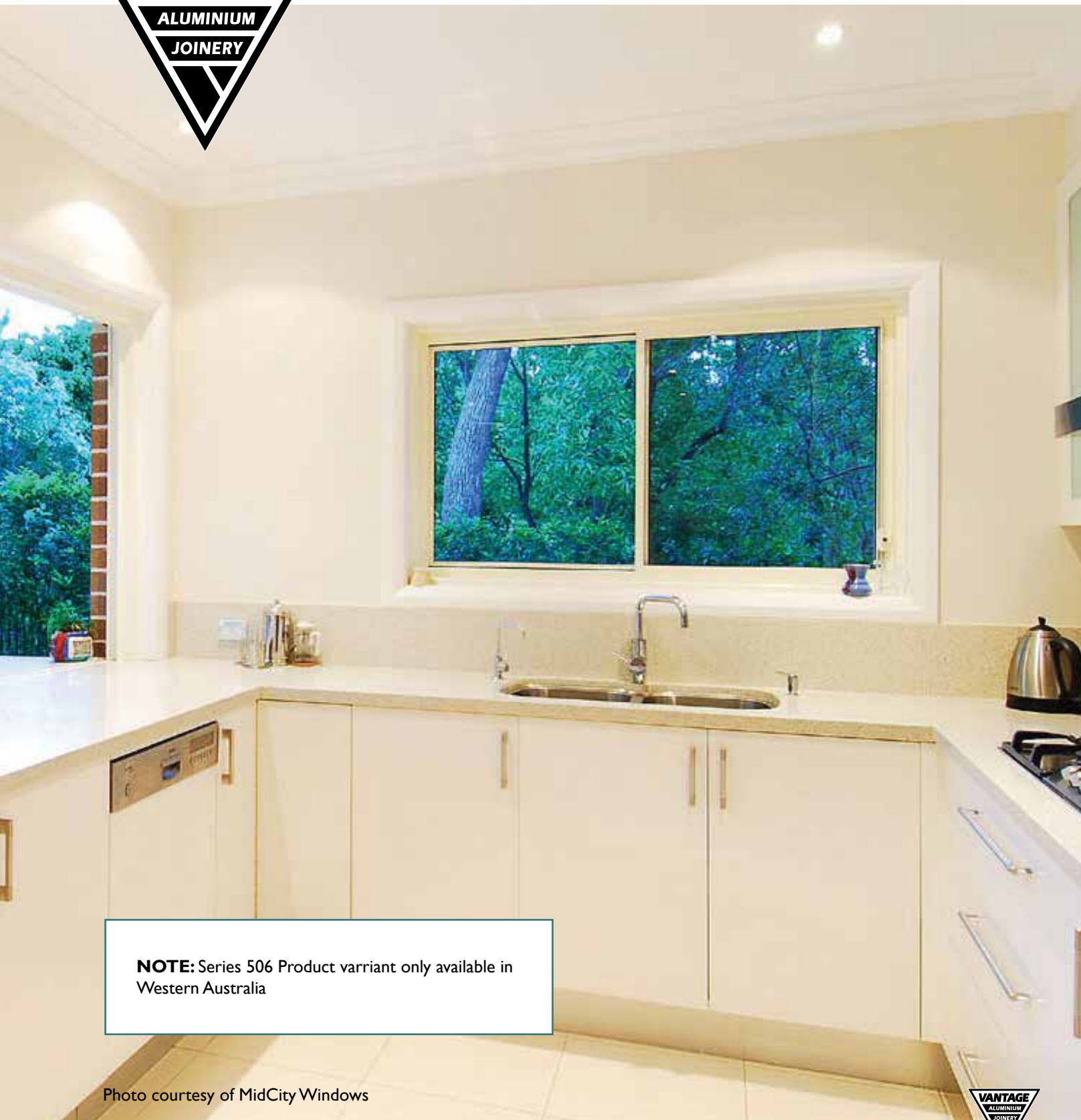


## Series 502-504 & 506 Residential Sliding Window



**NOTE:** Series 506 Product varriant only available in Western Australia

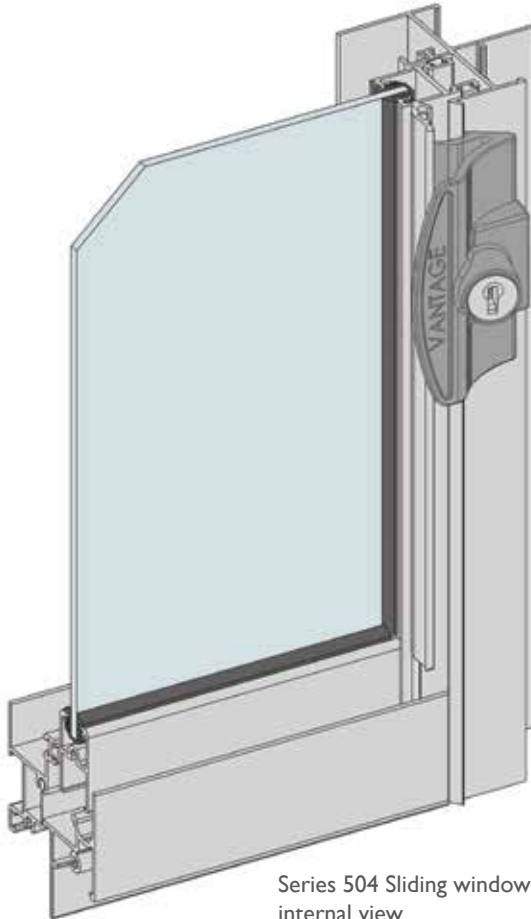
Photo courtesy of MidCity Windows



# Series 502-504 Residential Sliding Window

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

## KEY FEATURES / PERFORMANCE CHARACTERISTICS

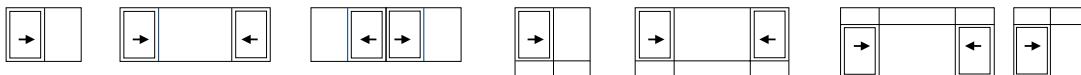


- Successfully tested for compliance with AS 2047.
- Optional meeting stile strengths cover a large variety of design wind load areas.
- It is easy to re-hand the sliding window after installation - change type 'SF' to 'FS'.
- Opening sashes run on large diameter wheels ensuring smooth operation.
- 50mm wide perimeter frame will couple to a large variety of adaptors - no screws or rivets required, refer to installation section for more information.
- Tubular type sump sills available for extra high water resistance.
- Fixed sill has built-in drainage to take care of condensation.
- Fixed glass hard up against the outer face, no ledges to catch dust and beaded from the inside, this allows reglazing without expensive scaffolding.
- Flyscreens tuck into the head and sill, held by nylon clips on the sides with no rivets.
- 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.

Maximum Panel Height*	1500mm
Maximum Panel Width*	900mm
Maximum Glass Thickness	≤20mm

\* Subject to individual site conditions and wind loads. Contact AWS Technical Support for more information, e-mail [techsupport@awsaustralia.com.au](mailto:techsupport@awsaustralia.com.au)

## TYPICAL CONFIGURATIONS



# Series 502-504 Residential Sliding Window

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



## SOUND REDUCTION

Acoustic performance of the Series 502 -504 residential sliding window has been tested with a number of glass combinations. During testing the window was fitted with 'Qlon' seals vertically and weatherpile horizontally.

Glass Description		
3mm Annealed glass	22dB(A)	RW22
6.38mm Laminated glass	31dB(A)	RW31

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



## WERS RATINGS

### Single Glazed

Glass Description	COOLING	HEATING	Uw	SHGCw	Tvw	Inf
3mm Clear	13%	16%	6.3	0.72	0.74	2.91
5mm Clear	13%	14%	6.4	0.71	0.75	2.91
5mm Grey	31%	6%	6.4	0.53	0.42	2.91
5mm EverGreen	33%	4%	6.4	0.49	0.62	2.91
6.38mm Laminate	17%	14%	6.3	0.68	0.74	2.91
6.38mm Solect	35%	33%	4.5	0.58	0.68	2.91
6.38mm Comfort Plus	46%	26%	4.5	0.44	0.49	2.91

### Double Glazed

Glass Description	COOLING	HEATING	Uw	SHGCw	Tvw	Inf
4Clr/10Gap/4Clr	37%	37%	4.2	0.58	0.61	2.91
4Az/10Gap/4EA	59%	30%	3.6	0.32	0.47	2.91
4Clr/10Ar/4ea	44%	45%	3.4	0.54	0.56	2.91
4Clr/10Gap/4EA	43%	42%	3.6	0.54	0.56	2.91
5Clr/8Gap/5Clr	38%	35%	4.3	0.56	0.60	2.91
5EG/8Ar/5EA	59%	31%	3.5	0.32	0.46	2.91
3EG/12Gap/3Clr	50%	29%	4.1	0.40	0.52	2.91
3Clr/12Ar/3EG	43%	46%	3.4	0.56	0.57	2.91



## 2D & 3D CAD FILES AVAILABLE

GO TO: [www.vantagealuminium.com.au](http://www.vantagealuminium.com.au) > CAD & Revit 3D Files  
CAD file: DWG or DXF VAN\_504



## MORE INFORMATION

For the latest updates regarding this product visit our website  
[www.vantagealuminium.com.au](http://www.vantagealuminium.com.au)

## HOW TO SPECIFY

### SYSTEM NAME

Vantage Series 502-504 Residential Sliding Window

### FINISH

Powder Coat  
Anodised

### COLOUR

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

### GLASS

Specify thickness  $\leq 6.5$ mm

Specify thermal performance where applicable (Uv & SHGC)

Specify acoustic performance where applicable (RW)

### HARDWARE

Refer to hardware selection guide for compatible options



## Specification Assistance

Need help specifying this product? email [techsupport@awsaustralia.com.au](mailto:techsupport@awsaustralia.com.au) and our qualified technical advisors will assist you with product selection and specification for your project.

# Series 502-504

## Residential Sliding Window

DATE: NOV 09  
 REPLACES: AUG 03  
 SCALE: NO TO SCALE

### SPECIFIERS CHECKLIST

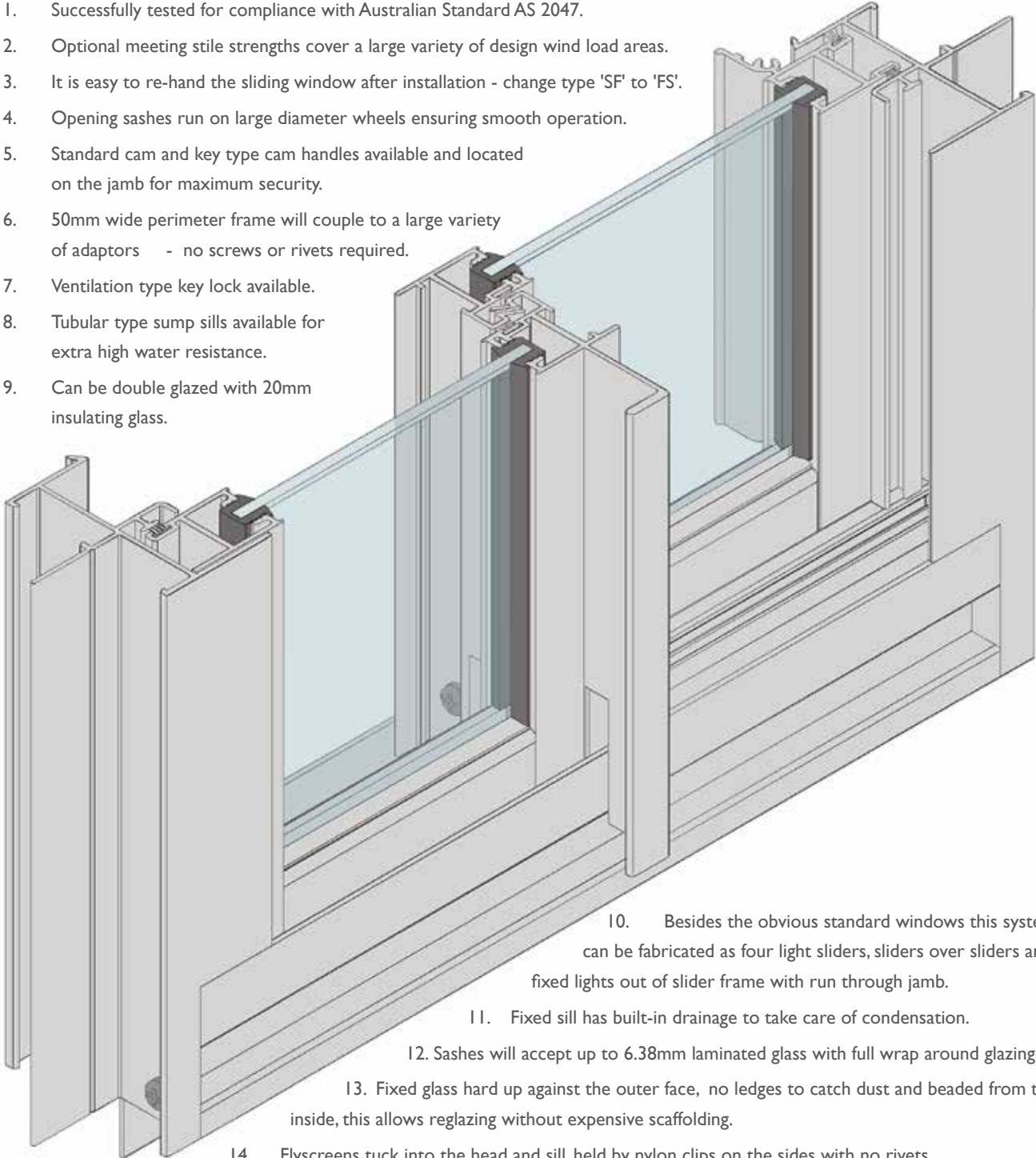
Not all sliding windows are the same. If you want your windows to perform, keep the elements on the outside where they belong and operate smoothly for years to come there are some things you should check/compare when choosing your supplier - compare us with the others.

FEATURE	502-504	Opposition
<b>Does the window comply with the relevant Australian Standards.</b> All windows should comply but it pays to ask for written proof.	<b>YES</b>	
<b>Coastal installations should be upgraded to at least 200 Pa (high) water rating.</b>	<b>YES</b>	
<b>Fixed lights and opening sashes can be reglazed from inside the building.</b> Typically reglazing an externally glazed window requires scaffolding in elevated situations.	<b>YES</b>	
<b>Condensation on fixed lowlights can be drained back to the outside.</b> 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.	<b>YES</b>	
<b>Fixed lights can be beaded off with matching extruded aluminium glazing beads.</b>	<b>YES</b>	
<b>Direction of slide can be changed without removing the window from building.</b> 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.	<b>YES</b>	
<b>Large diameter (14mm) wheels in height adjustable wheel carriage.</b> Large diameter wheels turn more easily and therefore will last longer. If a wheel stops turning it will wear quickly and the bearing shaft can damage the running rail.	<b>YES</b>	
<b>Very heavy sashes can be fitted with nylon tyred ball bearing wheels if necessary.</b>	<b>YES</b>	
<b>Clean aesthetic with no ugly visible rivets fixing the centre mullions.</b>	<b>YES</b>	
<b>Height adjustable cam handles are located on the jamb.</b> Optional key lock cam handle available. Key lock cam handle can be fitted during manufacture or retro fitted at a later date.	<b>YES</b>	
<b>Optional ventilation key lock available.</b> With no negative impact on water resistance of the window. No unsightly visible holes.	<b>YES</b>	
<b>Clean flyscreen installation.</b> Flyscreens nest cleanly into the frame. Flyscreens held in place with non rusting nylon clips and screens can be removed from inside.	<b>YES</b>	
<b>Removable barrier type flyscreens (fitted with expanded aluminium security mesh).</b> No spider recesses on the outside and no recesses on the inside. Can be removed from the inside by the home owner to allow future cleaning etc.	<b>YES</b>	
<b>Window can be coupled to sliding doors or other windows without visible rivets.</b>	<b>YES</b>	
<b>Rounded corner on the frame and sash members where ever possible.</b> Modern paint finishes don't like sharp corners.	<b>YES</b>	

# Series 502-504 Residential Sliding Window

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

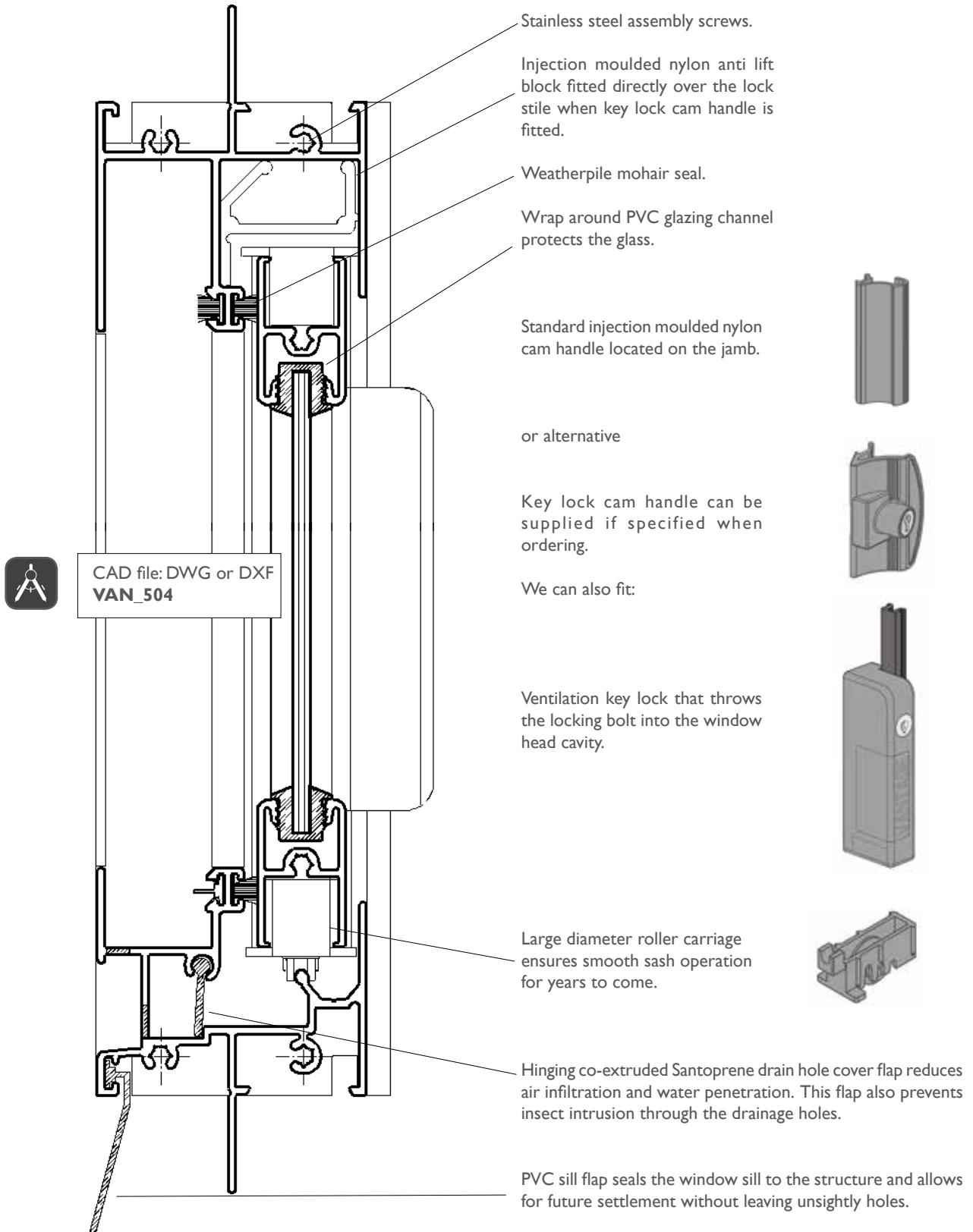
## DESIGN FEATURES

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. 50mm wide perimeter frame will couple to a large variety of adaptors - no screws or rivets required.
  7. Ventilation type key lock available.
  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 with run through jamb.
  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.
  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. For high performance - Upmarket and/or larger panels refer MAGNUM™ Series 601 and 602,
- 

# Series 502-504 Residential Sliding Window

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

## VERTICAL CROSS SECTION THROUGH OPENING SASH





# Series 502-504 Residential Sliding Window

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

## HORIZONTAL SECTION THROUGH 'SF' WINDOW

### Wind Ratings (Pa) Heavy meeting stiles.

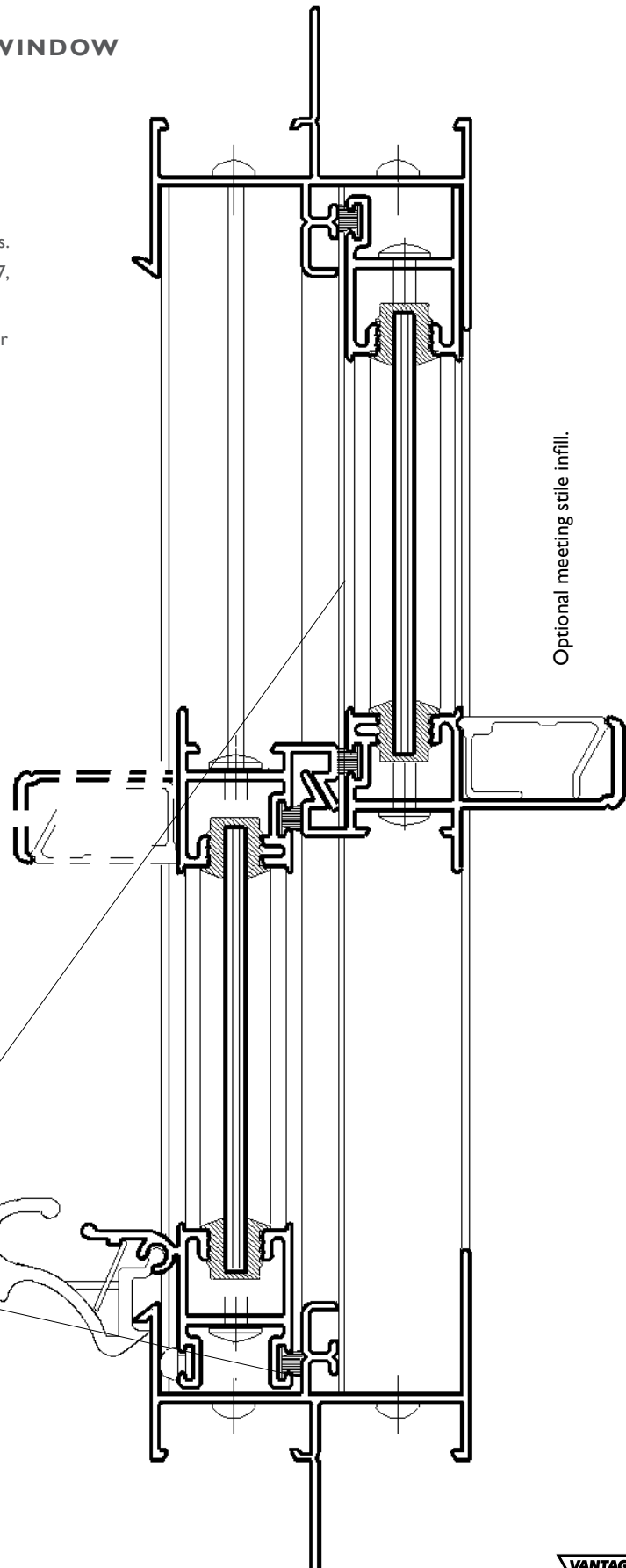
**S** = Serviceability limit state (deflection = L/150).

**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.

1500 Pa Serviceability ratings were restricted by the maximum water resistance (450Pa) achieved on this product.

Window		Meeting Stiles	
Height mm	Width mm	Heavy	
		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



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.



CAD file: DWG or DXF  
**VAN\_504**

# Series 502-504 Residential Sliding Window

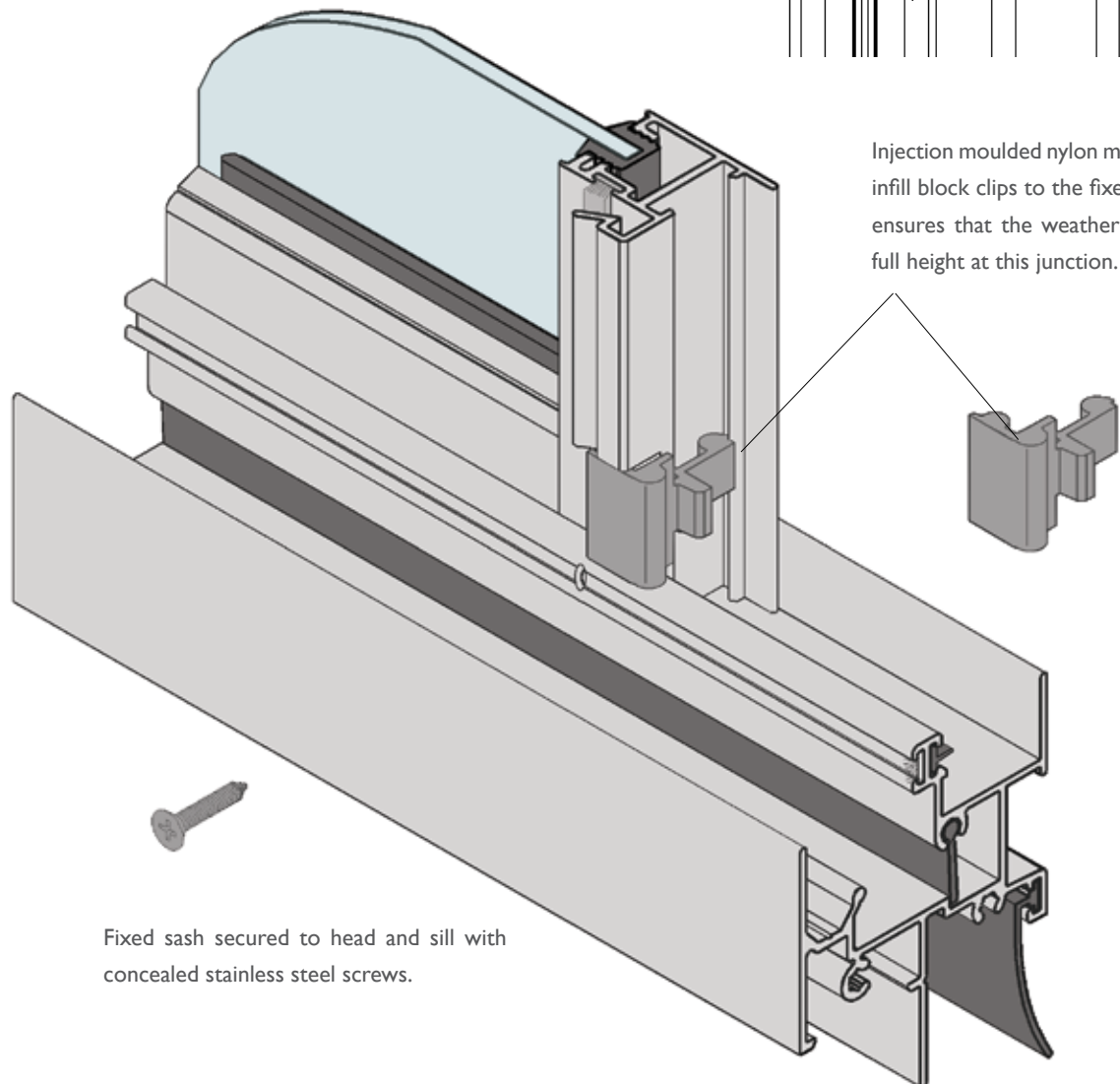
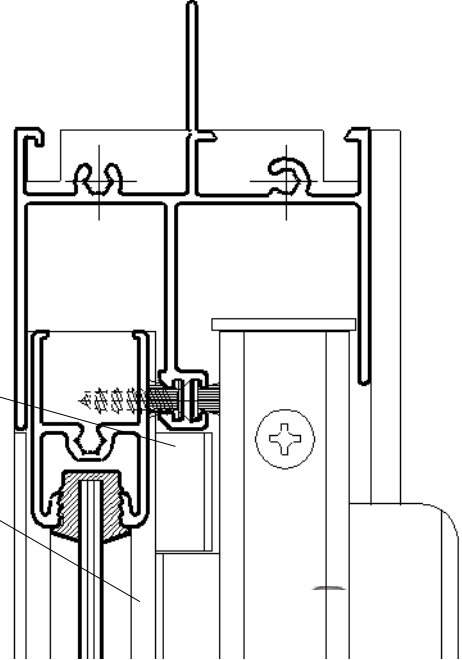
DATE: NOV 09  
REPLACES: AUG 03  
SCALE: FULL SIZE

## VERTICAL SECTION THROUGH FIXED SASH

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.

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

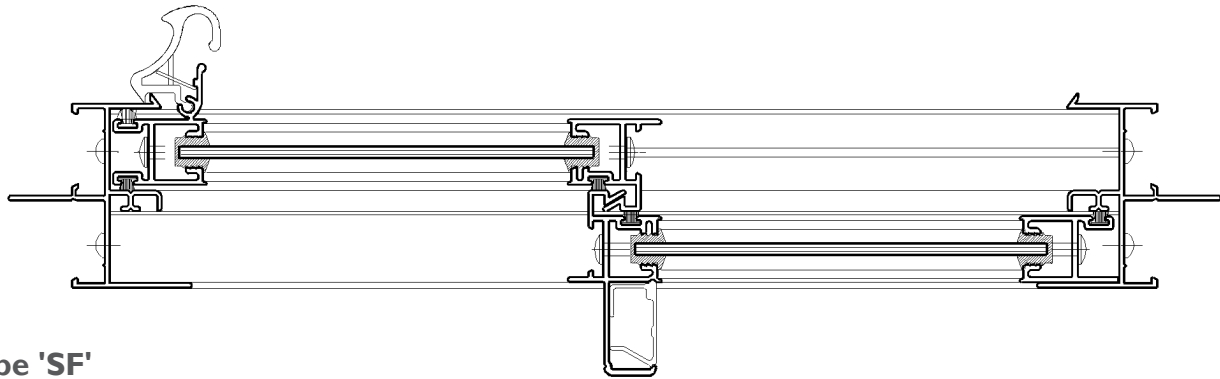


Series 502-504  
Residential Sliding Window

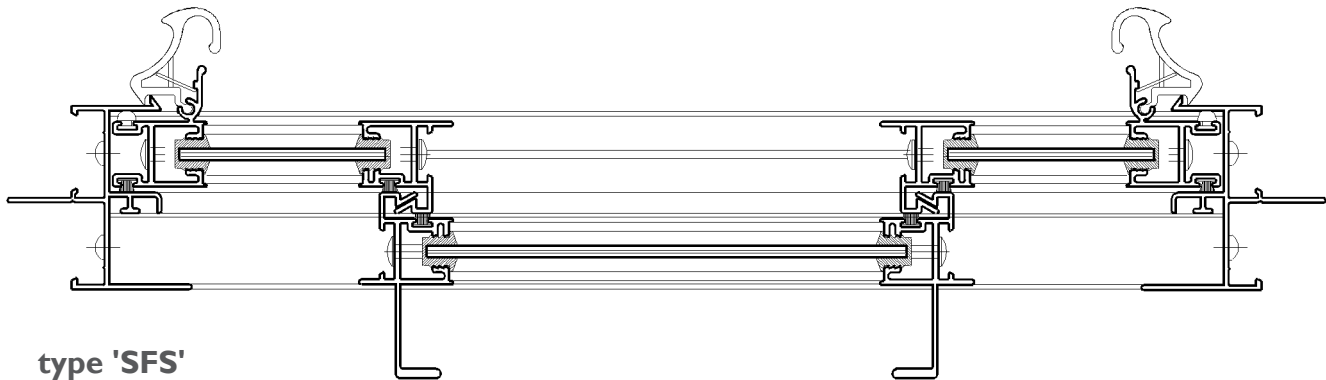
DATE: NOV 09  
REPLACES: AUG 03  
SCALE: HALF SIZE

HORIZONTAL SECTION THROUGH SLIDING WINDOWS

Standard Jamb latch/ lock illustration

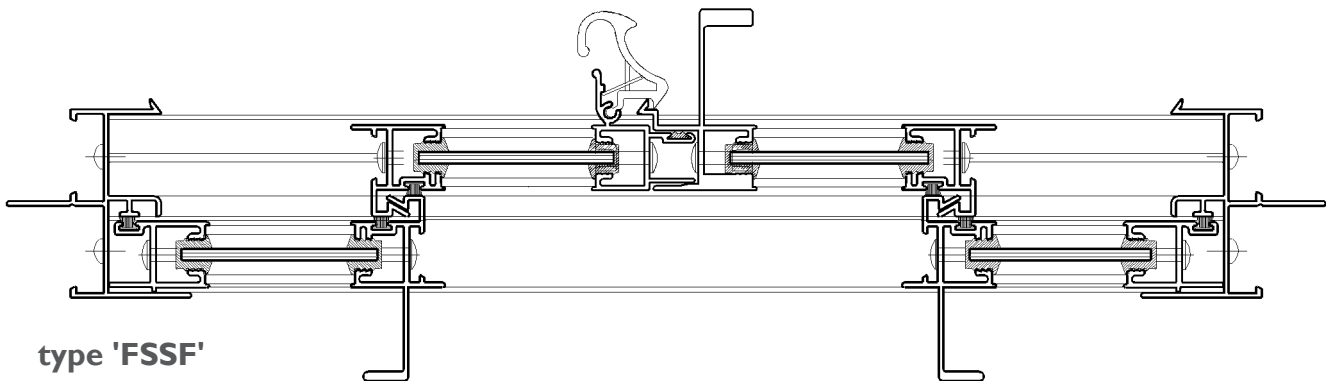


type 'SF'



type 'SFS'

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

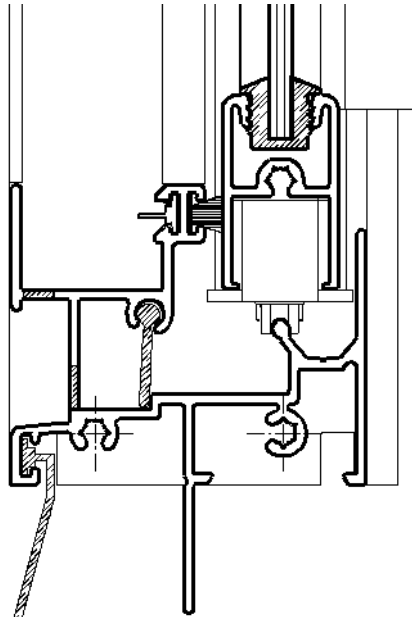


type 'FSSF'

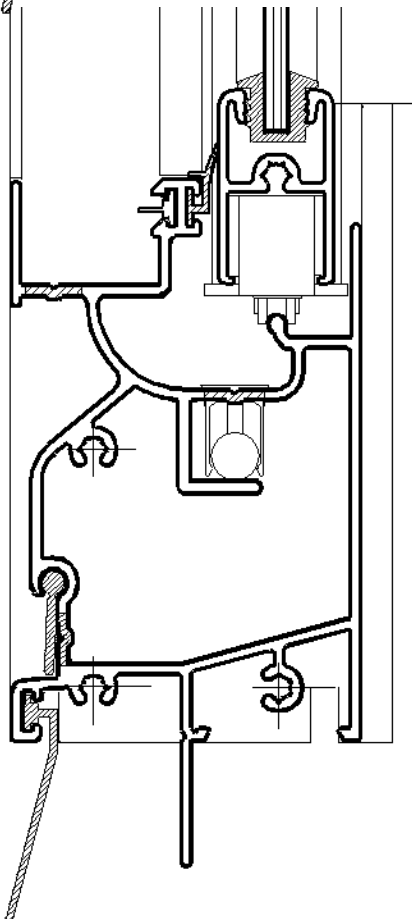
# Series 502-504 Residential Sliding Window

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

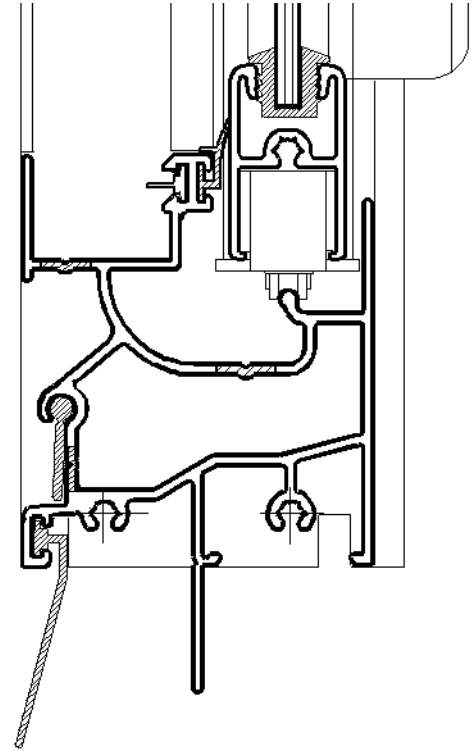
## SILL WATER RESISTANCE TREATMENT



**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.



**300Pa Water rated slider sill**  
Use 50mm tubular sill and fit co-extruded PVC dog leg fin seal to sill as detailed above.

**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 left.

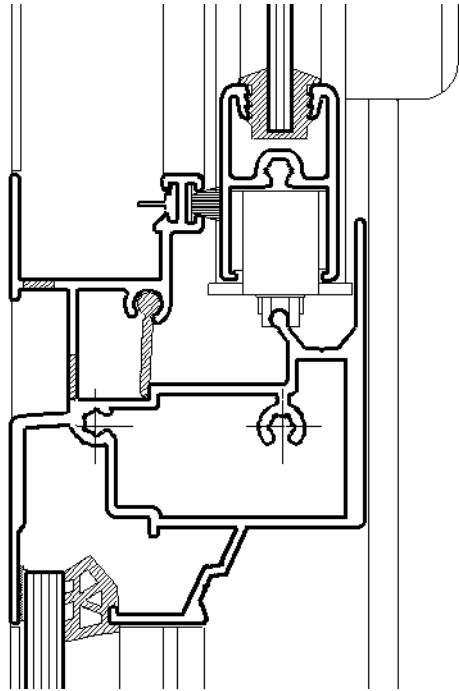


CAD file: DWG or DXF  
**VAN\_504**

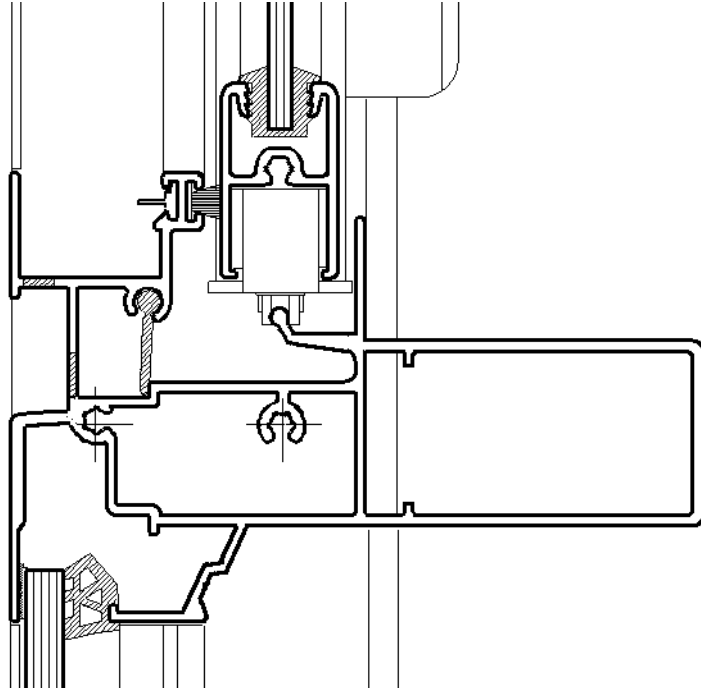
# Series 502-504 Residential Sliding Window

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

## TRANSOM DETAILS



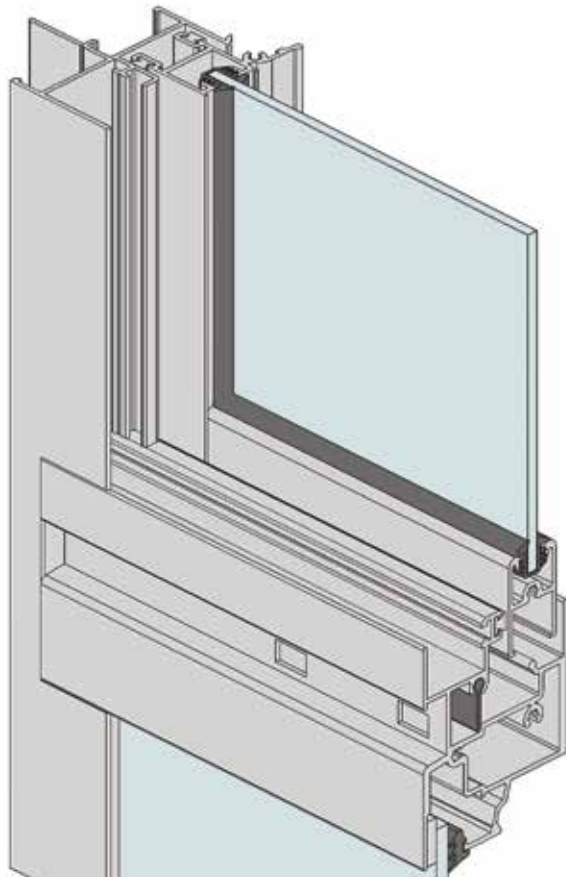
Light Transom



Heavy Transom



CAD file: DWG or DXF  
**VAN\_504**



### 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).

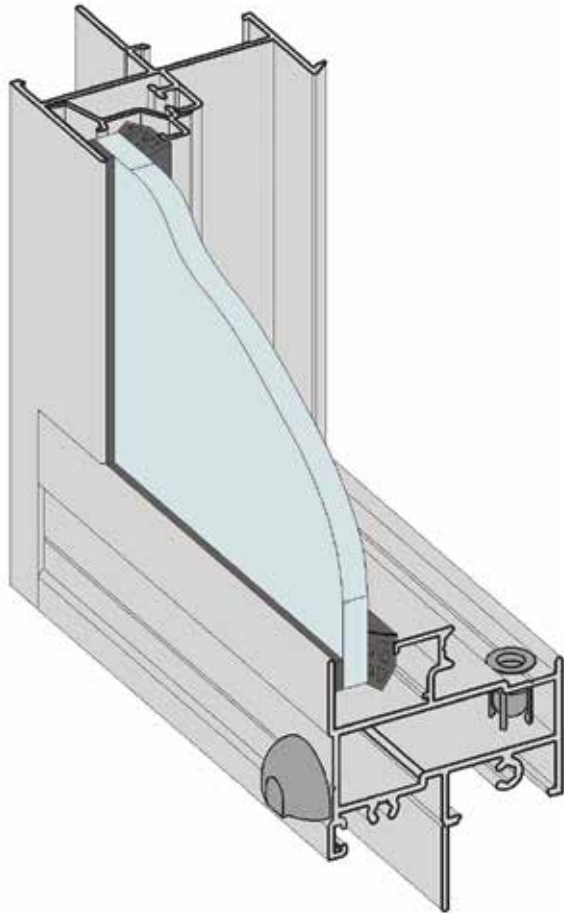
Window Type	Window		Meeting Stiles	
	Height mm	Width mm	Heavy	
			S	U
SFS	1800	2110	1560	2340
SFS	1800	2410	1168	1753
SFS	1800	2710	909	1364
SFS	1800	3010	729	1093
SFS	2100	2110	1361	2042
SFS	2100	2410	1015	1522
SFS	2100	2710	788	1181
SFS	2100	3010	630	945

Based on heavy transom top right

# Series 502-504 Residential Sliding Window

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

## FIXED SILL DETAILS



### 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 proprietary design (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.

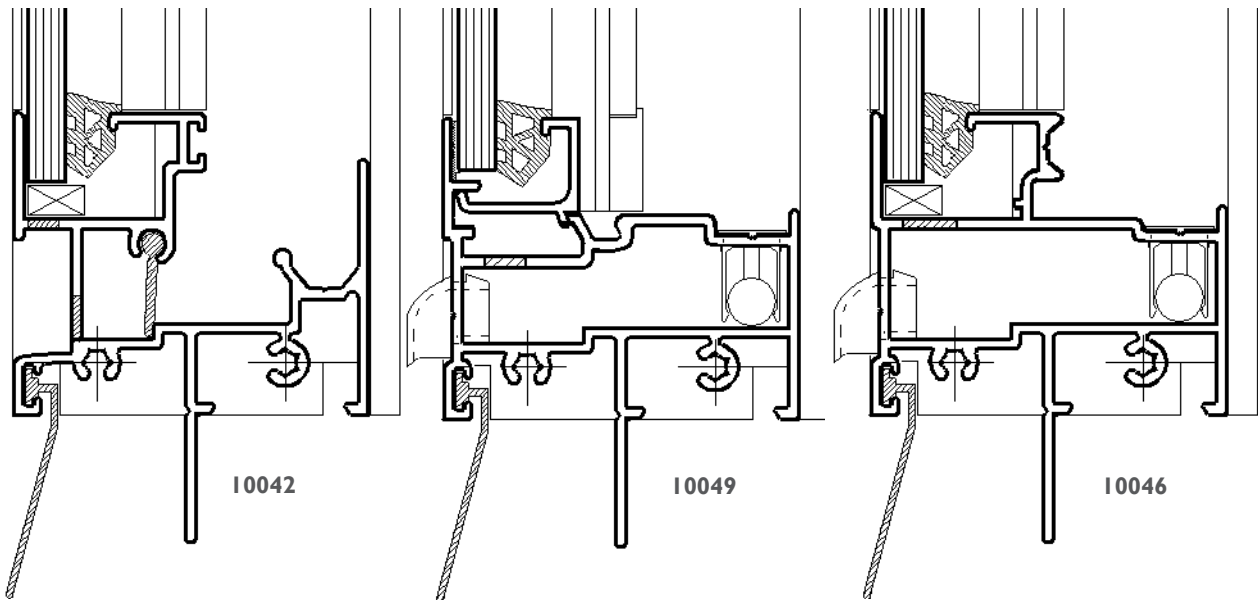
This proprietary design feature is protected by Australian Registered Design.

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.



CAD file: DWG or DXF  
**VAN\_504**



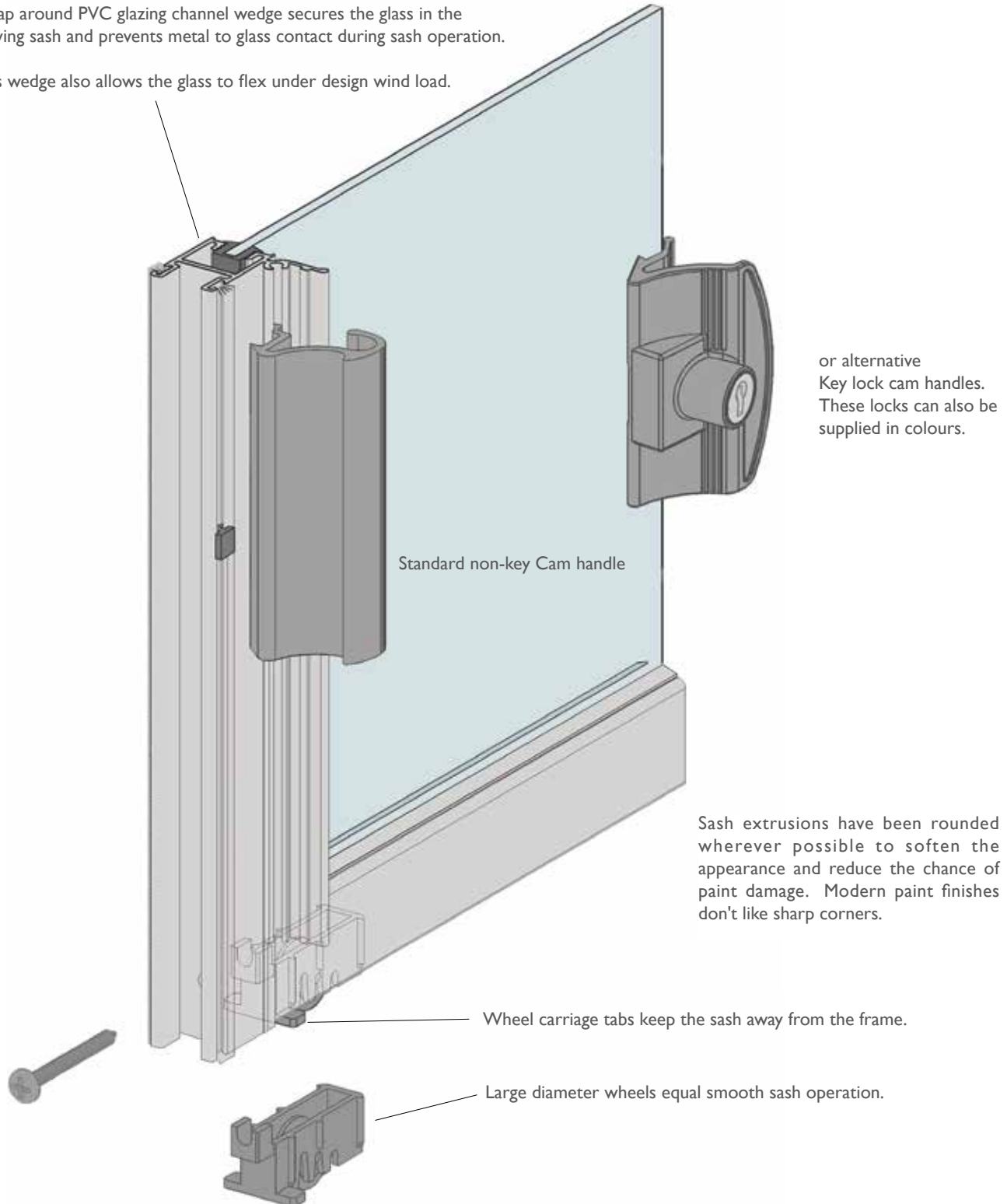
# Series 502-504 Residential Sliding Window

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

## 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.



# Series 502-504 Residential Sliding Window

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

## OPTIONAL CENTRE VENTILATION KEYLOCK

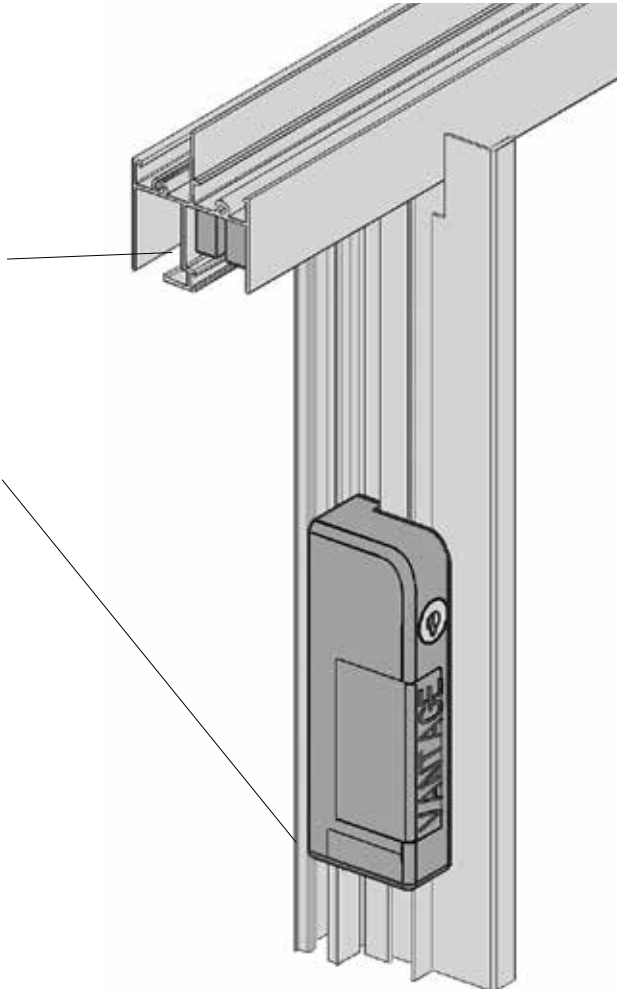
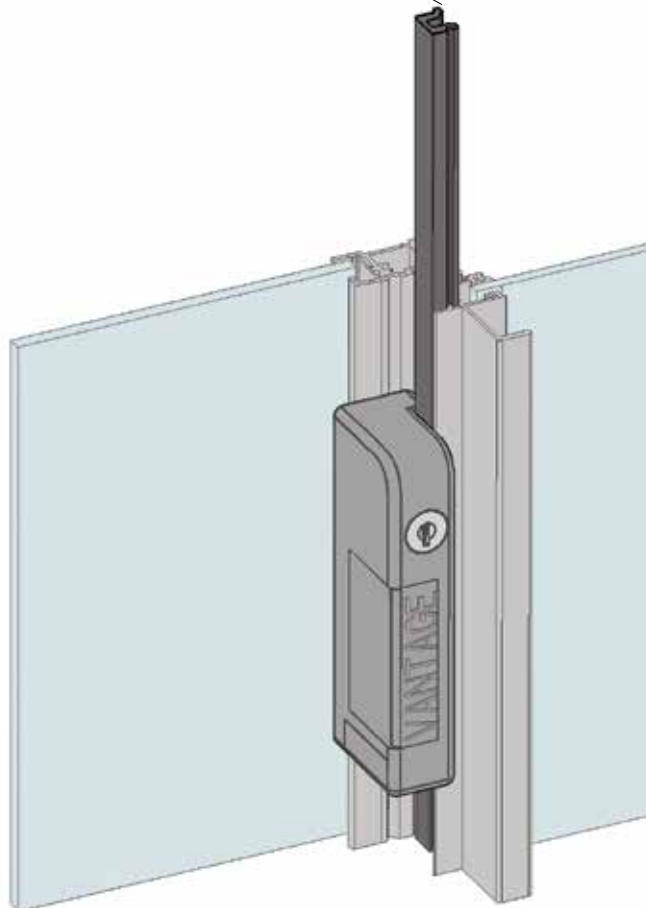
This custom ventilation keylock has been designed to lock the opening sash in the closed or partly open positions (50mm and 100mm) to allow ventilation. You would still use a plain latch on the jamb stile.

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

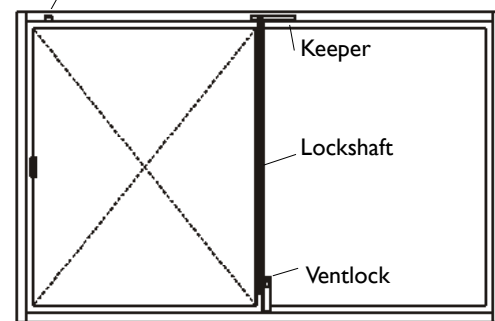
This prevents the sash from being lifted and or manipulated out of the locked position.

Slide the lock body down to sash assembly screw then secure the body with screw supplied. Fit nylon cover plate after fitting screw.

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



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.



### Important Note:

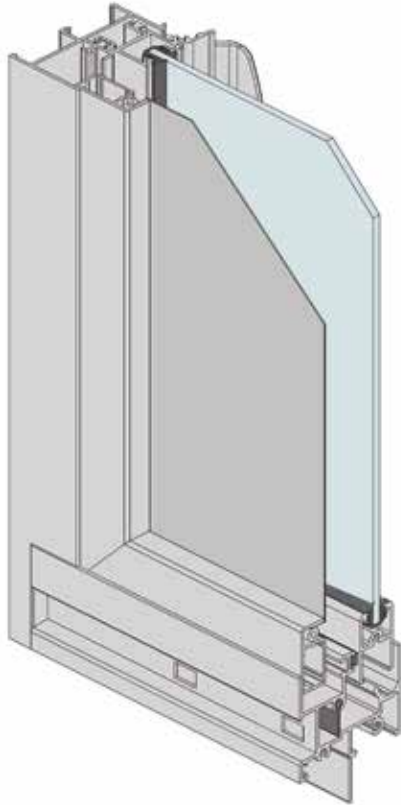
This ventilation keylock has no impact on the water resistance of the window.



# Series 502-504 Residential Sliding Window

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

## FLYSCREENING



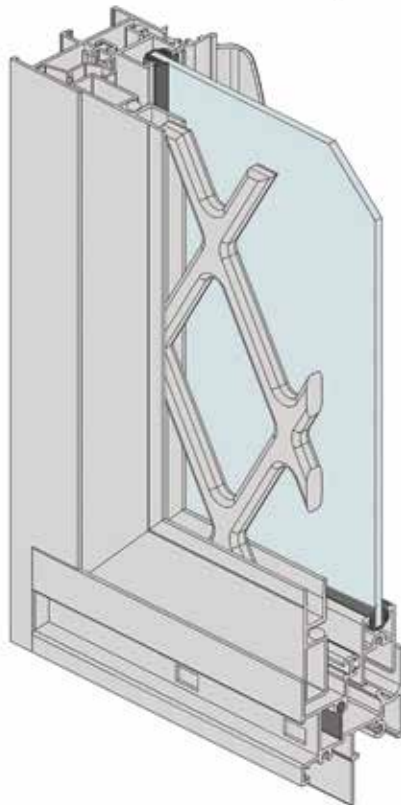
### Product Overview

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

- Flyscreen nests cleanly into frame
- Screen lines through with adjoining fixed sash
- 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:

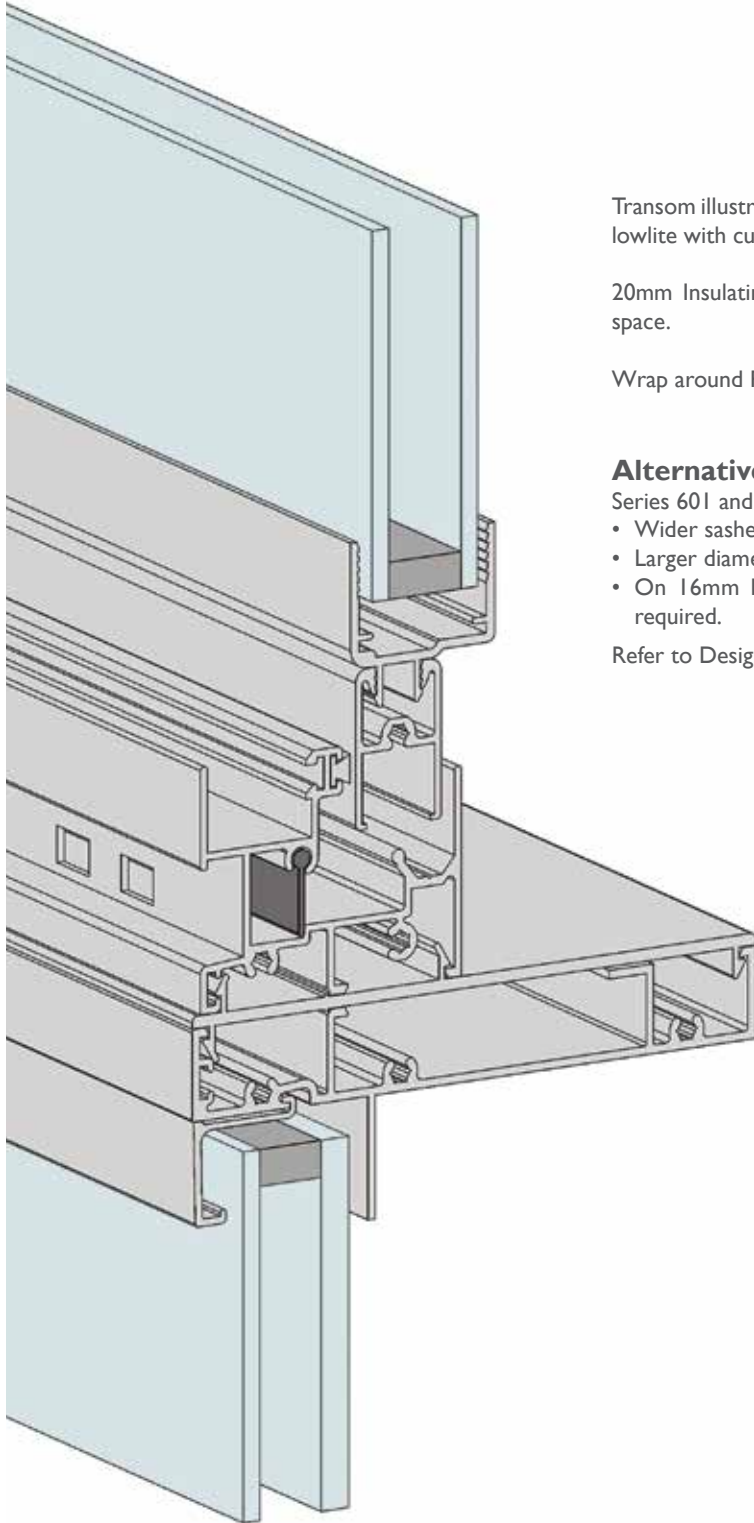
- Flyscreen sits hard up inside to the external face of the window as shown left. This ensures that there are no recesses for spiders or insect intrusion.
- Screen can be fitted/removed from the inside.
- Flyscreen held in place with custom extruded screen bead as shown left - no shakes or rattles.
- 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.**

# Series 502-504 Residential Sliding Window

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

## DOUBLE GLAZING OPTION



Transom illustrated is made up of 502-504 sliding window sill clipped to 516 lowlite with custom coupler.

20mm Insulating glass made up of two sheets of glass with argon filled 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 to Designer Series section for more details.

### Available couplers and trims:

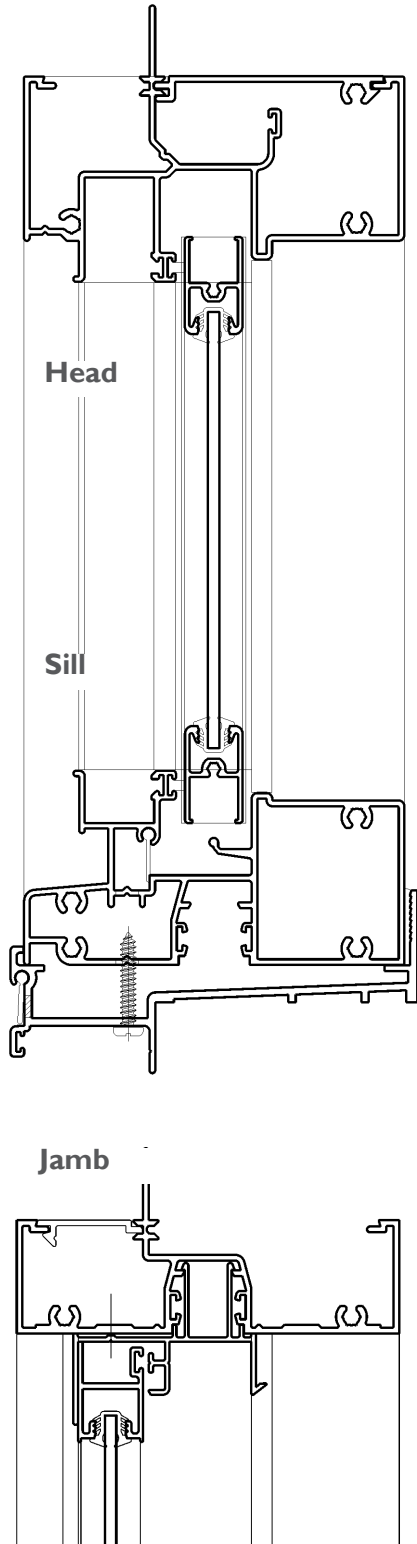
- 135° Bay coupler for 50mm windows.
- 135° Bay coupler for 50mm windows to 102mm doors.
- 90° Corner coupler for 50mm windows.
- 90° Corner coupler for 50mm windows to 102mm doors.
- 180° Coupler for 50mm windows.
- Door to window vertical coupler.
- Door to window horizontal coupler.
- 'Longreach'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

Refer to installation section for full details of couplers

# Series 502-504 Residential Sliding Window

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

## ALTERNATIVE SLIDING SASHES INTO COMMERCIAL FRAMING



### Alternative sliding sashes in commercial frame

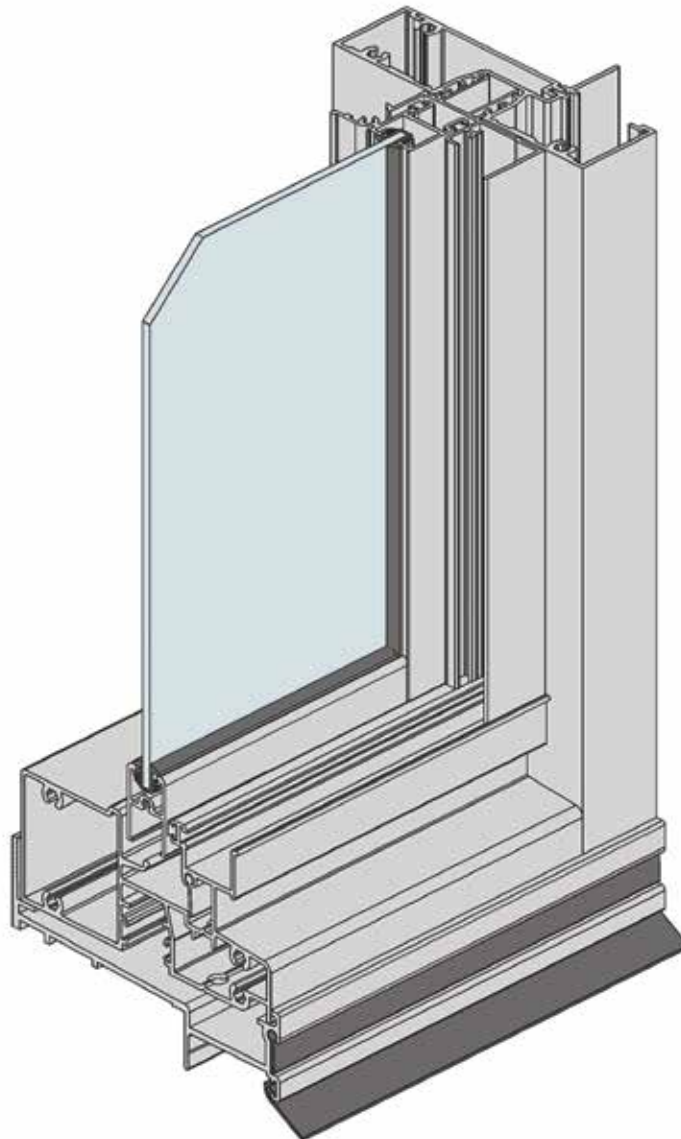
If you are looking for a bolder frame consider the AWS Commercial sliding window Series 452.

Features overview:

- Bold square commercial frame with built-in nailing fin.
- Nailing fin sub-sill is standard.
- Compatible with conventional CentreGLAZE™ commercial framing.
- Specifically designed head and sill sections



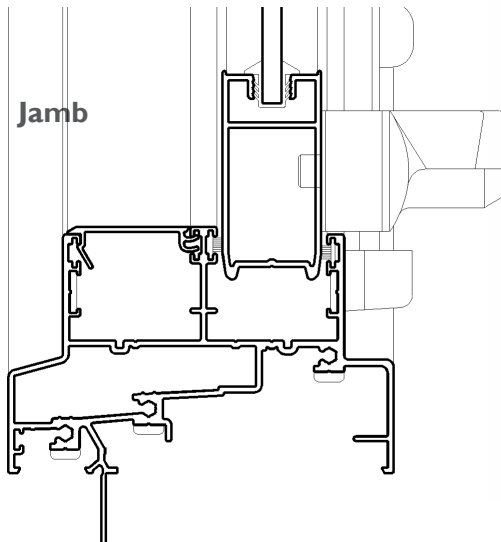
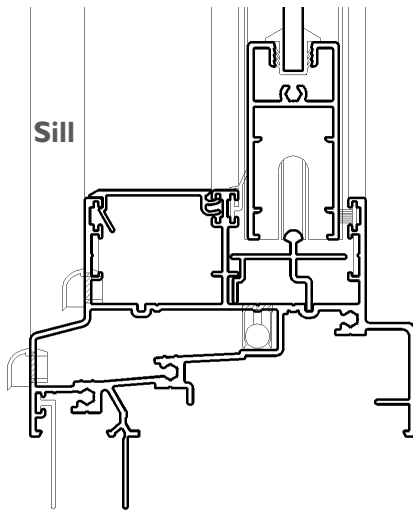
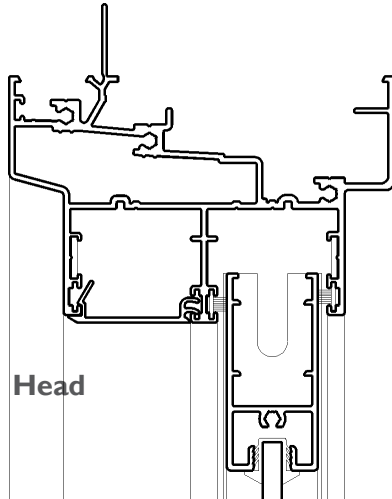
Refer AWS Commercial Specifier Manual for more details.  
Coloured animated images can be seen on AWS web site:  
[www.awscommercial.com.au](http://www.awscommercial.com.au)



# Series 502-504 Residential Sliding Window

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

## ALTERNATIVE MAGNUM™ SLIDING WINDOWS



### Alternative MAGNUM™ Series 602 Sliding Window

If you are looking for a bolder residential frame consider MAGNUM Series 602 Sliding Window.

#### Features overview:

- Bold square 102mm frame with built-in nailing fin.
- Extra strong meeting stiles allow large sliding windows to be fabricated in high wind load areas.
- Double sash design with the external sash fixed.



Refer Designer Series section of this Manual for more details.  
Coloured animated images can be seen on the Vantage web site:  
[www.vantagealuminium.com.au](http://www.vantagealuminium.com.au)

