



Design Features

This full vision vertical sliding sashless double-hung window has been designed to complement our existing quality product range including: SlideMASTER™ and DUO sliding doors, Bi-fold doors and the new Magnum™ horizontal sliding, awning and casement windows.

The window has been tested for compliance with the relevant Australian Standards and achieved a high water resistance of 300Pa.

102mm Frames, mullions and transoms have a soft 2mm internal radius.

Sashes can be secured with key or non-key locking shoot bolt type lock.

The main feature with this ClearVENT™ window is the clear unobtrusive vision as there are no horizontal central sash rails. As one sash is lifted the other lowers (the sashes are joined via cords and pulleys).

A fixed sill glass panel can be fitted into the ClearVENT™ window to make it easy for top ventilation only. This fixed sill panel could also be used on tall windows in elevated installations as a safety barrier (check the requirements of local authorities), refer details in these notes.

ClearVENT™ windows can be fitted with external flyscreens. Special extrusions have been cut to make sure this detail matches the overall window design, no turn buckles required. If you don't require screens we again have extrusions to suit this situation.

The window is compatible (appearance) with the high performance Magnum™ horizontal sliding, awning and casement windows. A large range of snap couplers allow these (102 and 50mm) windows to be joined at 90°, 135° and 180° without unsightly rivets or screws.

These couplers would also allow this window to couple to Bi-fold windows, Bi-fold doors, French doors, Sliding doors and DUO sliding doors.

Fixed lowlights / sidelights match Magnum™ awning fixed windows.

Sashes are counterweighted by the adjoining sash via stainless steel/ nylon pulleys and cords.

Sashes can be glazed with 6mm annealed, 5 or 6mm toughened or 6.38mm laminated glass. The fixed sidelights will accept glass from 4mm single glazing to 24mm IGU's.

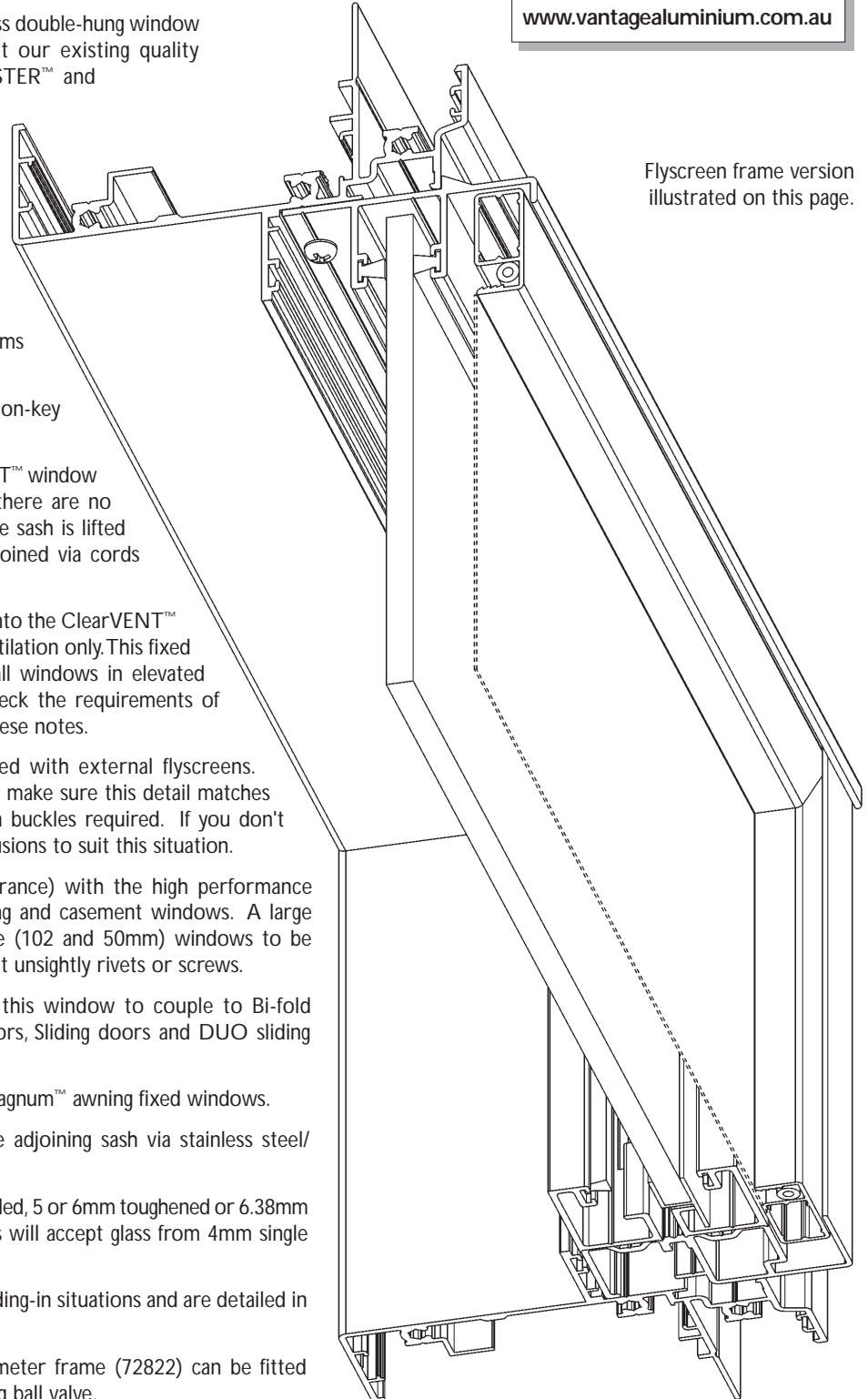
Four frame designs cover most building-in situations and are detailed in these notes.

The tubular 39mm x 102mm perimeter frame (72822) can be fitted with patented condensation draining ball valve.

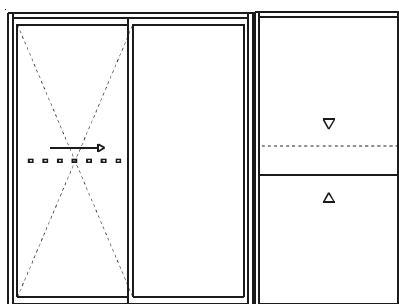
The same 39mm x 102mm perimeter frame (72822) will also accept 'Paddington' federation trims, as illustrated in these notes.

ClearVENT™ vertical sliding sashes can also be installed into Vantage Series 548 Hinged and Bi-fold doors.

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

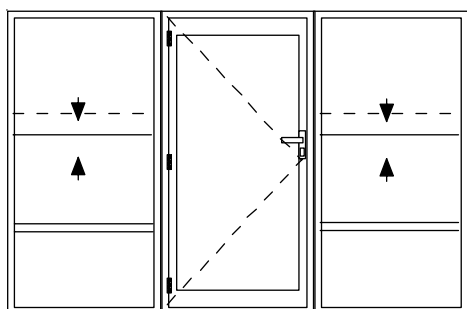


Flyscreen frame version illustrated on this page.



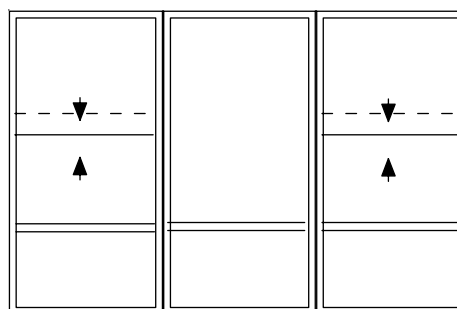
Series 614 double-hung windows can be clipped to Series 541 sliding or Series 543 DUO doors using the 'I' coupler 42030.

Likewise 90° corners using 42022 coupler and 135° bay corners with 42026.



Series 614 windows will also clip to Series 548 French doors using the 'I' coupler 42030.

Likewise 90° corners using 42022 coupler and 135° bay corners with 42026.



On tall combination windows subjected to high wind loads it's possible to use the 'I' coupler 42030 between individual windows to create a stronger mullion.

Glass Performance of ClearVENT™ sashes:

The weak link on frameless double-hung sashes will be the unsupported glass edge across the centre of the window. The situation is covered in Australian Standard AS1288-2006, Section 4.

Typical window examples based on this Standard

Maximum Window Width (based on 30mm frames - 72821 and 72823)

Wind Classification	6mm Annealed Glass	5mm Toughened Glass	6mm Toughened Glass	6.38mm Laminated Glass
N1	1210mm	1210mm	1210mm	1210mm
N2	1210mm	1210mm	1210mm	1210mm
N3	1067mm	1186mm	1210mm	1037mm
N4	904mm	1036mm	1186mm	880mm
N5	763mm	886mm	1036mm	744mm
N6	679mm	859mm	995mm	662mm
C1	942mm	1186mm	1210mm	917mm
C2	794mm	1012mm	1176mm	773mm
C3	679mm	859mm	995mm	662mm
C4	601mm	755mm	872mm	587mm
Human Impact	Not suitable	1136mm	1210mm	886mm

Human Impact

If the ClearVENT™ sill is within 500mm of the floor you have to allow that this window is subject to the Human Impact section of the Standard. Use the lower of the spans when Human Impact is allowed (eg. If your window was in wind classification N3 and within 500mm of the floor and used 6.38mm laminated glass the maximum window width would be 886mm - limited by Human Impact. Alternatively if the same window was in wind classification N4 the maximum window width would be 880mm - limited by glass span table).

Laminated Glass Limitations

Laminated glass can be used on ClearVENT™ sashes but as can be seen from the chart above, this option is quite weak.

Safety Note: Laminated glass is recommended over the use of toughened in areas subject to Human Impact, due to the counterbalancing effect of the top sash dropping rapidly if the toughened glass bottom sash is broken and the glass weight removed.



Architectural Information

Series 614 ClearVENT™ Double-hung Window Vertical Cross Section

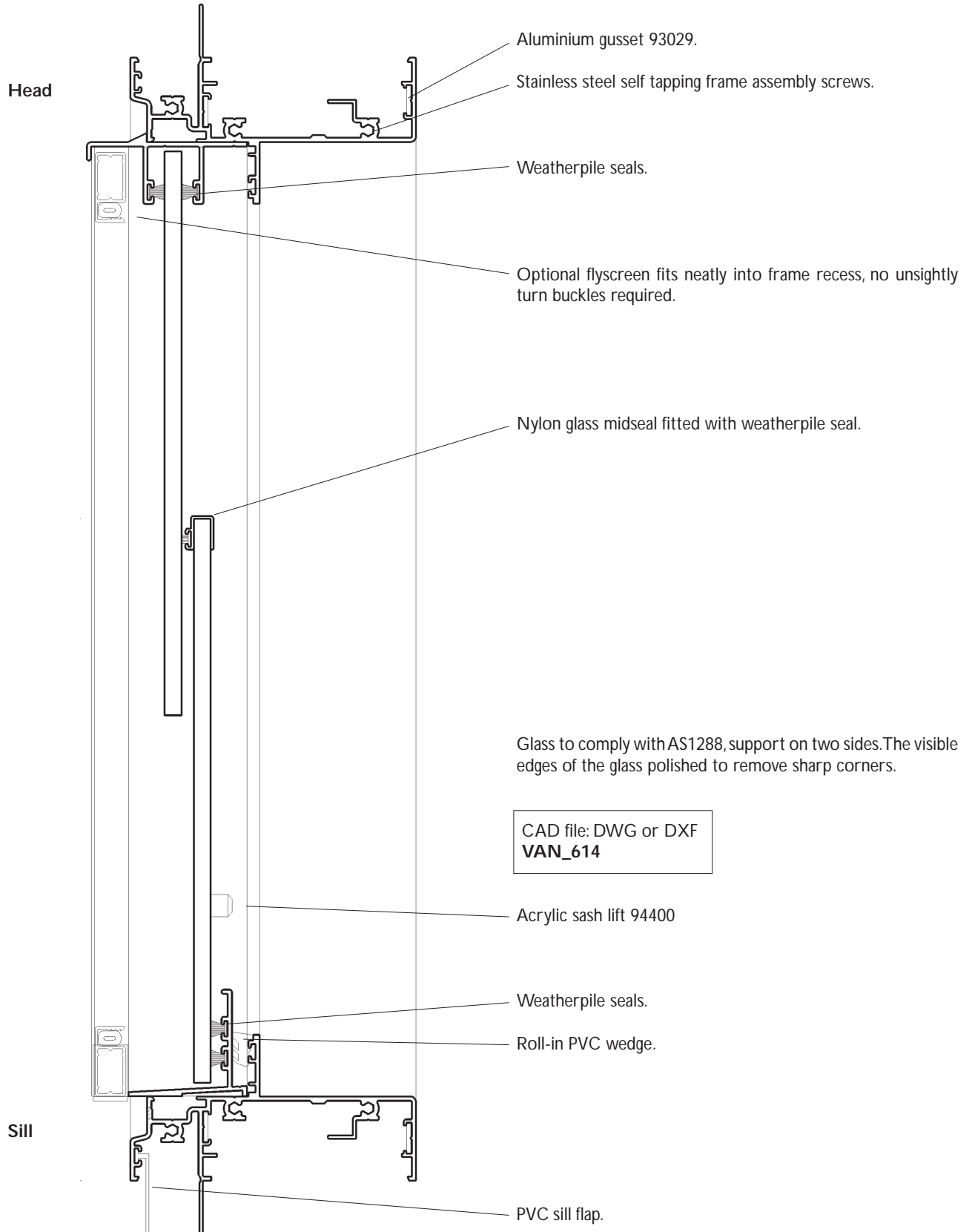
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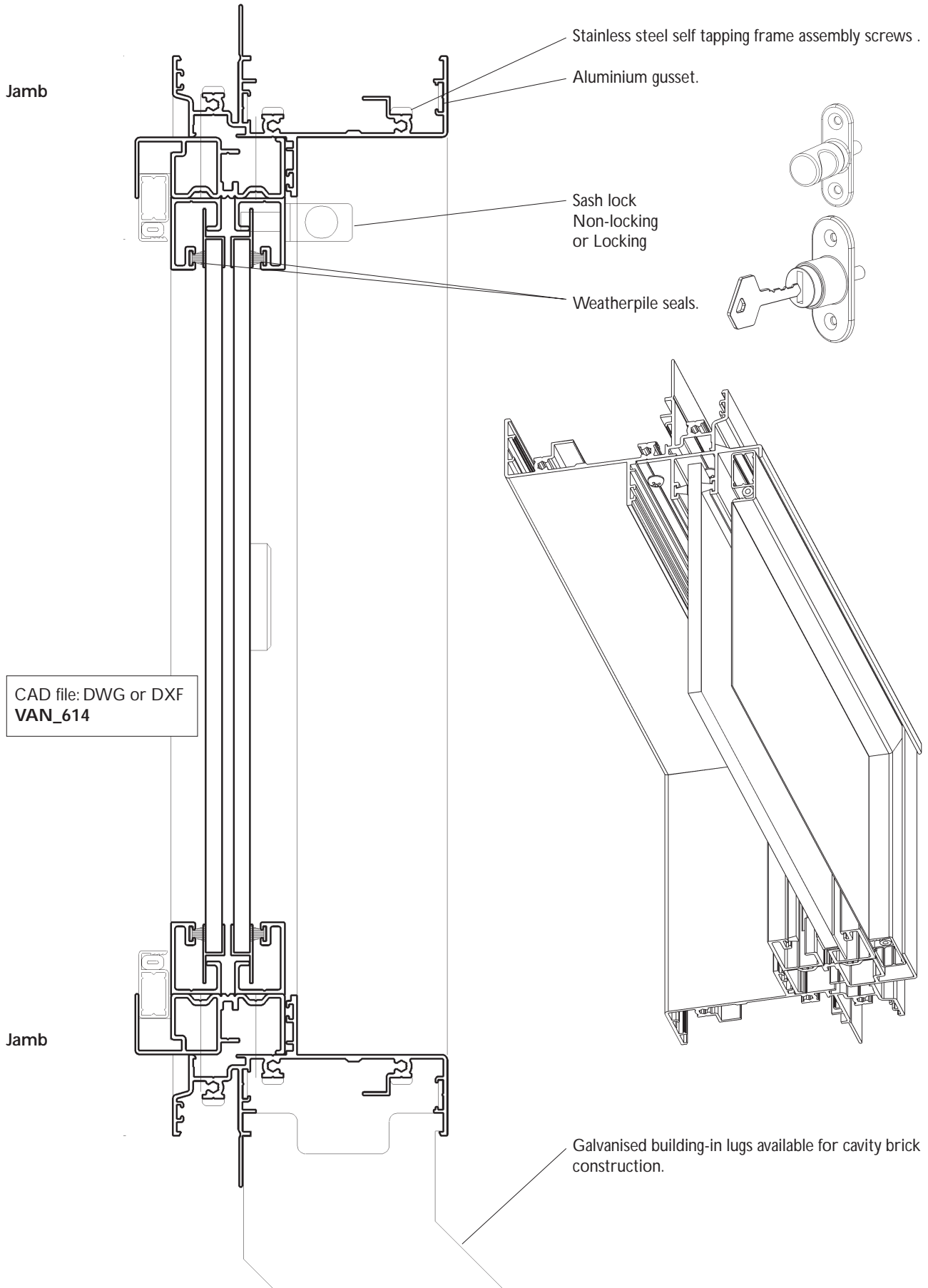
102 x 30mm Standard frame.



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Architectural Information

Series 614 ClearVENT™ Double-hung Window Horizontal Cross Section





'Paddington'

Series 614 ClearVENT™ 102mm x 39mm perimeter frame will accept 'Paddington' trims as shown on this page. Refer the web site for coloured details. For cad drawings (DXF or DWG) go to the installation section on the CD.

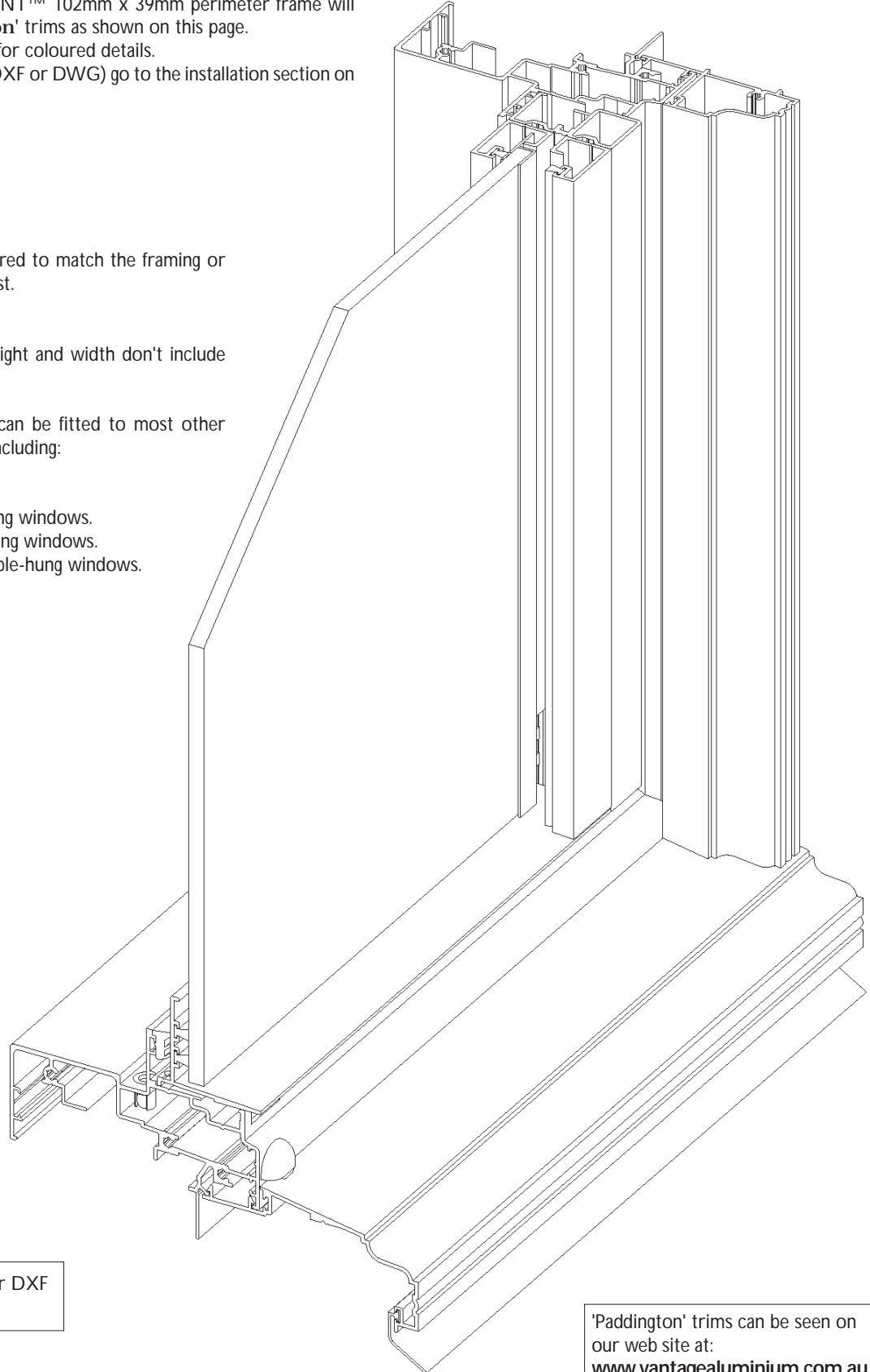
Trims can be coloured to match the framing or coloured to contrast.

When ordering:

Overall window height and width don't include the trims.

'Paddington' trims can be fitted to most other Vantage products including:

- Sliding doors
- French doors
- Magnum™ sliding windows.
- Magnum™ awning windows.
- Magnum™ double-hung windows.



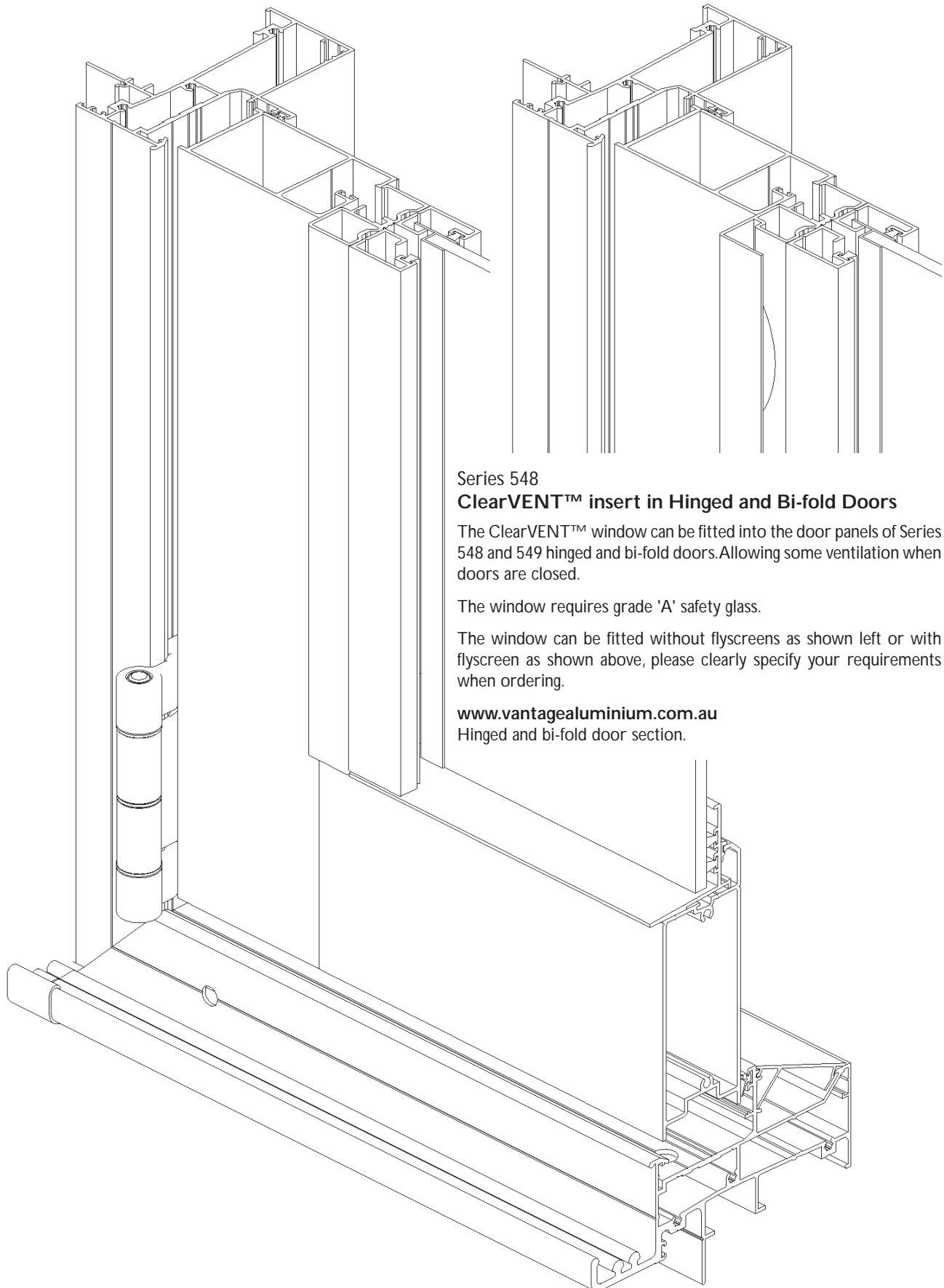
CAD file: DWG or DXF
VAN_614

'Paddington' trims can be seen on our web site at:
www.vantagealuminium.com.au

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Architectural Information

Series 614 ClearVENT™ Double-hung Window ClearVENT™ into Hinged or Bi-fold Doors



Series 548

ClearVENT™ insert in Hinged and Bi-fold Doors

The ClearVENT™ window can be fitted into the door panels of Series 548 and 549 hinged and bi-fold doors. Allowing some ventilation when doors are closed.

The window requires grade 'A' safety glass.

The window can be fitted without flyscreens as shown left or with flyscreen as shown above, please clearly specify your requirements when ordering.

www.vantagealuminium.com.au
Hinged and bi-fold door section.



Architectural Information

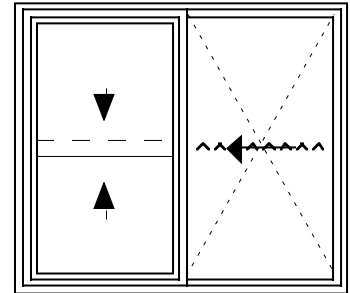
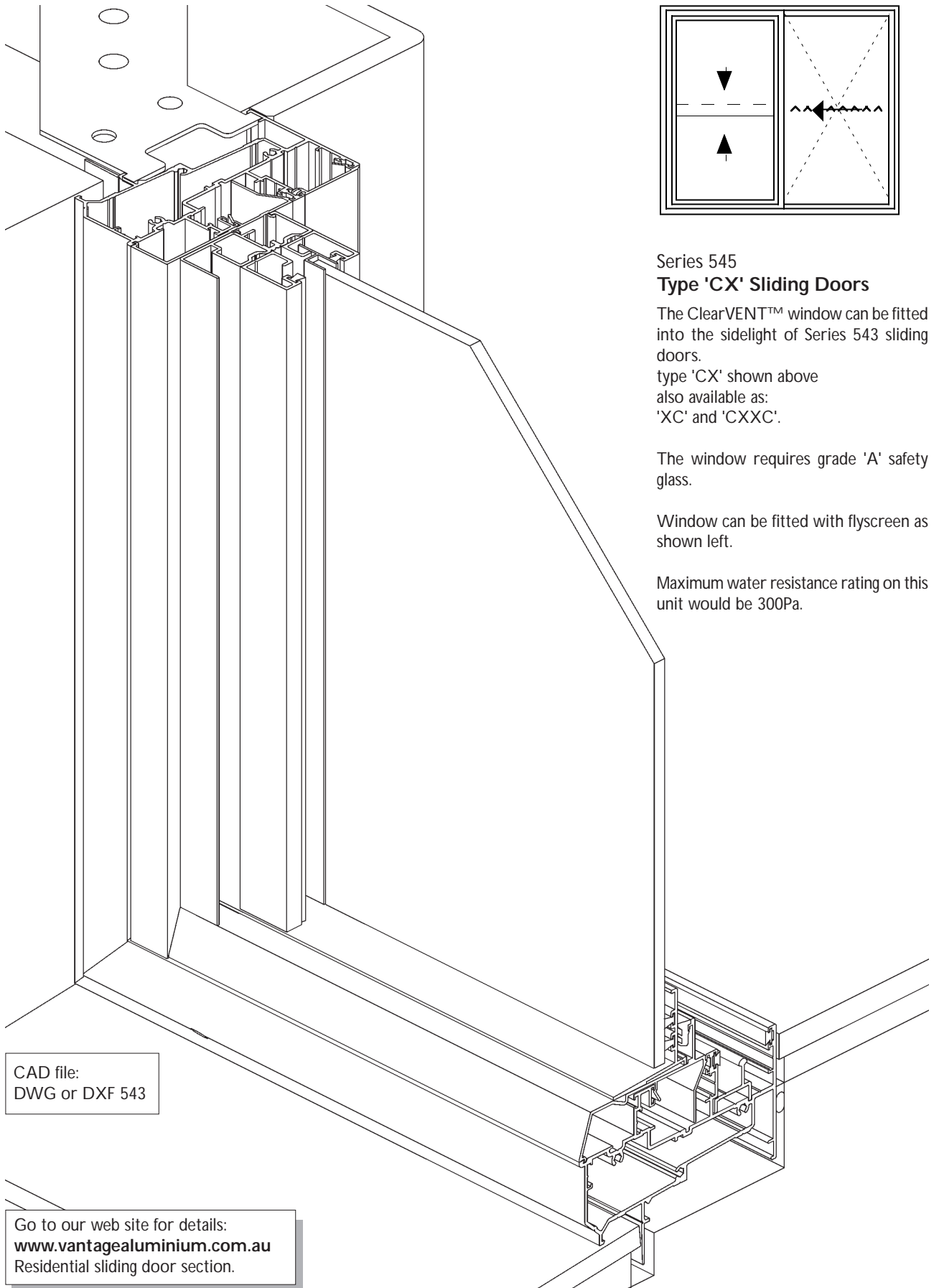
Series 614 ClearVENT™ Double-hung Window ClearVENT™ into Sliding Doors

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Series 545 Type 'CX' Sliding Doors

The ClearVENT™ window can be fitted into the sidelight of Series 543 sliding doors.

type 'CX' shown above
also available as:
'XC' and 'CXXC'.

The window requires grade 'A' safety glass.

Window can be fitted with flyscreen as shown left.

Maximum water resistance rating on this unit would be 300Pa.

CAD file:
DWG or DXF 543

Go to our web site for details:
www.vantagealuminium.com.au
Residential sliding door section.

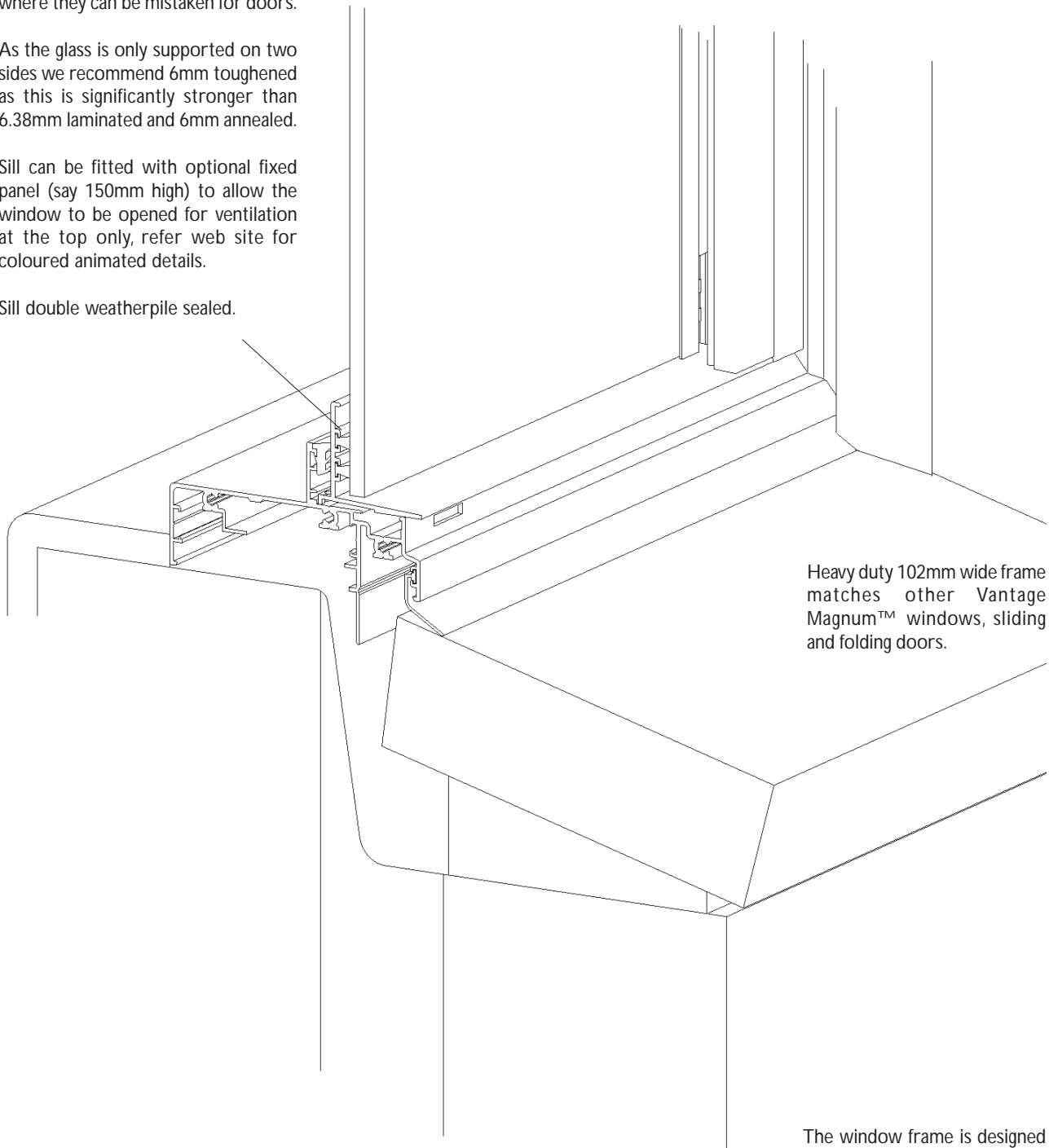


ClearVENT™ sashes will be glazed with 5 or 6mm toughened or 6.38mm laminated safety glass in situations where they can be mistaken for doors.

As the glass is only supported on two sides we recommend 6mm toughened as this is significantly stronger than 6.38mm laminated and 6mm annealed.

Sill can be fitted with optional fixed panel (say 150mm high) to allow the window to be opened for ventilation at the top only, refer web site for coloured animated details.

Sill double weatherpile sealed.



Heavy duty 102mm wide frame matches other Vantage Magnum™ windows, sliding and folding doors.

For building-in details go to our web site:
www.vantagealuminium.com.au
For CAD drawings go to the Vantage CD or contact us at:
info@vantagealuminium.com.au

The window frame is designed to be built into cavity brick as shown on this page or brick veneer construction. A large range of couplers, trims and lugs ensure that the product can be fitted cleanly into most situations.



Architectural Information

Series 614 ClearVENT™ Double-hung Window

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Series 614 ClearVENT™ Sashless Double-hung window internal view
(Not to scale)

