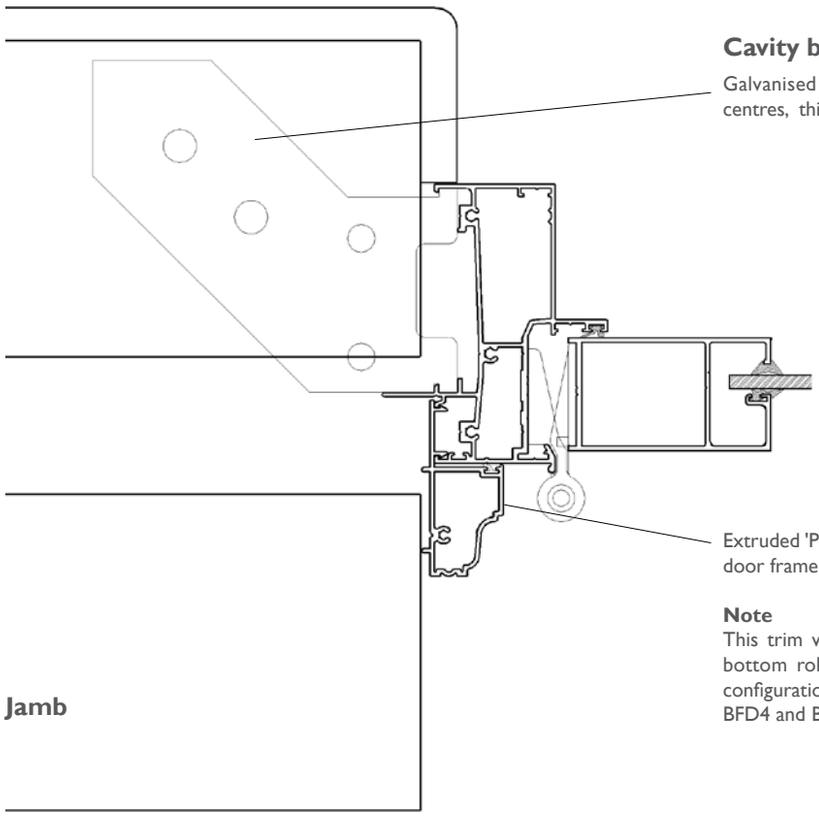
Installation

Door Building in Details

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

HORIZONTAL SECTION THROUGH JAMB FIXING DETAILS

Bi-Fold Door



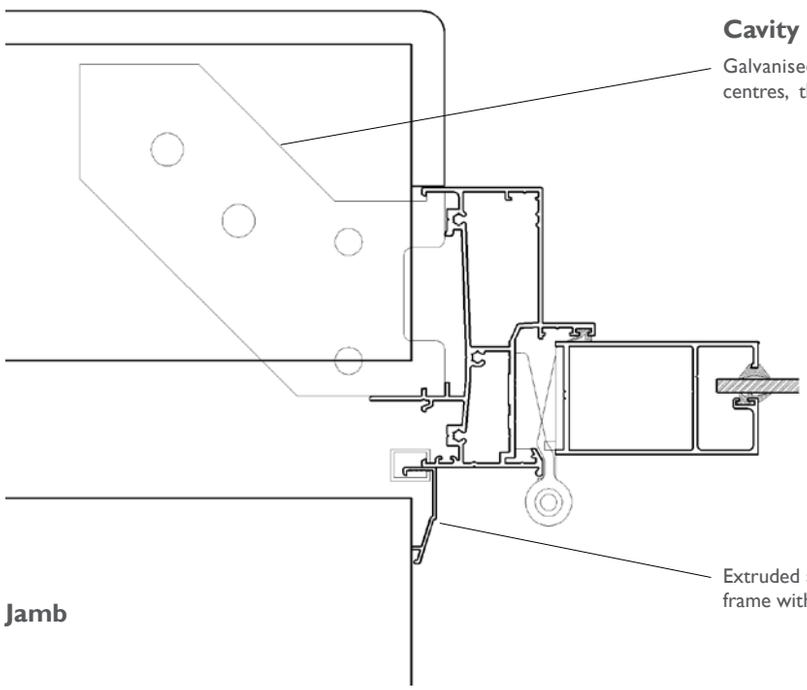
Cavity brick construction

Galvanised mild steel building-in lugs @ 450mm maximum centres, this will reduce in higher wind load areas.

Extruded 'Paddington' trim snaps direct to the Series 548 hinged door frame (open in or out).

Note
This trim would also clip to the Bi-fold door frame, but the bottom roller carriage would crash into the trim on those configurations where a wheel occurs on the last panel (i.e. BFD2, BFD4 and BFD6).

Jamb



Cavity brick construction

Galvanised mild steel building-in lugs @ 450mm maximum centres, this will reduce in higher wind load areas.

Extruded adjustable aluminium storm mould 10036 secured to frame with rigid PVC clips @ 450mm maximum centres.

Jamb

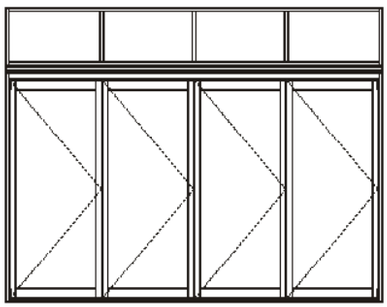
Installation

Door Building in Details

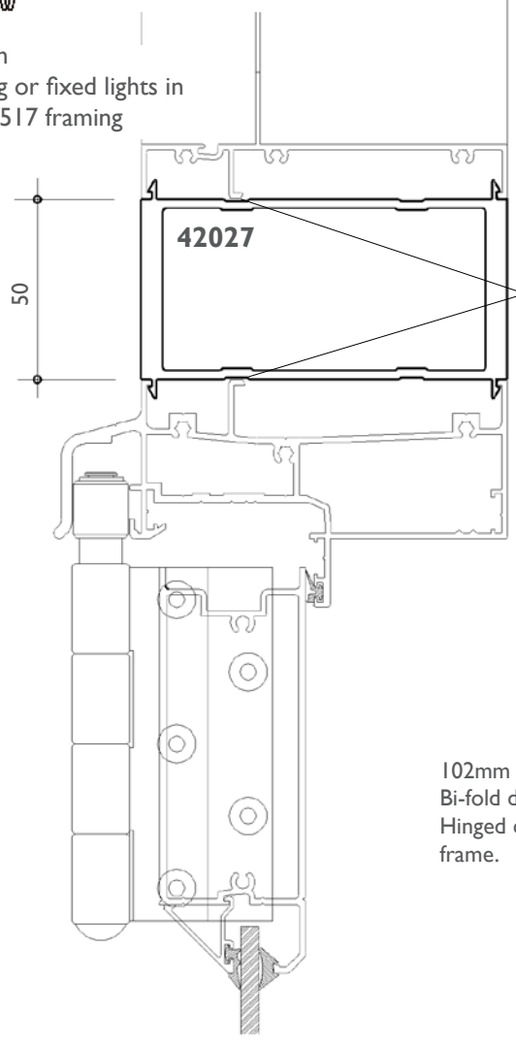
DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

HEAVY DUTY TRANSOM WITH FIXED HIGHLIGHT

Bi-Fold Door



102mm
Awning or fixed lights in
Series 517 framing

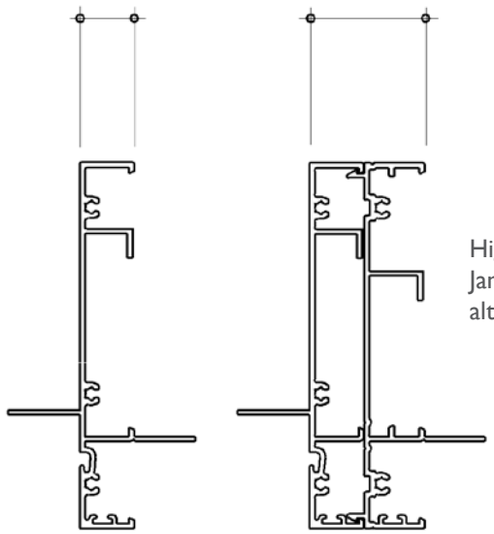


Seal the box stiffener to both frames at nailing fin position with concealed single sided foam tape.

102mm
Bi-fold door or
Hinged door
frame.

Standard 15mm wide frame

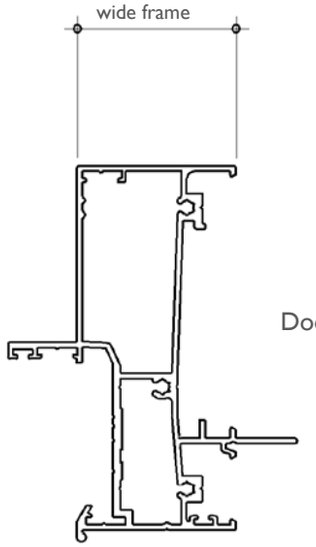
Special 32mm wide frame using the longreach frame extender



Highlight Jamb alternatives

CAD file: DWG or DXF
VAN_548

Standard 44mm wide frame



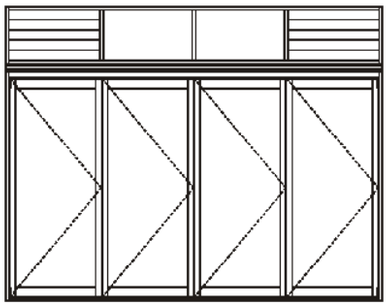
Door Jamb

Installation

Door Building in Details

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

HEAVY DUTY TRANSOM WITH LOUVRE HIGHLIGHT



Louvre highlight windows are made with full width louvre window frame . Details on how we create a fixed light in the louvre frame are shown in the Series 525 section.

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,.

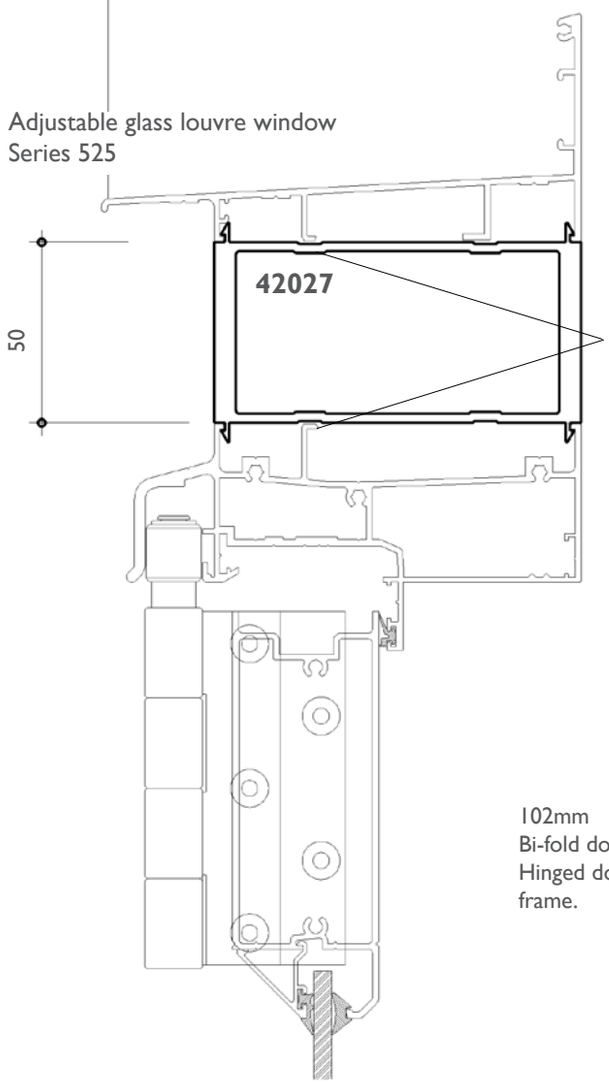
2200 Serviceability ratings were restricted by the maximum water resistance (300Pa) achieved on this product.

Blank Denotes rating under 500 Pa.

Frame Width mm	Heights Bifold mm	Heights Highlight mm	Transom Ratings (Pa) S	Transom Ratings (Pa) U
3600	2100	600	2041	3062
3900	2100	600	1600	2571
4200	2100	600	1264	2192
4500	2100	600	1017	1892
4800	2100	600	831	1651
3600	2400	600	1900	2850
3900	2400	600	1487	2380
4200	2400	600	1169	2020
4500	2400	600	937	1738
4800	2400	600	763	1512

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.

Adjustable glass louvre window
Series 525



Seal the box stiffener to both frames at nailing fin position with concealed single sided foam tape.

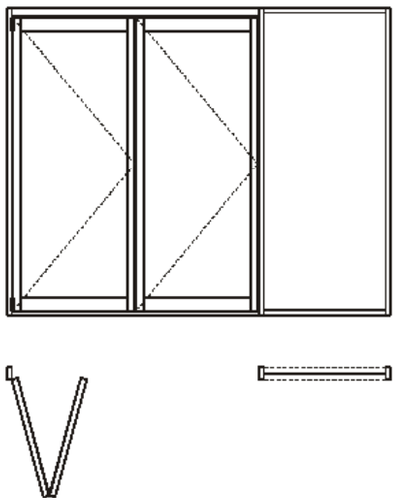
102mm
Bi-fold door or
Hinged door
frame.

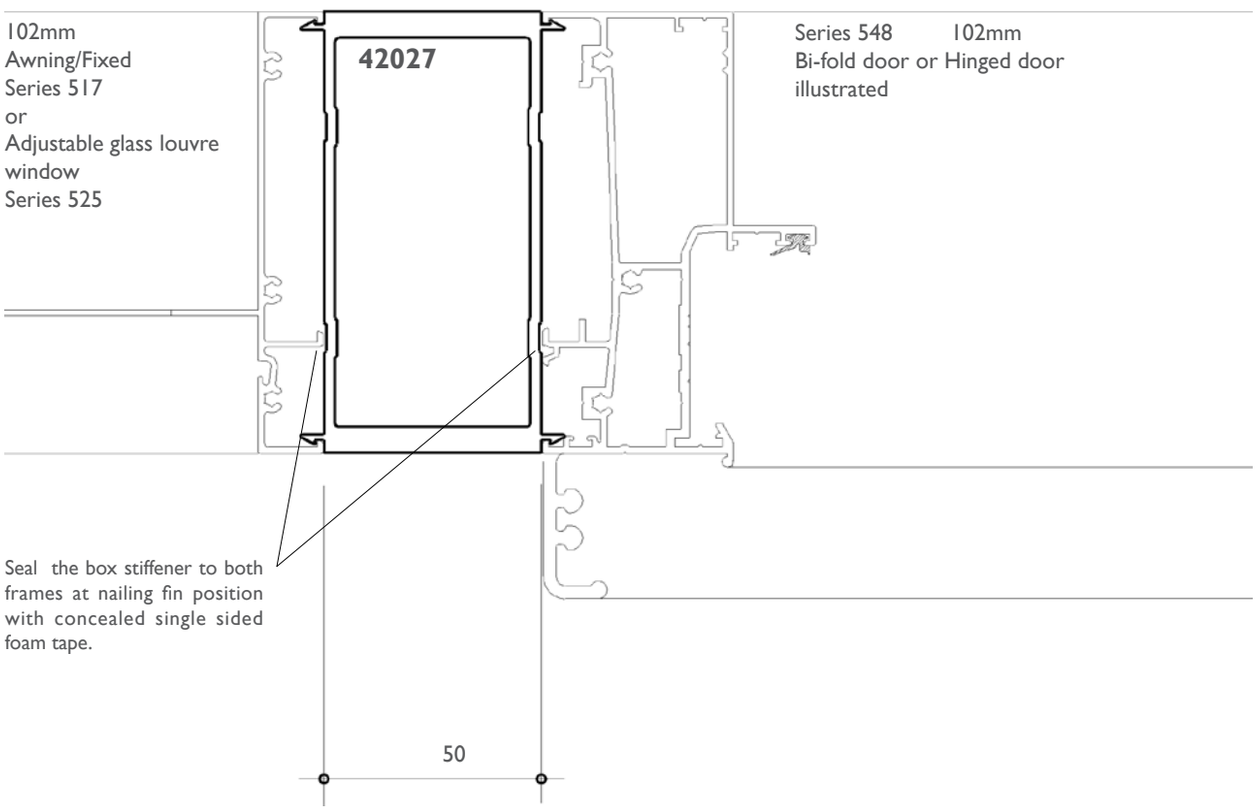
Installation

Door Building in Details

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

HORIZONTAL SECTION THROUGH HEAVY DUTY COUPLER





Most Important
This is not a load bearing coupler.

Installation

Door Building in Details

DATE: NOV 09
REPLACES: AUG 03
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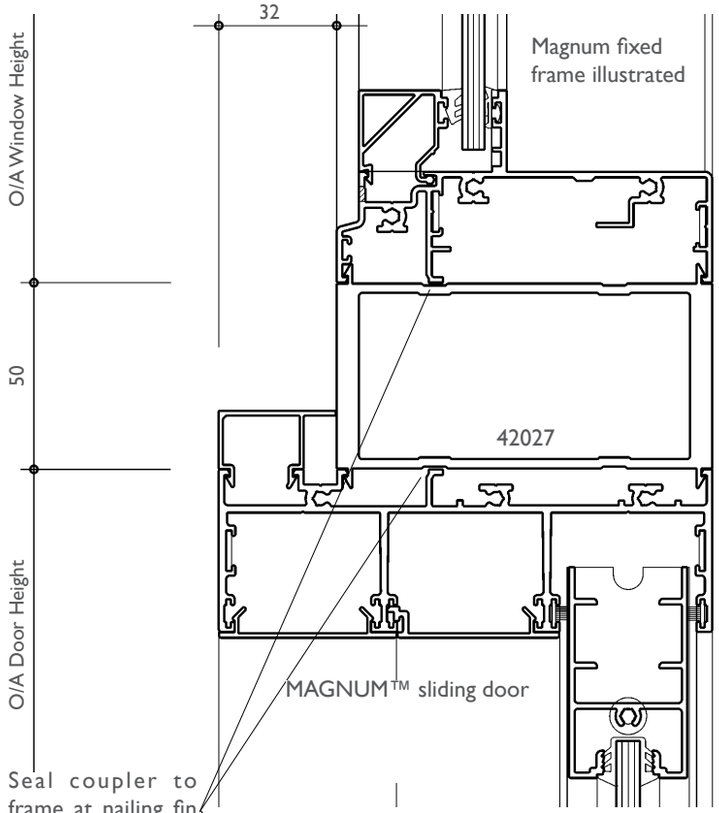
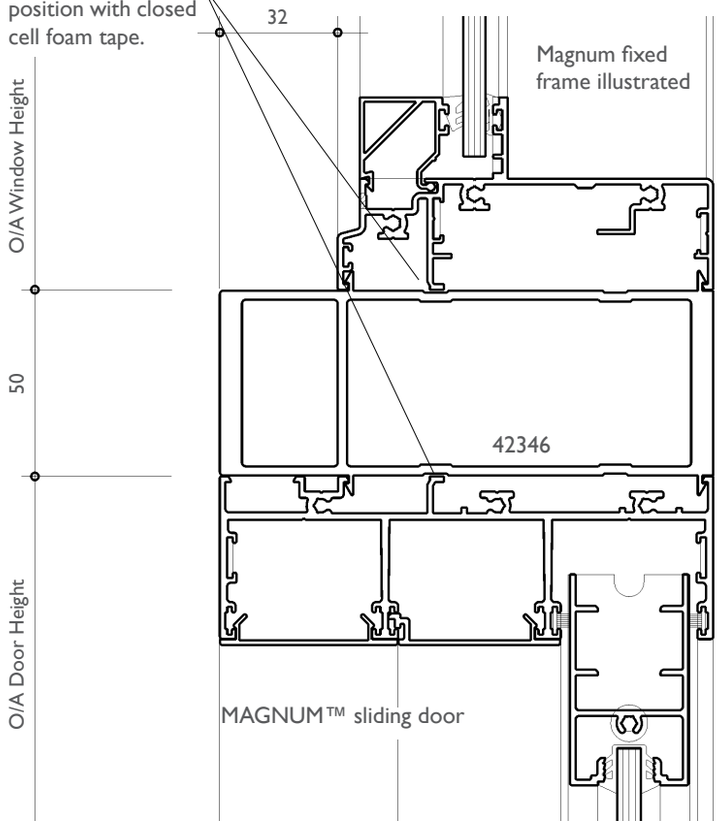
TRANSOM COUPLER - FIXED OVER MAGNUM™ SLIDING DOOR



Frame Width	Heights		Transom Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
3000	**300**	**2400**	2200	4668
3300	300	2400	2200	3707
3600	300	2400	1915	3025
3900	300	2400	1469	2521
4200	300	2400	1153	2136
4500	300	2400	923	1835
4800	300	2400	751	1595
3000	**600**	**2400**	2200	4116
3300	600	2400	2188	3282
3600	600	2400	1697	2686
3900	600	2400	1305	2244
4200	600	2400	1027	1905
4500	600	2400	823	1639
4800	600	2400	-	-
3000	**900**	**2400**	2200	3697
3300	900	2400	1970	2956
3600	900	2400	1529	2423
3900	900	2400	1178	2026
4200	900	2400	927	1722
4500	900	2400	744	1482
4800	900	2400	-	-



Frame Width	Heights		Transom Ratings (Pa)	
	Window	Door		
mm	mm	mm	S	U
3600	**300**	**2400**	2200	4233
3900	300	2400	2200	3527
4200	300	2400	1993	2989
4500	300	2400	1702	2568
4800	300	2400	1385	2232
5100	300	2400	1142	1960
5400	300	2400	954	1735
3600	**600**	**2400**	2506	3759
3900	600	2400	2093	3140
4200	600	2400	1777	2665
4500	600	2400	1517	2293
4800	600	2400	1236	1995
5100	600	2400	1020	1753
5400	600	2400	853	1553
3600	**900**	**2400**	2260	3391
3900	900	2400	1890	2835
4200	900	2400	1606	2409
4500	900	2400	1372	2074
4800	900	2400	1118	1806
5100	900	2400	924	1588
5400	900	2400	772	1407