

EW

top-hung bifold window hardware system

4 window panel capacity

20kg window capacity

retractable insect screen

# EW: BIFOLDING SYSTEM

EXTERNAL BIFOLDING WINDOW SYSTEM FOR SASH WEIGHTS TO 20KG

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

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 first folding window system to offer a fully integrated retractable insect screen, EW successfully brings the functionality and style of bifold technology to smaller-scale openings.

## 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 window panel to close 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 flyscreen 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.

## PROVEN PERFORMANCE

Produced in the 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 precision ground to ultra-fine clearances. Unparalleled performance is the result from this top-hung design, with smoothness of function that has to be felt to be believed.

## EASY ASSEMBLY, INSTALLATION & 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, while care has been taken to ensure adjustment is possible from inside the building in elevated applications.

## FINISHES

- Carriers, guides, pivots and hinges – architectural grade aluminium in bright gold, satin natural, white powdercoat and mahogany bronze.
- Aluminium lineal kits include head tracks and floor guide channels produced in matching finishes.
- Timber lineal kits are available in New Guinea Rosewood, Western Red Cedar and Surian Cedar.



## 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 [www.centor.com.au](http://www.centor.com.au). Alternatively architects and designers can simply specify "Centor EW" and leave detailed component selection to the builder, joiner or fabricator.



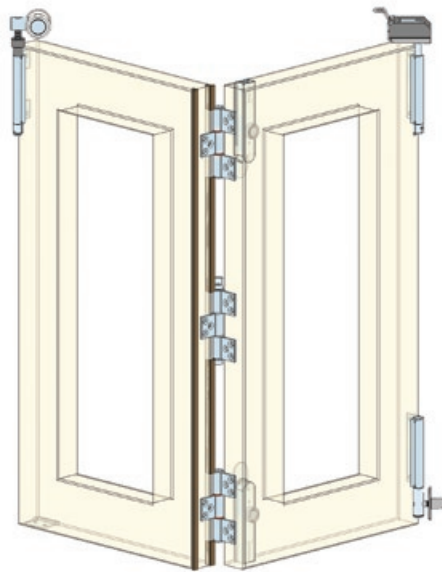
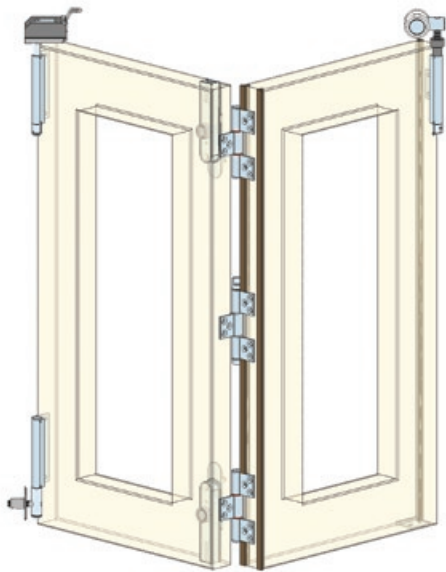
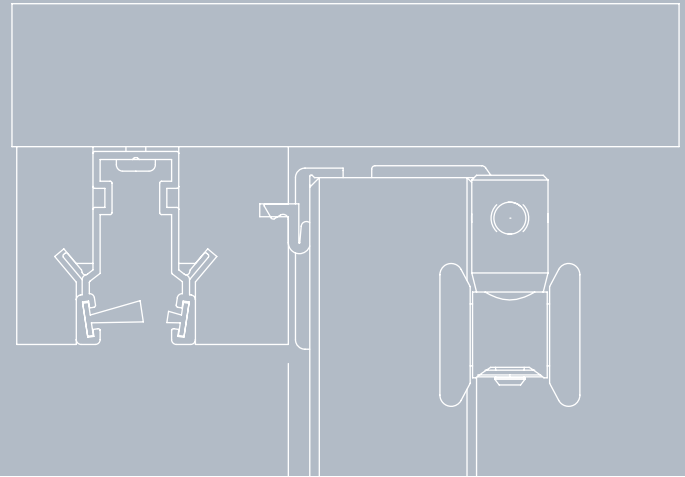
EW BRINGS THE FUNCTIONALITY AND STYLE OF BIFOLD TECHNOLOGY TO SMALLER-SCALE EXTERNAL OPENINGS. AN EXCITING ALTERNATIVE TO CONVENTIONAL WINDOW STYLES IN THE WIDEST VARIETY OF APPLICATIONS.



## EW: ARCHITECTURAL DETAIL

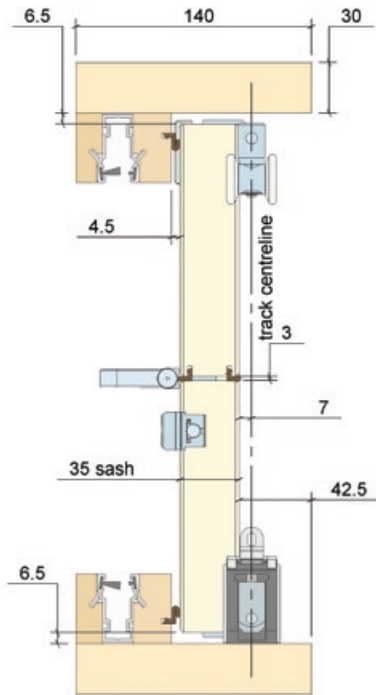
Downloadable DXF or DWG files ready for use in your own documentation are a convenient resource for architects and specifiers wishing to use Centor systems.

EW DXF or DWG files can be downloaded from [www.centor.com.au/au/ew\\_cad.html](http://www.centor.com.au/au/ew_cad.html)

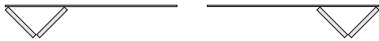


PATENTS APPLY

EW2

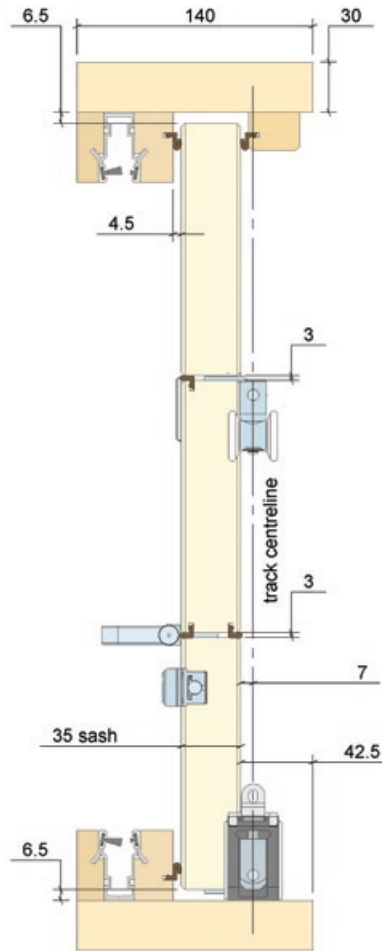


EW-004.DXF



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

EW3

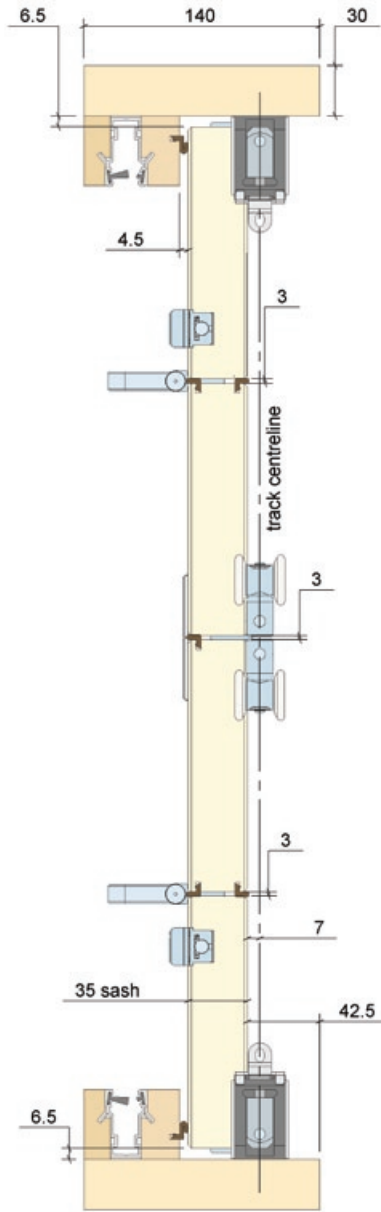


EW-003.DXF



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

EW2L2R

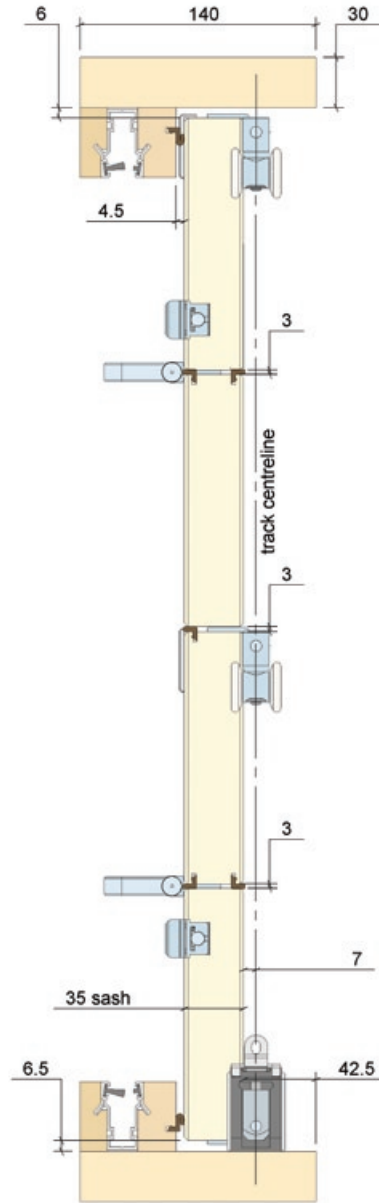


EW-001.DXF



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

EW4

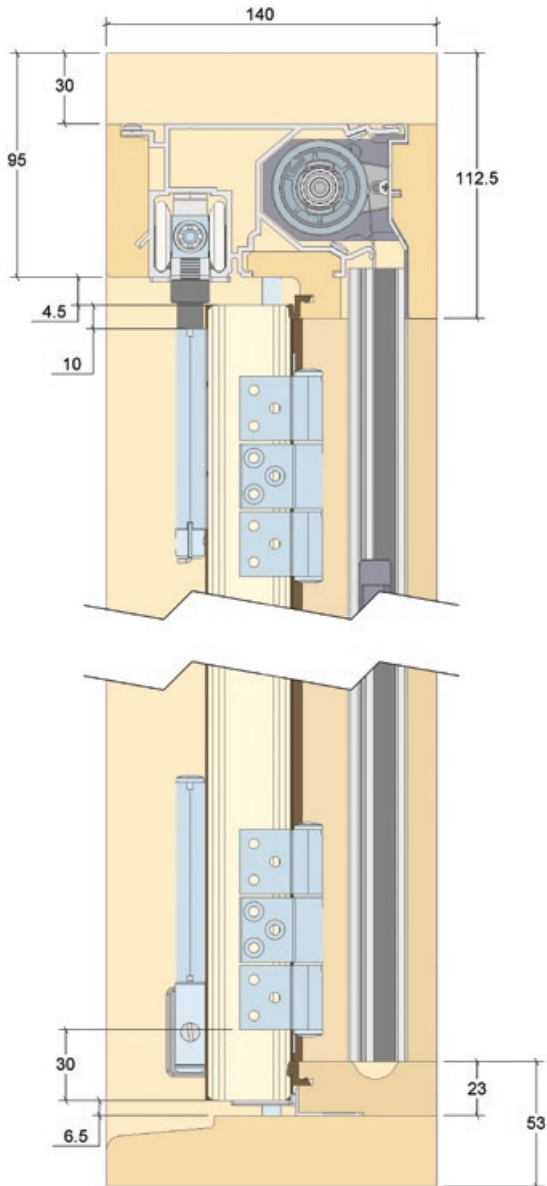


EW-002.DXF



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

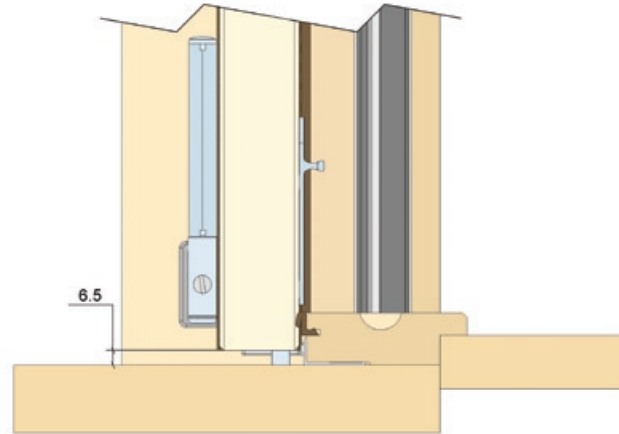
EW PROFILE



EW-005.DXF

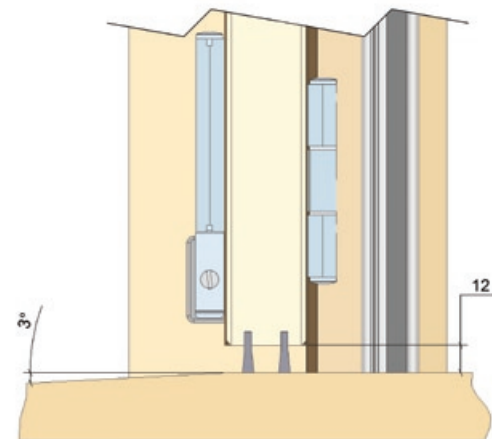
ALTERNATIVE SERVERY SILL DETAIL

Step servery



EW-006.DXF

3° FALL OUTSIDE SERVERY (4L,4R)



EW-007.DXF

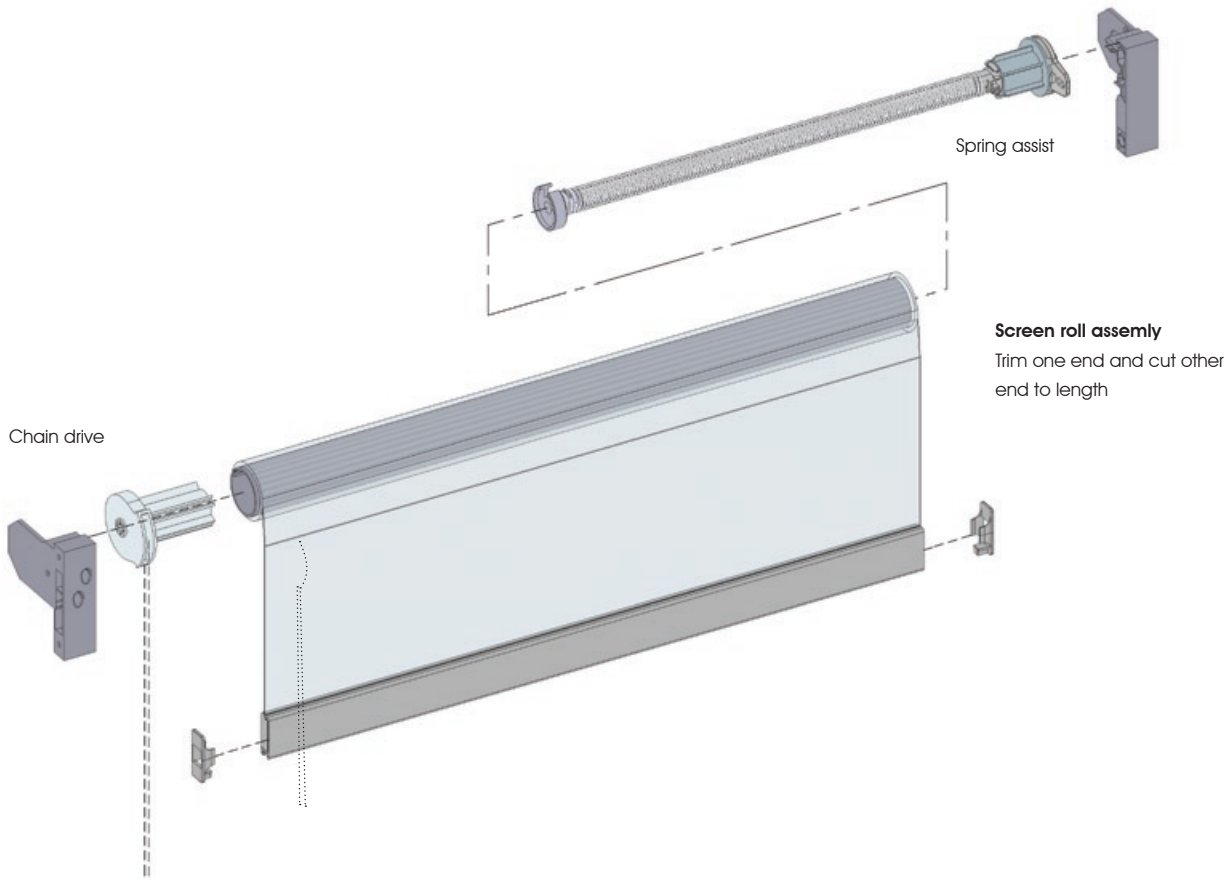
Servery Applications

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.

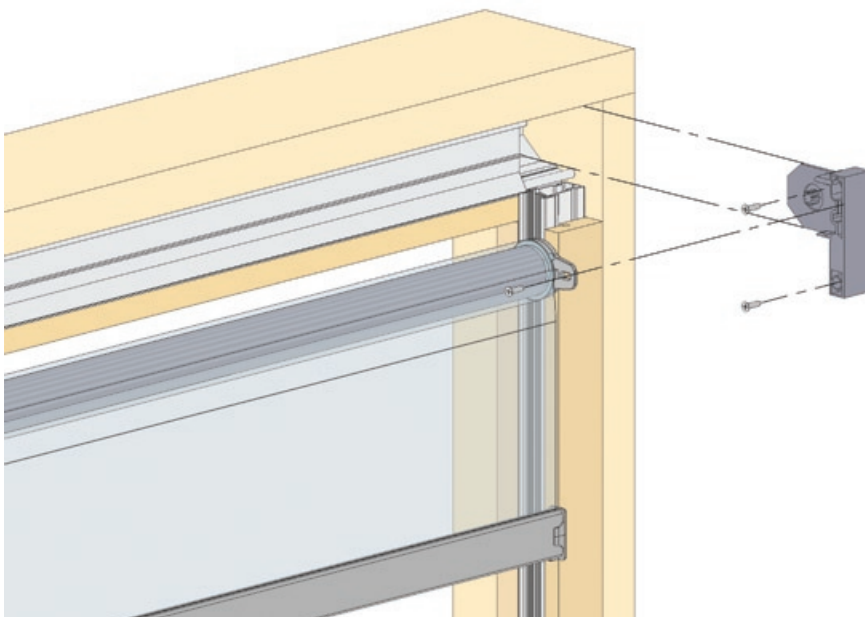
- 1 The best window combinations to use on a flat servery bench application are pairs of sashes – that is 2L or 2R, or a 2L2R (all with 12mm clearance).
- 2 With a 2L2R combination, Centor Architectural recommends the use of 2 additional DM dropbolts at the bottom of the 2 meeting stiles.
- 3 With a 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 We do 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).

SCREEN KIT CONTENTS

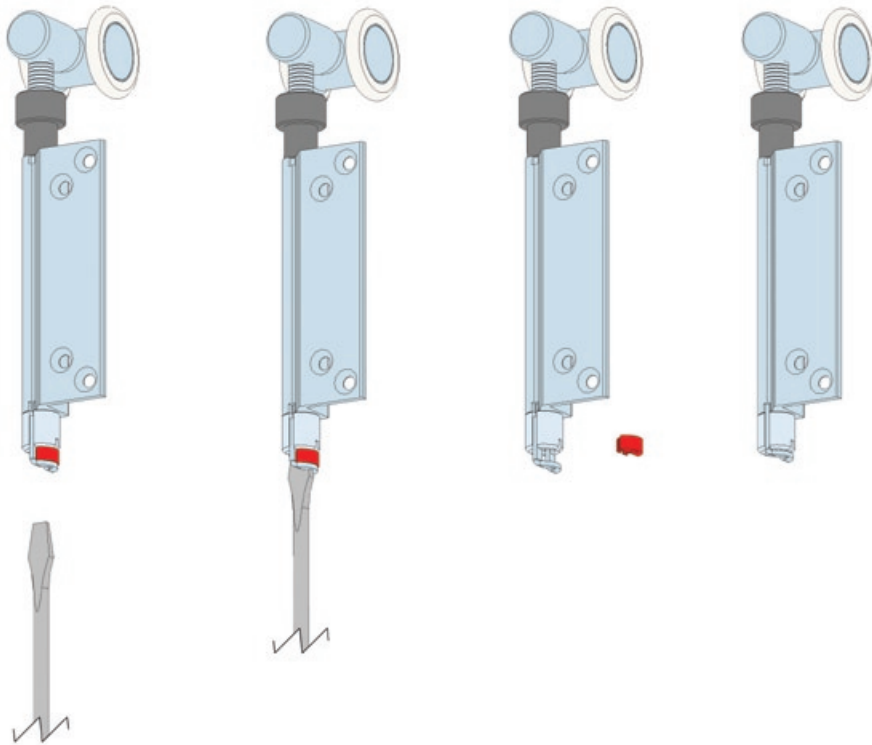


LOCK OFF SPRING ASSIST.



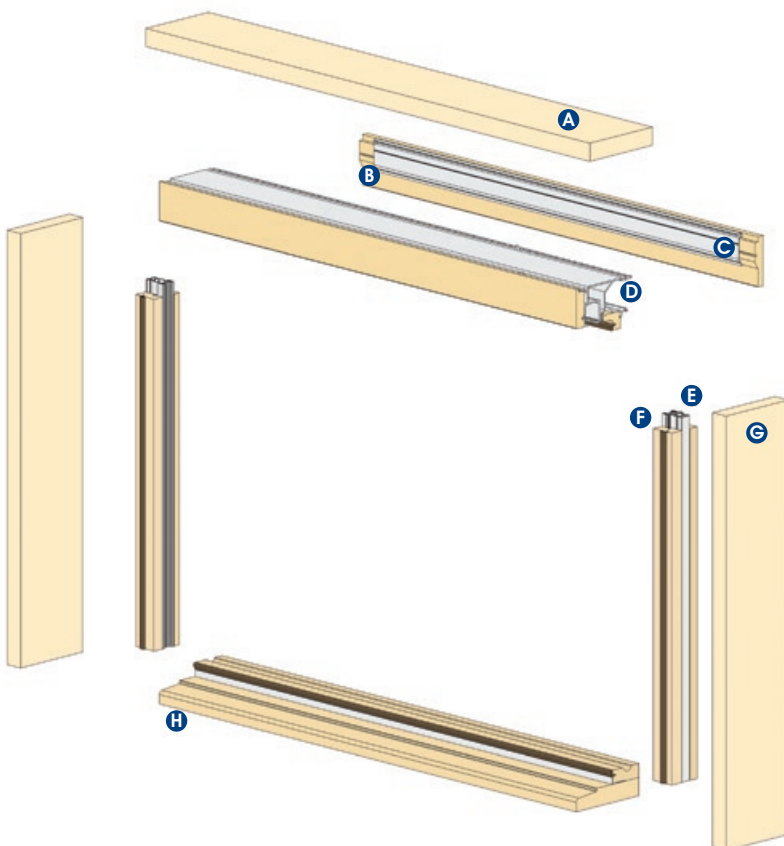


SURELOCK™



PATENTS APPLY

WINDOWCALC™



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

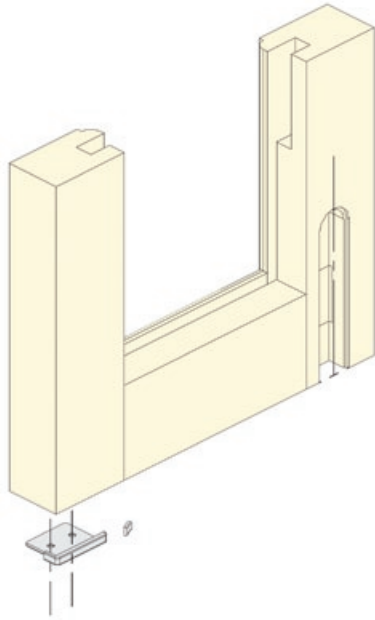
With WindowCalc™ you have several choices to obtain the desired window configuration.

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

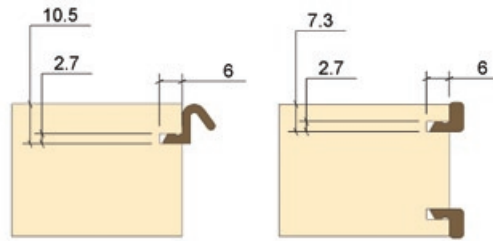
WindowCalc™ will calculate all lengths and list all hardware and components required. Input either a rough opening size or a panel size and making the choices available, WindowCalc™ will calculate all the other details. Go to [www.centor.com.au](http://www.centor.com.au) to download WindowCalc™ or if you would like it sent to you on a CD please email [help@centor.com.au](mailto:help@centor.com.au)

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

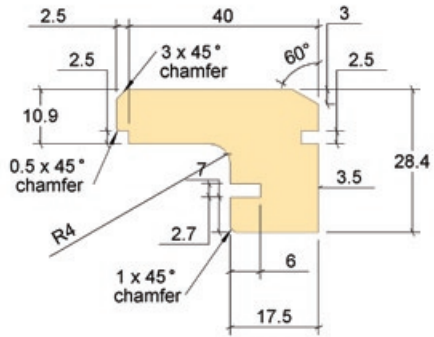
SASH JOINERY DETAIL



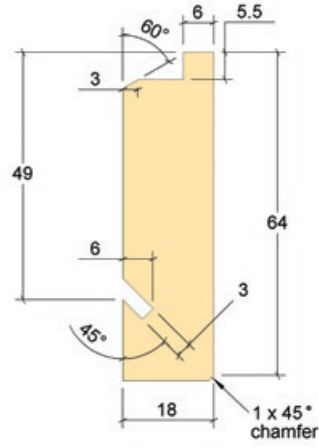
SEAL PREPARATION DETAIL



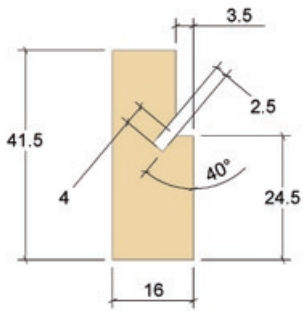
HEAD STOP



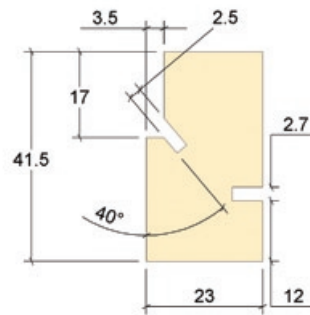
FACE BOARD



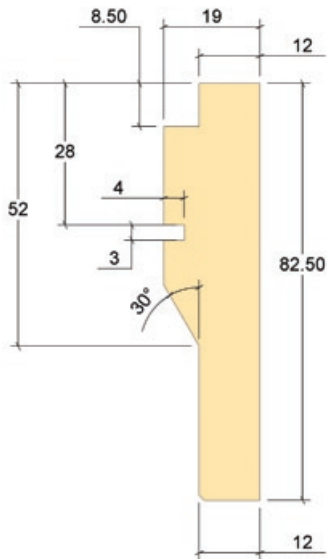
VERTICAL STOP (INSIDE)



VERTICAL STOP (OUTSIDE)



PELMET



## EW: COMPONENT SELECTION

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\*

KIT CONTAINS THESE PARTS		SELECT KIT SIZE	SELECT FINISH	KIT CODE
	track x 1	1200 H x 1900 W	satın natural	EWALK1219N
		1200 H x 1900 W	bright gold	EWALK1219G
	vertical screen guide x 2	1200 H x 1900 W	white powdercoat	EWALK1219W
		1200 H x 1900 W	mahogany	EWALK1219M
	pelmet backing x 1 mill finish only	1500 H x 2500 W	satın natural	EWALK1525N
		1500 H x 2500 W	bright gold	EWALK1525G
		1500 H x 2500 W	white powdercoat	EWALK1525W
	sill guide x 1	1500 H x 2500 W	mahogany	EWALK1525M

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

**TIMBER LINEAL KIT**

KIT CONTAINS THESE PARTS		SELECT KIT SIZE	SELECT FINISH	KIT CODE
	head stop x 1	1200 H x 1900 W	new guinea rosewood	EWTLK1219NRG
	face board x 1	1200 H x 1900 W	western red cedar	EWTLK1219WRC
	vertical stop (inside) x 2	1200 H x 1900 W	surian cedar	EWTLK1219SRC
	pelmet x 1	1500 H x 2500 W	new guinea rosewood	EWTLK1525NRG
	vertical stop (outside) x 2	1500 H x 2500 W	western red cedar	EWTLK1525WRC
	vertical stop (outside) x 2	1500 H x 2500 W	surian cedar	EWTLK1525SRC

Timber kits supplied are for 35mm sashes. Sashes of other thickness (say 32mm or 38mm) will require the customer to mill their own profiles to suit their sashes. Consult Centor Architectural for details.

CODE	OPENING CONFIGURATION	HARDWARE		KEY* (SEE BELOW)
2L		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW2 EWALK EWTLK EWR5 1 x DBSO300KR 1 x DBM1100KR	1 1 2 2 3 4 5 1 1
2R		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW2 EWALK EWTLK EWR5 1 x DBSO300KR 1 x DBM1100KR	1 1 2 2 3 4 5 1 1
3L		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW3 EWALK EWTLK EWR5 2 x DBSO300KR 2 x DBM1100KR	1 1 2 2 3 4 5 1 1
3R		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW3 EWALK EWTLK EWR5 2 x DBSO300KR 2 x DBM1100KR	1 1 2 2 3 4 5 1 1
2L2R		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW2L2R EWALK EWTLK EWR5 2 x DBSO300KR 2 x DBM1100KR	1 1 2 2 3 4 5 1 1
4R		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW4 EWALK EWTLK EWR5 2 x DBSO300KR 2 x DBM1100KR	1 1 2 2 3 4 5 1 1
4L		Hardware Aluminium Lineal Kit Timber Lineal Kit Flyscreen Dropbolts	EW4 EWALK EWTLK EWR5 2 x DBSO300KR 2 x DBM1100KR	1 1 2 2 3 4 5 1 1

**KEY\***

<p><b>1 finish</b> G = Gold N = Satin W = White M = Mahogany Bronze</p>	<p><b>3 timber finish</b> NGR = New Guinea Rosewood SRC = Surian Cedar WRC = Western Red Cedar</p>	<p><b>5 flyscreen handing</b> L = left hand R = right hand</p>
<p><b>2 kit size</b> 1219 = 1200 High x 1900 Wide 1525 = 1500 High x 2500 Wide</p>	<p><b>4 flyscreen length</b> 19 = 1900 long 25 = 2500 long</p>	

## WEATHER CERTIFICATION

### Test Results

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

### 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 is the first tracked folding window system to be successfully certified against Australian Standard AS2047 "Windows in Buildings Specification for materials and performance" and AS4420.1-6 "Methods of Test" by a Testing Laboratory accredited by the National Association of Testing Authorities, Australia (N.A.T.A.)

The EW was tested at Wintec Aluminium, Andrews, QLD, using Schlegel Pty Limited Aquamac™ Kerf Seals and has been certified to meet the 150Pa water rating and 1 l/sec commercial air infiltration rating.

### A Guide to AS2047

- 1 Deflection/Span Ratio does not apply to folding windows, however this was also tested.
- 2 Air Infiltration Test specifies the maximum air infiltration allowed at a given pressure. As a guide, at 75Pa pressure, a rating of less than 5.0 litres/second/sqm is required for non-airconditioned buildings or 1.0 litres/second/sqm for air-conditioned.
- 3 Water Penetration specifies the maximum pressure at which there shall be no penetration of uncontrolled water beyond any internal surface of the door. The minimum rated pressure specified by the standard is 150Pa.
- 4 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 700Pa.

## AS2047 CERTIFICATE NO. 0038

1000 Structural Pa **N3**  
Water Penetration 150

Suitable for airconditioned applications.  
Suitable N2 housing

## LABORATORY TESTING

	AS2047.1	EW	
min water penetration	150Pa	150Pa	✓
max air infiltration (per sq.m.)	5.0 litres/sec	0.2 litres/sec	✓
deflection test	500Pa	1000Pa	✓
min ultimate strength	700Pa	1500Pa	✓
non-cyclonic rating	N1	N3	✓

Tested in N.A.T.A. Registered Laboratories on timber windows and framing