



#### Design Features :

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

The window has been tested for compliance with the relevant Australian Standards and achieved a very high water resistance of 1000Pa, this makes the product suitable for most applications including multi-storey apartments.

Low air infiltration, makes the product suitable for air conditioned buildings.

The extra strong sashes allow large sash windows to be fabricated for high wind load areas, refer Pascal rating tables later in these notes.

Spliced or square glazing beads available.

102mm frames, mullion and transom have a soft 2mm internal radius.

Awning sashes can be fitted with cam handles, manual chain winders or concealed electric winders. The winder options suit fixed flyscreen installation as detailed in these notes.

The window is compatible (appearance, strength and performance) with the high performance Magnum™ horizontal sliding and ClearVENT™ double-hung sashless windows. A large range of snap couplers allow these windows to be joined at 90°, 135° and 180° without unsightly rivets or screws.

These couplers allow this window to couple to Bi-fold windows, Bi-fold doors, French doors, Sliding doors and DUO sliding doors. There are also horizontal couplers to allow Magnum™ windows to be fitted over doors.

Fixed lowlights/sidelights use the same frame as the opening sashes.

Sashes are hung on heavy duty four bar stainless steel or aluminium stays.

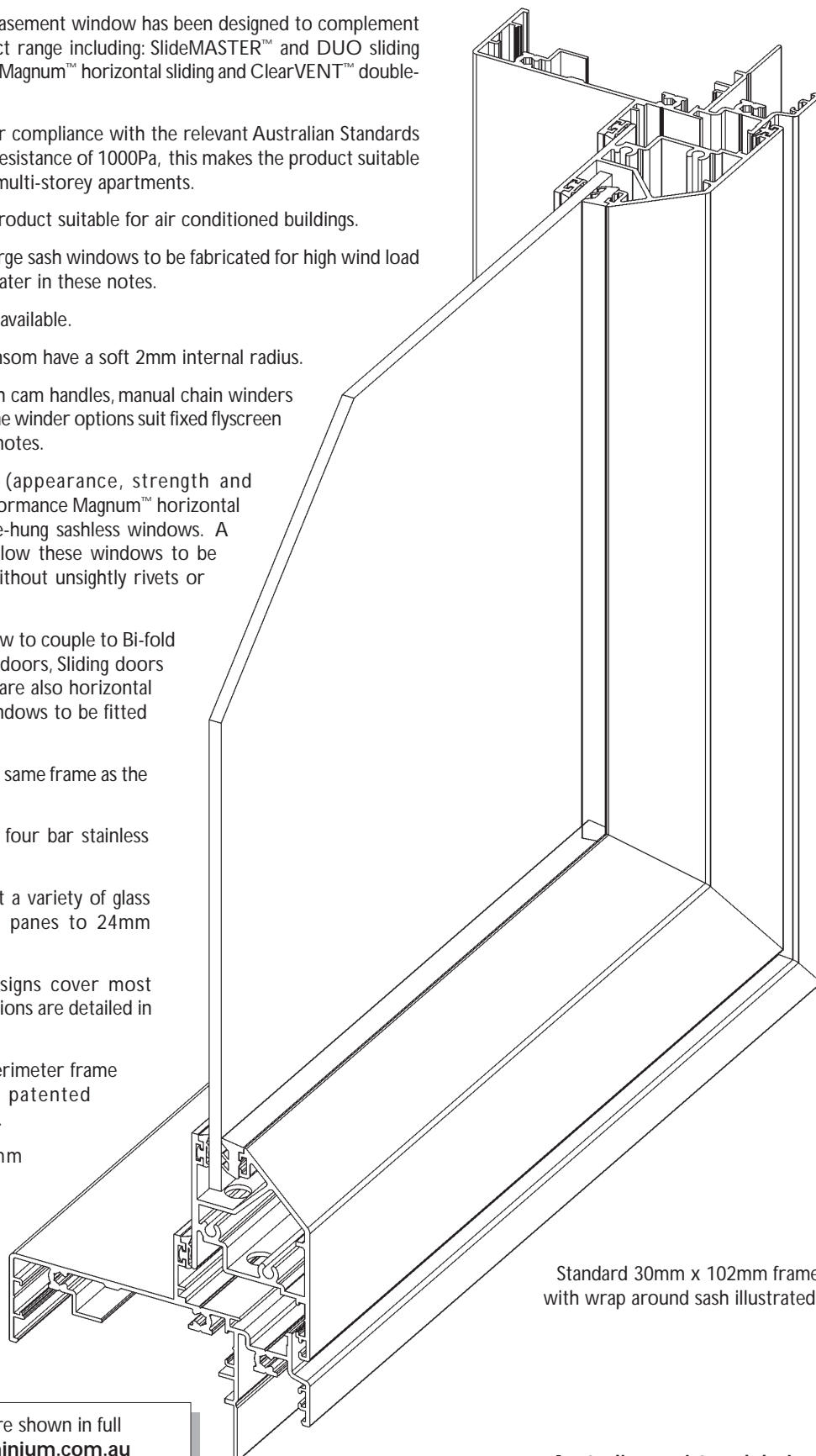
Sashes and sidelights will accept a variety of glass thicknesses from 4mm single panes to 24mm insulating glass units.

Four frame and four sash designs cover most situations, all frame and sash options 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 will also accept 'Paddington' federation trims, illustrated in these notes.

WERS (Window Energy Rated System) tables are in section 04. Sound reduction ratings can be found in section 55.



Standard 30mm x 102mm frame with wrap around sash illustrated.

All of the important features are shown in full colour at: [www.vantagealuminium.com.au](http://www.vantagealuminium.com.au)

Australian registered design.

# Architectural Information

## Series 616 Magnum™ Awning Window

### Vertical Cross Section - Awning with chain winder



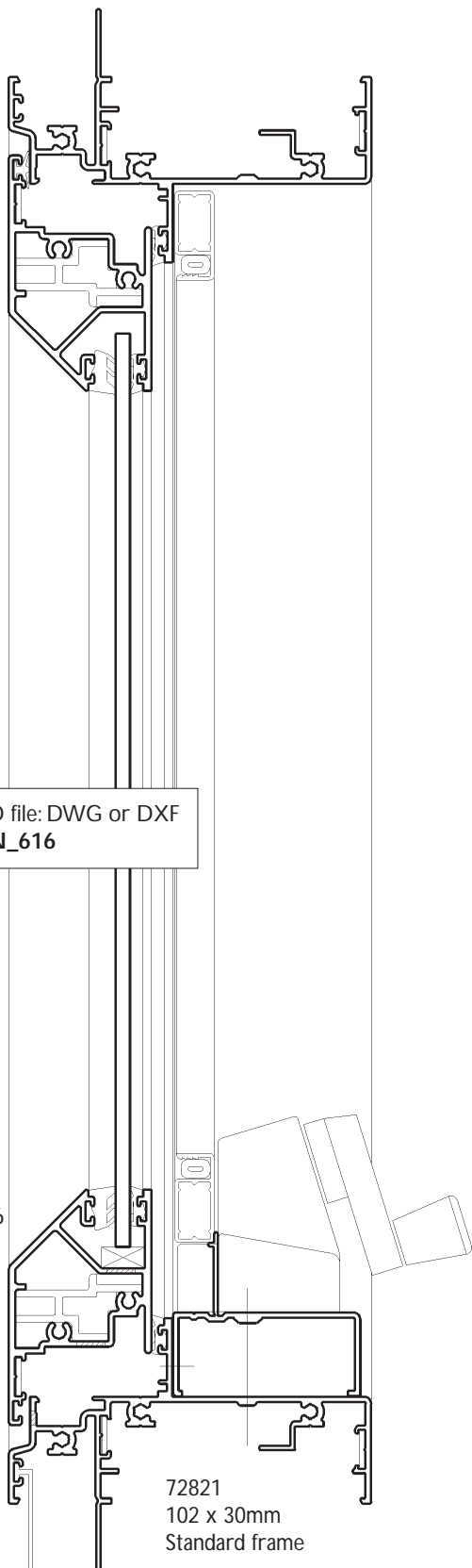
Wrap around sash fitted with stays and chain winder, in 102mm x 30mm standard frame (72821).

Rating tables for alternative sash side rails on this page.  
**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,

Serviceability rating has been limited to 3000 Pa and Ultimate strength rating has been limited to 4500 Pa.

**Please note:** There are size and strength limitations on the sash hardware as shown earlier in these notes.



CAD file: DWG or DXF  
**VAN\_616**

72836 sash

72821  
 102 x 30mm  
 Standard frame

Window			Sash types			
Height mm	Width mm		72836	72837	72838	72839
1600	910	S	1484	1484	1484	1484
		U	3526	3202	2874	4379
1600	1210	S	1102	1102	1102	1102
		U	2676	2431	2182	3324
1700	910	S	1395	1395	1395	1395
		U	3103	2819	2530	3854
1700	1210	S	1036	1036	1036	1036
		U	2349	2134	1915	2918
1800	910	S	1315	1281	1307	1315
		U	2753	2500	2244	3419
1800	1210	S	977	971	977	977
		U	2079	1889	1695	2583

Table 36.1 Wind Ratings (Pa) sashes.

### Sound Reduction

A number of glass combinations have been tested in this awning window. Opening sash was fitted with Santoprene fin seal on all inner sides.

- 4mm Annealed glass 30dB(A) RW32
- 6.38mm Laminated glass 34dB(A) RW34
- 10.38mm Laminated glass 36dB(A) RW36
- 24mm Insulating glass unit 35dB(A) RW35 (6-12-6)

Go to the SoundOUT section 55 for other options.



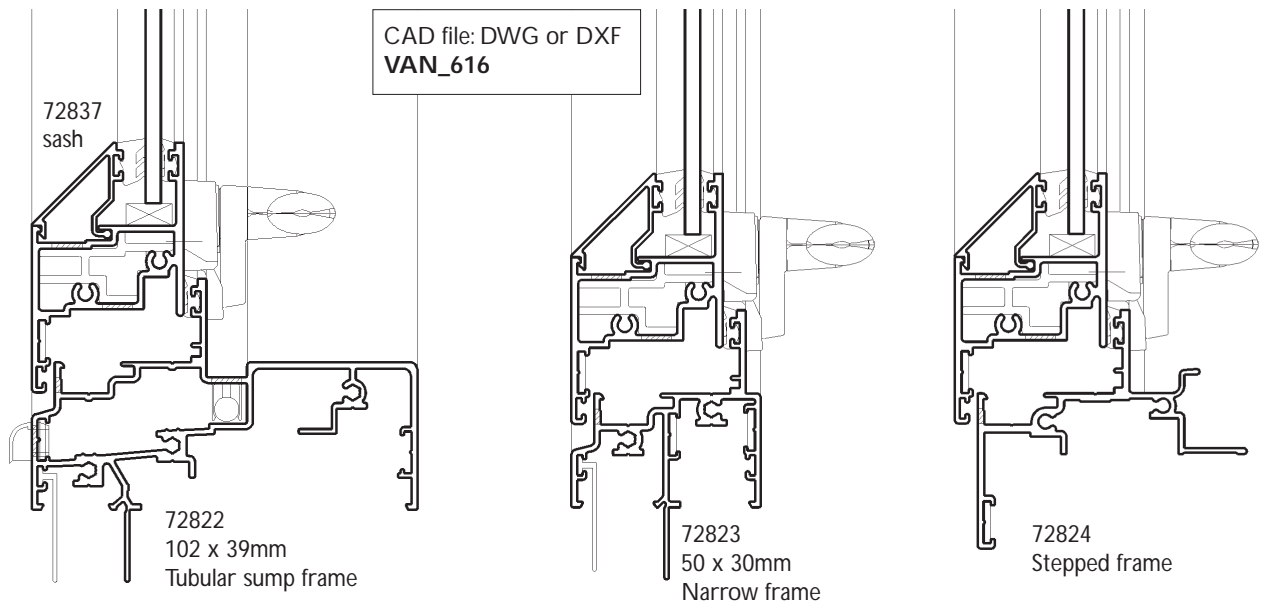
### Thermal Transmission WERS

This window has been WERS rated. The star ratings for heating and cooling climates with various glass options can be found in the WERS section 04.



## Series 616 Magnum™ Awning Window

Alternative Frames and Sashes

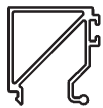


**Beaded 40mm sash (72837) fitted with stays and cam handles, in 102mm x 30mm sump frame.**

**Beaded 40mm sash fitted with stays and cam handles, in 50mm x 30mm frame and the face fit 40mm stepped frame.**

This frame is designed to accept the Vantage patented condensation draining ball valve.

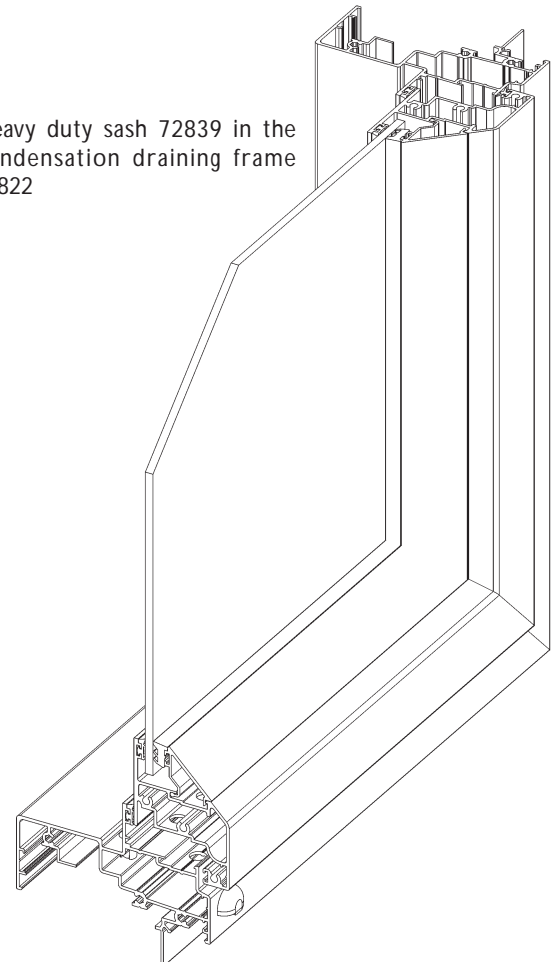
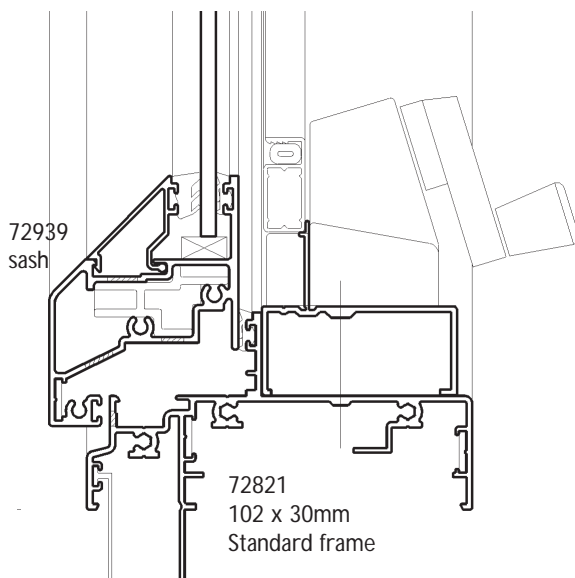
These frames are designed for those projects that don't require winders or fixed flyscreens.



### Square glazing beads.

We have an alternative square glazing bead option for both sashes and adjoining fixed lights.

Heavy duty sash 72839 in the condensation draining frame 72822



**50mm Wide heavy duty beaded sash (72839).**

Designed for large sashes in very exposed situations.

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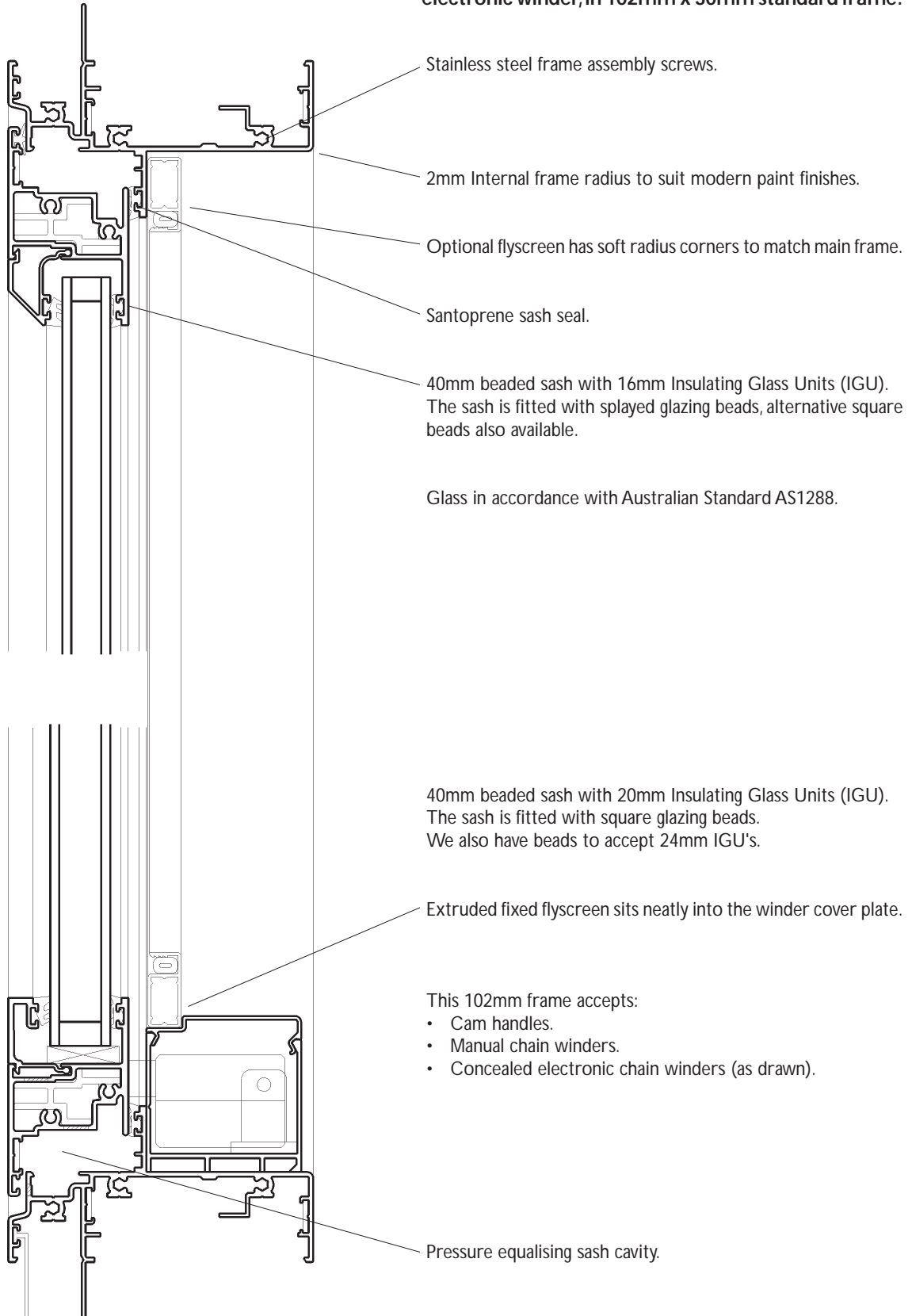
# Architectural Information

## Series 616 Magnum™ Awning Window

Vertical Cross Section - Awning with electric winder



40mm Beaded sash fitted with stays and concealed electronic winder, in 102mm x 30mm standard frame.





# Architectural Information

## Series 616 Magnum™ Awning Window

Vertical Cross Section - Transoms

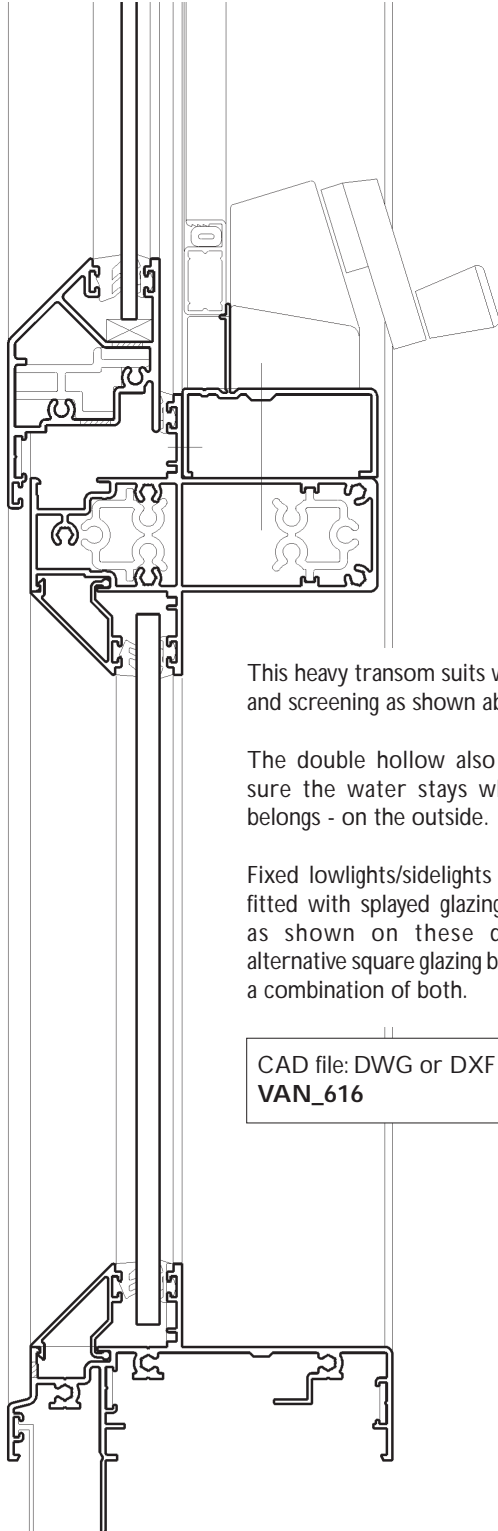
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The double hollow transom will accept winders and flyscreens.

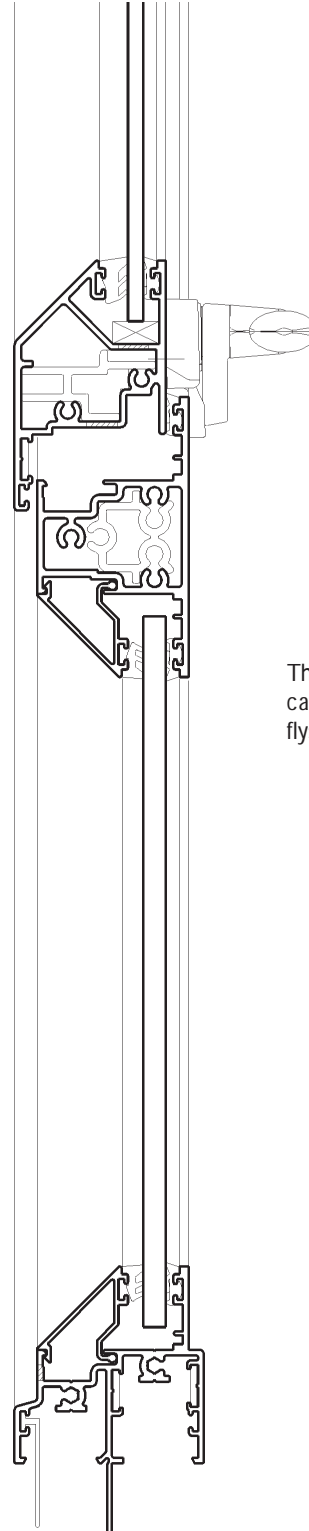


This heavy transom suits winders and screening as shown above.

The double hollow also makes sure the water stays where it belongs - on the outside.

Fixed lowlights/sidelights can be fitted with splayed glazing beads as shown on these details, alternative square glazing beads or a combination of both.

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VAN\_616



This light transom only suits cam handles, without flyscreens.

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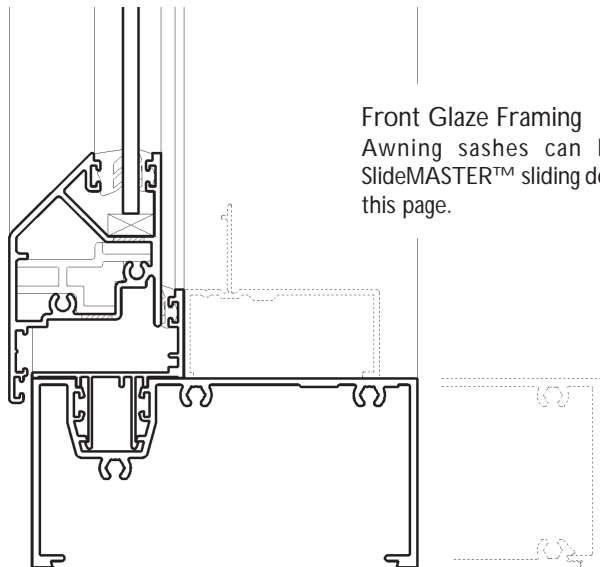
# Architectural Information

## Series 616 Magnum™ Awning Window

Awnings over SlideMASTER™

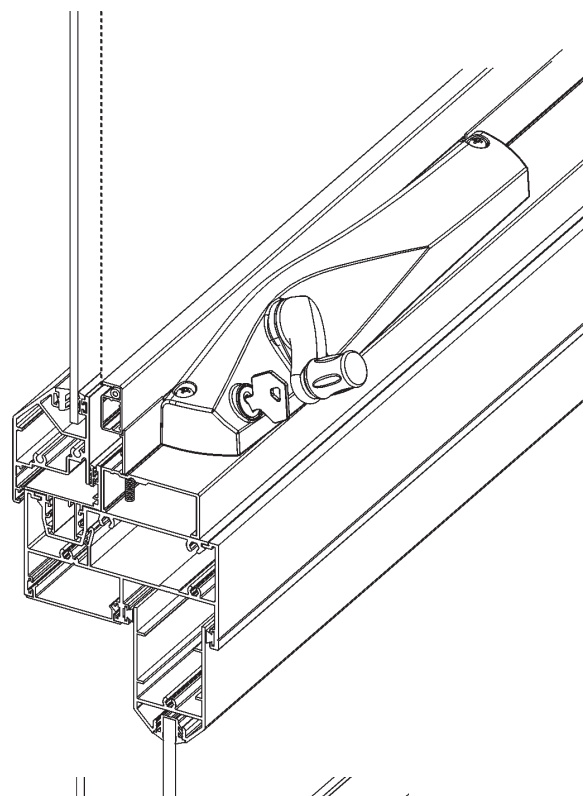


See the alternative winder options in full colour on our web site:  
[www.vantagealuminium.com.au](http://www.vantagealuminium.com.au)



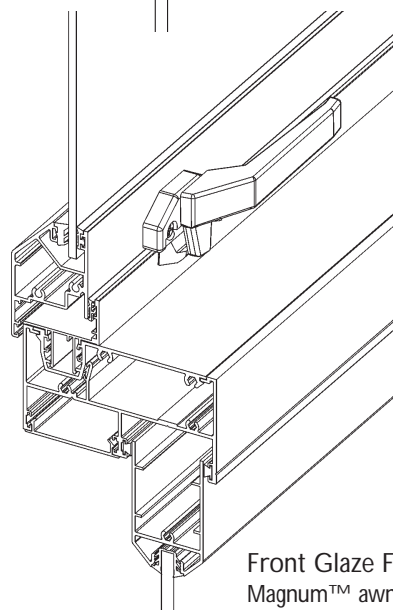
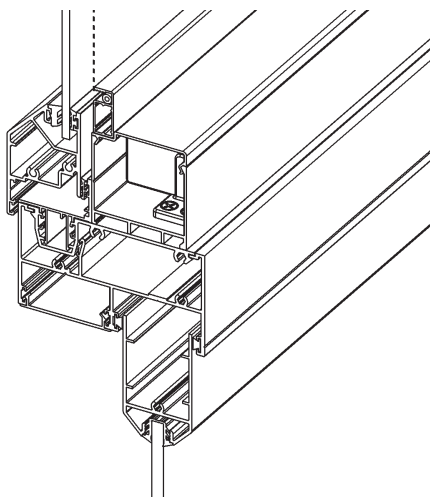
Front Glaze Framing  
Awning sashes can be fitted over SlideMASTER™ sliding doors as shown on this page.

Front Glaze Framing  
Magnum™ awnings can be fitted with manual chain winder as shown right.



Front Glaze Framing  
Magnum™ awnings can be fitted with concealed electric winder as shown below.

Note:  
If you are fitting awning sashes over SlideMASTER™ doors we recommend concealed electric winders.



Front Glaze Framing  
Magnum™ awnings can be fitted with cam handles as shown above.



# Architectural Information

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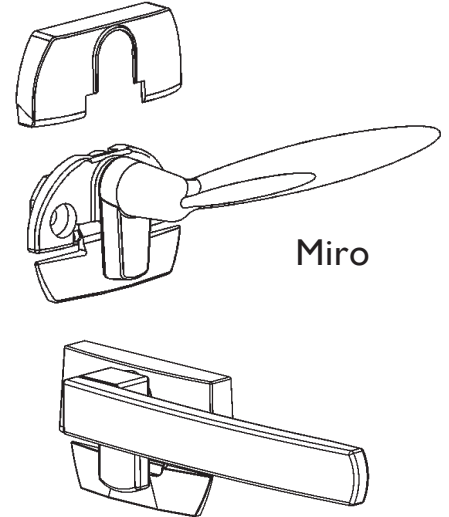
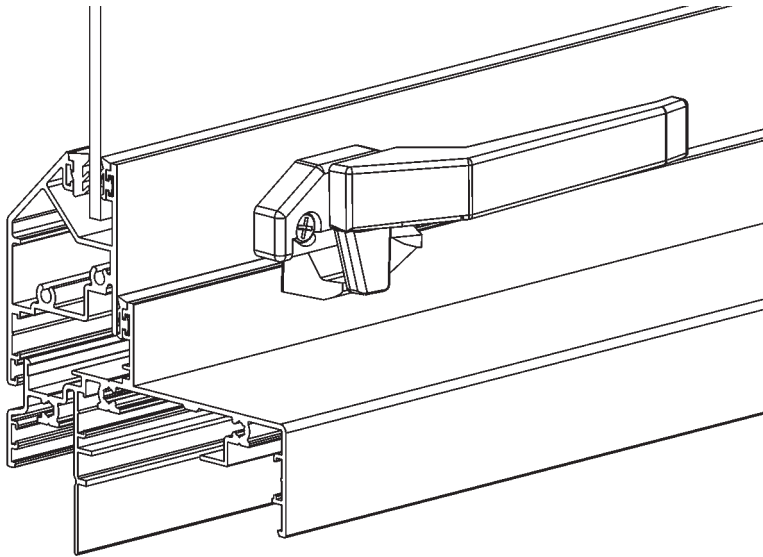
## Series 616 Magnum™ Awning Window

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Cam Handles and Stays

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Miro

ICON™

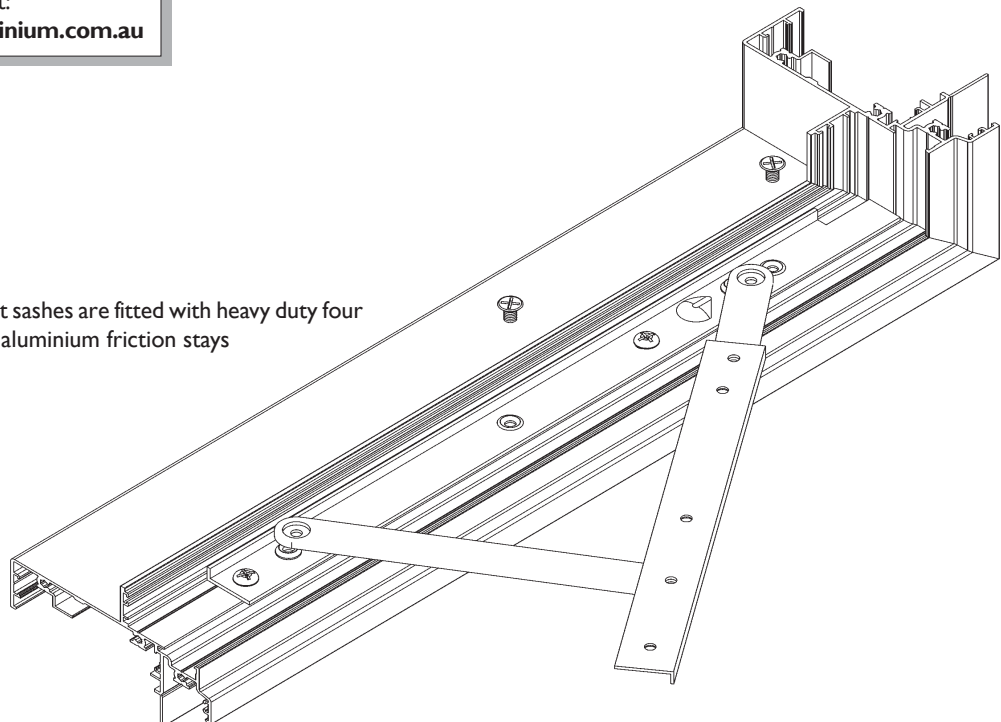
### Manual Cam Handles

Sashes can be fitted with Interlock wedgeless cam handles as shown above or the custom Vantage Miro or ICON™ wedgeless cam handles as shown right.

See the cam handle open and close in full colour at:  
[www.vantagealuminium.com.au](http://www.vantagealuminium.com.au)

### Friction Stays

Awning and Casement sashes are fitted with heavy duty four bar stainless steel or aluminium friction stays



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# Architectural Information

## Series 616 Magnum™ Awning Window

### Summary



A large variety of sash and glazing bead options allow us to offer splayed or square external finishes that will accept glass up to 24mm thick insulating glass units.

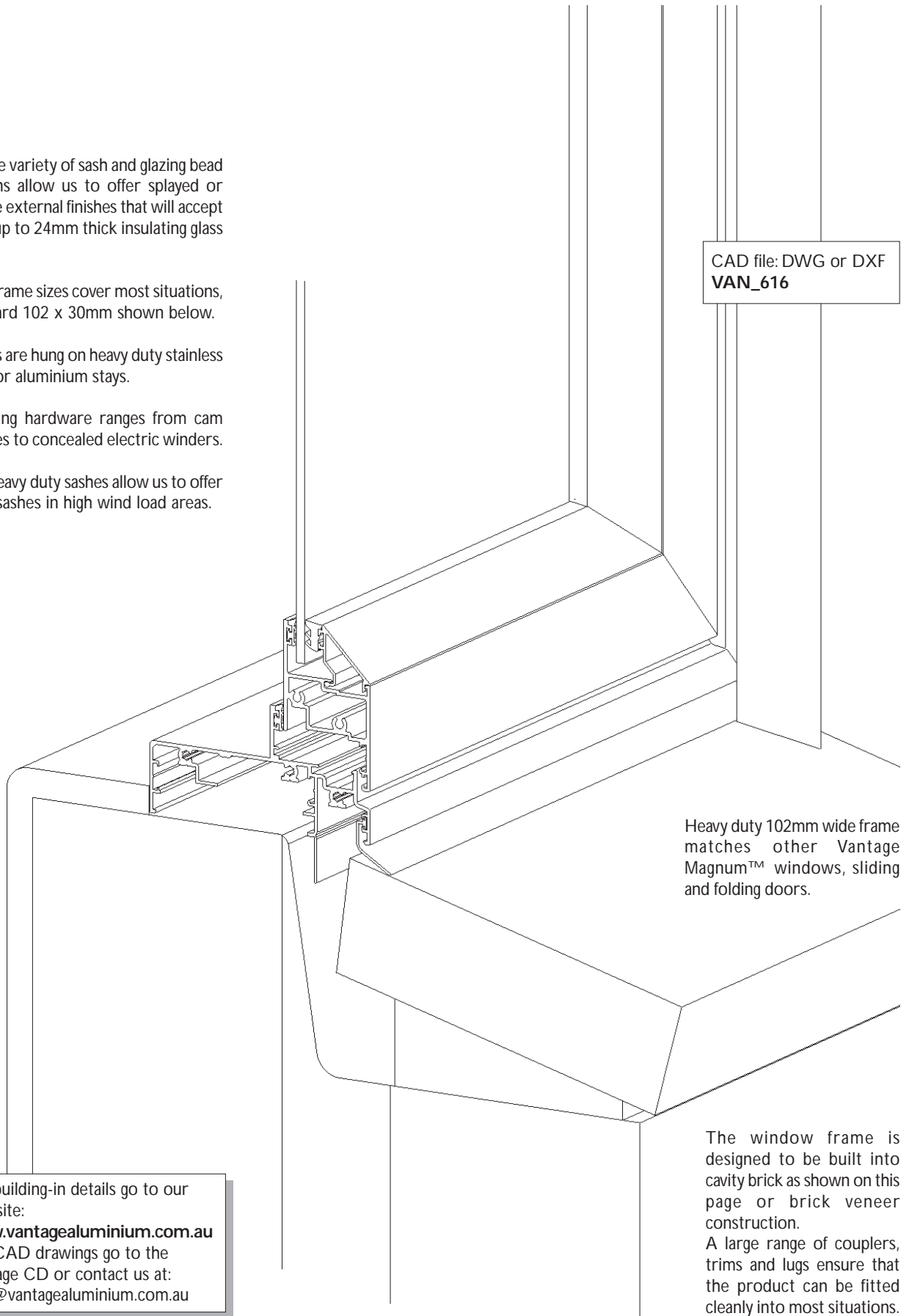
Four frame sizes cover most situations, standard 102 x 30mm shown below.

Sashes are hung on heavy duty stainless steel or aluminium stays.

Opening hardware ranges from cam handles to concealed electric winders.

The heavy duty sashes allow us to offer large sashes in high wind load areas.

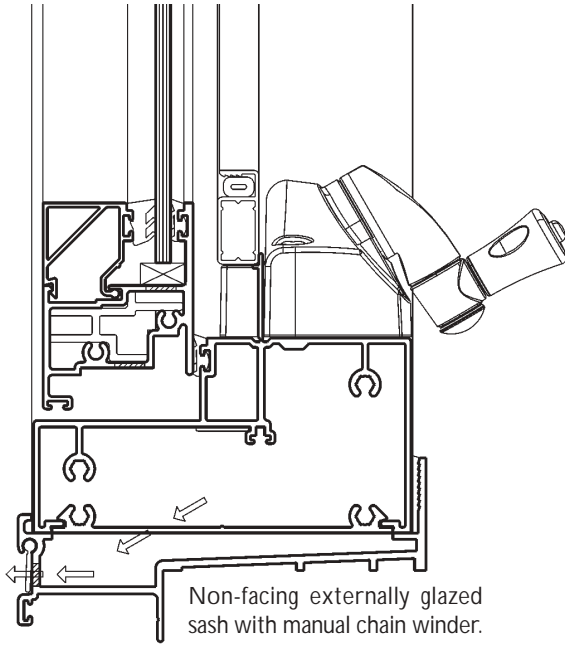
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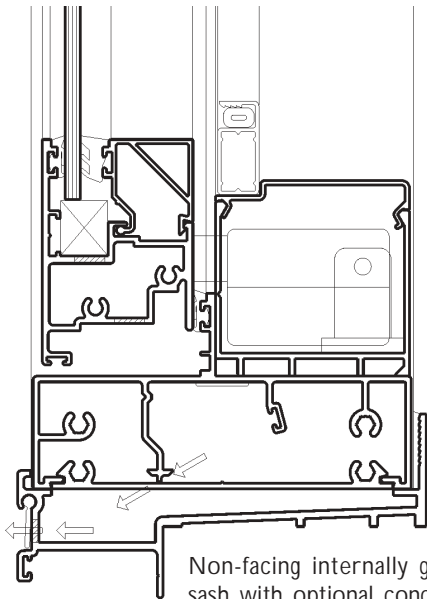
Heavy duty 102mm wide frame matches other Vantage Magnum™ windows, sliding and folding doors.

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.

For building-in details go to our web site:  
[www.vantagealuminium.com.au](http://www.vantagealuminium.com.au)  
For CAD drawings go to the Vantage CD or contact us at:  
[info@vantagealuminium.com.au](mailto:info@vantagealuminium.com.au)



Non-facing externally glazed sash with manual chain winder.



Non-facing internally glazed sash with optional concealed electric winder.

### Alternative Commercial Awning and Casement Windows

If you are looking for a bolder frame consider the AWS Commercial project out sash window Series 466.

Features overview:

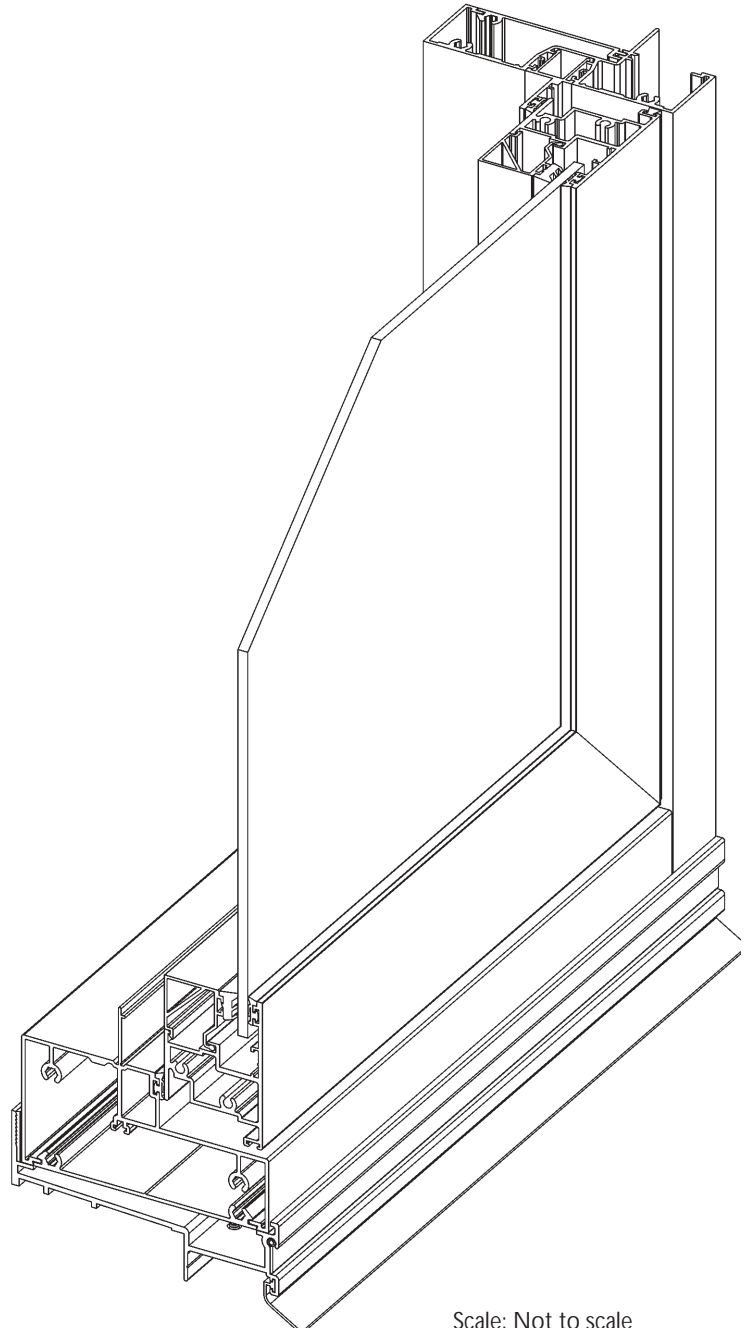
- Bold square commercial frame with built-in nailing fin.
- Nailing fin sub-sill is standard.
- Compatible with conventional CentreGLAZE™ shopfront framing.

Refer AWS Commercial Specifier Manual for more details.

Coloured animated images can be seen on AWS web site:

[awscommercial.com.au](http://awscommercial.com.au)

**Australian Registered Design.**



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#### Alternative Commercial Awning and Casement Windows

If you want very large awnings or casements we have a window that will accept Truth™ winders Series 467.

Features overview:

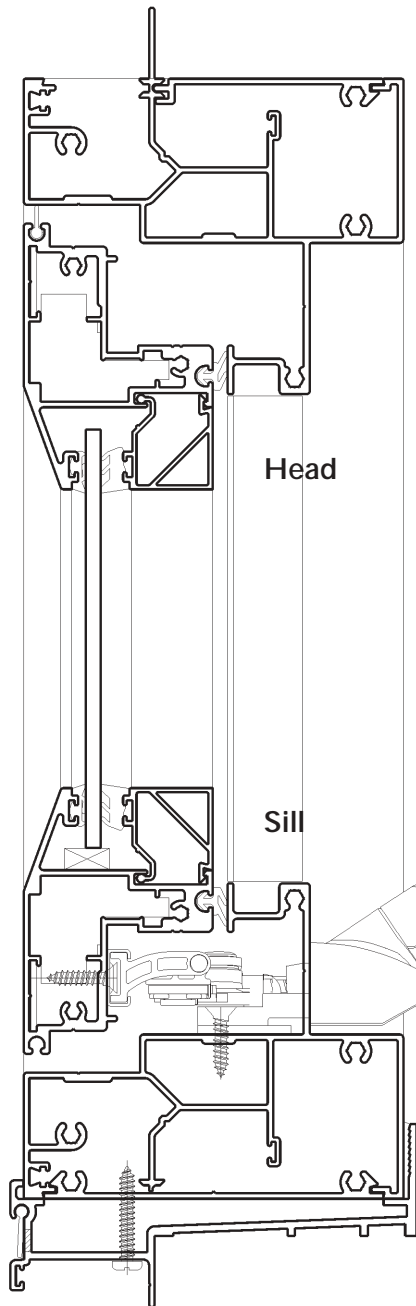
- Casements that will accept flyscreens and winders.
- Bold square commercial frame with built-in nailing fin.
- Nailing fin sub-sill is standard.
- Compatible with conventional CentreGLAZE™ shopfront framing.

Refer AWS Commercial Specifier Manual for more details.

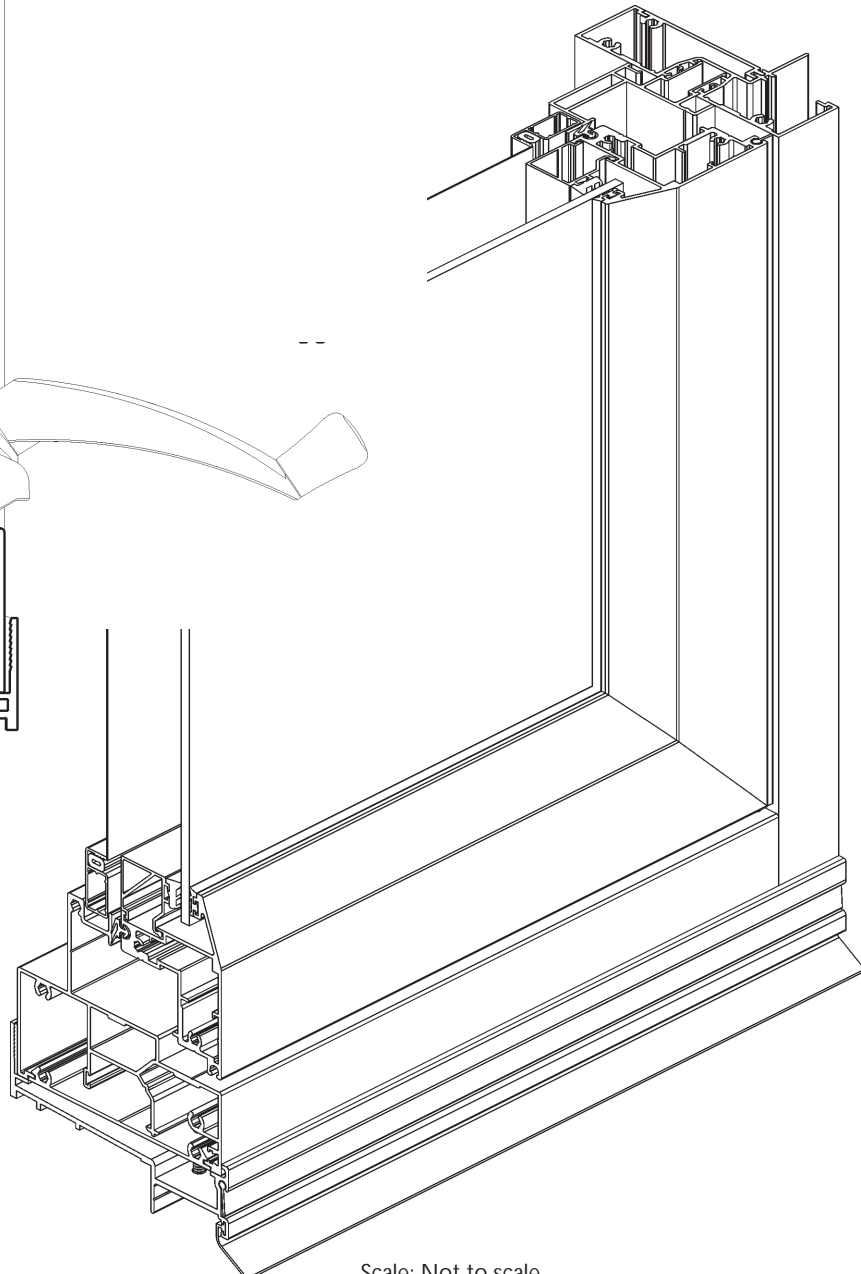
Coloured animated images can be seen on AWS web site:

[awscommercial.com.au](http://awscommercial.com.au)

**Australian Registered Design.**



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# Architectural Information

## Series 616 Magnum™ Awning Window

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36.10	Awnings & casements into shopfront framing.

Series 613 Awning window internal view  
with heaviest sash 72839 into  
heavy tubular frame 72922  
(Not to scale)

