



Architectural Information

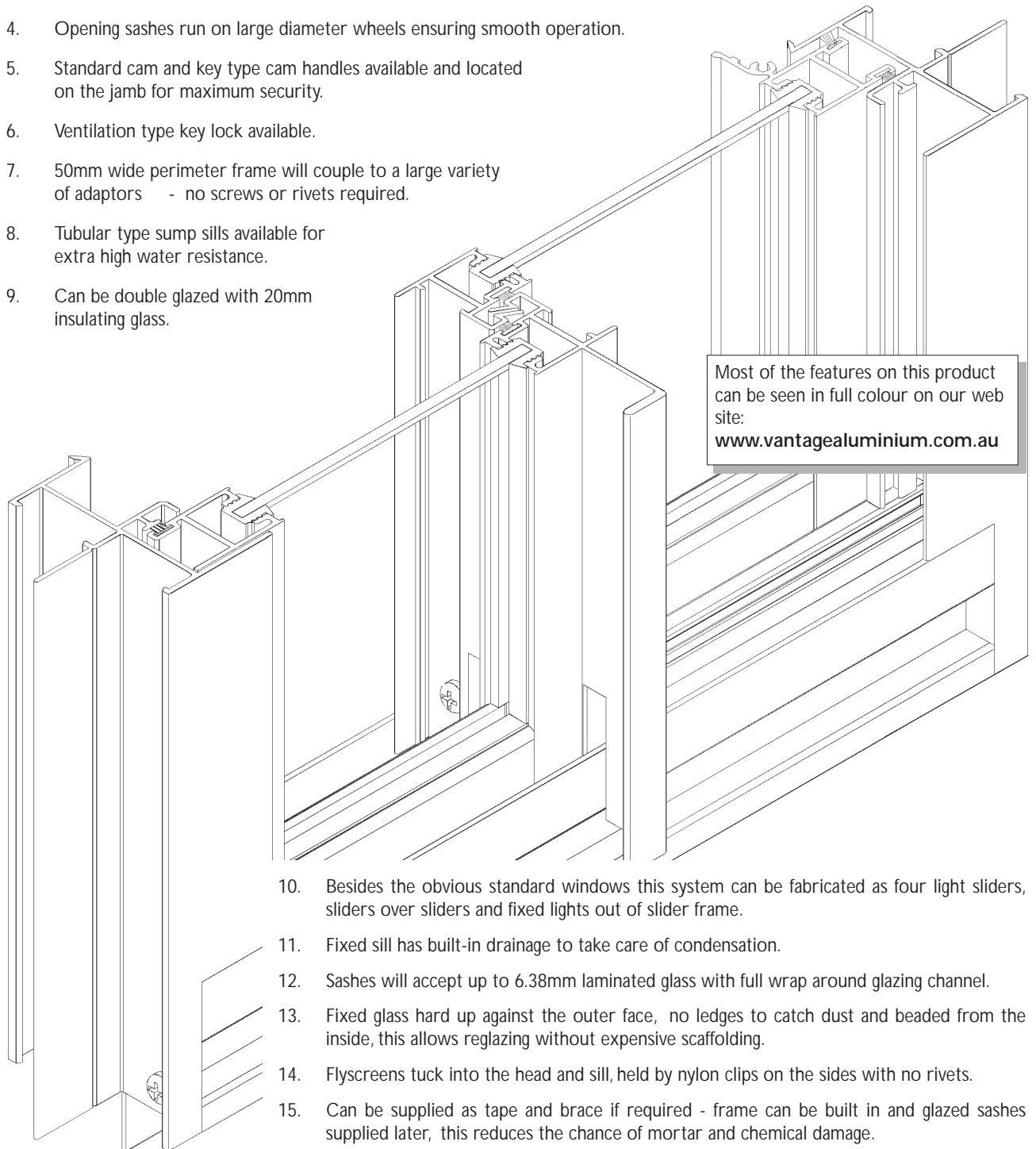
Series 502-504 Sliding Window

Introduction

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Date: May 06
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Scale: Not to scale

Design Features

1. Successfully tested for compliance with Australian Standard AS 2047.
2. Optional meeting stile strengths cover a large variety of design wind load areas.
3. It is easy to re-hand the sliding window after installation - change type 'SF' to 'FS'.
4. Opening sashes run on large diameter wheels ensuring smooth operation.
5. Standard cam and key type cam handles available and located on the jamb for maximum security.
6. Ventilation type key lock available.
7. 50mm wide perimeter frame will couple to a large variety of adaptors - no screws or rivets required.
8. Tubular type sump sills available for extra high water resistance.
9. Can be double glazed with 20mm insulating glass.



10. Besides the obvious standard windows this system can be fabricated as four light sliders, sliders over sliders and fixed lights out of slider frame.
11. Fixed sill has built-in drainage to take care of condensation.
12. Sashes will accept up to 6.38mm laminated glass with full wrap around glazing channel.
13. Fixed glass hard up against the outer face, no ledges to catch dust and beaded from the inside, this allows reglazing without expensive scaffolding.
14. Flyscreens tuck into the head and sill, held by nylon clips on the sides with no rivets.
15. Can be supplied as tape and brace if required - frame can be built in and glazed sashes supplied later, this reduces the chance of mortar and chemical damage.
16. WERS (Window Energy Rated System) tables are in section 04. Sound reduction ratings can be found in section 55.
17. For high performance - Upmarket and/or larger panels refer Magnum™ Series 601 and 602, sections 16 and 17.

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Series 502-504 Sliding Window

Check List



Not all sliding windows are the same. Sure they cover a hole in the wall - but if you want your windows to perform, 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 502-504	Opposition
Does the window comply with the relevant Australian Standards. <ul style="list-style-type: none"> All windows should comply but it pays to ask for written proof. 	Yes	
Coastal installations should be upgraded to 200 Pa, 300 Pa or 450 Pa water resistance.	Yes	
Fixed lights and opening sashes can be reglazed from inside the building. <ul style="list-style-type: none"> Reglazing an externally glazed window requires expensive scaffolding on elevated or first floor situations. Not a problem for the window manufacturer but could be very expensive for the home owner later on. 	Yes	
Condensation on fixed lowlights can be drained back to the outside. <ul style="list-style-type: none"> In colder areas glass can condensate and produce pools of water on the sill members, if this moisture can't be drained back to the outside staining may occur on timber linings. The patented Vantage drainage system transfers moisture back to the outside. 	Yes	
Fixed lights can be beaded off with matching extruded aluminium glazing beads.	Yes	
Direction of slide can be changed without removing the window from building. <ul style="list-style-type: none"> If the home owner should change their mind on the direction of slide after the windows are installed it's possible to easily re-hand the window without removing it from the building. 	Yes	
Large diameter (14mm) wheels in height adjustable wheel carriage. <ul style="list-style-type: none"> Large diameter wheels turn more easily and therefore will last longer. If a wheel stops turning it will usually wear very quickly and the bearing shaft can quickly start damaging the running rail - if running rails get damaged they are expensive to repair. 	Yes	
Very heavy sashes can be fitted with nylon tyred ball bearing wheels if necessary.	Yes	
No ugly visible rivets fixing the centre mullions. <ul style="list-style-type: none"> As the fixed sash on Series 504 is secretly fixed no unsightly screws are visible. 	No	
Height adjustable cam handles are located on the jamb.	Yes	
Optional key lock cam handle available. <ul style="list-style-type: none"> We can fit a key lock cam when we fabricate your windows or you can easily fit them later. Jamb key locks can be colour matched to the window frame. 	Yes	
Optional Centre/Ventilation key lock available. <ul style="list-style-type: none"> The Vantage custom vent lock can lock the sash in the closed or partly open positions. No unsightly visible holes drilled in your window sills. 	Yes	
Clean flyscreen installation. <ul style="list-style-type: none"> Flyscreens are hard up against the outer face of the window - no spider recesses. Flyscreens held in place with non rusting nylon clips and screens can be removed from inside. 	Yes	
Removable barrier type flyscreens (fitted with expanded aluminium security mesh). <ul style="list-style-type: none"> No spider recesses on the outside. Can be removed from the inside by the home owner to allow future cleaning etc. 	Yes	
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. <ul style="list-style-type: none"> Modern paint finishes don't like sharp corners. 	Yes	
No meeting stile holes or holes with temporary stick on patches. <ul style="list-style-type: none"> These holes can let in water and insects. 	Yes	

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



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Series 502-504 Sliding Window

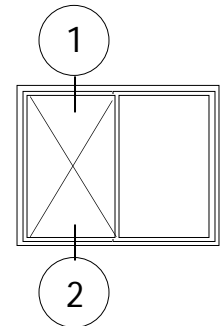
Vertical Section through Opening Sash

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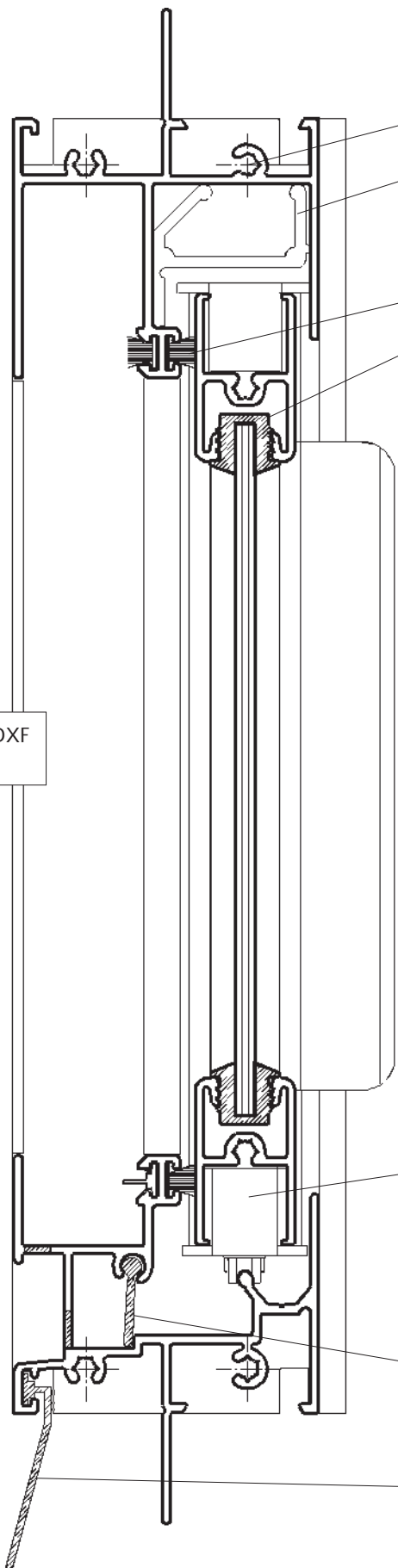
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CAD file: DWG or DXF
VAN_504



Stainless steel assembly screws.

Injection moulded nylon anti-lift block fitted directly over the lock stile when keylock cam handle is fitted.

Weatherpile mohair seal.

Wrap around PVC glazing channel protects the glass.

Standard injection moulded nylon cam handle located on the jamb .

or alternative

Key lock cam handle can be supplied if specified when ordering. Likewise this lock can be ordered in colours.

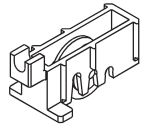
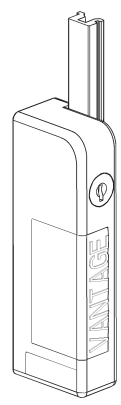
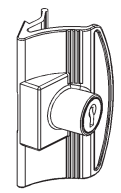
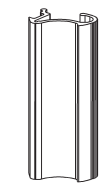
We can also offer

Ventilation key lock that throws the locking bolt into the window head cavity. This ventilation lock would be used in conjunction with non-key jamb latch.

Large diameter roller carriage ensures smooth sash operation for years to come.

Hinging drain hole cover flap reduces air infiltration and water penetration. This flap also prevents insect intrusion through the drainage holes.

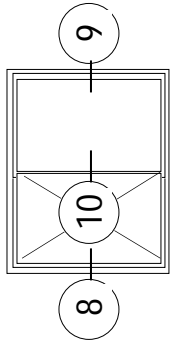
PVC sill flap seals the window sill to the structure and allows for future settlement without leaving unsightly holes.



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Series 502-504 Sliding Window

Horizontal Section through 'SF' Window



Window		Meeting Stiles	
Height	Width	Heavy	
mm	mm	S	U
1200	1310	2362	3543
1200	1510	2120	3180
1200	1810	1894	2840
1300	1310	1964	2946
1300	1510	1751	2627
1300	1810	1544	2315
1500	1310	1424	2136
1500	1510	1258	1887
1500	1810	1090	1635

Table 12.1 Wind Ratings (Pa) heavy meeting stiles.

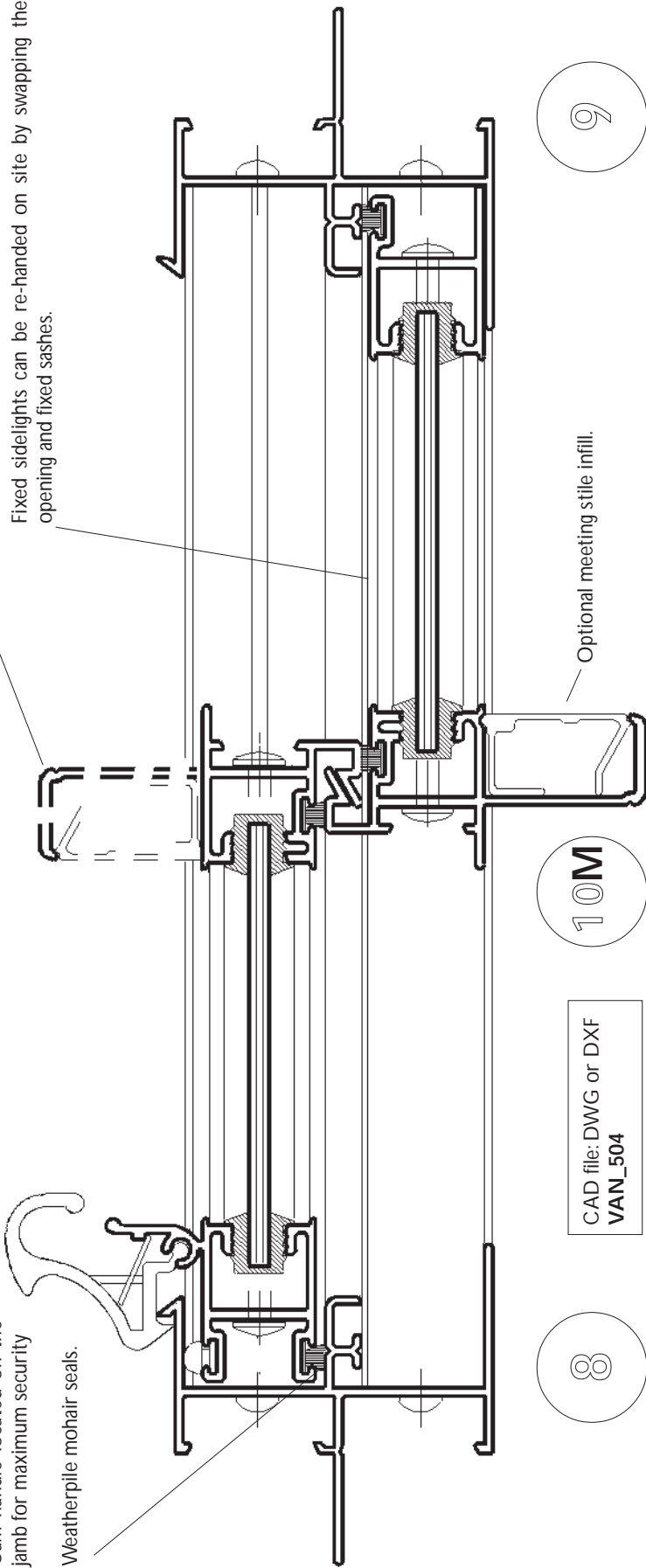
S = Serviceability limit state (deflection = L/150).
U = Ultimate strength limit state (factored yield strength = 104 MPa).
 These tables have been calculated using nominal section properties.
 A typical assembly has been tested as per the requirements of AS2047,
 Ultimate strength rating has been limited to 4500 Pa.
 3000 Serviceability ratings were restricted by the maximum water
 resistance (450Pa) achieved on this product.
 Blank Denotes rating under 500 Pa.

Double weatherpile full interlocking meeting stiles.

Heavy meeting stile combination shown dotted.

Fixed sidelights can be re-handed on site by swapping the opening and fixed sashes.

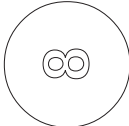
Cam handle located on the jamb for maximum security
 Weatherpile mohair seals.



Optional meeting stile infill.



CAD file: DWG or DXF
VAN_504





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Series 502-504 Sliding Window

Vertical Section through Fixed Sash

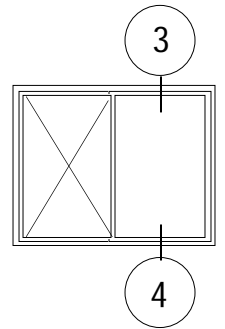
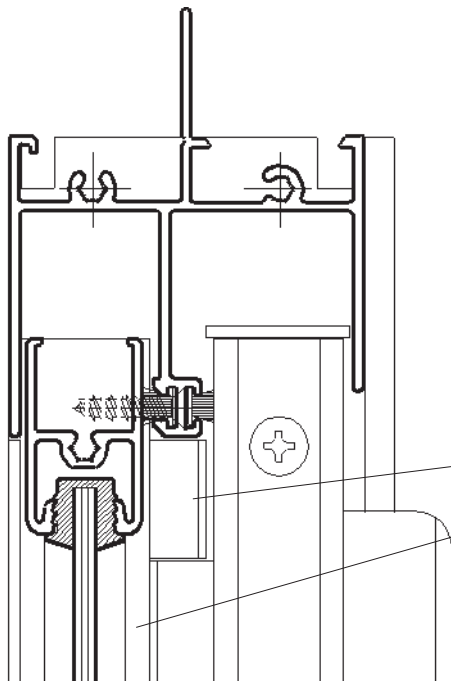
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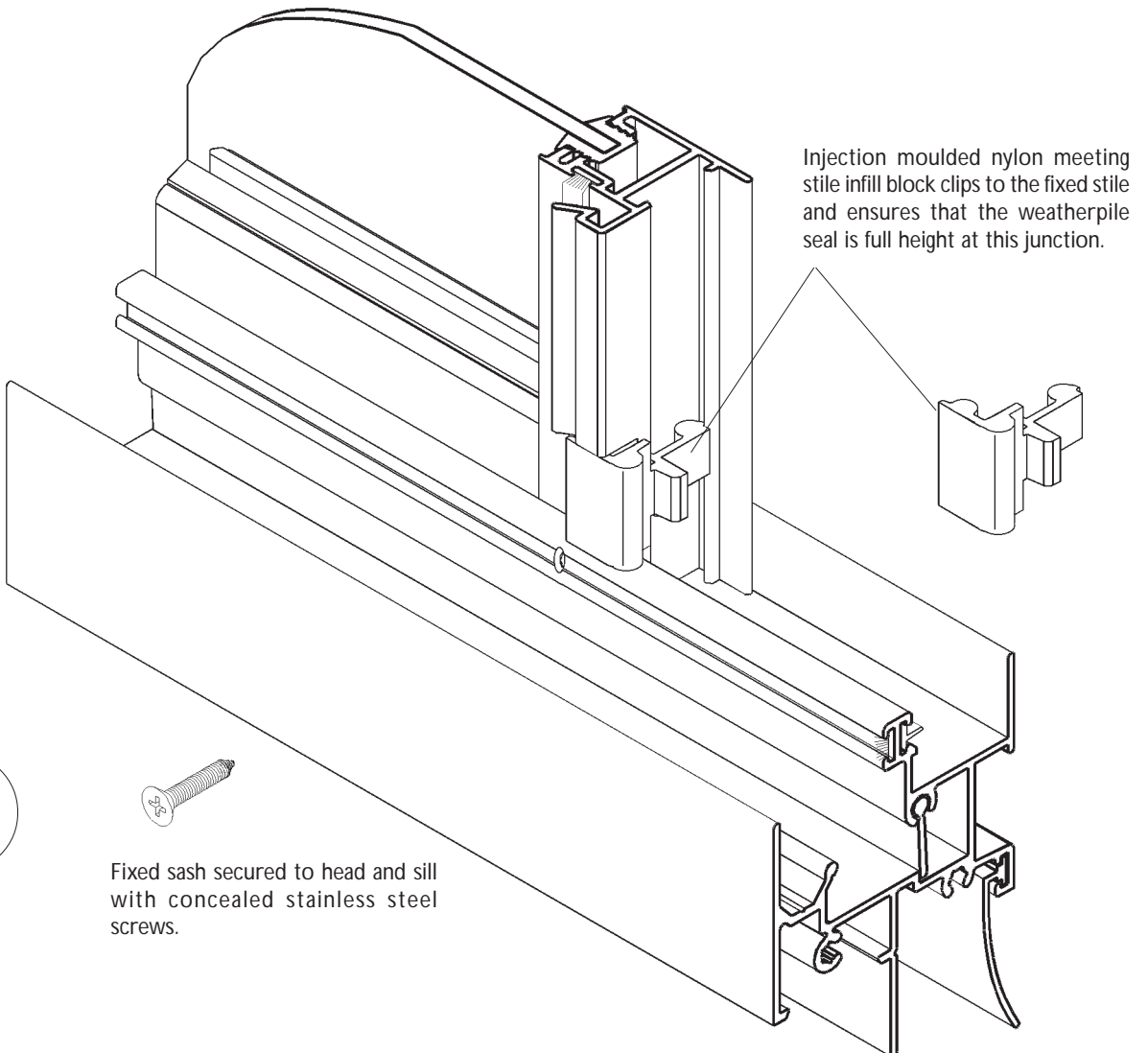
3



Injection moulded nylon meeting stile infill block.

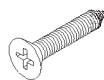
This fixed sash can easily be re-handed on site (ie. change type 'SF' windows to type 'FS') by the home owner.

The fixed sash can be removed from the frame and could be taken to the glazier if a breakage should occur.



Injection moulded nylon meeting stile infill block clips to the fixed stile and ensures that the weatherpile seal is full height at this junction.

4



Fixed sash secured to head and sill with concealed stainless steel screws.

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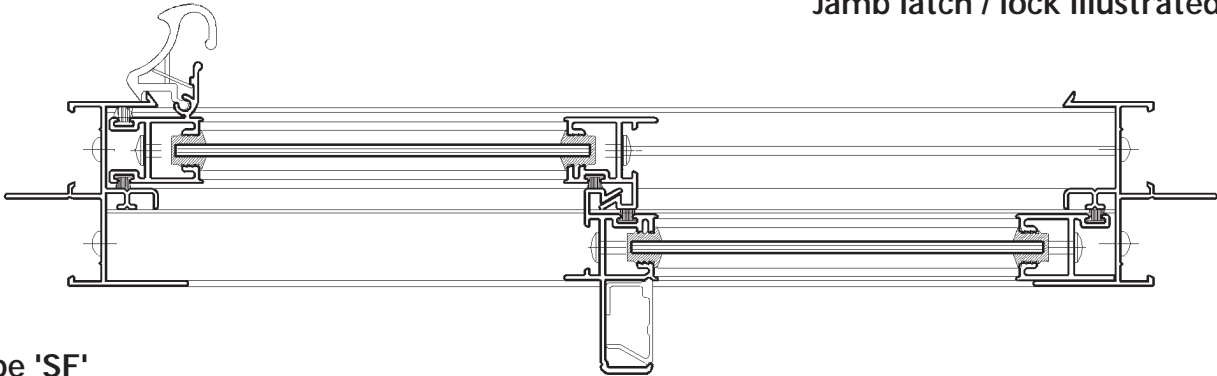
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Series 502-504 Sliding Window

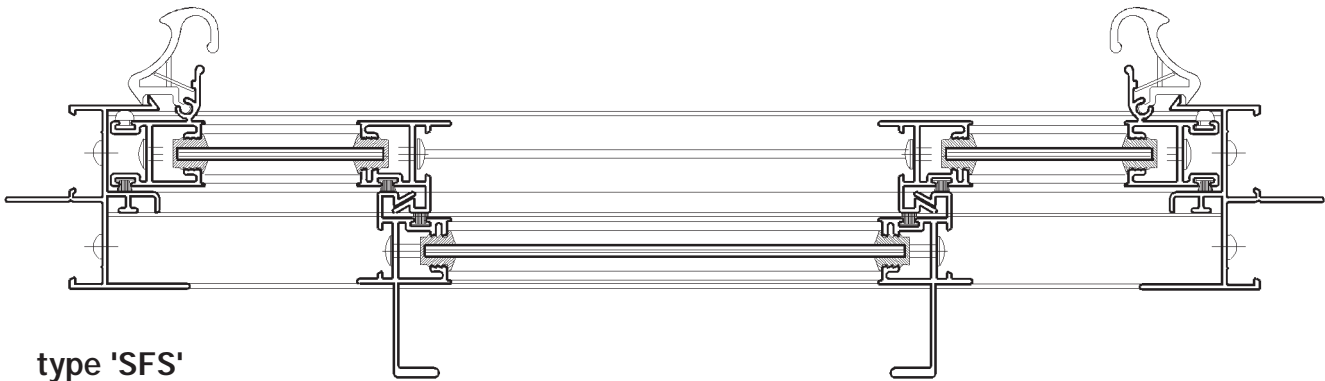
Horizontal Section through Sliding Windows



Standard
Jamb latch / lock illustrated

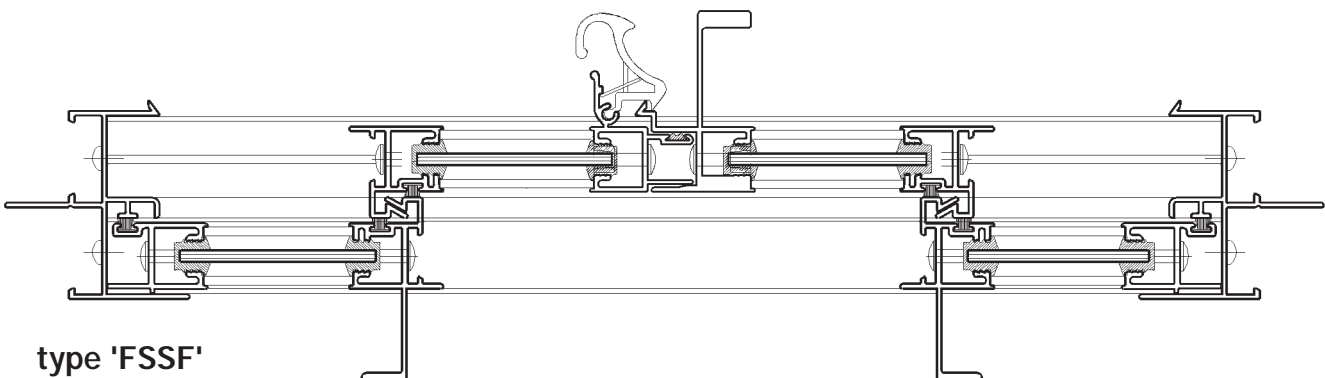


type 'SF'



type 'SFS'

Four light sliding windows have a customised pair of meeting stiles to ensure maximum weather performance.



type 'FSSF'



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Series 502-504 Sliding Window

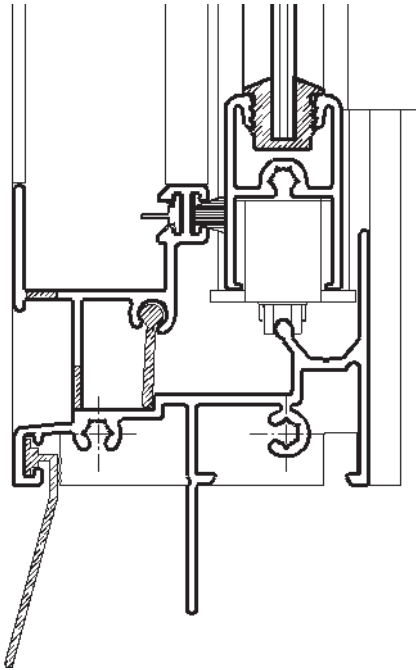
Sill Water Resistance Treatment

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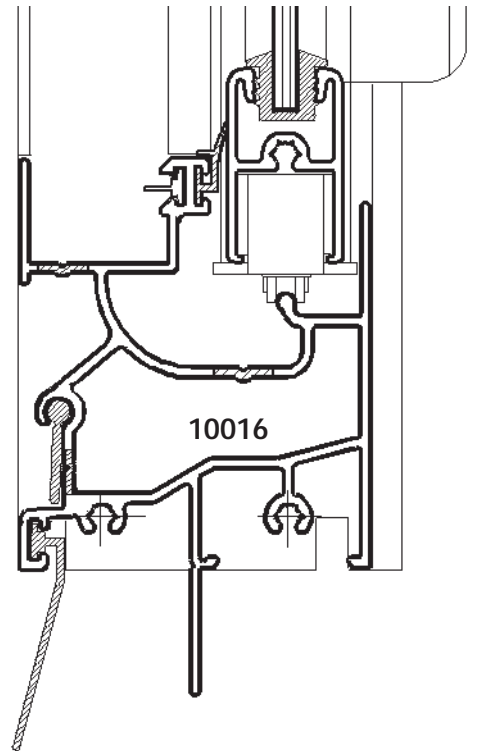
Scale: Full size



Standard
150Pa Water rated slider sill
Fitted with weatherpile mohair seal.

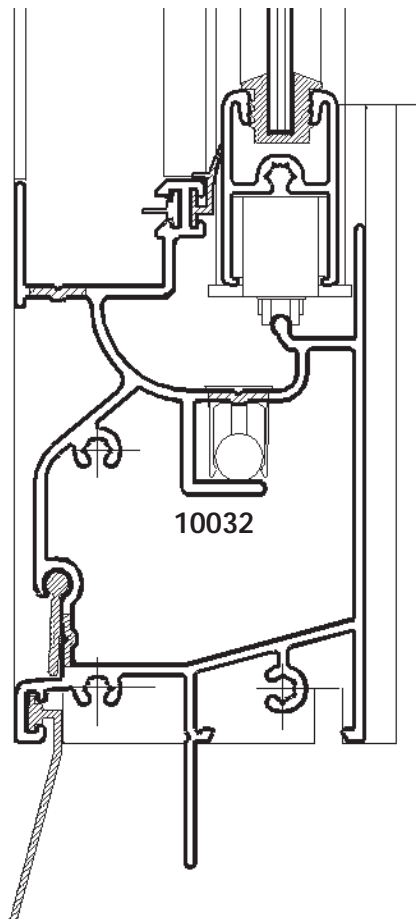
200Pa
Water rated slider sill
Fit co-extruded PVC dog leg fin seal to sill in lieu of the standard weatherpile mohair seal and the water rating will improve from 150Pa to 200Pa resistance.

CAD file: DWG or DXF
VAN_504



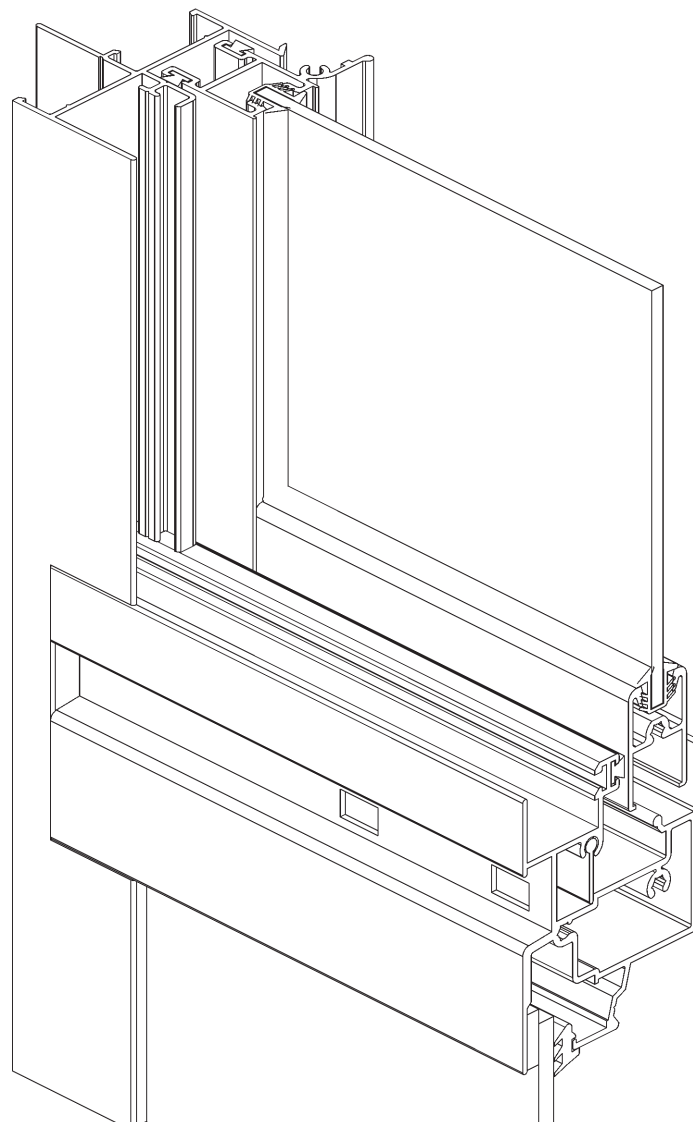
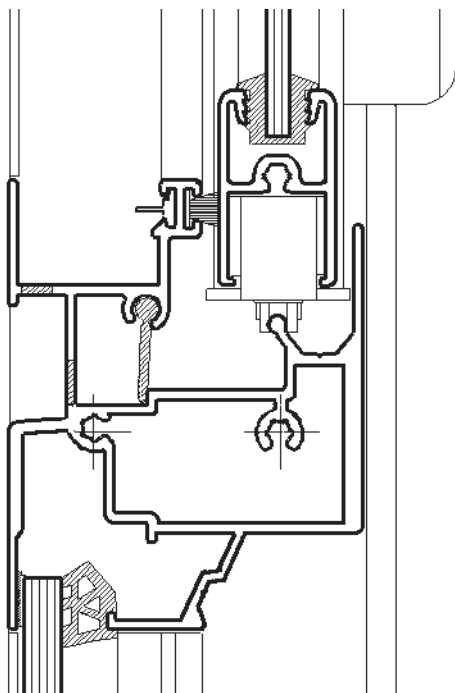
300Pa Water rated slider sill

Use tubular sill and fit co-extruded PVC dog leg fin seal to sill as detailed.

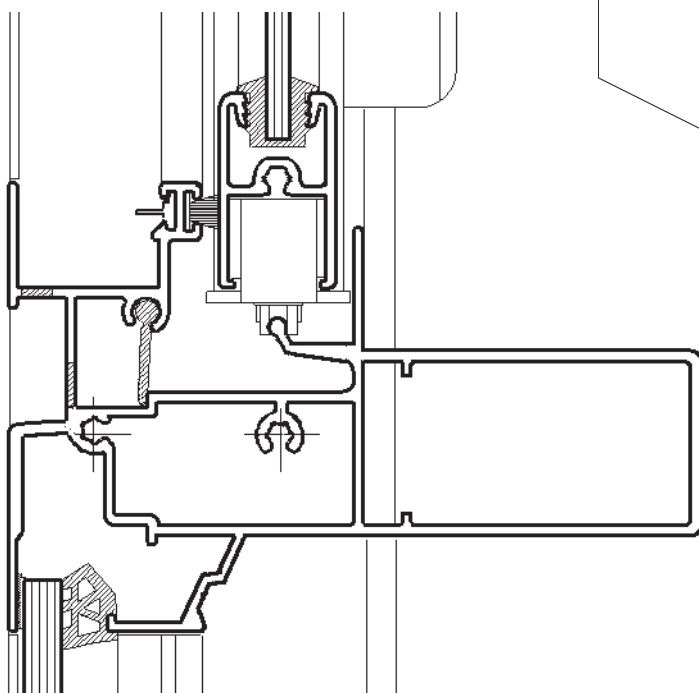


450Pa Water rated
slider sill

Use 75mm tubular sill and fit co-extruded PVC dog leg fin seal and anti blow back ball valves to sill as detailed.



CAD file: DWG or DXF
 VAN_504



Water Rating
 As the wind load rises the water rating sill changes as shown on previous page.

Transom Strength

This table is a guide to the transom strength.
 Highlight = 1200mm on 1800mm overall height.
 Highlight = 1300mm on 2100mm overall height.

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

type	Window		Transom	
	Height	Width	Heavy	
	mm	mm	S	U
SFS	1800	2110	1560	2340
SFS	1800	2410	1168	1753
SFS	1800	2710	909	1364
SFS	1800	3010	729	1093
SFS	2100	2110	1361	2042
SFS	2100	2410	1015	1522
SFS	2100	2710	788	1181
SFS	2100	3010	630	945

Table 12.2 Wind Ratings (Pa) Heavy transom.



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Series 502-504 Sliding Window

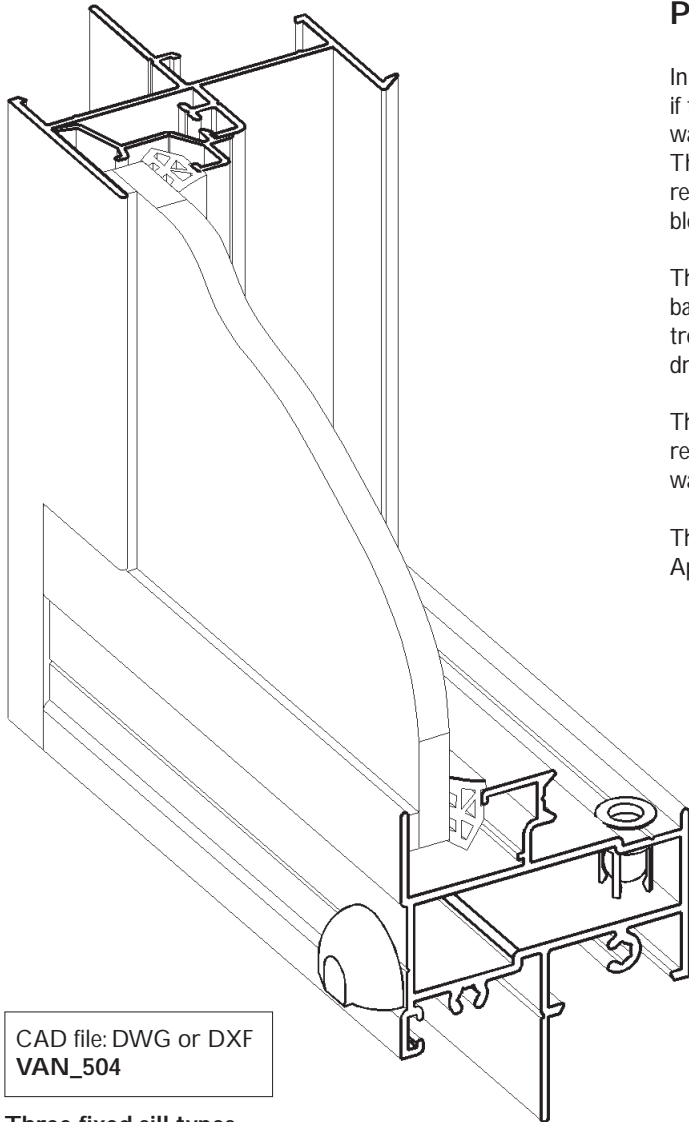
Fixed Sill Details

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Scale: Full size



CAD file: DWG or DXF
VAN_504

Product Overview

In cold areas condensation can form on the inner surface of glass, if this occurs the moisture has to go somewhere. In the past this water drained onto and in some cases stained the timber reveals. This patented design (Also covered by Australian design registration) drains the water back to the outside while preventing blow back under extreme weather conditions.

The condensation ball valve is fitted into tubular fixed trough, the ball valve allows condensation to be drained from the catchment trough into the tubular fixed sill and then out through the external drainage hood.

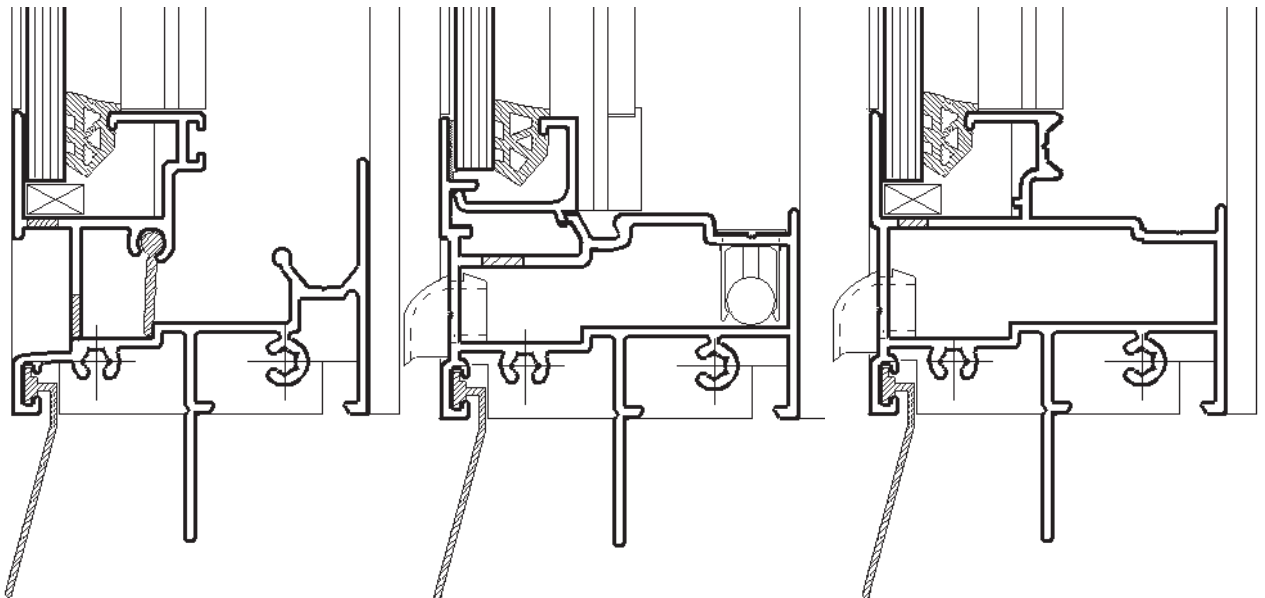
The polished nylon ball is light and will lift to the top of the retention carriage preventing air flow. This light ball also floats on water which reduces the chance of water intrusion.

This proprietary design feature is protected by Australian Patent Application and Australian Registered Design.

If you are building in a cold climate consider specifying VANTAGE condensation draining fixed sill with anti blow back ball valve system.

Three fixed sill types.

Type varies depending on the fabricator.



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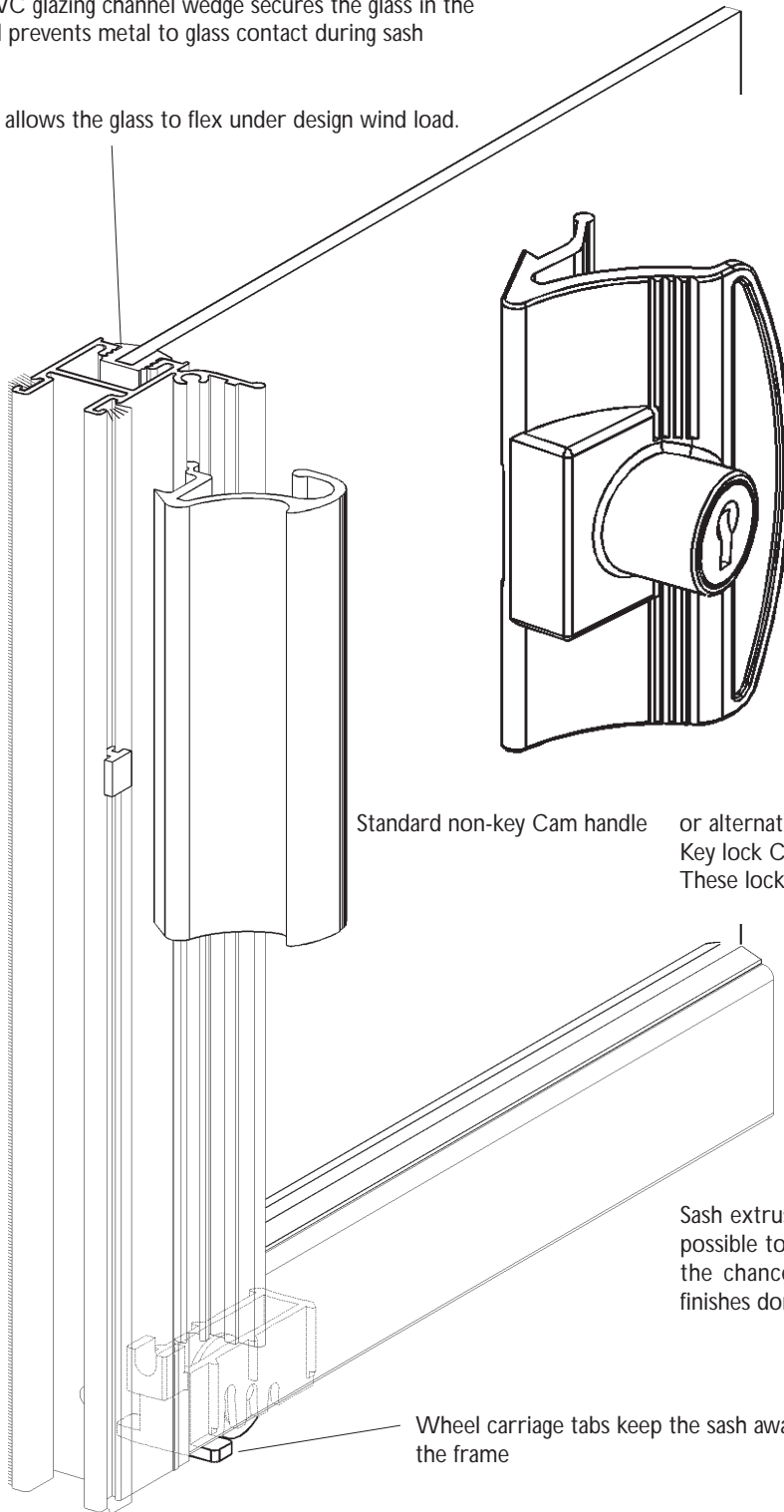
Series 502-504 Sliding Window

Opening Sash Lock Options



Wrap around PVC glazing channel wedge secures the glass in the moving sash and prevents metal to glass contact during sash operation.

This wedge also allows the glass to flex under design wind load.

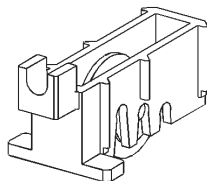
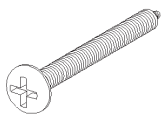


Standard non-key Cam handle or alternative Key lock Cam handles. These locks can also be supplied in colours.

Sash extrusions have been rounded wherever possible to soften the appearance and reduce the chance of paint damage. Modern paint finishes don't like sharp corners.

Wheel carriage tabs keep the sash away from the frame

Large diameter wheels equal smooth sash operation.



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Series 502-504 Sliding Window

Optional Centre Ventilation Keylocks

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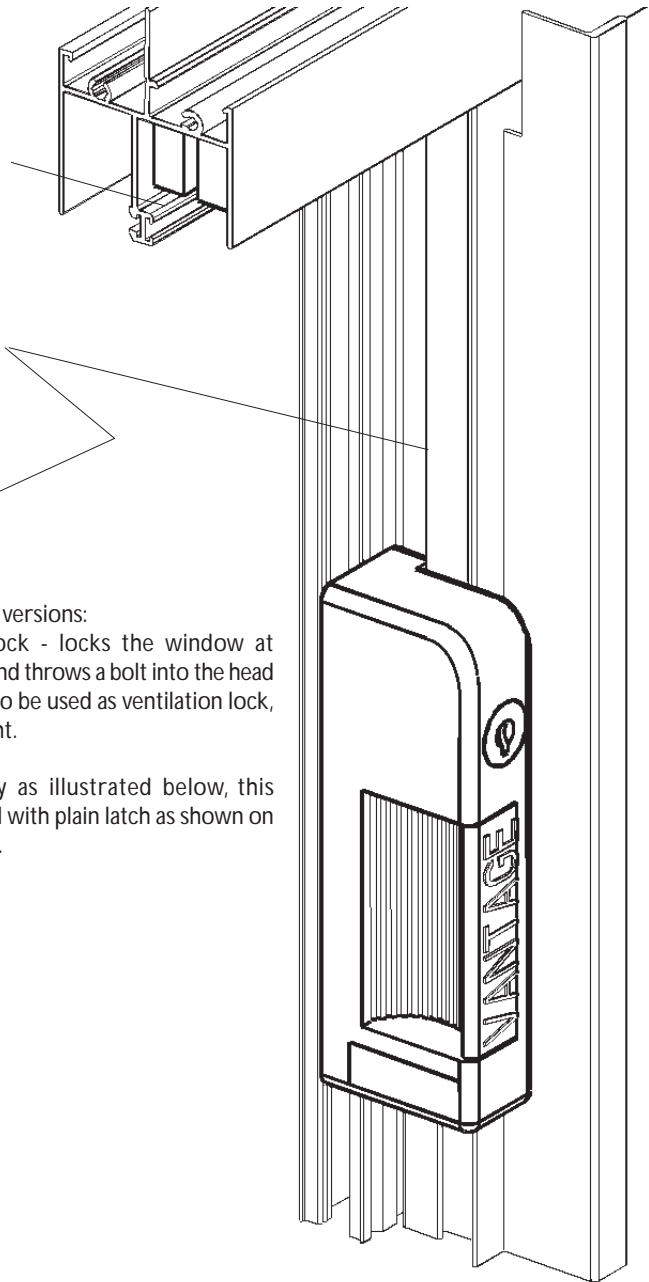
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This custom multi point keylock has been designed to lock the opening sash in the closed or partly open positions (50mm and 100mm) to allow ventilation.

The lock shaft throws into heavy duty nylon block located in the window head channel.

This prevents the sash from being lifted and or manipulated out of the locked position.

The heavy duty aluminium lock shaft is built into the window stile and coloured to match.

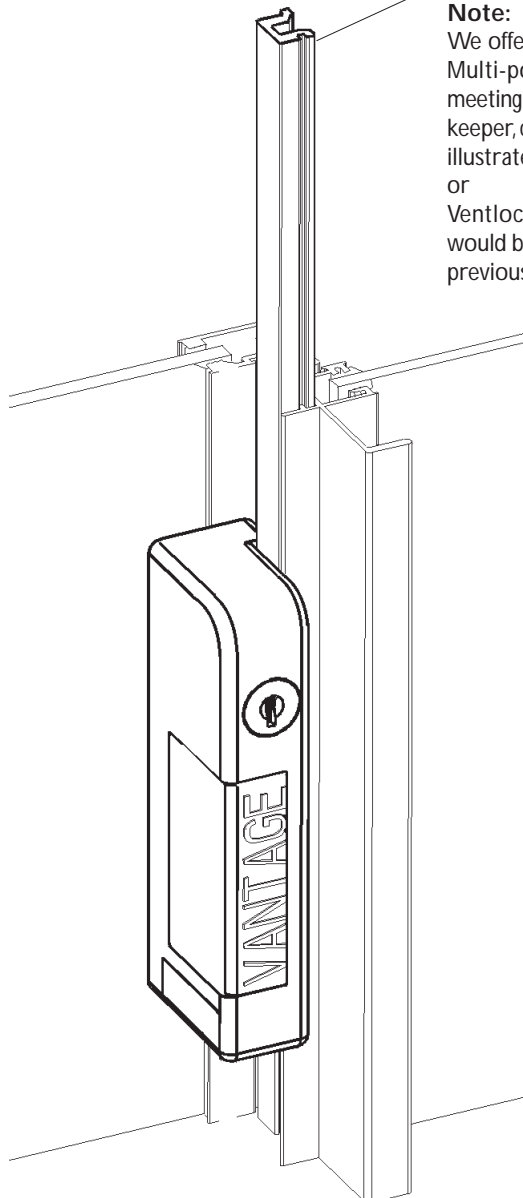


Important Note:

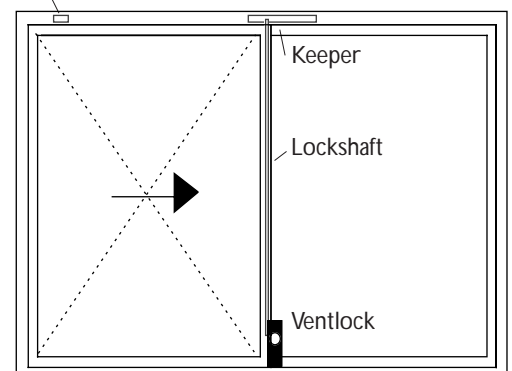
This Ventilation keylock has no impact on the water resistance of the window.

Note:

We offer two versions:
Multi-point lock - locks the window at meeting stile and throws a bolt into the head keeper, can also be used as ventilation lock, illustrated right.
or
Ventlock only as illustrated below, this would be used with plain latch as shown on previous page.



Snap in anti lift block fitted into the head extrusion approximately 100mm into the open area. This clip in block is to prevent sash manipulation when in the open and locked positions.





Product Overview

We have designed a flyscreen system for this sliding window with a couple of significant features:

- Flyscreen sits hard up to the external face of the window as shown left. This ensures that there are no recesses for spiders or insect intrusion.
- Screen can be fitted/removed from the inside or outside.
- Flyscreen held in place with custom nylon clip. No screws or rivets required. The clips keep the screen tight into the frame - no shakes or rattles.
- Water allowed to escape under the screen to the outside.
- We also offer a clean extruded screen frame as shown left.

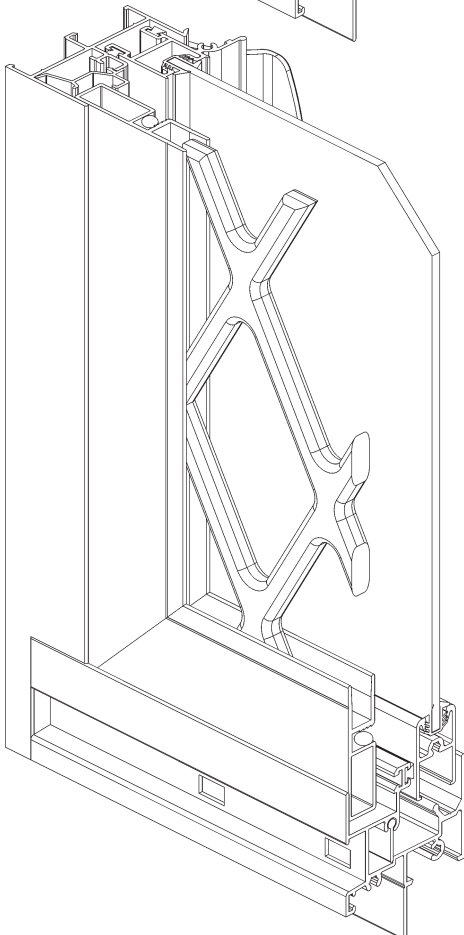
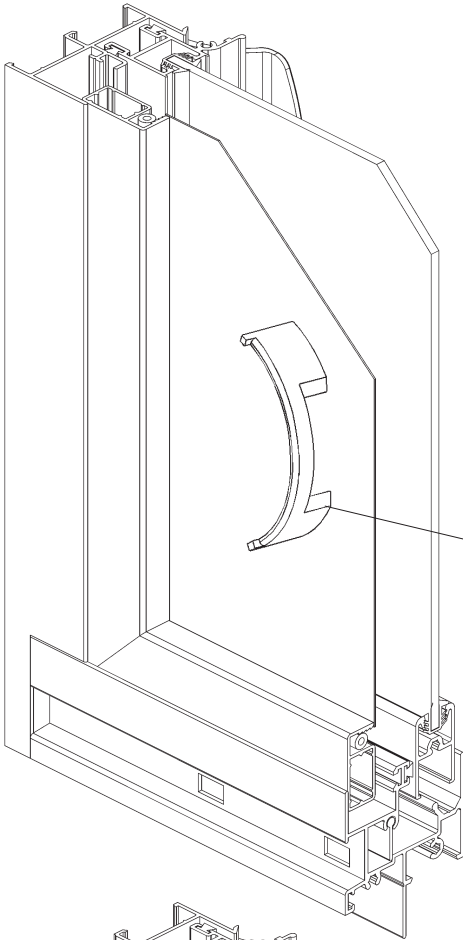
Custom flyscreen clip

Make sure your screens are fitted to Vantage specifications with the correct components.

Vantage sliding windows have been designed to accept barrier type flyscreens as shown left, with a number of features :

- Flyscreen sits hard up to the external face of the window as shown left. This ensures that there are no recesses for spiders or insect intrusion.
- Screen can be fitted/removed from the inside.
- Flyscreen held in place with custom extruded screen bead as shown left - no shakes or rattles.
- Water allowed to escape under the screen to the outside.
- We have designed a clean extruded screen frame as shown left.

Make sure your screens are fitted to Vantage specifications with the correct components.





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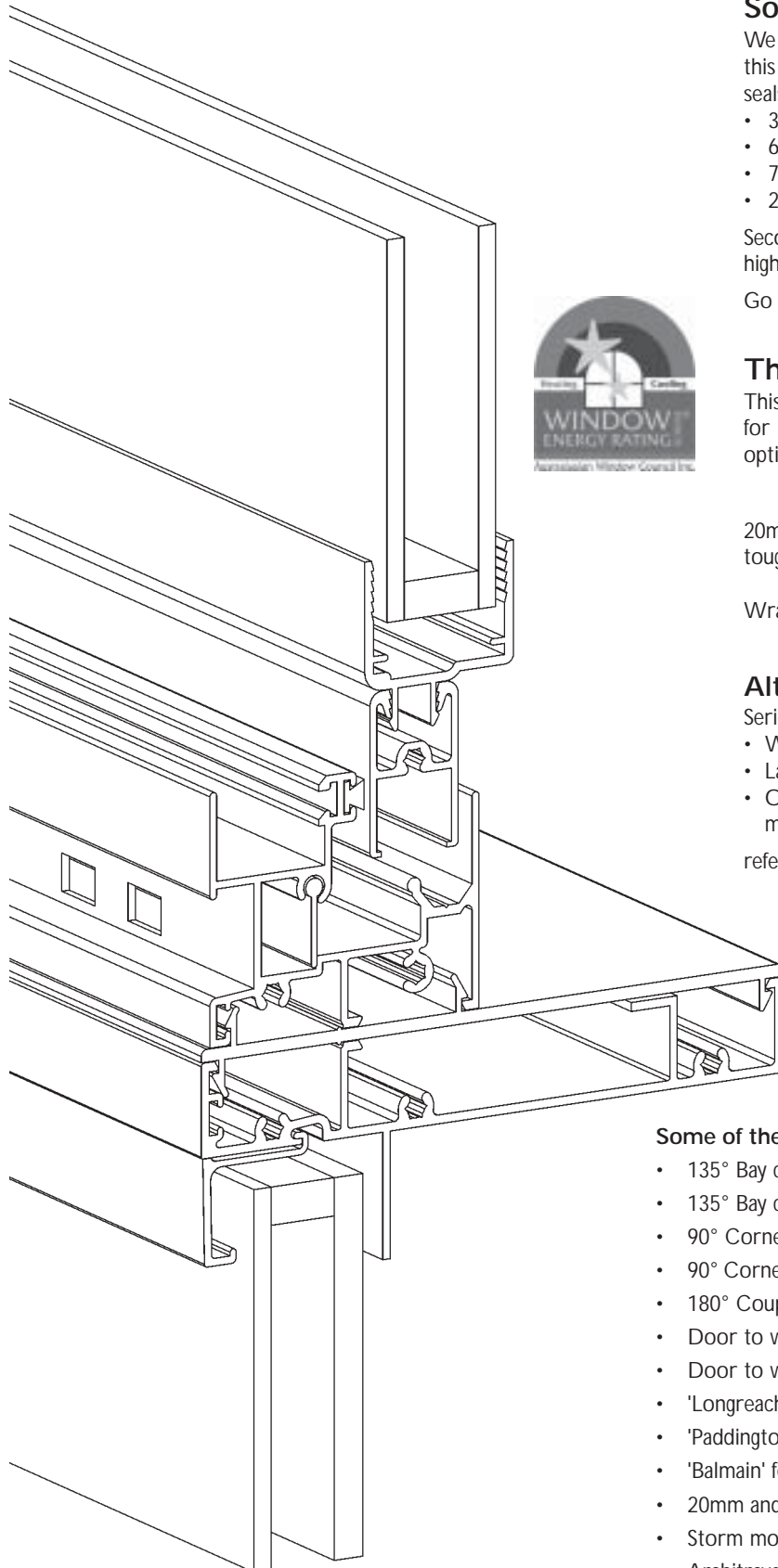
Double glazing

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Sound Reduction

We have tested a number of glass combinations in this sliding window. Window was fitted with 'Qlon seals vertically and weatherpile horizontally.

- 3mm Annealed glass 22dB(A) RW22
- 6.38mm Laminated glass 31dB(A) RW32
- 7.52mm Laminated glass 32dB(A) RW31
- 20mm Insulating glass unit 30dB(A) RW30

Secondary glazed sliding window will give significantly higher numbers 42dB(A) RW41

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.

20mm Insulating glass made up of two sheets of 3mm toughened glass with 14mm air space.

Wrap around PVC glazing channel.

Alternative

Series 601 and 602 are more suited to double glazing.

- Wider sashes.
- Larger diameter wheels.
- On 16mm IGU's there are dedicated sash members - no adaptors required.

refer sections 16 and 17 for more details.

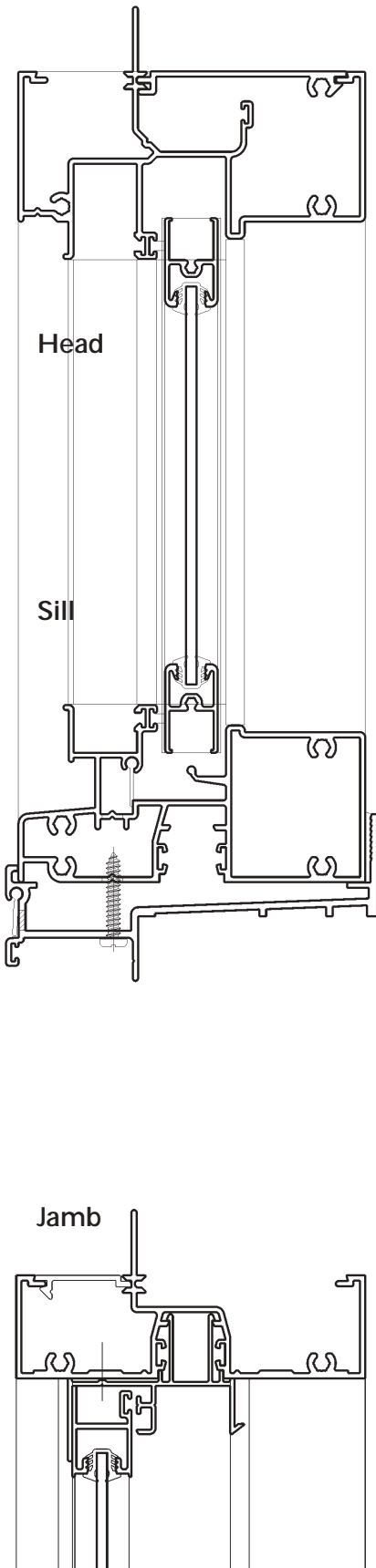
Some of the couplers and trims we can offer:

- 135° Bay coupler for 50mm windows.
- 135° Bay coupler for 50mm windows to 102mm doors.
- 90° Corner coupler for 50mm windows.
- 90° Corner coupler for 50mm windows to 102mm doors.
- 180° Coupler for 50mm windows.
- Door to window vertical coupler.
- Door to window horizontal coupler.
- 'Longreach' frame extender.
- 'Paddington' federation trims.
- 'Balmain' federation trims.
- 20mm and 50mm Flat trims.
- Storm moulds.
- Architraves.
- External flange adaptors.
- Flat jamb closer.

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Series 502-504 Sliding Window

Alternative Sliding Sashes into Shopfront Framing



Scale: Half full size

Alternative sliding sashes in commercial frame

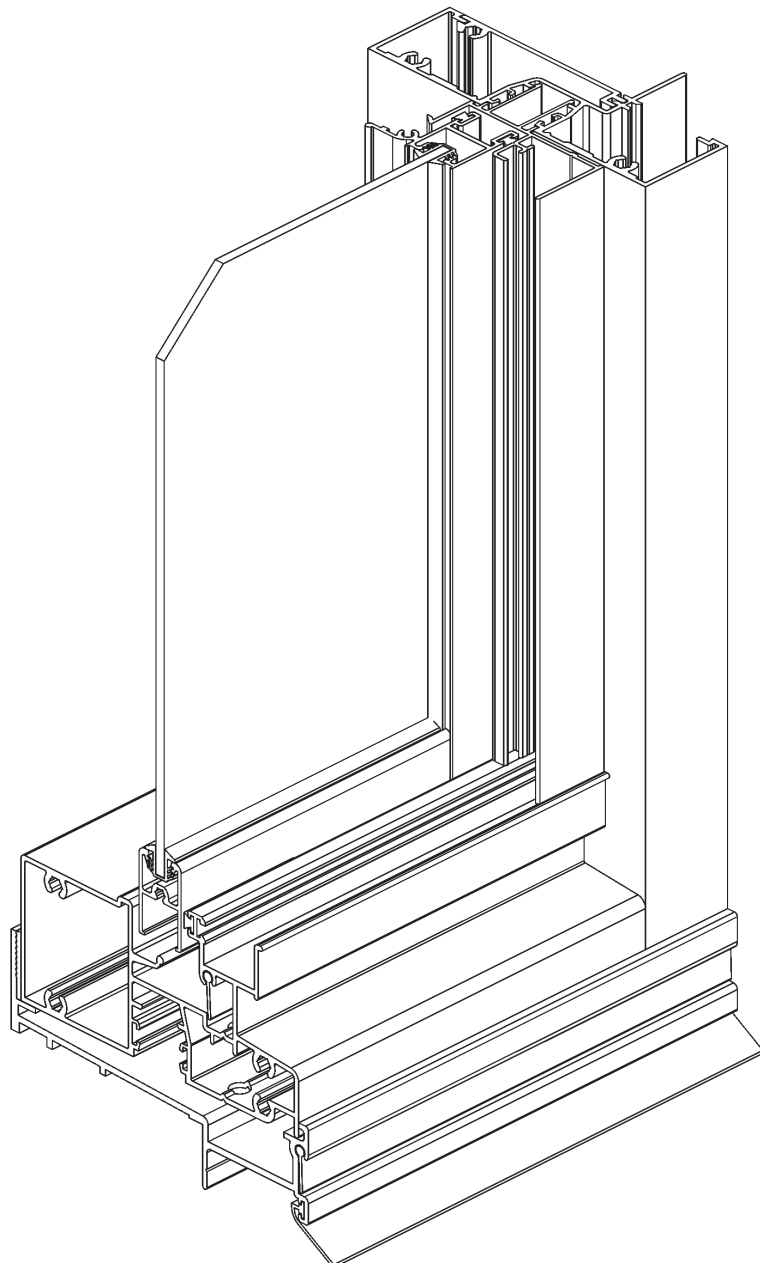
If you are looking for a bolder frame consider the AWS Commercial sliding window Series 452.

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

Australian Registered Design.



Scale: Not to scale



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12.4	Full size horizontal section through 'SF' sliding window - Jamb lock
12.5	Full size vertical section through fixed sash.
12.6	Half full size horizontal section through 'SF', 'SFS' and 'FSSF' sliding windows - Jamb lock
12.7	Sill water resistance treatment.
12.8	Transom details.
12.9	Fixed sill details.
12.10	Opening sash lock options.
12.11	Optional centre ventilation keylocks.
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Series 504 Sliding window internal view
(Not to scale)

