centor®

EW bifold window system for panels to 20kg

centor®

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

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.

Proved Performance

Produced in the architectural grade 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 th 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 hinge sets – architectural grade brushed stainless steel, PVD brass, white & custom powdercoat.
- Aluminium lineal kits include 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.

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 colours.

Warranty

Centor Architectural offers a 10 year warranty on its EW hardware. Please see www.centor.com.au for more details.

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 Alternatively architects and designers can simply specify "Centor EW" and leave detailed component selection to the builder, joiner or fabricator.
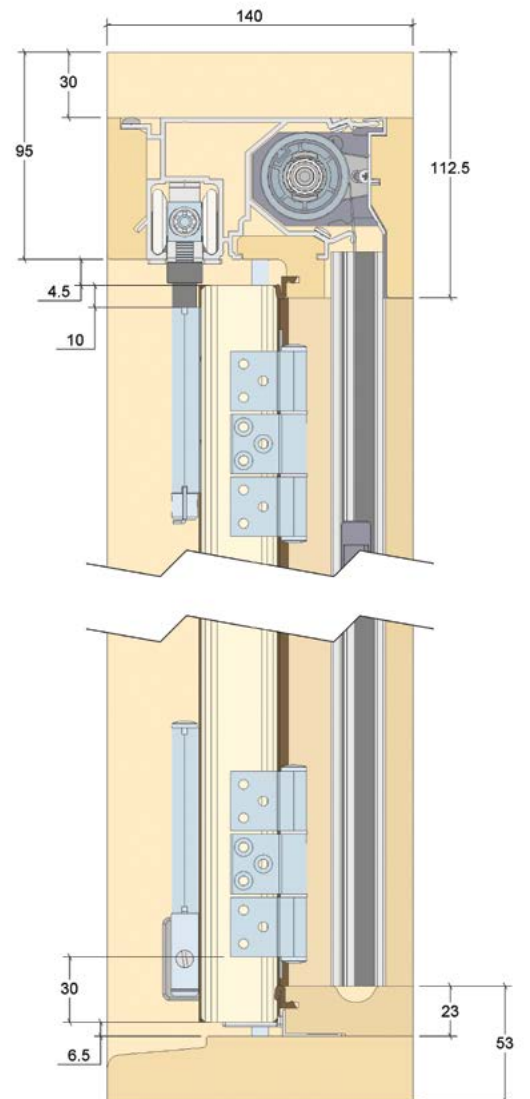
Architectural Detail

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.

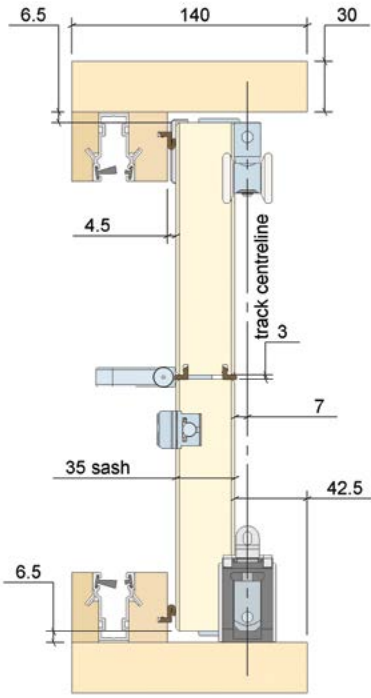EW DXF or DWG files can be downloaded from www.centor.com.au

PATENTS APPLY
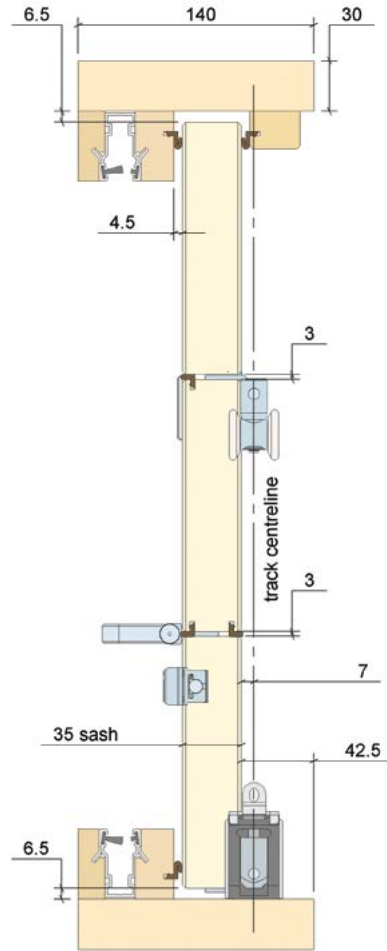
EW PROFILE

EW–005.DXF

Architectural Detail

EW2

6.5 140 30

4.5

track centreline

3

7

35 sash

42.5

6.5

EW–004.DXF

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

EW3

6.5 140 30

4.5

3

track centreline

3

7

35 sash

42.5

6.5

EW–003.DXF

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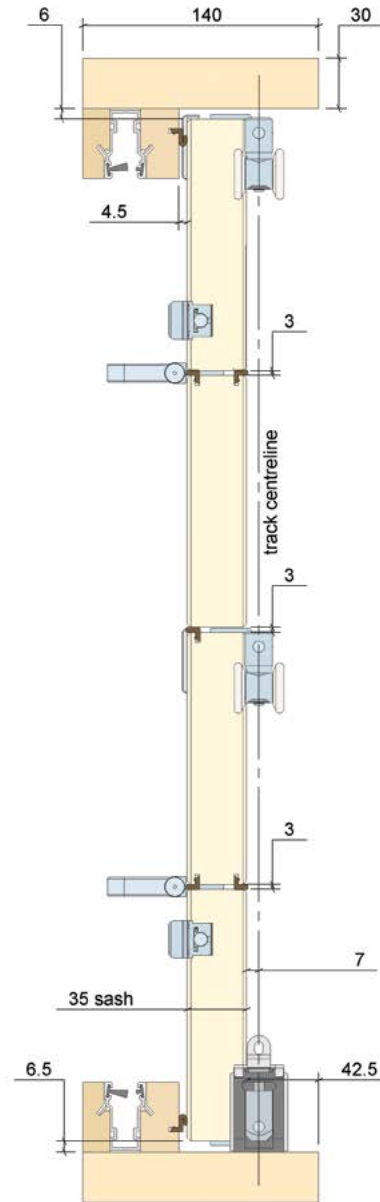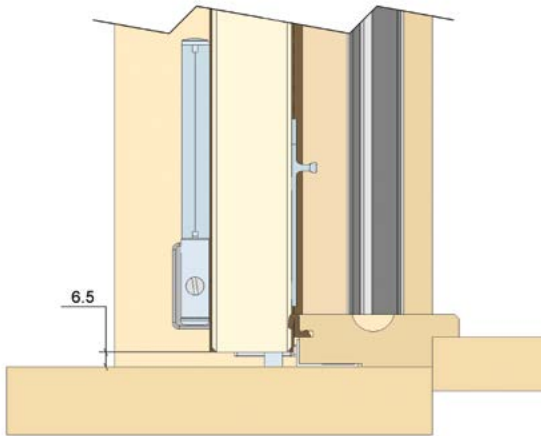3 sashes opening right (3R) uses EW3 hardware set

Architectural Detail

EW2L2R
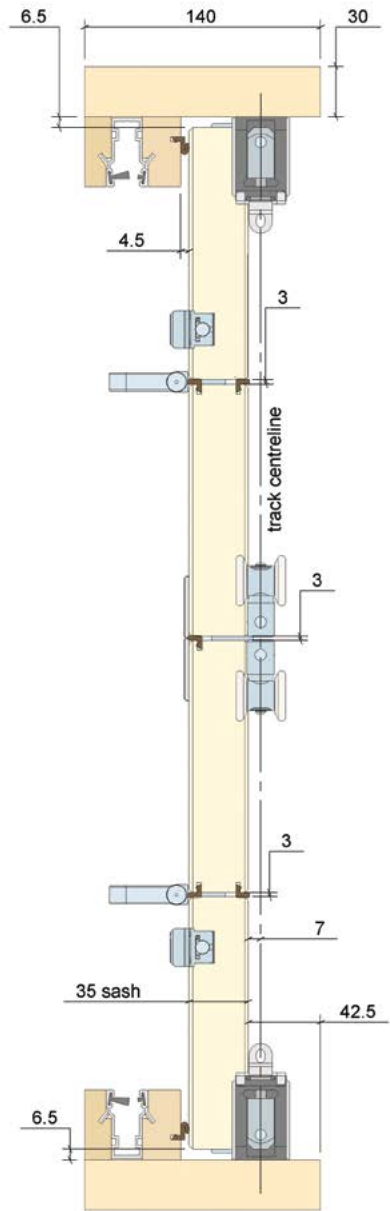
EW–001.DXF

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

Architectural Detail
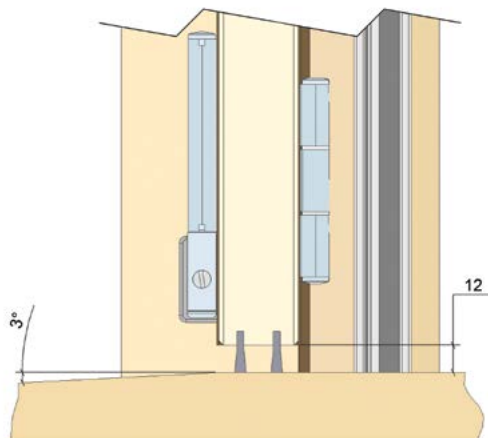
Alternative Servery Sill Detail

Step servery

6.5

EW–006.DXF

3° Fall Outside Servery (4l,4r)

3°

12

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).
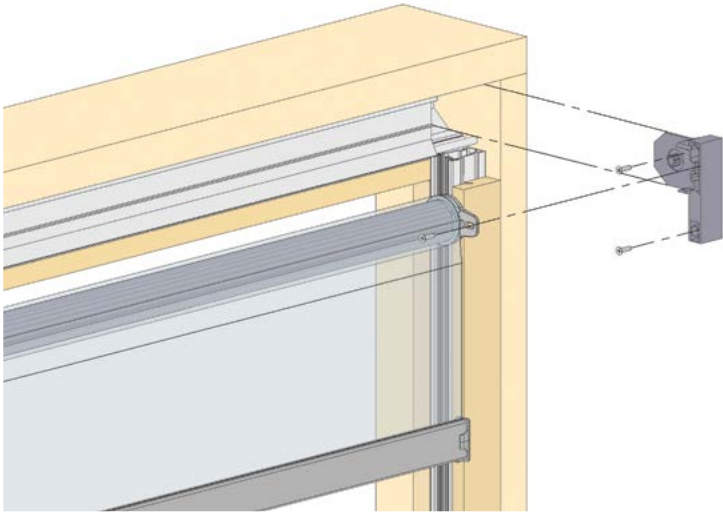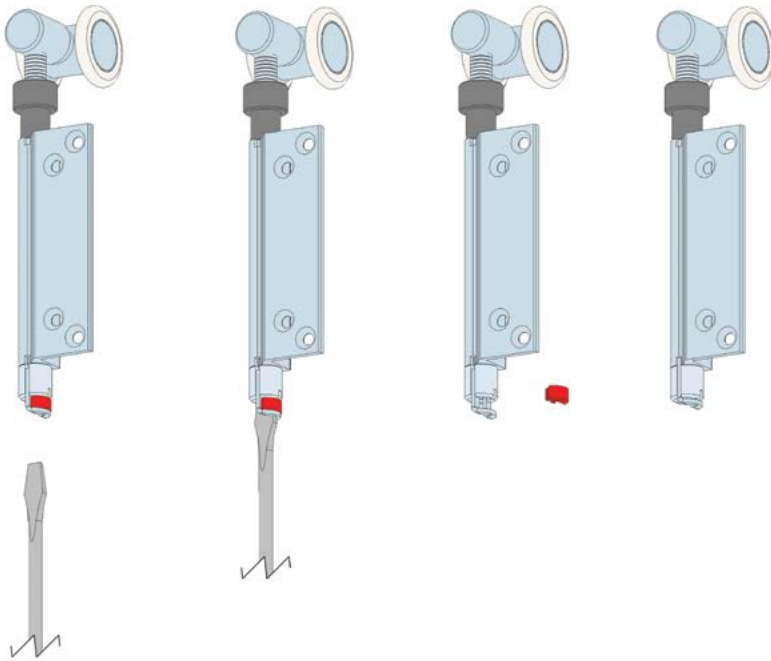
Architectural Detail

Screen Kit Contents

Spring assist

Screen roll assemly
Trim one end and cut other
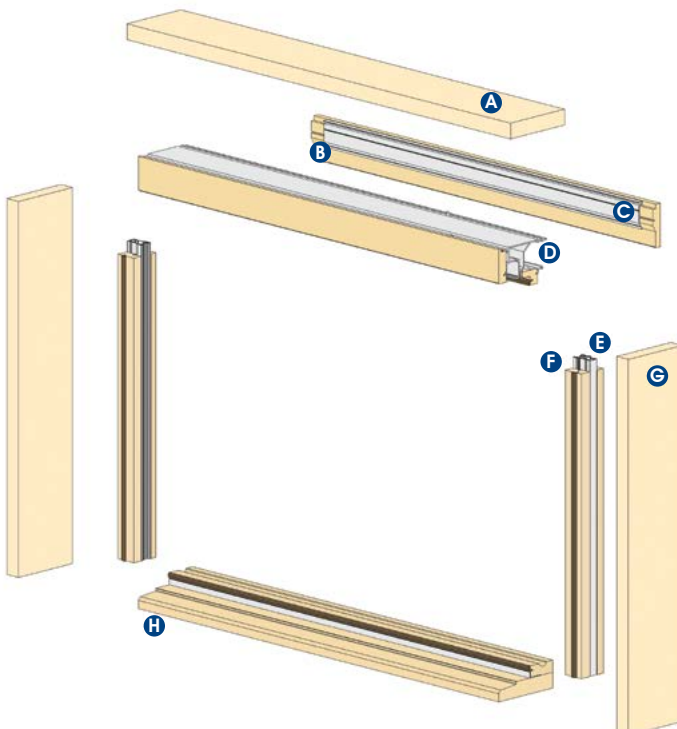end to length

Chain drive
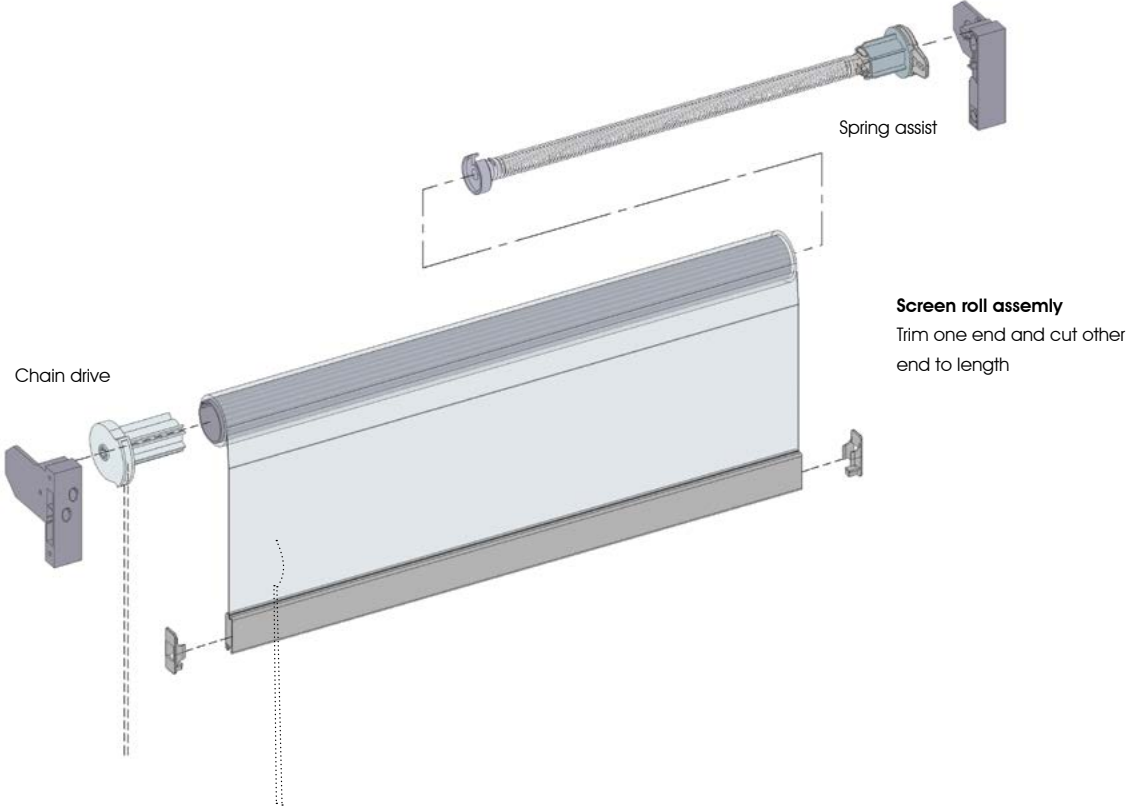
Lock Off Spring Assist.

Architectural Detail

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 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. Go to www.centor.com.au to download WindowCalc™.
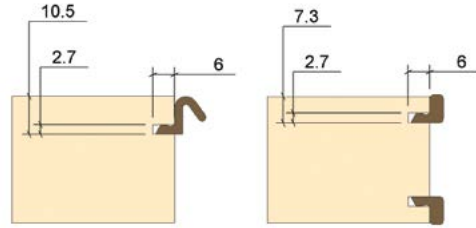
A   Head

B   Pelmet

C   Pelmet aluminium backing

D   Track assembly

E   Vertical screen guide

F   Vertical stops
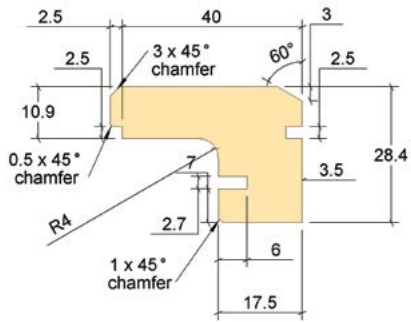
G   Jamb

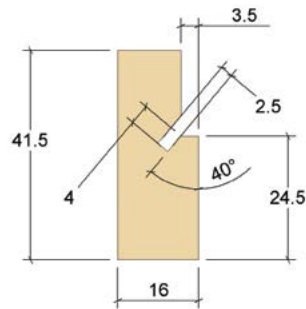H   Sill assembly

Architectural Detail
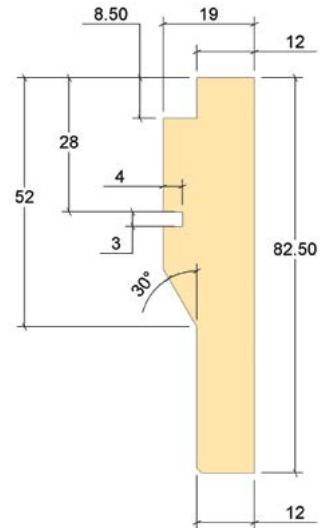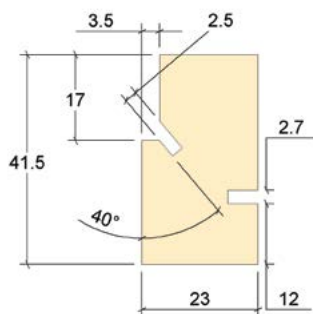
Sash Joinery Detail
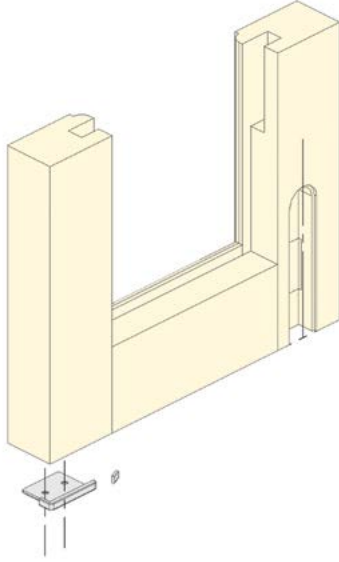
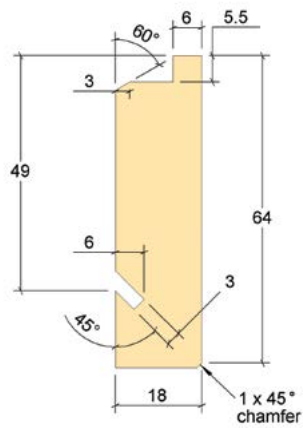## Seal Preparation Detail

Head Stop

Vertical Stop (inside)
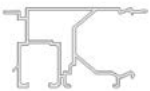

Pelmet

Vertical Stop (outside)

Face board

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	natural anodised	EWALK1219N
		1200 H x 1900 W	gold anodised	EWALK1219G
	vertical screen guide x 2	1200 H x 1900 W	custom powdercoat	EWALK1219PC
	pelmet backing x 1 mill finish only	1500 H x 2500 W	natural anodised	EWALK1525N
		1500 H x 2500 W	gold anodised	EWALK1525G
	sill guide x 1	1500 H x 2500 W	custom powdercoatv	EWALK1525W

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

Component Selection

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
		1200 H x 1900 W	western red cedar	EWTLK1219WRC
	face board x 1	1200 H x 1900 W	surian cedar	EWTLK1219SRC
		1500 H x 2500 W	new guinea rosewood	EWTLK1525NRG
	vertical stop (inside) x 2	1500 H x 2500 W	western red cedar	EWTLK1525WRC
	pelmet x 1	1500 H x 2500 W	surian cedar	EWTLK1525SRC
	vertical stop (outside) x 2			

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.

Panel Layouts

CODE	OPENING CONFIGURATION	HARDWARE		KEY* (SEE BELOW)
2L		Hardware	EW2	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	EW2	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	EW3	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	EW3	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	EW2L2R	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	EW4	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	EW4	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
W = White

3 timber finish
NGR = New Guinea Rosewood
SRC = Surian Cedar
WRC = Western Red Ceder

5 flyscreen handing
L = left hand
R = right hand

2 kit size
1219 = 1200 High x 1900 Wide
1525 = 1500 High x 2500 Wide

4 flyscreen length
19 = 1900 long
25 = 2500 long

Weather Certification

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 stonger 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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