



Architectural Information

Series 517 Awning Window

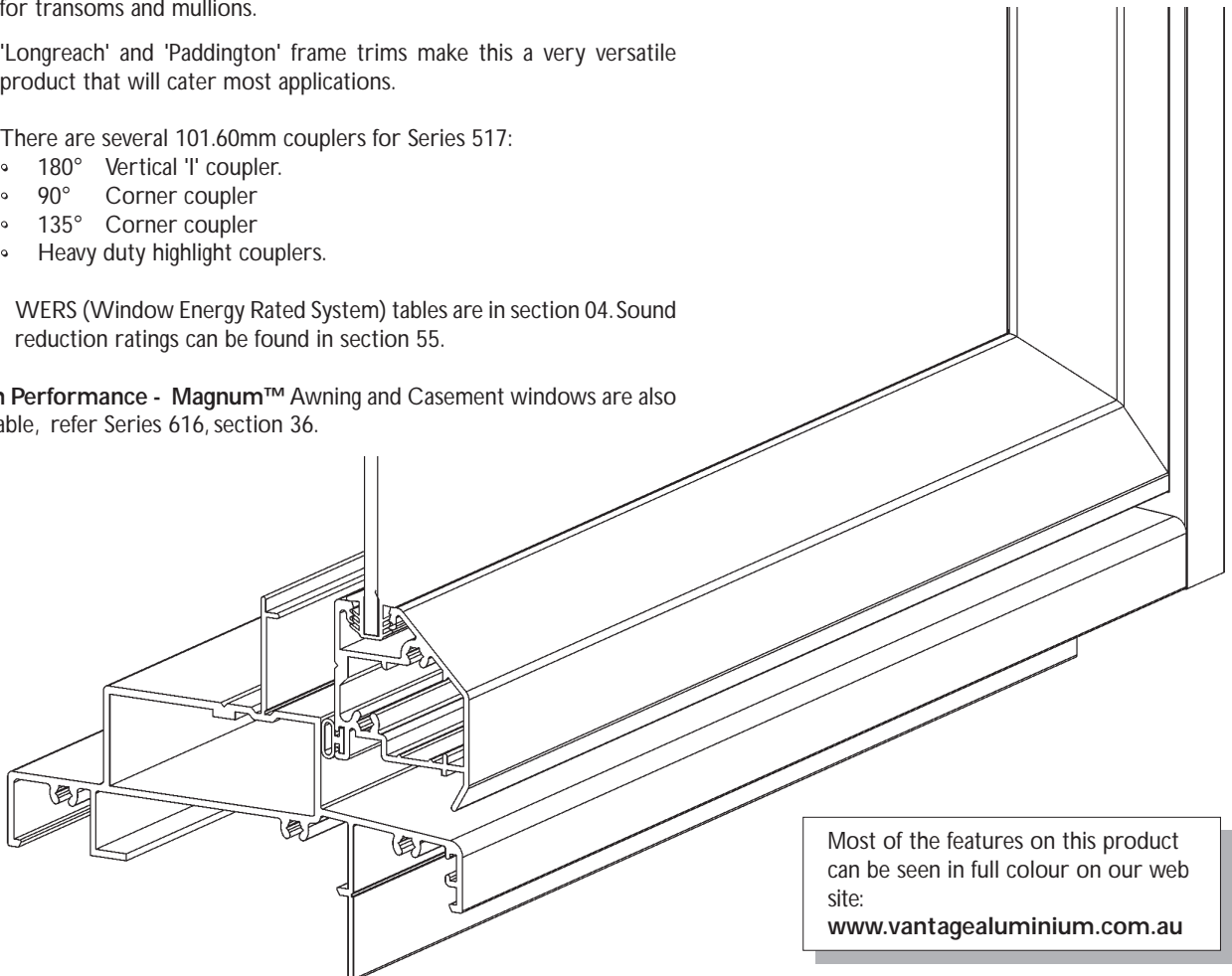
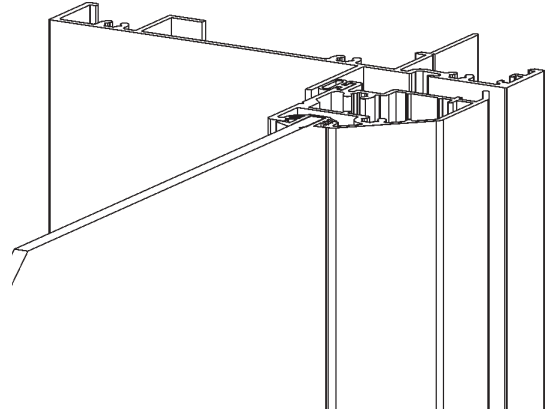
Introduction

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Design Features

1. The 101.60mm wide frame allows the fabrication of chain winder awning windows with the winder contained within the frame line.
2. Very high water resistance (450Pa) allows this window to be used in most situations.
3. This framing system has been designed to align with and snap to the Vantage Series 541 & 543 sliding doors head or jamb (as detailed right) and the Series 548 French doors.
4. The fixed light beading system can match opening sashes.
5. There are three glazing beads to choose from:
 - Splayed - Standard single glazed horizontal bead.
 - Square - Standard single glazed vertical bead.
 - 'L' shape - 19mm Insulating glass double glazed horizontal and vertical beads.
6. Series 517 will snap to the head of Series 541 sliding doors to create fixed or awning highlights. There are three types of couplers, pick the one that suits the width and design wind load.
7. The 101.60mm fixed light framing system can be used when tall fixed lights are required in a high wind load area, refer Pascal tables.
8. The 50mm tubular fixed light transom out of the Series 516 awning window can also be used with this 101.60mm frame.
9. There are tables in these notes showing a variety of typical strengths for transoms and mullions.
10. 'Longreach' and 'Paddington' frame trims make this a very versatile product that will cater most applications.
11. There are several 101.60mm couplers for Series 517:
 - 180° Vertical 'I' coupler.
 - 90° Corner coupler
 - 135° Corner coupler
 - Heavy duty highlight couplers.
12. WERS (Window Energy Rated System) tables are in section 04. Sound reduction ratings can be found in section 55.

High Performance - Magnum™ Awning and Casement windows are also available, refer Series 616, section 36.



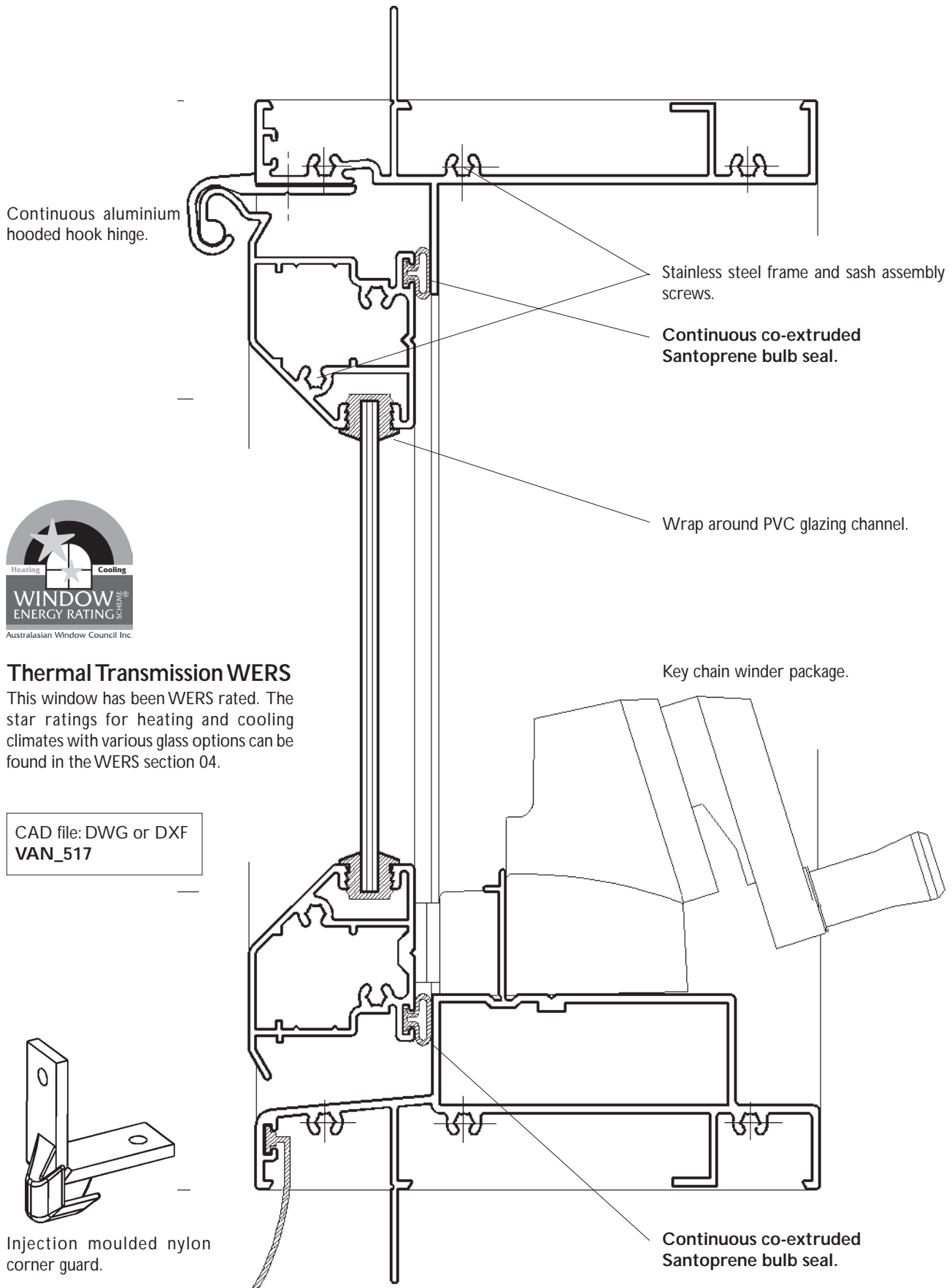
Most of the features on this product can be seen in full colour on our web site:
www.vantagealuminium.com.au

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Series 517 Awning Window

Vertical Section through Awning Window



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.

CAD file: DWG or DXF
VAN_517



Architectural Information

Series 517 Awning Window

Standard Chain Winder & Performance

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Window type	Window		Standard Sash		H.D. Sashes	
	Height	Width	16012		16014 & 16024	
	mm	mm	S	U	S	U
A	1200	910	1244	1998	2038	3627
A	1200	1010	1132	1814	1854	3292
A	1200	1210	970	1547	1589	2809
A	1300	910	962	1681	1576	3051
A	1300	1010	873	1523	1431	2764
A	1300	1210	745	1293	1220	2347
A	1400	910	760	1435	1245	2604
A	1400	1010	689	1298	1128	2355
A	1400	1210	585	1098	958	1993
A	1500	910	611	1239	1001	2249
A	1500	1010	553	1120	906	2032
A	1500	1210			766	1741

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.

A typical assembly has been tested as per the requirements of AS2047,

Ultimate strength rating has been limited to 4500 Pa.

3000 Serviceability ratings were restricted by the maximum water resistance (450Pa) achieved on this product.

Blank Denotes rating under 500 Pa.

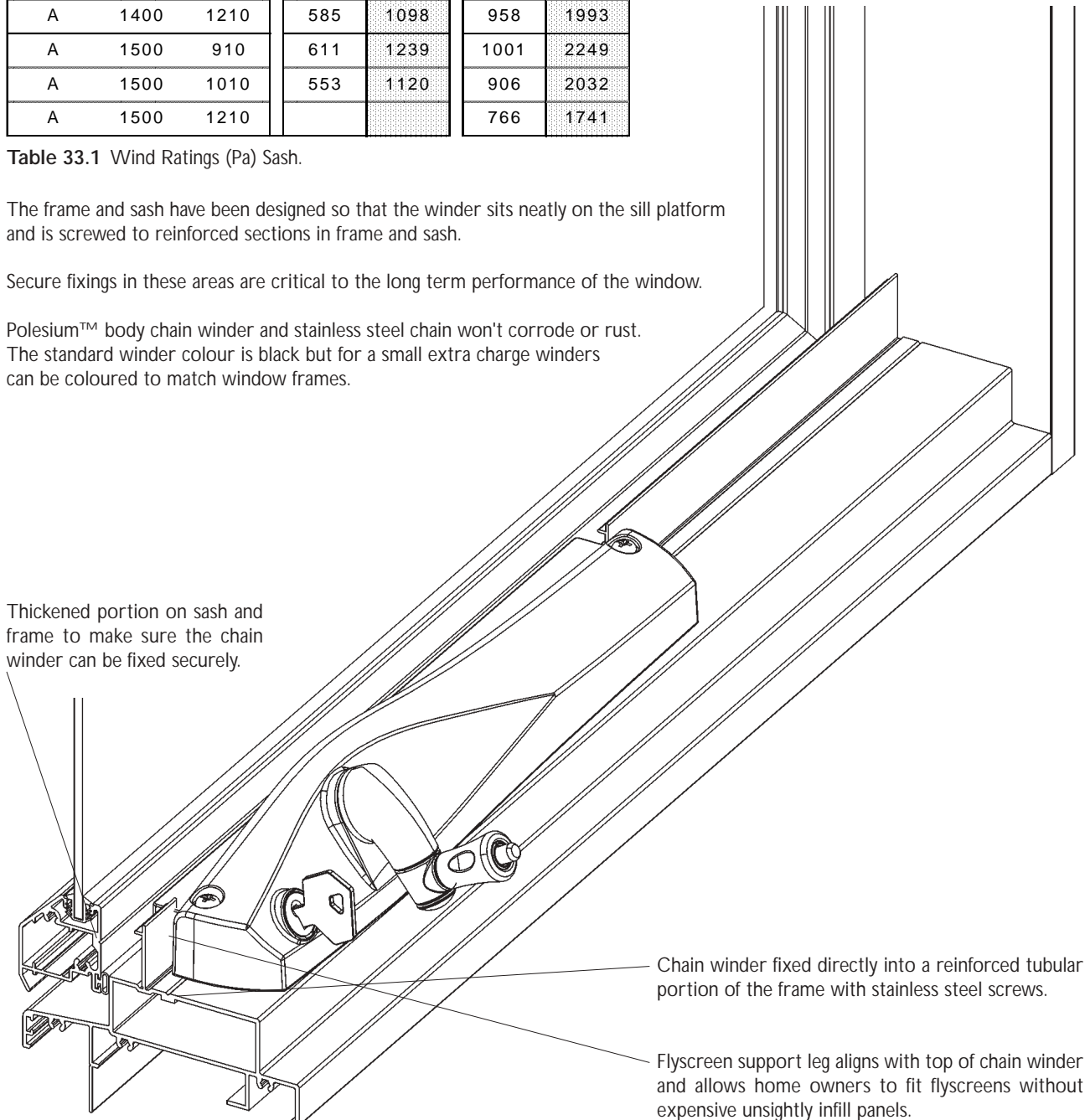
Table 33.1 Wind Ratings (Pa) Sash.

The frame and sash have been designed so that the winder sits neatly on the sill platform and is screwed to reinforced sections in frame and sash.

Secure fixings in these areas are critical to the long term performance of the window.

Polesium™ body chain winder and stainless steel chain won't corrode or rust. The standard winder colour is black but for a small extra charge winders can be coloured to match window frames.

Thickened portion on sash and frame to make sure the chain winder can be fixed securely.



Chain winder fixed directly into a reinforced tubular portion of the frame with stainless steel screws.

Flyscreen support leg aligns with top of chain winder and allows home owners to fit flyscreens without expensive unsightly infill panels.

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Architectural Information

Series 517 Awning Window

Check List



Not all awning windows are the same. Any window company can make a window that will fill the hole in the wall - but if you want your awning windows to keep the elements on the outside where they belong and operate smoothly for years to come there are some things you should check/compare when choosing your supplier.

Features	Vantage 517	Opposition
Does the window comply with the relevant Australian Standards.	Yes	
• Vantage awning and fixed windows have been tested for compliance with Australian Standards.		
Standard awning window has very high 450 Pa water resistance .	Yes	
High performance co-extruded Santoprene bulb sash seal .	Yes	
Fixed sidelights and / or lowlights have splayed beads on the outside to match the adjoining awning sash rails.	Yes	
• This external splayed bead sheds water and dust away from the glass line.		
Heavy duty hardware.	Yes	
• Awning sashes fitted with heavy duty chain winder.		
• Casement windows fitted with stainless steel friction stays and wedgeless cam handles.		
Chain winder with corrosion resisting stainless steel chain (10 year manufacturers warranty) standard.	Yes	
Reinforced hardware fixing points.	Yes	
• The Vantage Series 517 awning has thickened sections (3mm) on both frame and sash where we fix the chain winder and cam handles.		
Chain winder fixed directly to the sill.	Yes	
• The chain winder needs to be fixed as securely as possible to the sill.		
This is why the Series 517 awning has no spacers or packers under the winder and is screwed directly into a thickened section in the sill.		
• The custom winder sill allows the winder to be fitted within the frame line on dedicated winder platform.		
Sash corner guards.	Yes	
• Awning and casement sashes in the open position can be dangerous. Series 516 is fitted with moulded nylon corner guards to blunten the sharp corner and reduce the chance of injuries.		
Water resisting hinge hood.	Yes	
• When the awning sash is in the open or closed position the vulnerable top rail is protected from the elements with a continuous extruded aluminium hinge hood.		
Clean flyscreen installation.	Yes	
• The awning sill has a built-in upstand to accept flyscreen installation.		
• Building in this flyscreen support leg will save the owner money when they come to fit flyscreens as no trims or infills are required..		
Window can be coupled to sliding doors or other windows without visible rivets.	Yes	
Rounded corner on the frame and sash members where ever possible.	Yes	
• Modern paint finishes don't like sharp corners.		

These are what we see as the most important points to be checked - Compare us with the others.

Sound Reduction

A number of glass combinations have been tested in this awning window. Opening sash was fitted with co-extruded Santoprene bulb seal on all sides.

- 3mm Annealed glass 30dB(A) RW31
- 6.38mm Laminated glass 34dB(A) RW34
- 10.38mm Laminated glass 36dB(A) RW37
- 20mm Insulating glass unit 30dB(A) RW30

Go to the SoundOUT section 55 for other options.



Architectural Information

Series 517 Awning Window

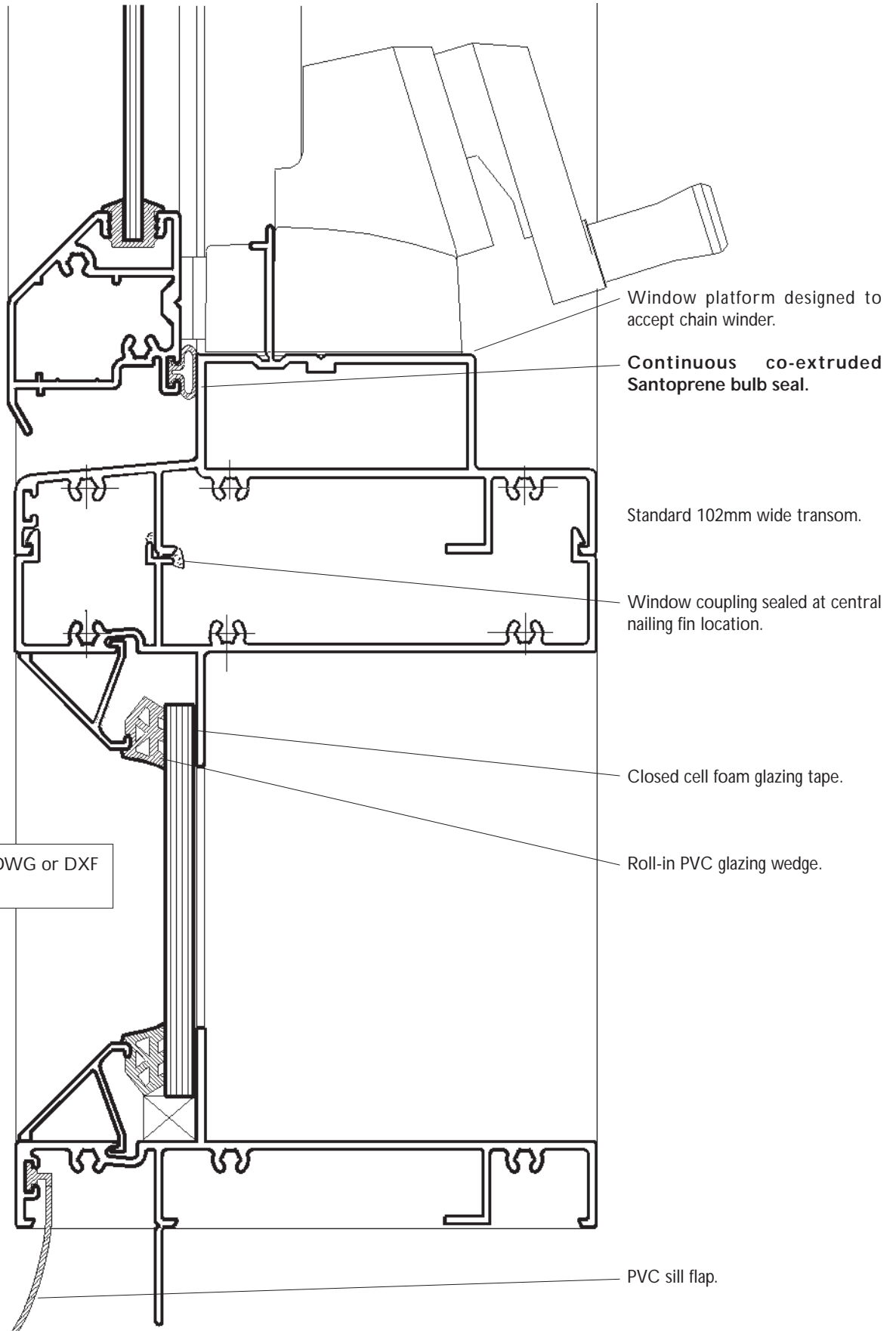
Vertical Section through Awning / Fixed Window

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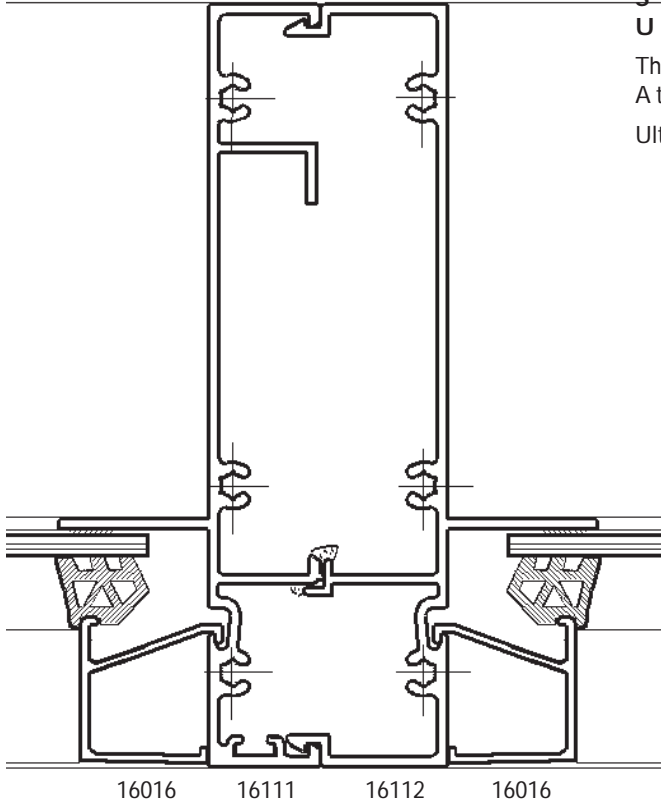
Transom Ratings (Pa)

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. A typical assembly has been tested as per the requirements of AS2047,

Ultimate strength rating has been limited to 4500 Pa.



Frame Height mm	Mullion Centres mm	Mullion Ratings (Pa)	
		S	U
1800	900	2556	3834
1800	1200	2063	3095
2100	900	1834	2751
2100	1200	1449	2173
2400	900	1383	2074
2400	1200	1078	1618

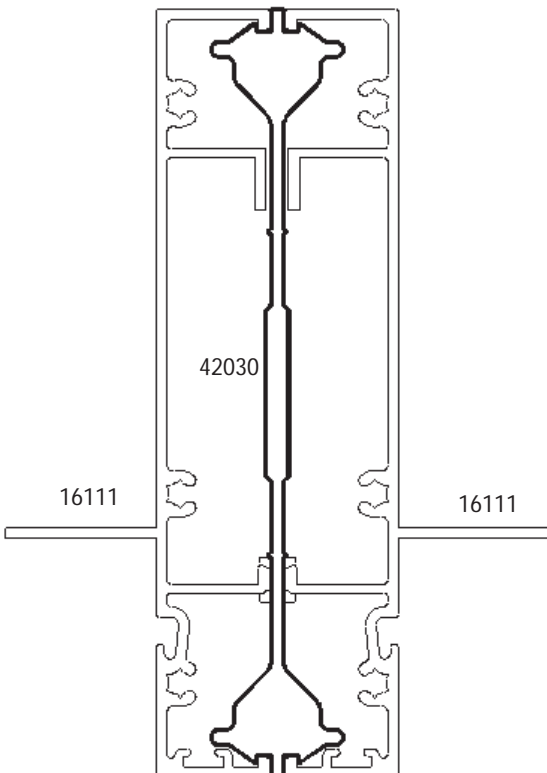
Table 33.2 Wind Ratings (Pa) Mullion 16112 with 16111.

16111 with 16112
 mullion
 $I_{xx} = 674 \times 10^3 \text{mm}^4$

Snap together weatherproof mullions

CAD file: DWG or DXF
VAN_517

16111 with 42030 and 16111
 mullion
 $I_{xx} = 1193 \times 10^3 \text{mm}^4$



2mm

Frame Height mm	Mullion Centres mm	Mullion Ratings (Pa)	
		S	U
2100	900	3000	4500
2100	1200	2675	4013
2400	900	2554	3830
2400	1200	1991	2987
2700	900	1997	2995
2700	1200	1544	2316
3000	900	1606	2409
3000	1200	1234	1851

Table 33.3 Wind Ratings (Pa) Mullion 16111 both side of 42030 coupler.



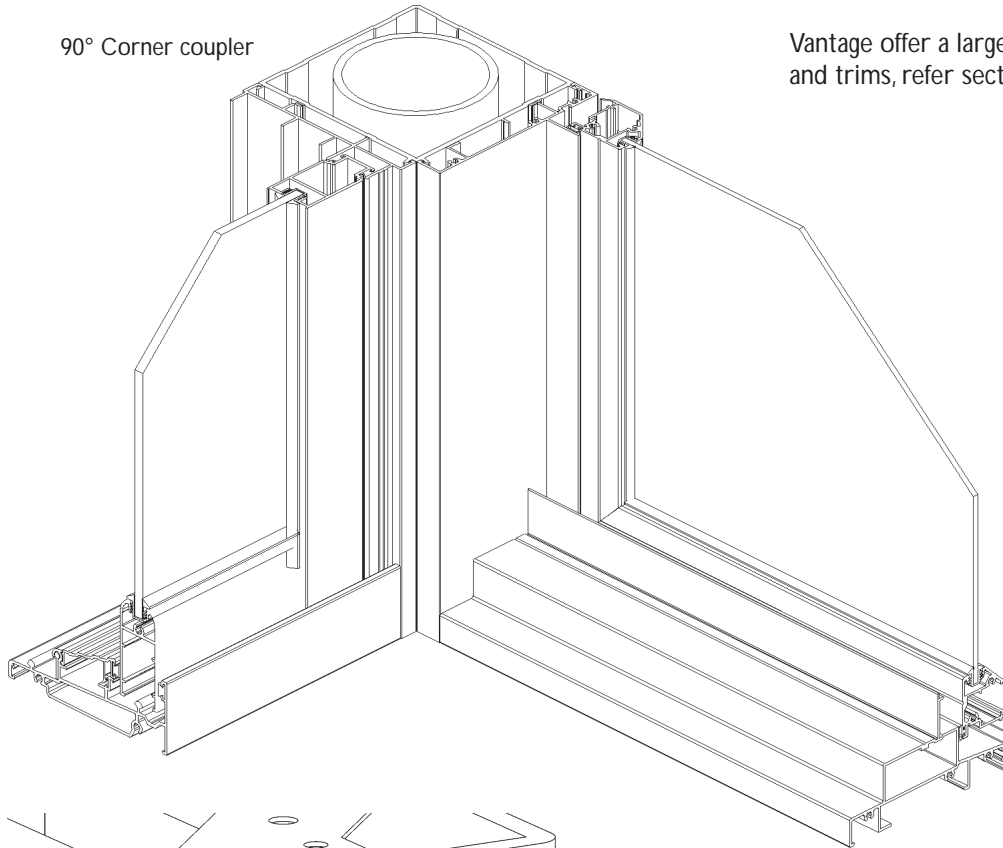
Architectural Information

Series 517 Fixed Window

Couplers

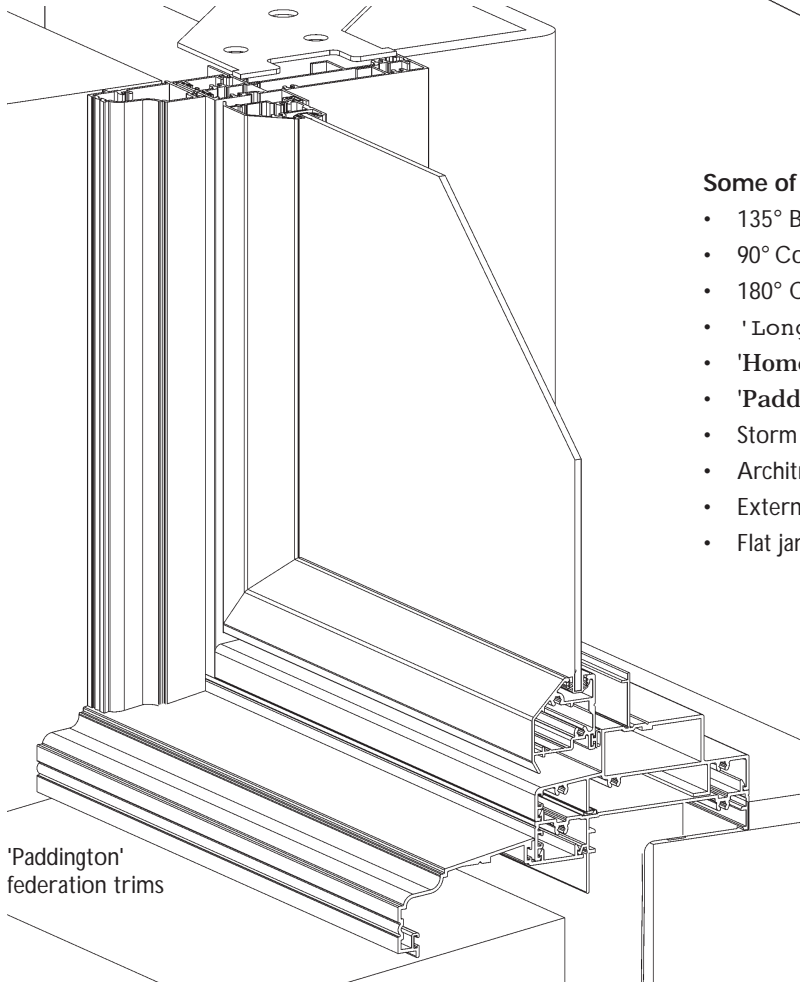
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90° Corner coupler



Vantage offer a large range of snap on couplers and trims, refer section 10 for full details.

CAD file: DWG or DXF
VAN_COUPLERS



'Paddington'
federation trims

Some of the couplers and trims we can offer:

- 135° Bay coupler for 102mm windows or 102mm doors.
- 90° Corner coupler for 102mm windows or 102mm doors.
- 180° Coupler for 102mm windows.
- 'Longreach' frame extender.
- 'Homebush' frame extender.
- 'Paddington' federation trims (illustrated lower left).
- Storm moulds.
- Architraves.
- External flange adaptors.
- Flat jamb closer.

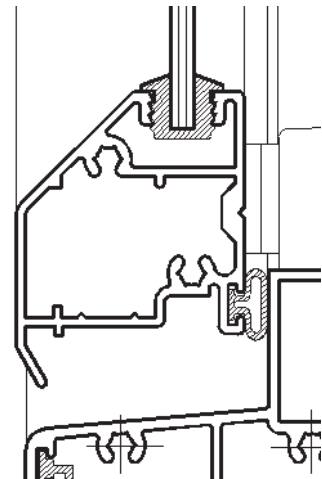


Series 616 Alternative

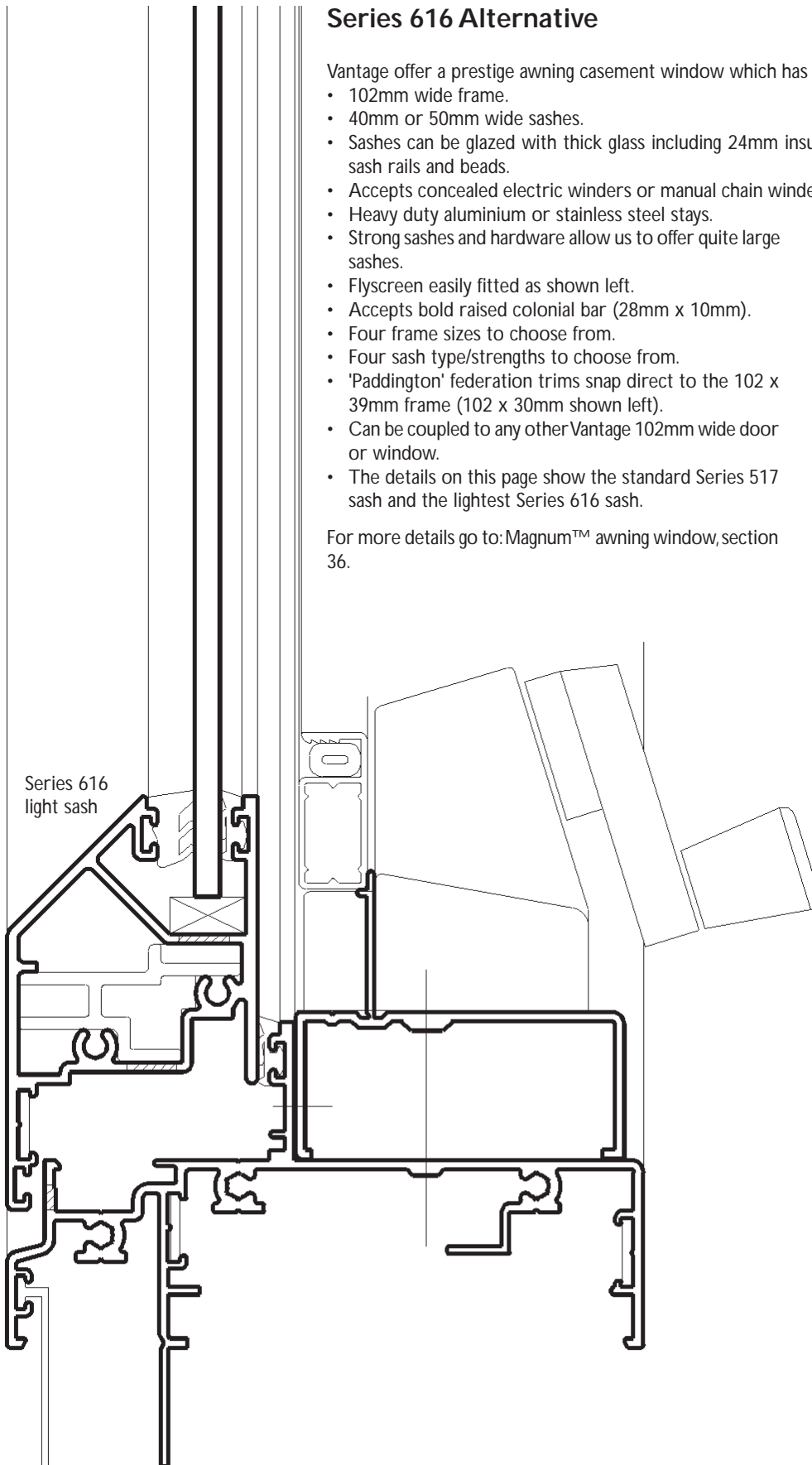
Vantage offer a prestige awning casement window which has a number of additional features :

- 102mm wide frame.
- 40mm or 50mm wide sashes.
- Sashes can be glazed with thick glass including 24mm insulating glass units with dedicated sash rails and beads.
- Accepts concealed electric winders or manual chain winders as shown left or cam handles.
- Heavy duty aluminium or stainless steel stays.
- Strong sashes and hardware allow us to offer quite large sashes.
- Flyscreen easily fitted as shown left.
- Accepts bold raised colonial bar (28mm x 10mm).
- Four frame sizes to choose from.
- Four sash type/strengths to choose from.
- 'Paddington' federation trims snap direct to the 102 x 39mm frame (102 x 30mm shown left).
- Can be coupled to any other Vantage 102mm wide door or window.
- The details on this page show the standard Series 517 sash and the lightest Series 616 sash.

For more details go to: Magnum™ awning window, section 36.



Series 517 sash



Series 616 light sash

CAD file: DWG or DXF
VAN_616



Architectural Information

Series 517 Awning/Fixed Window

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33.8	Alternative windows.

Series 517 Awning window internal view
with standard manual chain winder
(Not to scale)

