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#### **KEY FEATURES/PERFORMANCE CHARACTERISTICS**



Series 462 Architectural Sliding Window. Internal View.

Maximum Panel Height*	1600mm
Maximum Panel Width*	1350mm
Maximum Glass Thickness	≤20mm

\* Subject to individual site conditions and wind loads. Contact AWS Technical Support for more information, email techsupport@awsaustralia.com.au

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### 2D & 3D CAD FILES AVAILABLE

To access 2D & 3D CAD models visit our online specifier resource centre **www.specifyaws.com.au** 



#### MORE INFORMATION

For the latest updates regarding this product visit our website www.elevatealuminium.com.au/462

- 102mm thick commercial grade sliding window, incorporates bold frame lines and thick (strong) sashes that can carry thick heavy glass, including double glazing.
- The perimeter frame designed to make installation into brick veneer and cavity brick easier with built-in nailing fins (weather bars).
- Extra strong sashes allow large sash windows to be fabricated for high wind load areas.
- Double sash design with the external sash fixed.
- Both fixed and opening sashes can be installed, replaced or reglazed from inside.
- Large variety of window combinations possible (SF, FS, SFS, SS or FSSF) with and without highlights and/or lowlights.
- We also offer double sliding configuration where both sashes can be opened.
- Sliders can be fitted with standard mortice locks as shown below or alternative surface locks.
- Sashes run on heavy duty wheel carriages.
- Flyscreens can be fitted. When there is no requirement for flyscreens, frame is fitted with cavity closers so there are no unwanted recesses.
- Co-extruded PVC sill seal keeps water out of the system.
- Built-in proprietary ball valve drainage to transfer any water that may get into the drainage trough to the tubular sump sill.
- Will resist up to 300Pa water infiltration and comply with airconditioning requirements.



This image shows the ICON<sup>™</sup> sliding window mortice lock.Alternative ANDO<sup>™</sup> & MIRO<sup>™</sup> designs also available and featured later in this manual.

A number of glass combinations have been tested with this system to acheive sound reduction

**Glass Description** 

4mm Glass

6.38mm Laminated glass

10.38mm Laminated glass

16mm IGU (4mm Glass / 8mm air gap / 4mm Glass

NOTE: The actual tests were carried out on a product very similar to this window (Series 601).

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#### **HOW TO SPECIFY**

#### SYSTEM NAME

Elevate Aluminium Systems Series 462 Architectural Sliding Window

#### FINISH

Rating

Rw31 **Rw33** 

Rw35

Rw32

Powder Coat

Anodised

#### COLOUR

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

#### **GLASS**

Specify thickness ≤20mm

Specify thermal performance where applicable (Uv & SHGC)

Specify acoustic performance where applicable (RW)



Need help specifying this product?Emailtechsupport@ awsaustralia.com.au and our qualified technical advisors will assist you with product selection and specification for

NOTES

I. Uw is the whole window U-value 2. SHGCw is the whole window solar heat gain

coefficient

3. Tvw is the whole window visible (light) transmittance 4. Maximum air infiltration is 5.0L/s.m2 at a positive pressure difference of 75 Pa as measured according to AS 2047

5. Static performance (Uw SHGCw Tvw Tdw) calculated using Window 6.3 and Therm 6.3 software (LBNL), 1999-2010

6. Results disclosed at Australian Fenestration Rating

Council (AFRC) regulations. 7. Ratings for use with Section J of the Building Code of Australia - Class 2-9

For the latest WERS data for this system visit www.wers.net



your project.

Window ID	Glass Type	Uw	SHGCw	Tvw	Inf
AVVS-030-01	5CLR	6.0	0.66	0.69	1.15
AVVS-030-02	5SG	6.0	0.46	0.57	1.15
AVVS-030-03	5GY	6.0	0.49	0.39	1.15
AVVS-030-04	6.38Sct	4.2	0.54	0.63	1.15
AVVS-030-05	6.38VLam	5.9	0.65	0.69	1.15
AVVS-030-06	4SnClr	4.8	0.46	0.51	1.15
AVVS-030-07	6SnClr	4.8	0.45	0.50	1.15
AVVS-030-08	6EVanBG	4.6	0.35	0.42	1.15
AVVS-030-09	6EVanClr	4.6	0.48	0.49	1.15
AVVS-030-10	6EVanGy	4.6	0.31	0.24	1.15
AVVS-030-11	6EVanSpB	4.6	0.28	0.29	1.15
AVVS-030-12	6EVanSpGn	4.6	0.28	0.35	1.15
AVVS-030-13	6.38LamGy	6.0	0.27	0.10	1.15
AVVS-030-14	6.38TLam	6.0	0.31	0.25	1.15
AVVS-030-15	6.38SnClr	4.7	0.44	0.50	1.15
AVVS-030-16	6.38SnGy	4.7	0.33	0.24	1.15
AVVS-030-17	6.38CPClr	4.4	0.52	0.61	1.15
AVVS-030-18	6.38CPGn	4.4	0.38	0.53	1.15
AVVS-030-19	6.38CPGy	4.4	0.38	0.29	1.15
AVVS-030-20	10.38GyLam	6.0	0.18	0.07	1.15
AVVS-030-21	10.38ClrLam	6.0	0.41	0.41	1.15
AVVS-030-22	10.38SnClr	5.1	0.36	0.40	1.15
AVVS-030-23	I0SnClr	4.8	0.33	0.36	1.15
AVVS-030-24	I0.38TLam	4.8	0.33	0.36	1.15

Single Glazed Window ID Glass Type

WERS RATINGS

numbers listed below.

SOUND REDUCTION

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### **RS RATINGS**

#### **Double Glazed**

Window ID	Glass Type	Uw	SHGCw	Tvw	Inf
AVVS-030-25	4/10/4	4.0	0.56	0.58	1.15
AVVS-030-26	5/8/5	4.1	0.54	0.58	1.15
AWS-030-27	4/10/4ET	3.5	0.52	0.54	1.15
AWS-030-28	4/10Ar/4ET	3.3	0.52	0.54	1.15
AWS-030-29	4Az/10/4ET	3.5	0.31	0.45	1.15
AVVS-030-30	5SG/8Ar/5ET	3.4	0.32	0.44	1.15
AVVS-030-31	4SnClr/10/4	4.3	0.34	0.37	1.15
AWS-030-32	4SnClr/10Ar/4	4.1	0.34	0.37	1.15
AWS-030-33	6.38CPClr/8/4	4.3	0.39	0.44	1.15
AVVS-030-34	6.38CPClr/8Ar/4	4.0	0.39	0.44	1.15
AVVS-030-35	6.38CPGy/8/4	4.3	0.28	0.21	1.15
AVVS-030-36	6.38CPGy/8Ar/4	4.1	0.28	0.21	1.15
AVVS-030-37	6SnClr/10/6	4.3	0.33	0.36	1.15
AVVS-030-38	6SnClr/10Ar/6	4.1	0.33	0.36	1.15
AVVS-030-39	10SnClr/6/6	4.5	0.32	0.35	1.15
AVVS-030-40	10SnClr/6Ar/6	4.3	0.32	0.35	1.15

#### NOTES

I. Uw is the whole window U-value 2. SHGCw is the whole window solar heat gain coefficient 2. SHGCW is the Whole Window Solar neat gain coefficient
3. Twi is the whole window visible (light) transmittance
4. Maximum air infiltration is 5.0L/s.m2 at a positive pressure difference of 75 Pa as measured according to AS 2047
5. Static performance (Uw SHGCw Tww Tdw) calculated using Window 6.3 and Therm 6.3 software (LBNL), 1999-2010
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For the latest WERS data for this system visit www.wers.net



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#### **DESIGN FEATURES**

The 26mm thick heavy duty sliding window sashes have been fitted into custom head, sill and jamb inlay adaptor that snaps to standard 30mm frame as shown right or alternative 44mm wide jamb.

The extra strong sashes allow large sash windows to be fabricated for high wind load areas.

Double sash design with the external sash fixed (SF) or both sashes moving (SS).

Both fixed and opening sashes can be installed, replaced and/or reglazed from inside the building. This could be an important feature in elevated situations

There is a large variety of window combinations possible (SF, FS, SFS, FSSF or SS) with and without highlights/lowlights.

We have designed a number of compatible framing suites that can be coupled or used together.

- Series 400 CentreGLAZE<sup>™</sup> framing
- Series 424 Double GLAZED CentreGLAZE™ framing

102mm x 44mm head and sill, 102mm x 30mm (or alternative 44mm) jamb, 44mm mullion and 44mm transoms match.

Sliders can be fitted with standard mortice locks or alternative surface locks.

Sashes run on heavy duty wheel carriages.

Two flyscreen options (not applicable to type 'SS' windows):

- No flyscreens: Frame fitted with cavity closers so there are no unwanted recesses to catch dust, water and bugs, as shown right.
- **Conventional flyscreens:** Two conventional size extruded flyscreen frames (25 x 11) can be fitted into the window using custom frame trims to accept the screen, refer details in these notes.

Co-extruded PVC sill seal keeps water out of the system. We have built-in the proprietary ball valve drainage to transfer any water that may get into the drainage trough to the tubular sump sill. This valve also reduces blowback through the hooded external drainage holes.

Unwanted frame recesses are fitted with snap-in flat closers to ensure that the clean looks are maintained.

It's possible to re-hand the window on-site (change type 'SF' to 'FS') depending on what lock has been used.

Sashes and sidelights will accept a variety of glass thicknesses from 4mm to 20mm insulating glass units. Dedicated sash rail and stiles for 16mm IGUs.

We have 90° and 135° corner mullions for bay and box windows.





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Series 462 can be fabricated as 'SF', 'FS', 'SFS', 'FSSF' or SS with lowlights and/or highlights as shown above.

The illustration left shows how the unwanted recesses are closed off to improve weather performance and appearance.

#### Safety Glass:

On the example below, the door panel and the two sashes in the sliding window sidelights would require grade 'A' safety glass. If the opening sash was in the open position it would be within 300mm of the door opening. Highlight and lowligh must also be glazed using grade 'A' safety glass. Refer Australian Standard AS 1288 for more information.

Alternative 44mm wide jamb illustrated.

Water Resistance: We always recommend the use of sub-sills under commercial frames.





#### SASH STRENGTH

'SF', 'FS' and 'SS' windows						
Height	Width		Meeting stile combinations			
mm	mm		Light	Medium	Heavy	Extra Heavy
		L/180 S	1064	1717	2528	
1600 1832	1832	L/250 S	766	1243	2216	
		U	2273	2576	3792	
1600 213		L/180 S	946	1517	2234	
	2132	L/250 S	681	1105	1970	
		U	2008	2276	3351	
1600 2432		L/180 S	871	1388	2043	
	2432	L/250 S	627	1017	1814	
		U	1837	2082	3065	
		L/180 S	826	1309	1927	
1600	2732	L/250 S	595	965	1720	
		U	1732	1963	2890	

'SFS' win	dows					
Height	Width	Meeting stile combinations				
mm	mm		Light	Medium	Heavy	Extra Heavy
		L/180 S	1100	1762	2594	
1600	2432	L/250 S	792	1284	2289	
		U	2332	2643	3891	
		L/180 S	1028	1641	2416	
1600 27	2732	L/250 S	740	1200	2140	
		U	2172	2462	3624	
1600 30		L/180 S	981	1565	2304	
	3032	L/250 S	707	1146	2043	
		U	2071	2347	3456	
		L/180 S	947	1510	2223	
1600	3332	L/250 S	682	1106	1972	
		U	1998	2265	3334	
		L/180 S	918	1461	2151	
1600	3632	L/250 S	661	1072	1911	
		U	1935	2192	3227	

'FSSF' w	indows					
Height	Width	Meeting stile combinations				
mm	mm		Light	Medium	Heavy	Extra Heavy
		L/180 S	1507	2444	3333	
1600	2432	L/250 S	1085	1760	3138	
		U	3251	3684	5000	
		L/180 S	1343	2179	3215	
1600	2732	L/250 S	967	1569	2797	
		U	2891	3276	4823	
		L/180 S	1219	1976	2908	
1600	3032	L/250 S	877	1423	2537	
		U	2615	2963	4363	
		L/180 S	2	1813	2669	
1600	3332	L/250 S	807	1309	2334	
		U	2399	2719	4003	
		L/180 S	1044	1682	2478	
1600	3632	L/250 S	752	1219	2174	
		U	2228	2524	3716	

Rating tables for window meeting stiles on this page. **S** = Serviceability limit state

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- (deflection = L/180 or deflection L/250). **U** = Ultimate strength limit state
  - (factored yield strength = 104MPa).

These tables have been calculated using nominal section properties.

A typical assembly has been tested as per the requirements of AS 2047.

Serviceability rating has been limited to 3333Pa and Ultimate strength rating has been limited to 5000Pa.





Type 'FSSF' windows are limited by the strength of the centre meeting stiles.

#### Meeting stile combinations

	External	Internal
Light	42036	42036
Medium	42036	42014
Heavy	42036	42015
Extra heavy	42015	42015
Describence	• • • • • • • • • • • • • • • • • • •	1

Details on meeting stiles are shown on later page.

#### Water resistance - 300Pa

We always recommend sub-sills under commercial windows.



Wind Ratings (Pa)

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**JAMB DETAIL** 



This image shows ICON<sup>™</sup> mortice lock and the alternative ANDO<sup>™</sup> and MIRO<sup>™</sup> cover plates.

- ICON<sup>™</sup> cover plate is brushed stainless steel.
- ANDO<sup>™</sup> cover plate is cast aluminium and available in a variety of standard and special powder coat finishes.
- MIRO<sup>™</sup> cover plate incorporates high performance powdercoat finish ideal for coastal applications.

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The custom jamb adaptor has been designed to allow us to have two lines of reveal fixings (as shown). This pulls the reveal up tight on the window frame - no more gaps.

The detail left shows the standard 30mm narrow jamb. We also have a 44mm wide nailing fin jamb.

Window can be fitted with standard mortice lock (ANDO<sup>™</sup> or ICON<sup>™</sup>) as shown or alternative surface mounted lock. You can view the lock options in colour on our website www.elevatealuminium.com.au





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#### HORIZONTAL SECTION THROUGH 'SF' WINDOW



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Australian registered design.

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#### **SILL DRAINAGE**





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#### DOUBLE GLAZED WRAP AROUND SLIDING SASH - TYPE 'FS' WITH 16mm IGU AND 24mm IGU IN THE DOUBLE GLAZED FIXED LOWLIGHT

This detail is created with run through double glazed jambs.

The jamb runs through to ensure overall frame strength and weather resistance.

In the lowlight area the wide glazing pocket will accept 24mm IGU's with co-extruded Santoprene captive and roll-in glazing wedges.

In sliding sash area we use a dedicated jamb adaptor, to snap into the double glazed frame pocket.

Series 462 transom (sill) accept the double glazed CentreGLAZE<sup>™</sup> pocketed filler.To achieve a wide double glazed pocket in the fixed area we snap the double glazed channel adaptor to the transom sill as detailed right.

The double glazed unit nests neatly into transom, jambs and sill, giving a clean professional finish.

Water resistance 300Pa.

Heavy double glazed sashes heavier than 30Kg will be fitted with double bogey wheels.'





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### DOUBLE GLAZED WRAP AROUND SLIDING SASH WITH 16mm IGU AND 24mm IGU IN THE DOUBLE GLAZED FIXED LOWLIGHT





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#### HORIZONTAL & VERTICAL SECTION TYPE 'SS' WINDOWS

# VERTICAL SECTION type 'SS' WINDOWS



The panels shown on this page will accept glass up to 7.52mm thick, we also have stiles, rails and wedges that will accept 8.38, 10.38 laminated and 16mm IGU's or 20mm thick IGU's with channel adaptor.

Standard 30mm nailing fin jamb.

Series 462 windows are fitted with custom ANDO<sup>™</sup> press button locks (both sashes). Key lock when required.



This cut away image of alternative  $\mathsf{ICON}^{\,\mathsf{TM}}$  mortice.

The features of this lock are:

- Stainless steel ICON<sup>™</sup> face plate and push plate.
- Stainless steel lock tongue hole dress plate.
- Stainless steel lock tongue.
- The lock will self latch when closed, can be key locked when required for added security.



Panels run on large diameter ball bearing nylon tyres for smooth long term operation. Single wheel rollers used on panels <=30Kg, on heavier panels >30Kg we fit double bogey wheels.





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