



FSA[®]

FENESTRATION
SOLUTIONS
AUSTRALIA

CATALOGUE
EW HARDWARE SYSTEM
centor[®]



MAKING
LIFE
BETTER

WHAT WE STAND FOR

Everyday we live our overarching purpose; to make life better for our team, our customers and to drive our industry forward. To be better than yesterday and committed to a better tomorrow through everything we do.

Ultimately, we inspire architectural innovation and improve homes to create enjoyable and efficient lifestyles. We search the world over to source the most desirable, innovative and superior products available for the Australasian market. Combining stunning aesthetic design, state-of-the-art features, and first-class thermal efficiency, FSA introduces incredibly smart solutions for Australian window & door manufacturers and their customers.

Our experience and research reflects a detailed understanding of local and international markets, technical expertise and a dedication to exceptional customer service and streamlined support. This is exemplified in our extensive portfolio demonstrating our commitment to making life better.



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AN EXCITING WINDOW ALTERNATIVE

EW brings the functionality and style of bifold technology to smaller-scale external openings. An exciting alternative to conventional window styles in the widest variety of applications.

Centor EW is an external bifolding window hardware system for windows with a maximum sash weight up to 20 kilograms.

EW is suitable for a range of smaller residential and commercial openings including counters and serveries, as an alternative to conventional windows in bedrooms or living areas, or anywhere the larger panel capacity of one of Centor’s bifold door systems is not required.

EW comes complete with aluminium and timber lineal kits and can be fully factory assembled prior to installation. The system offers a vertically retractable insect screen, bringing functionality and style to bifold windows.

EW Specifications	
max opening	1500 x 2500mm
max panel weight	20kg
max panel height	1500mm
max panel width	610mm
panel thickness	32 – 38mm
max number of panels	4



EFFORTLESS OPERATION



Weatherproof

Impressive water performance ratings are achievable from outward opening windows with the system achieving its superior rain and wind resistance in part from the way the window panel closes snugly against weather seals. Resistance to air infiltration up to fifty times better than a sliding window, and impressive acoustic sealing qualities are additional benefits.

Screening

The EW insect screen system is fully integrated into the window system and can be fully retracted for unobscured vistas. The chain-operated system can be operated with one hand and provides for easy access over benches or furniture.

Dropbolts

Easily installed in timber panels with dedicated router bits, Centor's DM and DS low profile dropbolts avoid the untidy look of bolted-on fasteners and come in a range of finishes.

Easy assembly, installation and adjustment

EW has been designed to be fully assembled and fitted in the fabricator's factory allowing simple site installation of the finished unit. Whether assembled in the factory or on site, installation couldn't be easier with complete kits for four popular configurations, comprehensive instructions and drill jigs available for the surface-mounted fittings.

Patented Surelock™ adjustment mechanisms allow vertical and lateral adjustments to be made with a screwdriver.

UNPARALLELED PERFORMANCE



Proved performance

Produced in architectural grade stainless steel, solid brass, aluminium and engineering grade plastics, individual EW components have undergone extensive laboratory testing including cyclic testing to 50,000 cycles as well as corrosion testing, structural testing and finite element analysis. Stainless steel bearings are custom machined individually and are precision ground. Unparalleled performance is the result from this top-hung design, with smoothness of function that has to be felt to be believed.

Finishes

Carriers, guides, pivots and hinge sets: architectural grade brushed stainless steel, PVD Brass, white and custom powdercoat.

Aluminium lineal kits including head tracks and floor guide channels: natural & gold anodised, custom powdercoat.

Timber lineal kits are available in New Guinea Rosewood, Western Red Cedar and Surian Cedar.

Warranty

In line with a commitment to the highest possible quality Centor offers a 10-year warranty on all E3 hardware. For full details refer to the current Centor Catalogue, or view information online at centor.com.

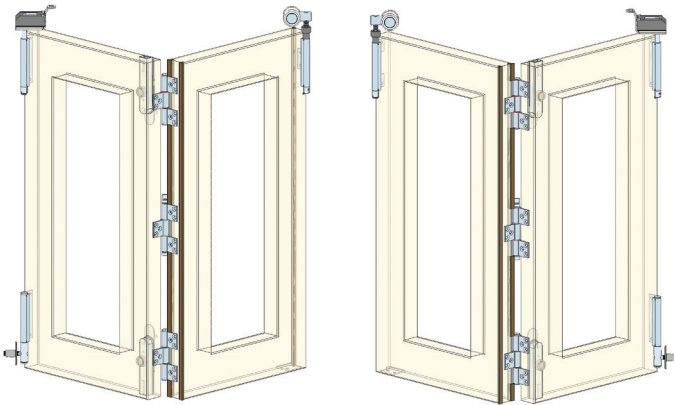
Specifying EW

Windowcalc, Centor’s free specification and ordering software, simplifies component selection and assists with calculating size and number of window sashes. Windowcalc is downloadable from centor.com. Alternatively, architects and designers can simply specify ‘Centor EW’ and leave detailed component selection to the builder, joiner or fabricator.

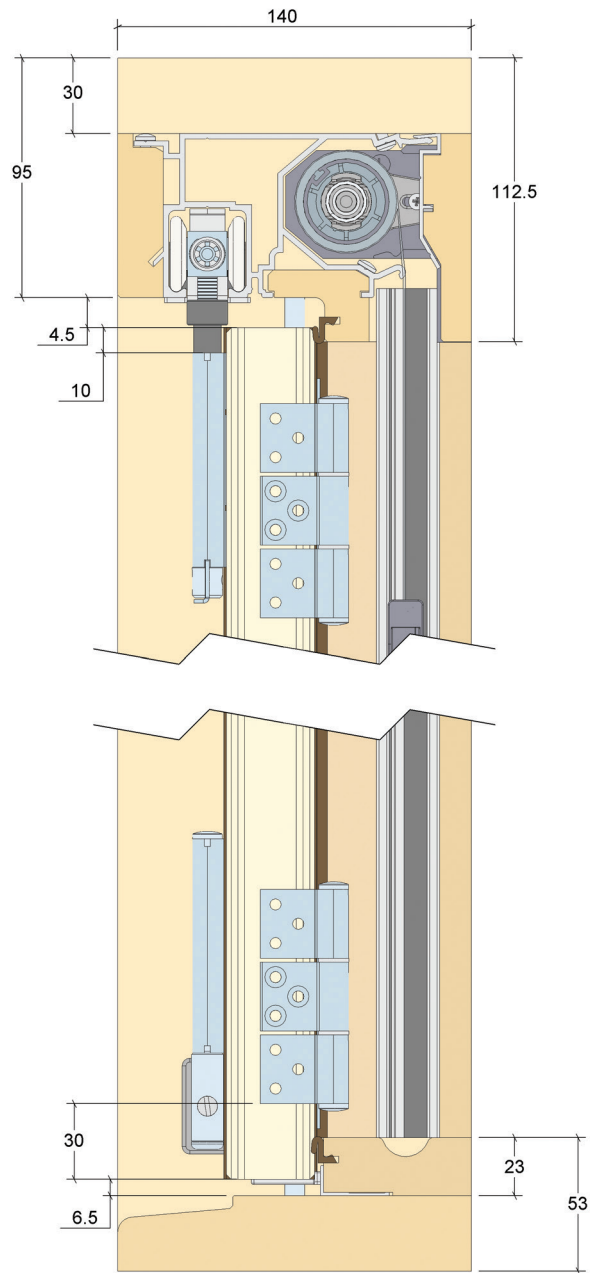


Downloadable DXF or DWG files ready for use in your own documentation are a convenient resource for architects and specifiers wishing to use Centor systems.

EW DXF or DWG files can be downloaded from centor.com

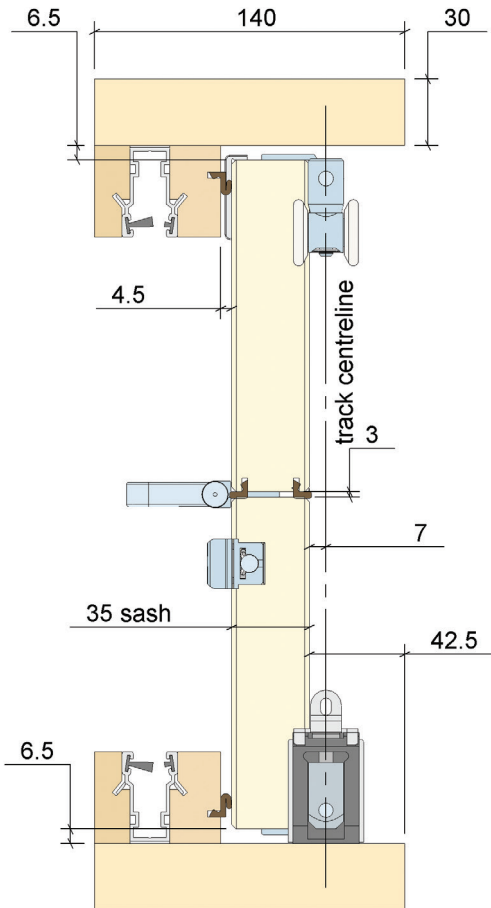


Patents apply



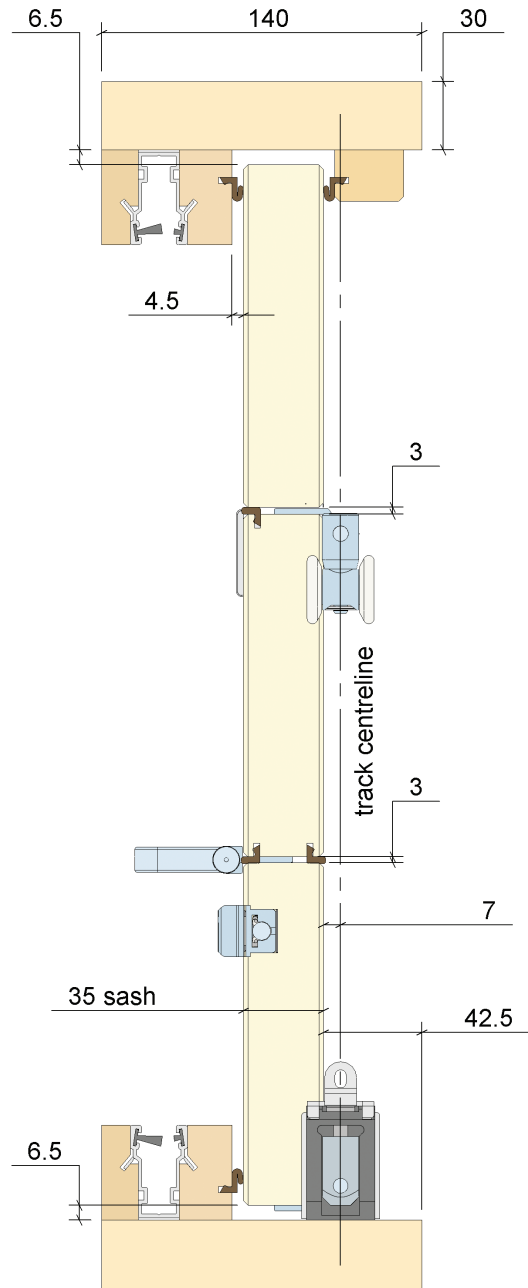
EW profile

EW2



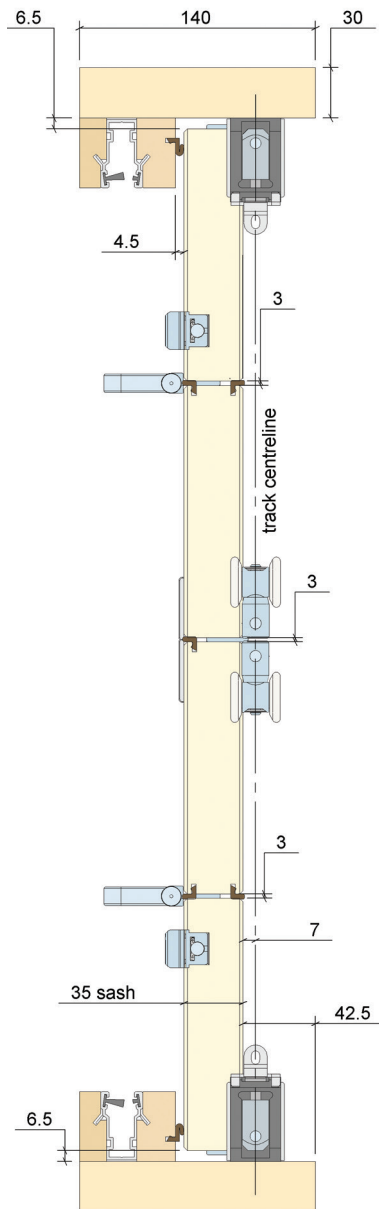
2 sashes opening left (2L - shown above) uses EW2 hardware set
 2 sashes opening right (2R) uses EW2 hardware set

EW3



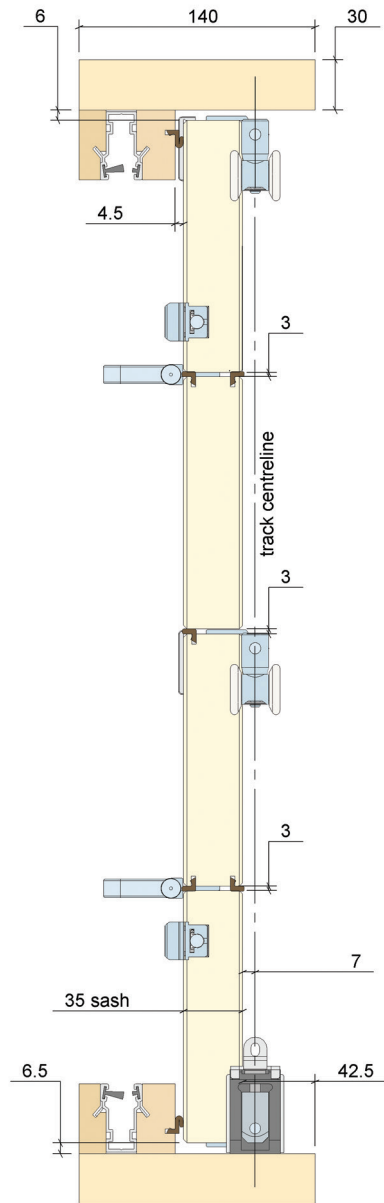
3 sashes opening left (3L - shown above) uses EW3 hardware set
 3 sashes opening right (3R) uses EW3 hardware set

EW2L2R



2 sashes opening left and 2 sashes opening right (2L2R) uses EW2L2R hardware set

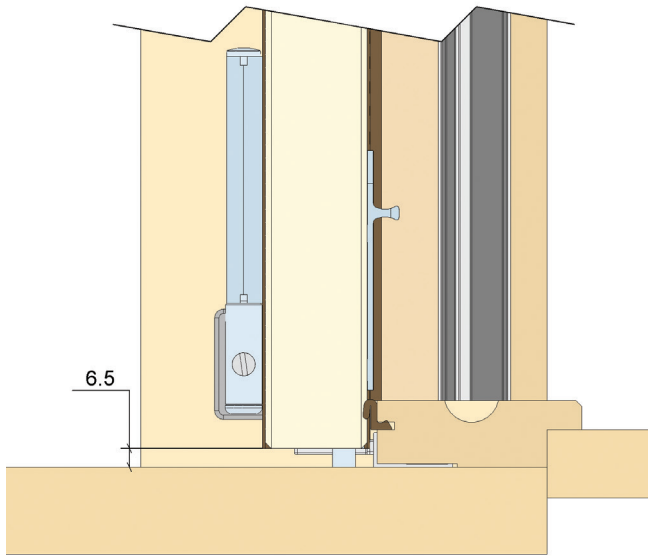
EW4



4 sashes opening left (4L - shown above) uses EW4 hardware set
4 sashes opening right (4R) uses EW4 hardware set

Alternative servery sill detail

Step servery



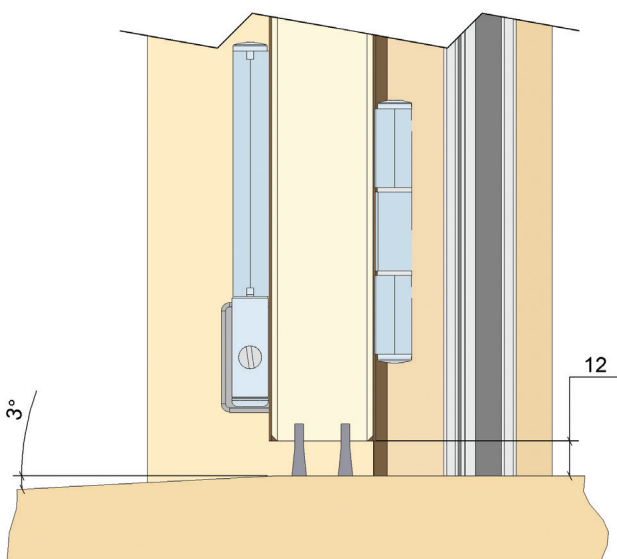
Servery applications

A kitchen opening out onto a deck is the perfect place to install an EW over a flat benchtop (ie with no sill stop and no friction guide). There are a few considerations to take into account to ensure you are delighted with the outcome.

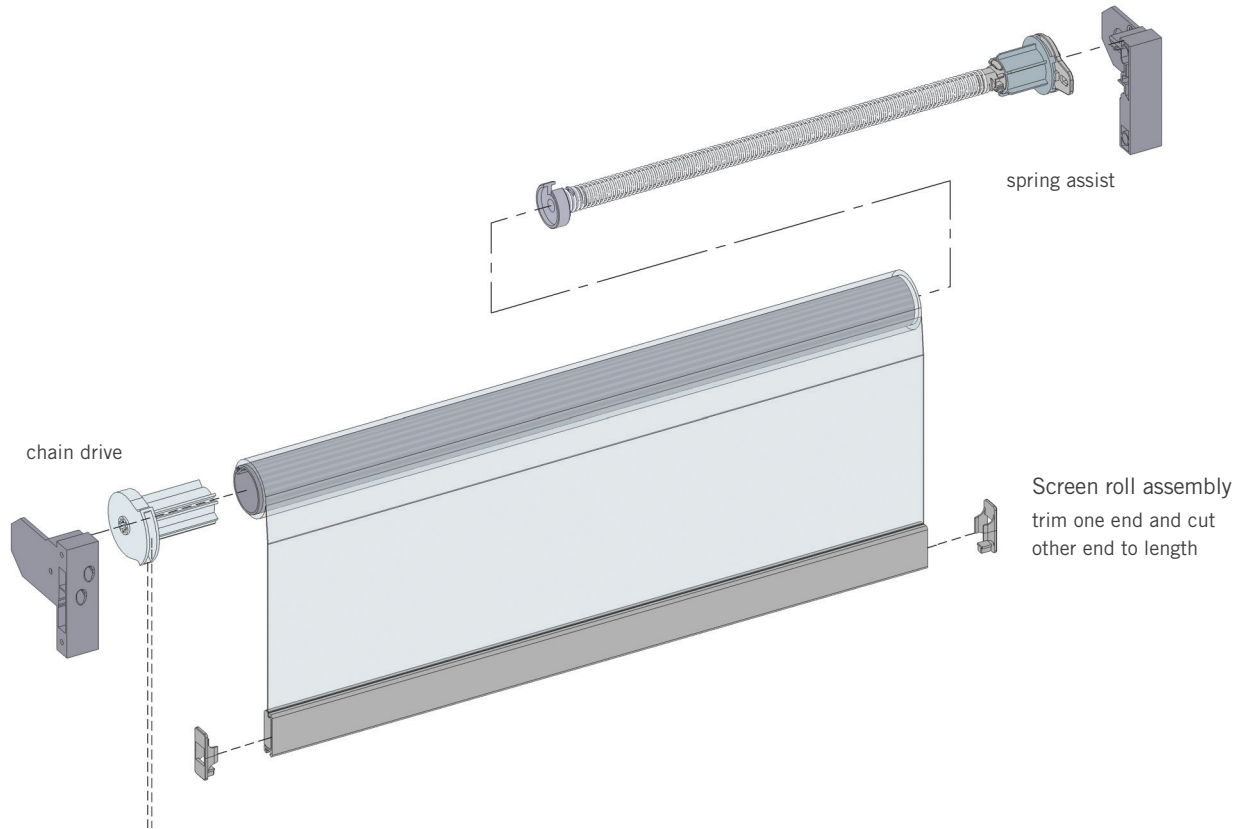
1. The best window combinations to use on a flat servery bench application are pairs of sashes - that is 2L or 2R, or a 2L2R (all with a 12mm clearance).
2. With a 2L2R combination, Centor recommends the use of 2 additional DM dropbolts at the bottom of the 2 meeting stiles.
3. With a 4L or 4R combination you will need to make an allowance for the sashes dropping when being opened. This is a popular solution in some house designs, and to make it work well, the benchtop will need to have 12mm clearance and a 3° fall on the benchtop outside of the window line. This will ensure that there is adequate clearance between the sash and the benchtop.
4. Centor does not recommend the use of a 3L or 3R combination without a friction guide.

It is not feasible to make this style of window weatherproof, and therefore water proofing needs to be assured by other means - such as a wide verandah (also perfect over the deck).

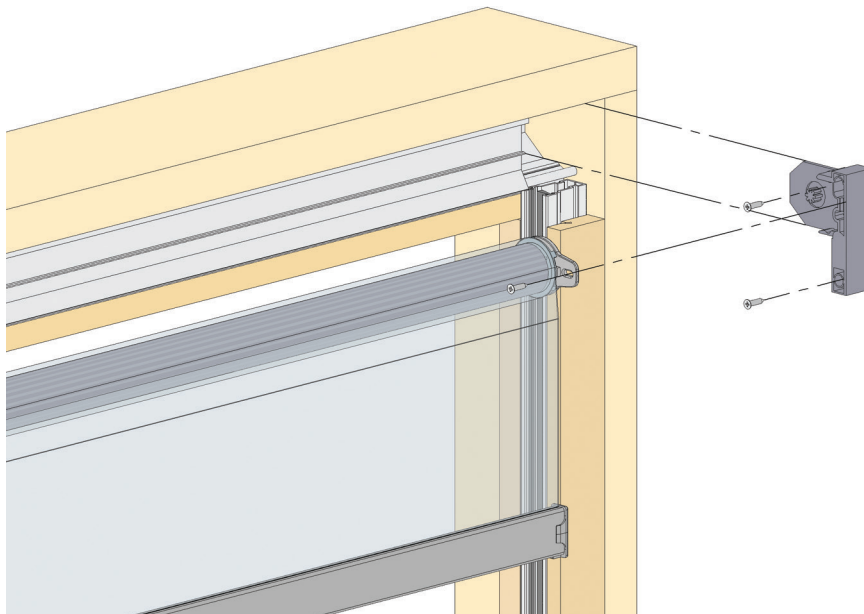
3° fall outside servery (4L, 4R)

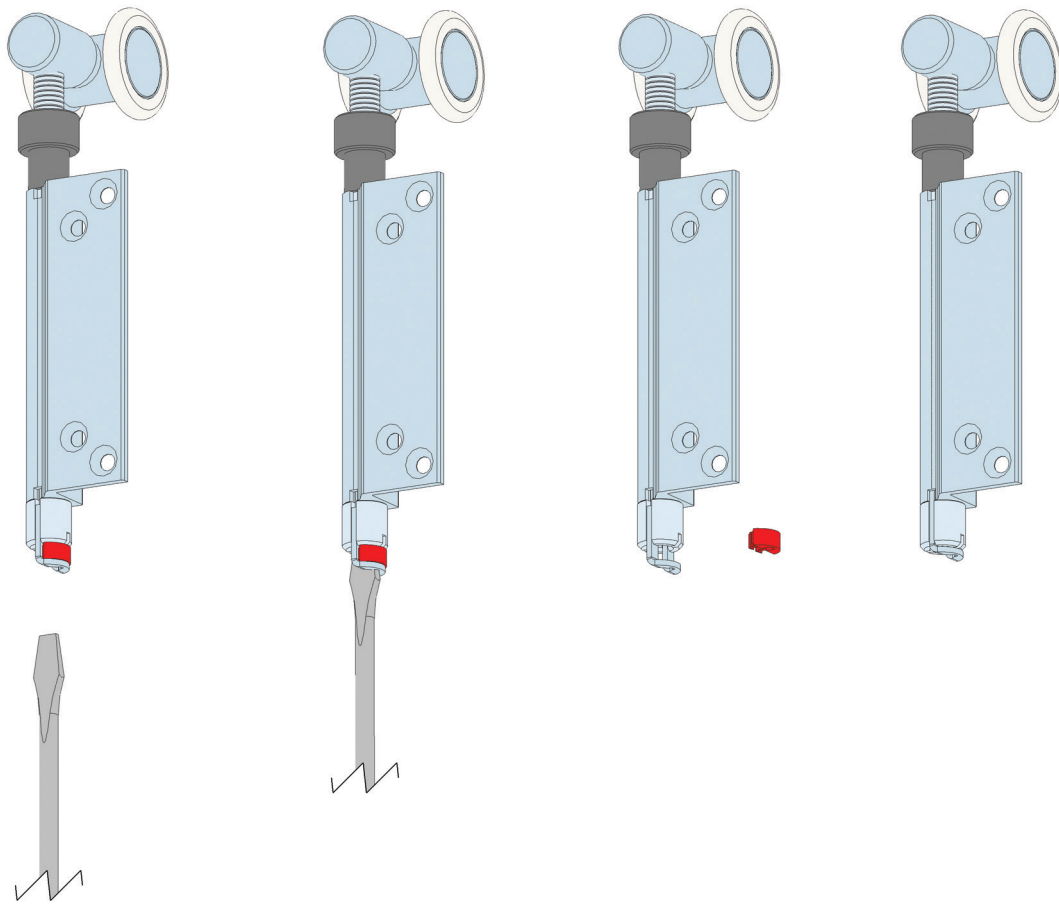


Screen kit contents

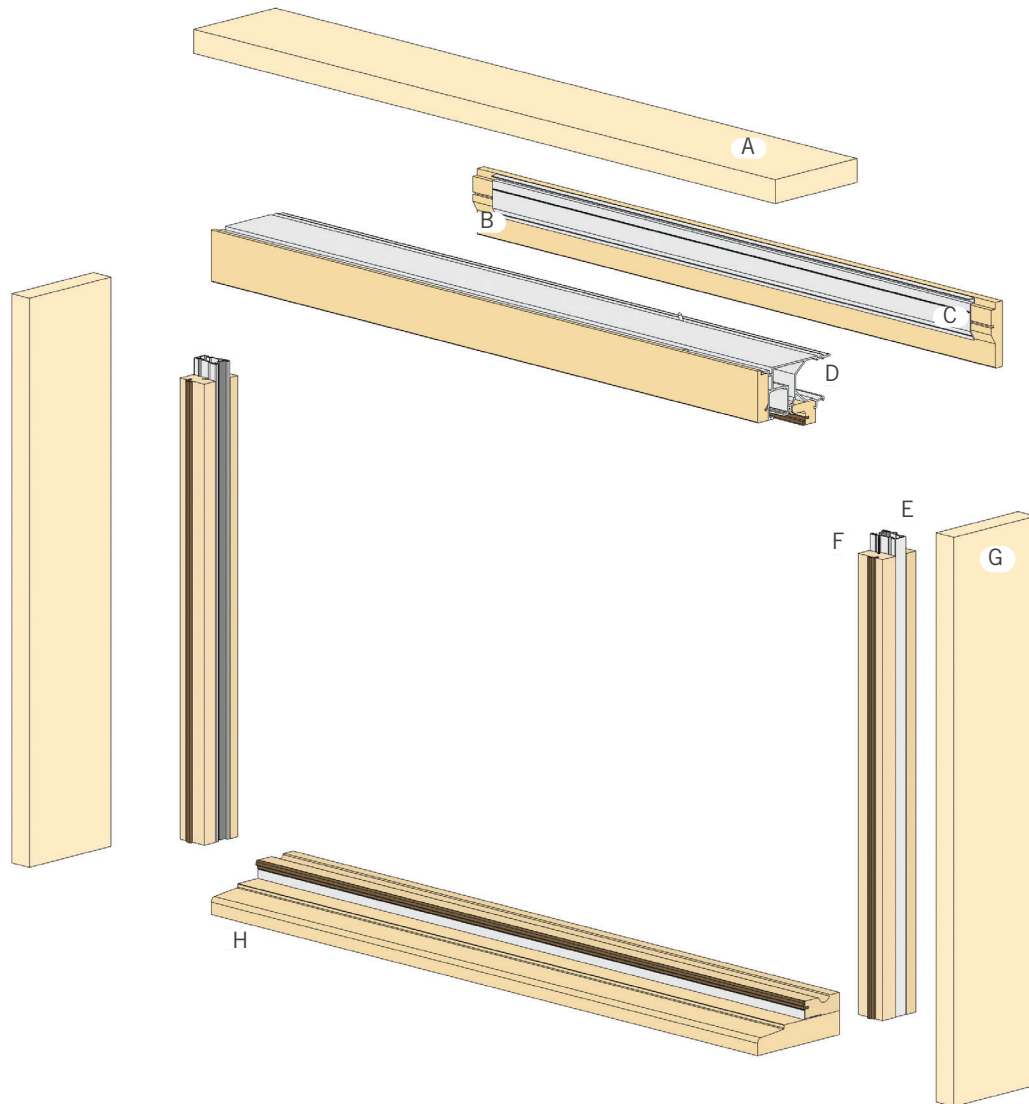


Lock off spring assist





Surelock™ is Centor's patented carrier pin locking system which ensures that once door heights are set at the top pivots, intermediate and end carriers, they stay set!



The Centor WindowCalc XL™ package calculates exact panel and cutting sizes and also specifies the required hardware for the EW.

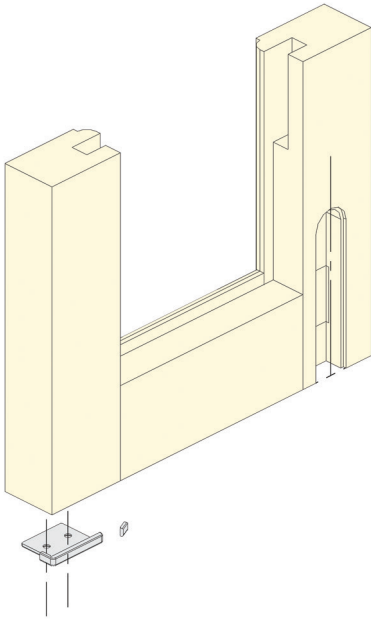
With WindowCalc™ you have several choices to obtain the desired window configuration.

Your choices include: the number of sashes; window material (wood or aluminium); rollscreen; timber species; hardware and extrusion finishes; sill option (flat servery or not); seal colour; keying and dropbolt style.

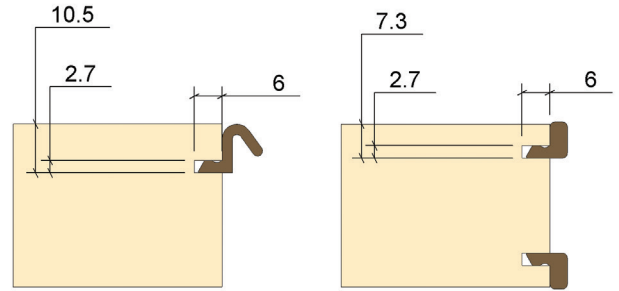
WindowCalc™ will calculate all lengths and list all hardware and components required. Input either a rough opening size or a panel size and making the choices available, WindowCalc™ will calculate all the other details. WindowCalc™ can be downloaded from centor.com.

- A Head
- B Pelmet
- C Pelmet aluminium backing
- D Track assembly
- E Vertical screen guide
- F Vertical stops
- G Jamb
- H Sill assembly

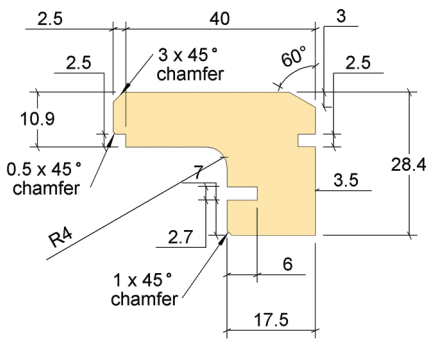
Sash joinery detail



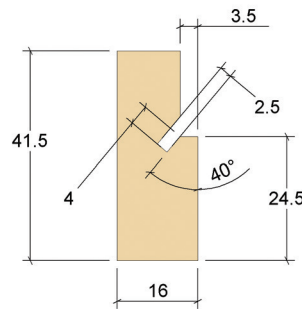
Seal preparation detail



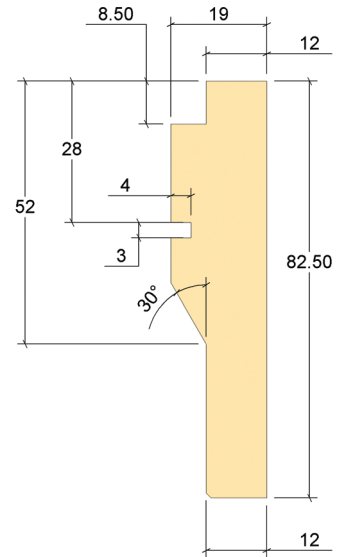
Head stop



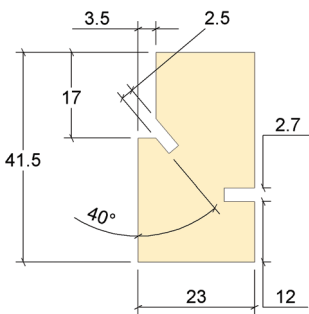
Vertical stop (inside)



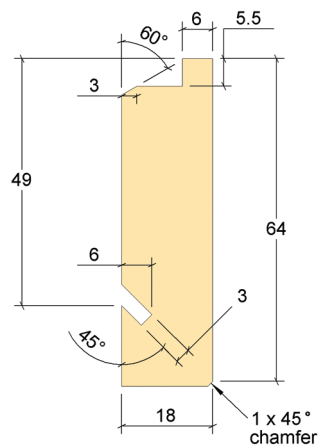
Pelmet



Vertical stop (outside)



Face board

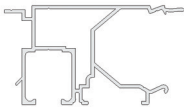
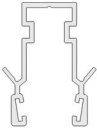




A screened* EW system is specified with 6 separate groups of components. Components are required from each group to build a screened EW folding window system.

1. Aluminium Lineal Kit - choose surface finish and size required to suit opening
2. Timber Lineal Kit - choose timber species and size required to suit opening
3. Rollscreen Kit - choose left or right handed operation and size required to suit opening
4. Window Hardware Kits - choose surface finish and hardware kits required to suit panel layout
5. Dropbolts - choose surface finish, type, size and number required to suit panel layout
6. Weather Seals - choose colour, type and amount of each seal required to suit opening size and panel layout



*For non-screened please select a top track and proceed with steps 4, 5 and 6.

Aluminium lineal kit*

Parts Contained in Kit	Select Kit Size	Select Finish	Kit Code
 <p>track x1</p>	1200 H x 1900 W	natural anodised	EWALK1219N
	1200 H x 1900 W	gold anodised	EWALK1219G
 <p>vertical screen guide x2</p>	1200 H x 1900 W	custom powdercoat	EWALK1219PC
 <p>pelmet backing x1 mill finish only</p>	1500 H x 2500 W	natural anodised	EWALK1525N
	1500 H x 2500 w	gold anodised	EWALK1525G
 <p>sill guide x1</p>	1500 H x 2500 W	custom powdercoat	EWALK1525W

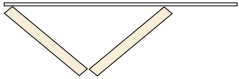
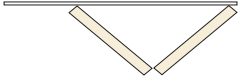
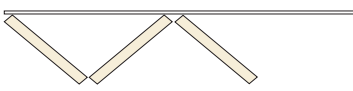
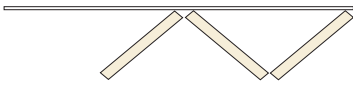

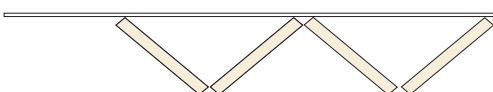
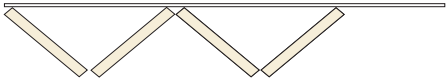
*Aluminium lineal kits contain the required head seal and vertical guide seals

Timber Lineal Kit

Parts Contained in Kit		Select Kit Size	Select Finish	Kit Code
	head stop x1	1200 H x 1900 W	new guinea rosewood	EWTLK1219NRG
	face board x1	1200 H x 1900 W	western red cedar	EWTLK1219WRC
	vertical stop (inside) x2	1200 H x 1900 W	surian cedar	EWTLK1219SRC
	pelmet x1	1500 H x 2500 W	new guinea rosewood	EWTLK1525NRG
		1500 H x 2500 W	western red cedar	EWTLK1525WRC
	vertical stop (outside) x2	1500 H x 2500 W	surian cedar	EWTLK1525SRC

Timber kits supplied are for 35mm sashes. Sashes of other thicknesses will require the customer to mill their own profiles to suit their sashes. Consult Centor for details

Hardware Selection

Code	Opening Configuration	Hardware		Key* (see below)
2L		Hardware	EWS2L	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	1 x DBSO300KR	1
			1 x DBMI100KR	1
2R		Hardware	EWS2R	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	1 x DBSO300KR	1
			1 x DBMI100KR	1
3L		Hardware	EWS3L	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	2 x DBSO300KR	1
			2 x DBMI100KR	1
3R		Hardware	EWS3R	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	2 x DBSO300KR	1
			2 x DBMI100KR	1
2L2R		Hardware	EWS2L2R	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	2 x DBSO300KR	1
			2 x DBMI100KR	1
4R		Hardware	EWS4R	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	2 x DBSO300KR	1
			2 x DBMI100KR	1
4L		Hardware	EWS4L	1
		Aluminium Lineal Kit	EWALK	1 2
		Timber Lineal Kit	EWTLK	2 3
		Flyscreen	EWRS	4 5
		Dropbolts	2 x DBSO300KR	1
			2 x DBMI100KR	1

*Key

1 finish

G = gold

N = satin

S = brushed stainless steel

PC = custom powder coat

TG = PVD Brass

2 kit size

1219 = 1200 high x 1900 wide

1525 = 1500 high x 2500 wide

3 timber finish

NGR = new guinea rosewood

SRC = surian cedar

WRC = western red cedar

4 flyscreen length

19 = 1900 long

25 = 2500 long

5 flyscreen handing

L = left hand

R = right hand

Test Results

A window was tested and certified by a NATA accredited testing facility (laboratory 14093) for a window 1500 x 2500mm in Western Red Cedar. This test certificate is valid for any stronger species of wood at the ratings listed here. For higher ratings using stronger species, retesting will be required. Contact Centor for full manufacturing details.

Weathersealing

The Centor EW folding system was designed specifically for use in external environments, typically where a sliding glass window would previously be used. The system allows folding window panels to close tightly against weatherseals to effectively resist water penetration and air infiltration.

The system was the first tracked timber folding window system to be successfully certified against Australian Standard AS2047 by a Testing Laboratory accredited by the National Association of Testing Authorities, Australia (N.A.T.A.)

The EW was tested using Aquamac™ Kerf Seals and has been certified to meet the 150Pa water rating and 1 l/sec air infiltration rating.

A Guide to AS2047

1. Air Infiltration Test specifies the maximum air infiltration allowed at a given pressure. As a guide, at 75Pa pressure, a rating of less than 1.0 litres/second/sqm for high performance windows.
2. Water Penetration specifies the maximum pressure at which there shall be no penetration of uncontrolled water beyond any internal surface of the window. The minimum rated pressure specified by the standard is 150Pa.
3. Ultimate Strength specifies that the windows and hardware shall not collapse when subjected to positive (inwards) or negative (outwards) pressure. As a guide, the minimum rated load is 600Pa.

AS2047 Test Results - Certificate No. 0038

EW	
min water penetration	150Pa
max air infiltration (per sq.m.)	0.2 litres/sec
deflection test	1000Pa
min ultimate strength	1500Pa

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