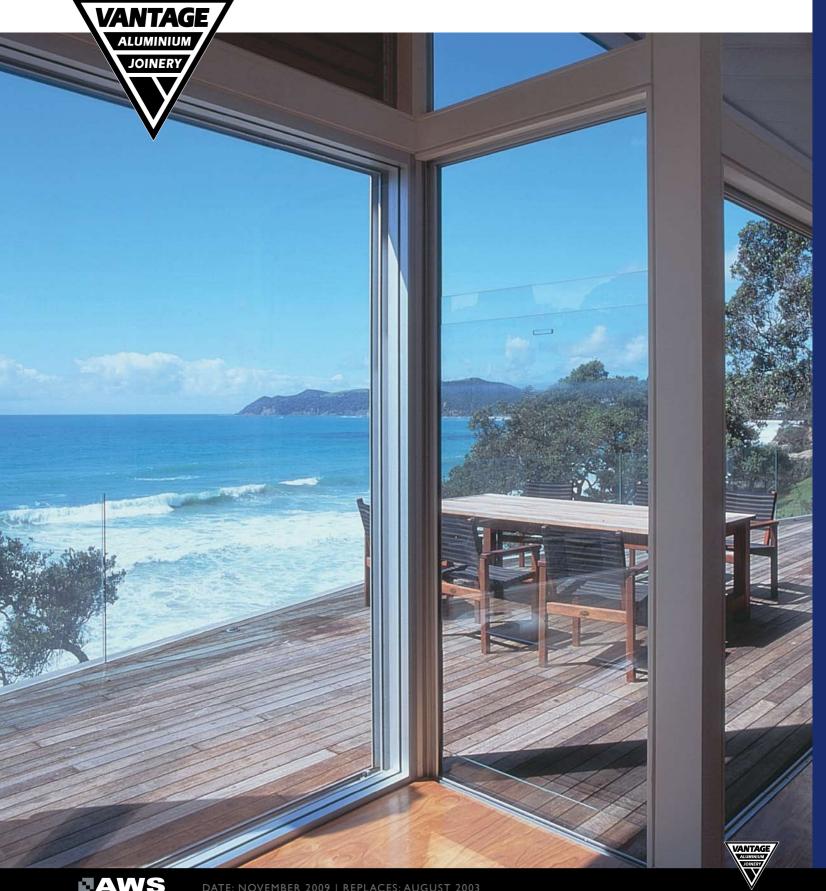
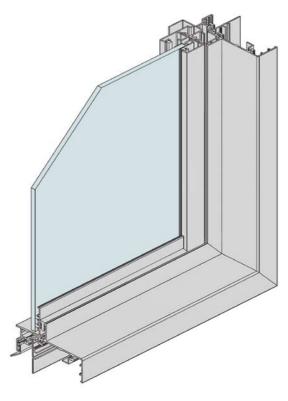
Series 614 $Clear VENT^{\intercal M} \ \ Double \ Hung \ Window$



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

KEY FEATURES / PERFORMANCE CHARACTERISTICS



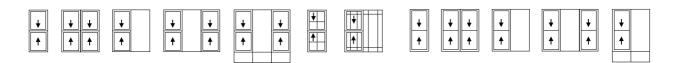
Series 614 ClearVENT $^{\text{TM}}$ Sashless Double-hung window internal view

- Tested for compliance with the relevant Australian Standards.
- 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). 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.

Maximum Panel Height*	1010mm
Maximum Panel Width*	1210mm
Maximum Glass Thickness	≤ 6.38mm

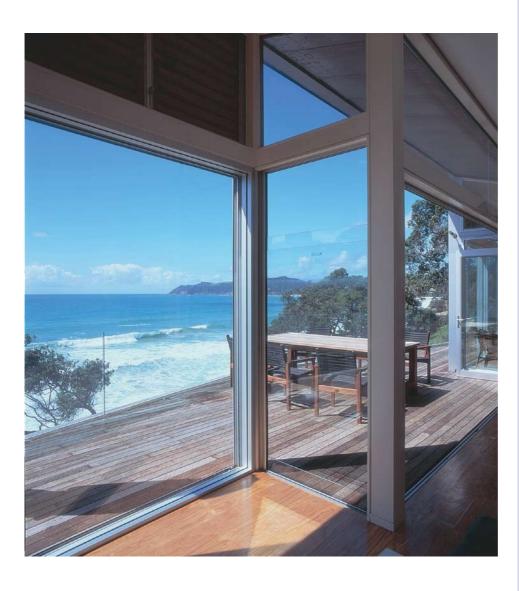
^{*} Subject to individual site conditions and wind loads. Contact AWS Technical Support for more information, e-mail techsupport@awsaustralia.com.au

TYPICAL CONFIGURATIONS





DATE: NOV 09
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SCALE: NOT TO SCALE



HOW TO SPECIFY

SYSTEM NAME

Vantage Series 614 ClearVENT™ Sashless Double HungWindow

FINISH

Powder Coat

Anodised

COLOUR

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

GLASS

Specify thickness ≤ 6.38mm

Specify thermal performance where applicable (Uv & SHGC)

Specify acoustic performance where applicable (RW)

HARDWARE

Refer to hardware selection guide for compatible options



2D & 3D CAD FILES AVAILABLE

GO TO: www.vantagealuminium.com.au > CAD & Revit 3D Files CAD file: DWG or DXF VAN 614



MORE INFORMATION

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



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.



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

SPECIFIERS CHECKLIST

Not all sashless double-hung windows are the same. We have incorporated a couple of features worth considering

FEATURE	Series 614	Opposition
Does the window comply with the relevant Australian Standards. All windows should comply but it pays to ask for written proof.	YES	
Designed for exposed locations. Series 614 has a 300Pa water resistance as standard. This makes the product suitable for most residential locations.	YES	
Can I make large windows and still comply. We can make this sashless double-hung up to 2100mm x 1210mm wide and still comply.	YES	
Wide frame with bold sashes. 102mm wide perimeter frame.	YES	
Easy to operate. ClearVENT™ sashes are easy to open and close. As you lift the bottom sash the top sash carries the weight through a pulley system and lowers accordingly.	YES	
Key locking option. Besides the standard spring loaded shoot bolt latch we offer a key locking bolt where insurance requires the fitting of key locks to windows.	YES	
Clean flyscreen installation. A major feature with this window is the way we fit flyscreens when selected. The screens nest into recess in jamb and are secured with concealed spring loaded nylon clips to reduce the chance of screens rattling or falling out. Our competitors usually secure their screens with unsightly turnbuckles - there is nothing upmarket about turnbuckles. If you are fitting Clear VENT™ sashes and you don't want flyscreens we also offer jambs without the flyscreen recess.	YES	
Window can be coupled to sliding doors or other windows without visible rivets.	YES	
Rounded internal frame corners where ever possible. The main perimeter frame has 2mm soft internal corner radius. Lowlight mullions also have the same soft internal radius plus they are setback 2mm from the edge like timber windows to give a clean finish. Modern paint finishes don't like sharp corners.	YES	
Compatible products. ClearVENT™ 614 double-hung window has been designed to match and couple with a large range of MAGNUM™ products.	YES	



DATE: NOV 09
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SCALE: NOT TO SCALE

DESIGN FEATURES

This full vision vertical sliding sashless double-hung window has been designed to complement our existing quality product range including: SlideMASTER $^{\text{\tiny M}}$ and MAGNUM $^{\text{\tiny TM}}$

sliding doors, Bi-fold doors and the MAGNUM $^{\text{\tiny M}}$ 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).

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 $^{\text{\tiny M}}$ 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 MAGNUM sliding doors.

Fixed lowlights / sidelights match MAGNUM™ awning fixed windows.

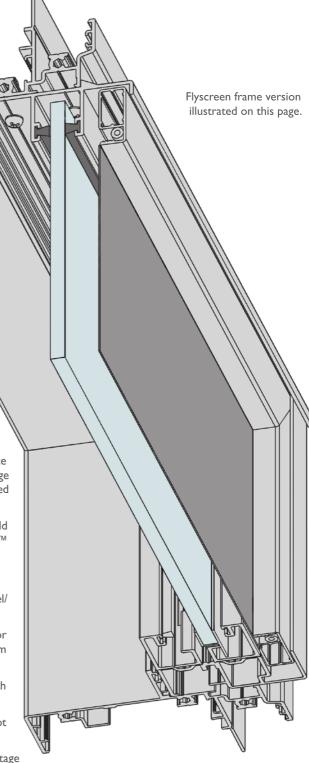
Sashes are counterweighted by the adjoining sash via stainless steel/nylon pulleys and cords.

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.

The tubular $39 \text{mm} \times 102 \text{mm}$ perimeter frame (72822) can be fitted with proprietary condensation draining ball valve.

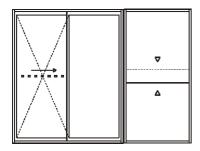
The same $39mm \times 102mm$ perimeter frame (72822) will also accept 'Paddington' federation trims, as illustrated in these notes.

ClearVENT[™] vertical sliding sashes can also be installed into Vantage Series 548 Hinged and Bi-fold doors, plus the MAGNUM[™] sliding door fixed panel.



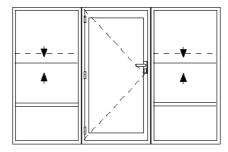
DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE

COUPLING OPTIONS



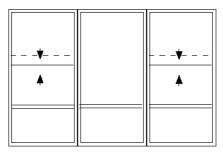
Series 614 double-hung windows can be clipped to Series 541& 542 Sliding or Series 618 MAGNUM™ doors using the 'l' coupler 42030.

Likewise 90° corners using 42022 coupler and 135° bay corners with 42026. Refer to installation section for more information.



Series 614 windows will also clip to Series 548 French doors using the 'l' 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 'l' coupler 42030 between individual windows to create a stronger mullion.

Glass Performance of ClearVENT™ sashes:

Not suitable

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
NI	1210mm	1210mm	1210mm	1210mm
N2	1210mm	1210mm	1210mm	1210mm
N3	1067mm	I I 86mm	1210mm	1037mm
N4	904mm	1036mm	I I 86mm	880mm
N5	763mm	886mm	1036mm	744mm
N6	679mm	859mm	995mm	662mm
CI	942mm	I I 86mm	1210mm	917mm
C2	794mm	1012mm	I I 76mm	773mm
C3	679mm	859mm	995mm	662mm
C4	601mm	755mm	872mm	587mm

Human Impact

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).

1136mm

1210mm

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 counter balancing effect of the top sash dropping rapidly if the toughened glass bottom sash is broken and the glass weight removed.

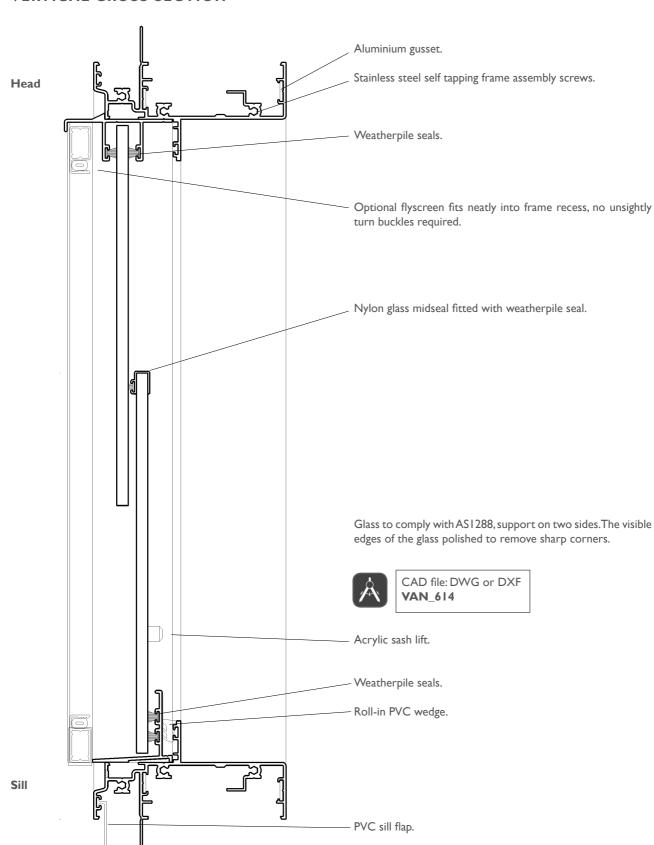


886mm

DATE: NOV 09 REPLACES:

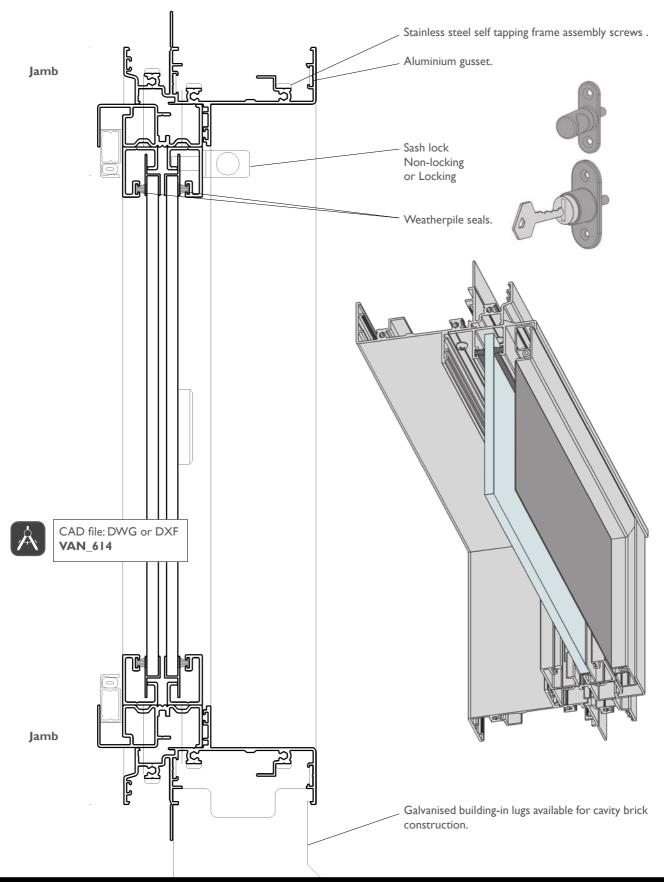
AUG 03 HALF FULL SIZE SCALE:

VERTICAL CROSS SECTION



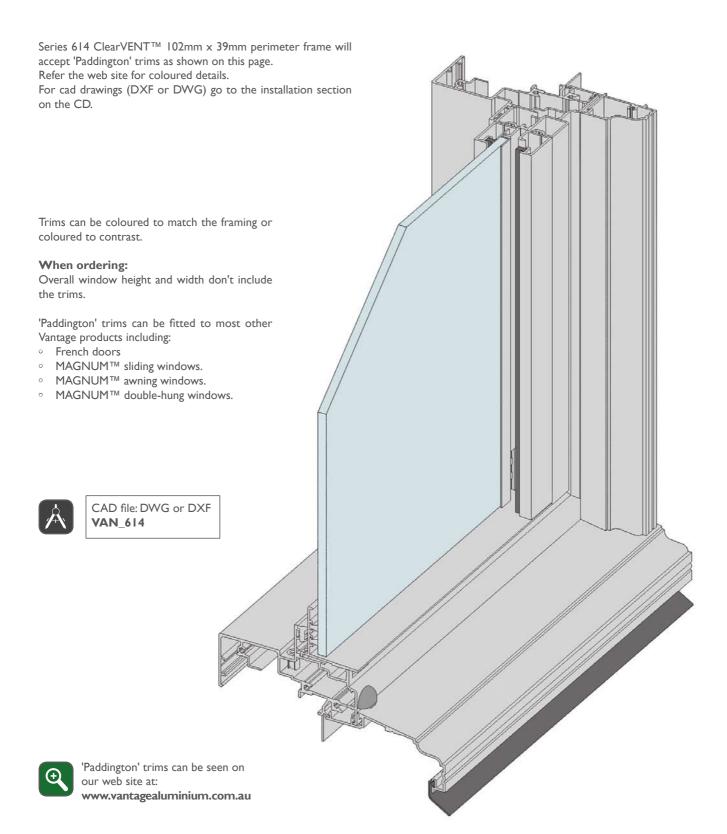
DATE: NOV 09
REPLACES: AUG 03
SCALE: HALF FULL SIZE

HORIZONTAL CROSS SECTION

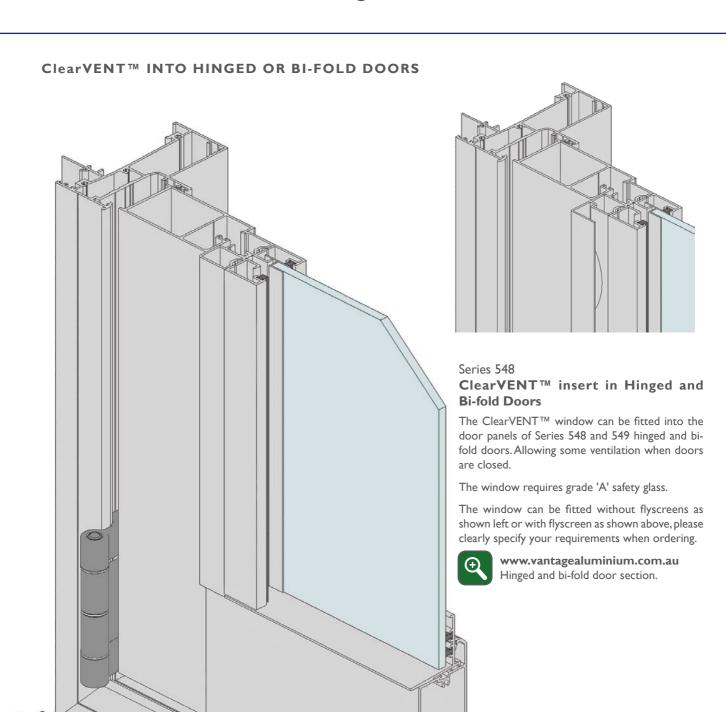


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REPLACES: AUG O3
SCALE: NOT TO SCALE

OPTIONAL 'PADDINGTON' TRIMS



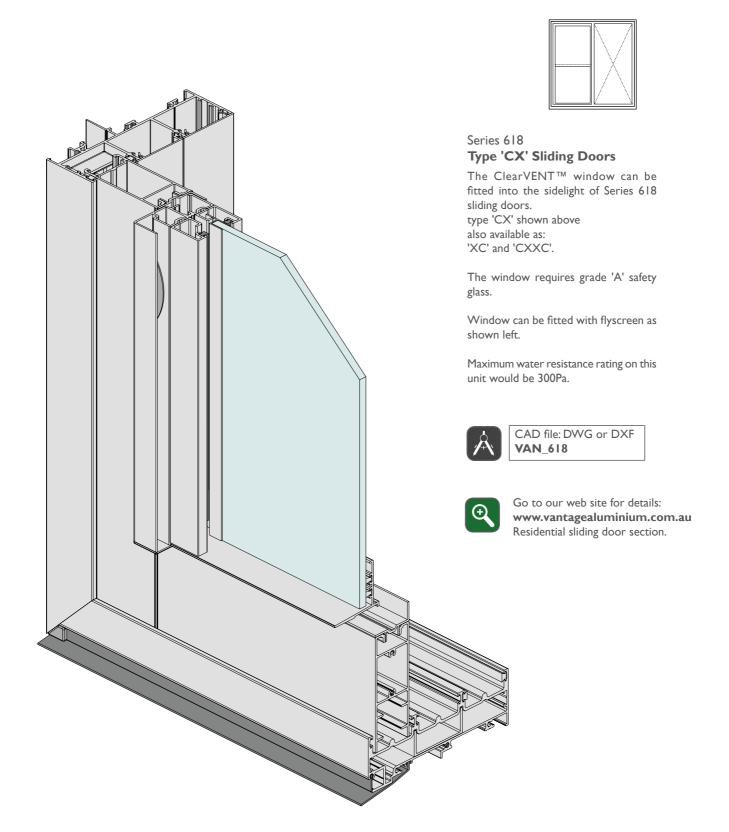
DATE: NOV 09
REPLACES: AUG 03
SCALE: NOT TO SCALE





DATE: NOV 09
REPLACES: AUG O3
SCALE: NOT TO SCALE

ClearVENT™ INTO SLIDING DOORS





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

ALTERNATIVE COMMERCIAL DOUBLE HUNG

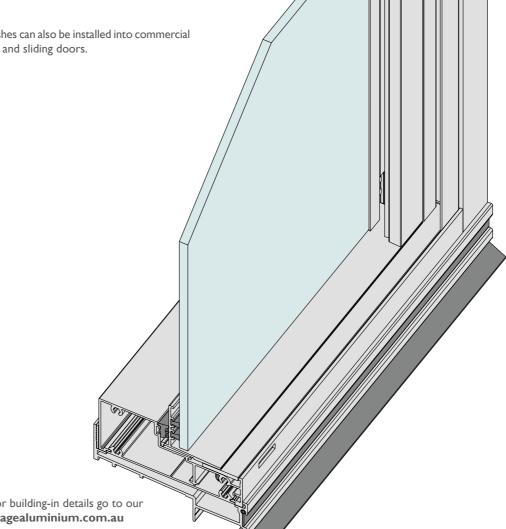
Using existing custom nailing fin perimeter framing and ClearVENT™ inlay adaptors we have created a commercial sashless double-hung window - Series 464.

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

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

ClearVENT $^{\text{\tiny M}}$ windows can be fitted with external flyscreens, as shown on the detail right. 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.

 ${\sf ClearVENT}^{\scriptscriptstyle{\sf TM}}\ {\sf vertical}\ {\sf sliding}\ {\sf sashes}\ {\sf can}\ {\sf also}\ {\sf be}\ {\sf installed}\ {\sf into}\ {\sf commercial}$ Series 50 or 51 hinged, Bi-fold and sliding doors.





For CAD drawings or building-in details go to our web site: www.vantagealuminium.com.au