CONTACT



SHUTTER TECHNICAL GUIDE



ADDRESS V11 – FEB 2024

UNIT 11, 30 HEATHCOTE ROAD

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WHY ELEMENT 13?

Aluminium is incredibly strong for its light weight. Manufactured by one of the leading fabricators of high-quality hardware worldwide, Element 13 shutters are made with high-grade stainless-steel hardware and are unaffected by moisture and impervious to insect attack, making them perfect for both internal and external applications.

Element 13 is finished with Interpon Powder Coating by AkzoNobel, the global leader in powder coatings and parent company of Dulux. AkzoNobel coatings are solvent-free paints used on world landmarks that include the Bird's Nest Stadium and Water Cube in Beijing, major Premier League football stadiums in the UK, the Maracanã Stadium in Brazil and the Yas Marina Circuit grand prix complex in Abu Dhabi.

- o 64mm, 89mm, and 114mm louvres
- Stainless steel hardware
- o 8 x standard powder coated colours
- o DULUX Colorbond colours available
- 3 x timber look colours
- Custom paint option
- AkzoNobel Interpon Powder Coat
- Raked shapes available
- o Bolts and keyed locks available
- Fly screen option
- o Blades can be fixed or movable
- o Ten-Year warranty on extrusion, paint finish and metal components

ELEMENT 13 SHUTTER SPECIFICATIONS

PROPERTIES	SPECIFICATIONS		
Material	Aluminium Extrusion		
Application	Internal / External		
Louvre Shape	Hollow Elliptical		
Louvre Type (width)	64mm 89	9mm	114mm
Louvre Thickness	12.2mm		,
Wall Thickness	1.4mm		
Louvre End Caps	Aluminium End C	ар	
Minimum Panel Opening Width & Height	W = 200mm		H = 300mm
Maximum Hinged Panel Opening Width & Height	W = 1100mm		H = 3500mm
Maximum Hinge Bi-Fold Panel Opening Width & Height	W = 1000mm		H = 3500mm
Maximum Track Bi-Fold Panel Opening Width & Height	W = 1500mm		H = 3500mm
Maximum Track Bypass Panel Opening Width & Height	W = 1500mm		H = 3500mm
Maximum U Channel/Fixed Panel Width & Height	W = 1500mm		H = 3500mm
Maximum Fixed Louvre Panel Width & Height	W = 2500mm		H = 3500mm
Maximum Panel Height without Divider Rail	1800mm *2nd divider rail required if panel height exceeds 2800mm		
Stile Width & Thickness	30mm x 60mm Beaded		
Rail Thickness (Depth)	26mm		
Minimum & Maximum Top & Bottom	Minimum = 72mm		
Rail Sizes	Maximum = 150mm		
Clearview Tilt Rod only	Front or Back		
	Euro Close Top and Bottom		
	Dual Option		

Special Shapes	Not available	
Raked Shutters	Allow an extra two weeks	
	Beaded L Frame	
	Flat Bullnose Z Frame	
	U Channel	
Frame Styles Available	T Posts	
	H Section	
	T Section	
	Square Posts	
	25mm x 25mm	
Aluminium L Angle	25mm x 10mm	
Additional E Angle	50mm x 50mm	
	50mm x 20mm	
Stainless Steel Angle	L Angle 75mm x 80mm	
Paint Finish	AkzoNobel Interpon Powder Coat	
	Silver	
	White	
	Cream	
Standard Colours Available	Black	
(Powder Coat)	Monument	
	Paperbark	
	Woodland Grey	
	Classic Cream	
Douglar Coated Woodgrain Finish	Walnut	
Powder Coated Woodgrain Finish *Surcharge applies	Light Cedar	
Surcifial ge applies	Golden Oak	
	Any DULUX Colourbond colour.	
Custom Colours *Surcharge applies	If it hasn't been used before, customer will	
	need to supply a sample pot to be sent to	
	the factory.	
	*Allow an extra two weeks.	
Hinge Options	Standard Non-Mortise Stainless Steel	

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SIZE TYPE

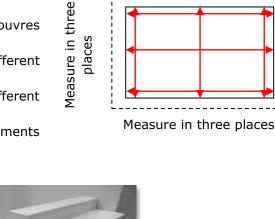
WINDOW SIZE / INSIDE MOUNT

When specifying window size or opening size on your order, the **factory will take a deduction** between the frame and the reveal from each side of both the width and the drop when manufacturing your shutters.

Window View

When measuring the opening size:

- 1. Ensure that the opening depth will allow louvres to rotate freely
- 2. Measure to the inside width in three different places
- 3. Measure to the inside height in three different places
- 4. Record the smallest of the three measurements for each
- 5. Check for window squareness





Inside Mount L Frame



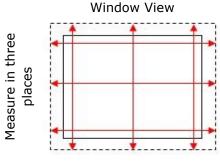
Inside Mount Z Frame

FINISH SIZE / OUTSIDE MOUNT

When specifying finish size or make size on your order, the **factory will NOT take a deduction** and the shutter unit (panels and frames) will be manufactured to your exact width and height specifications to the outside edge of the frame.

When measuring the make size:

- 1. Ensure that the opening depth will allow louvres to operate
- 2. Measure width from outside of frame to outside of frame in three different places
- 3. Measure height from outside of frame to outside of frame in three different places
- 4. Record the largest of the three measurements for each
- 5. Check for window squareness



Measure in three places



Outside Mount L Frame



Outside Mount L Frame

FACTORY DEDUCTIONS

All Z Frames	4mm from opening width and 4mm from opening height
All L Frames	4mm from opening width and 4mm from opening height
Direct Mount / Panel Only	6mm from opening width and 6mm from opening height
Top and Bottom U Channel	4mm from opening width and 4mm from opening height
	30mm from actual panel height
U Channel x all 4 sides	4mm from opening with and 4mm from opening height.
	30mm from actual panel height
	28mm from the actual total panel width (14mm left and
	14mm right)
U Channel with Vertical	4mm from opening width and 4mm from opening height
	30mm from actual panel height and 25mm from actual panel
H-Section	width

LOUVRE CLEARANCES

L FRAME INSIDE MOUNT:

64mm	Requires 10mm clearance from the back of frame
	57mm minimum depth of reveal
90mm	Requires 28mm clearance from the back of frame
89mm	76mm minimum depth of reveal
114mm	Requires 40mm clearance from the back of frame
	82mm minimum depth of reveal

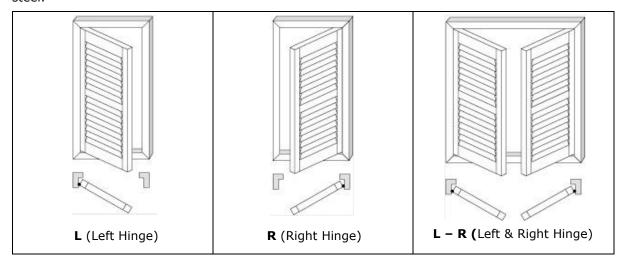
Z FRAME INSIDE MOUNT:

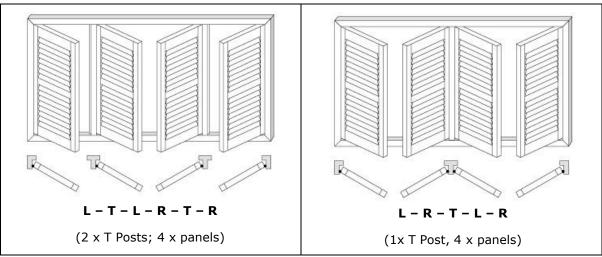
64mm	Requires Nil clearance from the back of frame
	47mm minimum depth of reveal
89mm	Requires 18mm clearance from the back of frame
	66mm minimum depth of reveal
114mm	Requires 30mm clearance from the back of frame
	72mm minimum depth of reveal

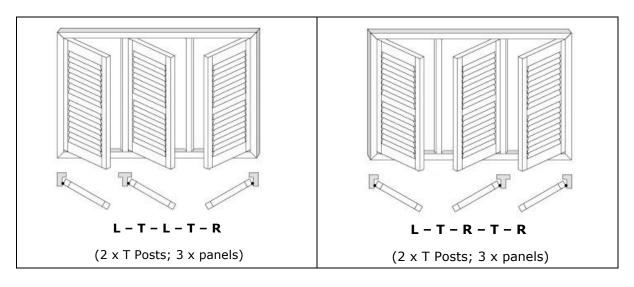
REGULAR SHUTTERS

HINGED PANELS

Panels can be hinged inside mount with L Frame or Z Frame using Non-Mortise Hinges or Pivot Hinges. Hinges are painted to match the colour of the shutter panel or are available in stainless steel.

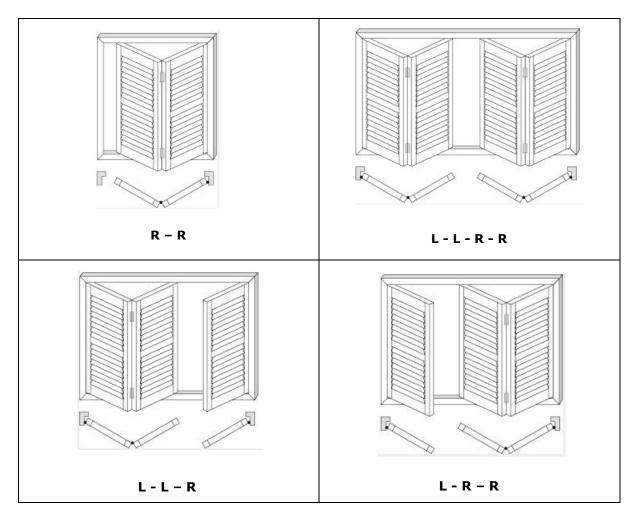






BI-FOLD HINGED

Bi-Fold hinged allows for a **maximum of two panels** to be hinged together and fold against each other to provide full view from the window or doorway.



FIXED PANELS (U CHANNEL)

Ideal for alfresco areas or outdoor rooms. Panels are easily slipped into 50mm deep top U channel and 25mm deep bottom U channel.

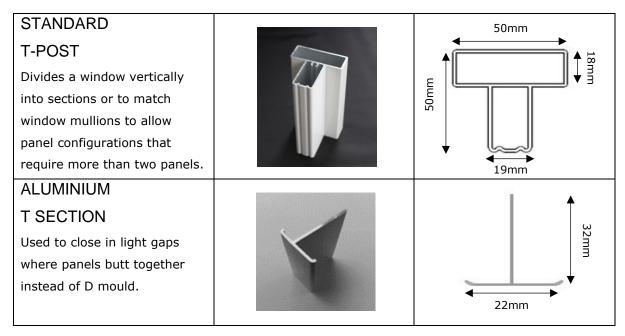
Sides can be dressed in $25mm \times 25mm \setminus L$ angle for light block or using U channel as a four-sided frame.



H section or T Section can be used for multiple panel layouts to close light gaps between panels.

Maximum panel width: 1500mm Maximum panel height: 3500mm

T-POSTS



MEASURING T-POSTS

WINDOW SIZE / INSIDE MOUNT

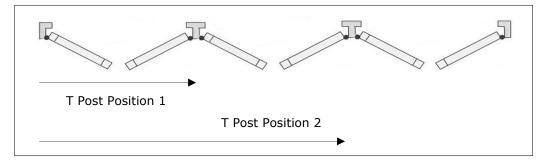
Position 1 – Measure from left side of inside the window to centre of the first T post location.

Position 2 – Measure from the far left of inside the window to the centre of each T-Post.

FINISHING SIZE / OUTSIDE MOUNT

Position 1 – Measure from left edge of frame to the centre of first T-Post.

Position 2 – Measure from the far left of the frame to the centre of each T-Post.



HORIZONTAL T-POSTS

Required when multiple shutters are needed to cover large window heights and when panels exceed 3500mm in height.

WINDOW SIZE / INSIDE MOUNT

Measure from the bottom window edge to the centre of the T-Post for Position 1.

FINISHING SIZE / OUTSIDE MOUNT

Measure from the bottom edge of the frame to the centre of the T-Post.

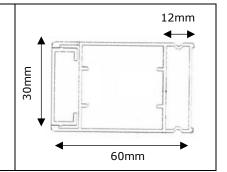
STILE TYPES

SQUARE STILE

Standard stile with beaded edge.

Used for all applications/ layouts.

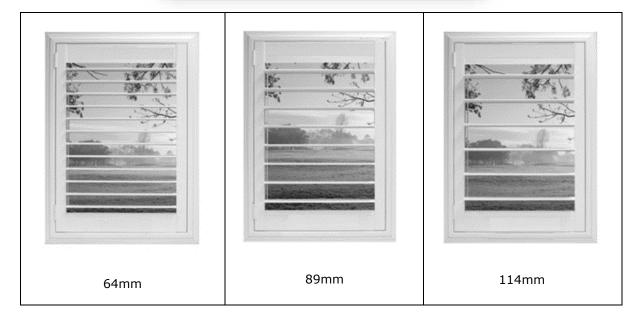




LOUVRE / BLADE SIZES

There are 64mm, 89mm and 114mm standard louvre sizes available.

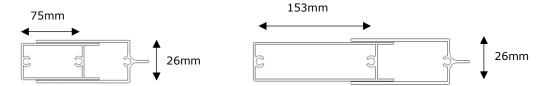




TOP AND BOTTOM RAILS

Top and bottom rail is one profile consisting of two adjustable pieces that are expanded or contracted depending on overall height of the shutter and the number of blades.

Below shows the minimum and maximum lengths of top and bottom rails.

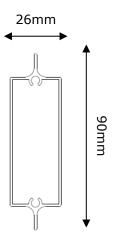


DIVIDER RAILS

Shutters that are 1800mm and above in height require a divider rail. Panels that exceed 2800mm in height require a second divider rail.

Divider rail location is adjusted by the factory from measurements given, dependent on louvre size and panel height. If you require your divider rail to be exact, please specify **divider rail critical** as it may vary half a louvre in height or drop.

A critical divider rail location may affect the size of the top and bottom rails. When exact **(critical)** divider rail location is requested, top and bottom rails may be unequal and larger than normal.



ALLOWABLE DIVIDER RAIL TOLERANCES

LOUVRE SIZE	TOLERANCES +/-
64mm	25.4mm
89mm	38.1mm
114mm	50.8mm

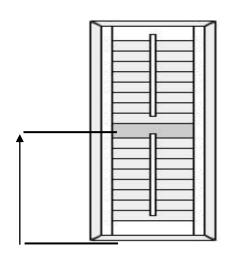
MEASURING DIVIDER RAILS

WINDOW SIZE / INSIDE MOUNT

Measure from the bottom of the window up to the middle of your desired divider rail location.

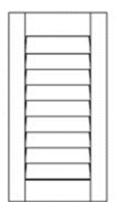
FINISH SIZE / OUTSIDE MOUNT

Measure from the bottom of the shutter/frame up to the middle of your desired divider rail location.



TILT ROD

Element 13 tilt rods are hidden and are located on the back of the panel. Refer to the diagram below.





Front View

Back View

SPLIT TILT ROD

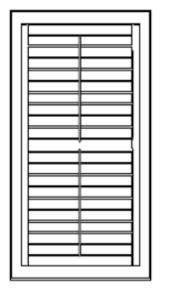
Large louvre banks can be split into individually operated banks for better closure without adding a divider rail for panel heights below 1800mm.

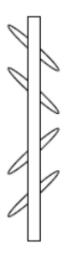
Split tilts also provide the added benefit of privacy options.

Split tilt locations can be specified at custom locations for all louvre sizes with any tilt rod option, or at manufacturing by default.

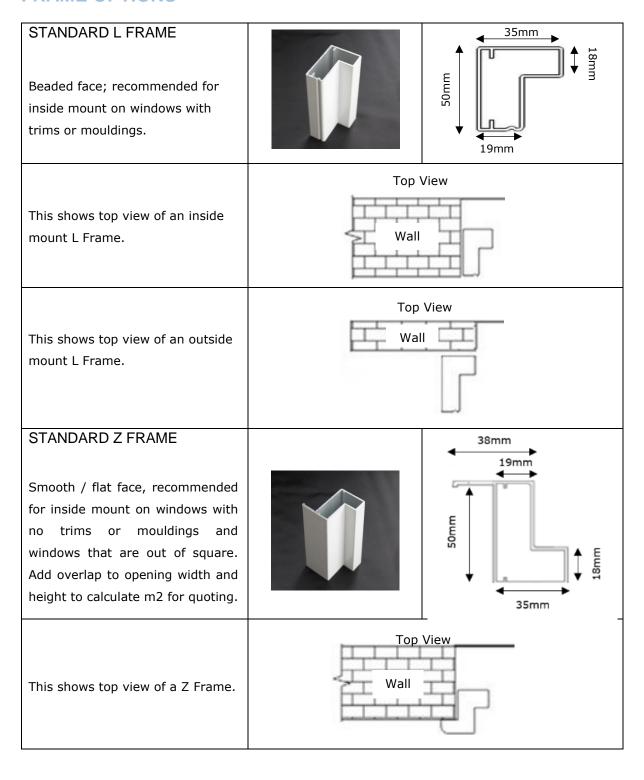
- o **50/50** = Split halfway
- o **50/50 CAM** = Split halfway above midrail
- o **50/50 CBM** = Split halfway below midrail
- Custom = Advise required split location from the bottom up

Where panel height exceeds 1524mm, a 50/50 split halfway will automatically be produced.





FRAME OPTIONS



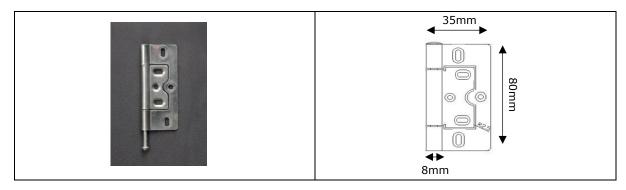
TOP ALUMINIUM U **CHANNEL** Inside mount, panels lift into top channel and slip into bottom channel. Powdercoated to colour match panels. 37mm **BOTTOM ALUINIUM** U **CHANNEL** Inside mount, panels lift into top channel and slip into bottom channel in the same manner as sliding glass windows. 37mm Powdercoated to colour match. **ALUMINIUM H SECTION** 42mm Used vertically in a U channel installation where two panels butt together to close light gaps. Powdercoated to colour match panels. 34mm

HINGE TYPES

NON-MORTISE HINGE

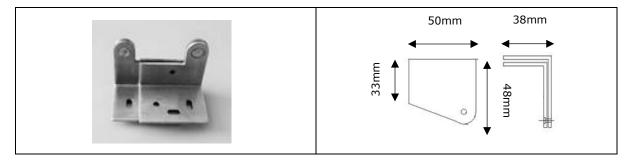
Standard stainless steel (default) and manufactured for external use.

Internal powder coated hinges are available on request in white, cream or matching for custom colour orders.



PIVOT HINGE

Standard pivot hinges are stainless steel. Can be used for multiple panel layouts where T-Post is not required.



HINGE QUANTITY

PANEL HEIGHT	NUMBER OF HINGES
	_
Up to 1117mm	2
1118mm - 1828mm	3
1829mm – 2438mm	4
2439mm and over	5

COLOURS

Colours that are available within the Element 13 range are:

- o White A100
- o Cream A103
- o Black A107
- o Silver A108
- o Monument ????
- o Paperbark ????
- Woodland Grey ????
- o Classic Cream ????
- Light Cedar A202
- o Golden Oak A203
- o Walnut A300
- o Any DULUX Colorbond paint.

*If it hasn't been used before, customer will need to supply a sample pot to be sent to the factory.





LOCK OPTIONS

All locks are installed on the stile and lock into the top/bottom frame.

FLUSH BOLT

Available in:

- Silver
- o White
- Black

Bottom fix only for Bi-Fold and Bypass.



SECURITY LOCK

Available in stainless steel.

Top or bottom fix.

Recommended bottom fix.





KEYED LOCK

Available in:

- o White
- o Silver

2 x keys, top and bottom fix.

Maximum panel height 3500mm.



DOOR HANDLE LOCK

Available in stainless steel only. Bottom fix only on hinged panels.



LOUVRE LOCKS

Stainless steel barrel bolts lock into the stile for each tilt or rotation. Louvres can be locked into four places, opened, closed or at 40° in the open position.



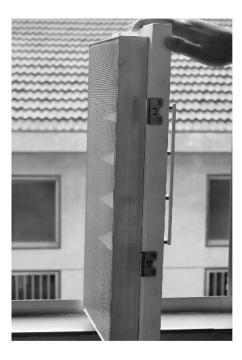


FLYSCREEN

Attached to the rear of panels using angle and spline, flyscreens are nylon mesh.

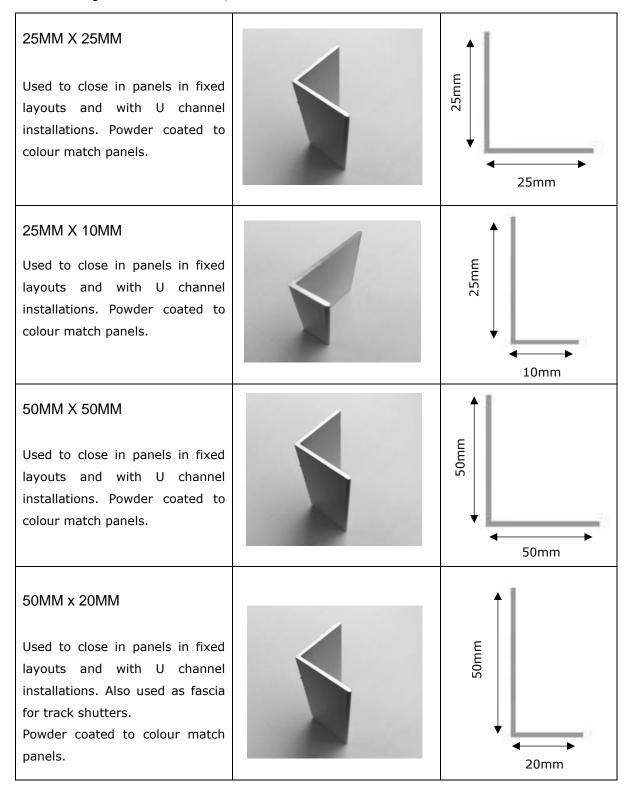
It is recommended that tilt rod is attached to front of panel for easy access for adjustment of tensioning over time.





L ANGLES

Custom L Angle sizes are available, however standard sizes that are offered are as follows.



RAKE SHUTTERS







Half Rake

Angled

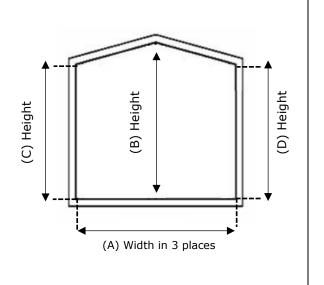
FULL RAKE SHUTTER

INSIDE MOUNT

- Measure inside reveal width in 3 places (A), provide the smallest of each.
- 2. Provide the inside reveal height of the centre (B), left (C) and right side (D)
- 3. Provide the inside reveal height at ¼ and ¾ positions.

OUTSIDE MOUNT

- 1. Measure the window width and height in the same manner as above but from the outside edge of the frame (provide the largest of each).
- 2. Provide the outside window height at ¼ and ¾ positions.



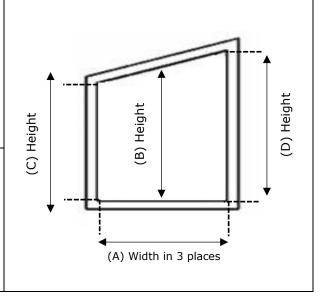
HALF RAKE SHUTTER

INSIDE MOUNT

- Measure inside reveal width in 3 places (A), provide the smallest of each.
- 2. Provide the inside reveal height of the centre (B), left (C) and right side (D)
- 3. Provide the inside reveal height at ¼ and ¾ positions.

OUTSIDE MOUNT

- Measure the window width and height in the same as above from the outside edge of the frame (provide the largest of each).
- 2. Provide the outside window height at ¼ and ¾ positions.



BI-FOLD SHUTTERS

Utilising the top and bottom track to support and guide the panels, Bi-Fold shutter panels are hinged together and fold against each other to allow full view through the window or doorway.

Panels can be configured to open all to one side or to either side of an opening and requires an even number of panels opening one way.



TRACKING INCLUSIONS

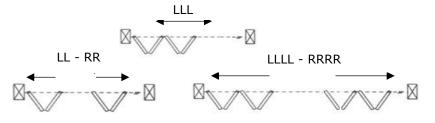
Tracking is charged at a lineal metre rate and includes fascia and standard hardware. The maximum length supplied in ONE piece is 3657mm.

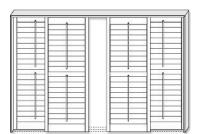
Kit Includes loose:

- o Top track
- 2x fascias (1x front, 1x rear with no returns)
- Wheel carriers and plates assembled in tracks (1 per panel)
- o Floor track and bottom guides

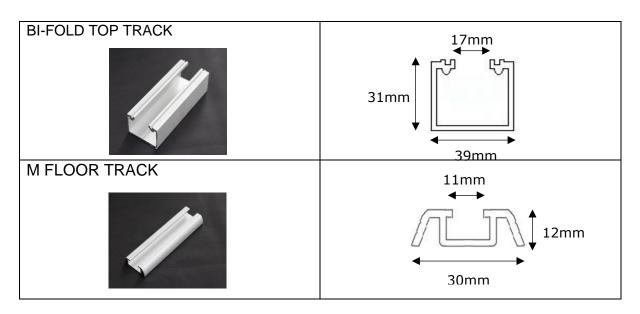
PANEL CONFIGURATION

Track Bi-Folds require an even number of panels stacking in one direction and must have the end panel returning to the track. Layout codes indicate stacking direction. Panels fold inward by default with tilt rod at rear of panels. The maximum single Bi-Fold panel width is 1500mm.

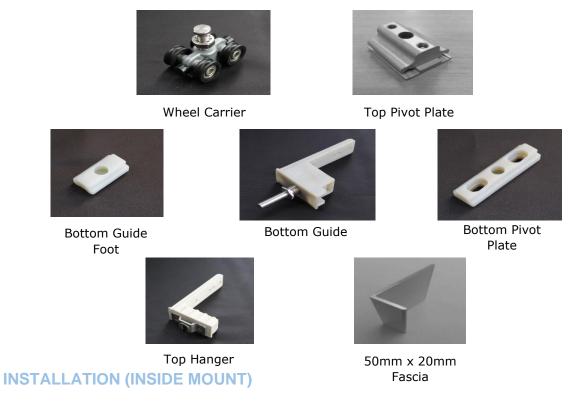




TRACKING

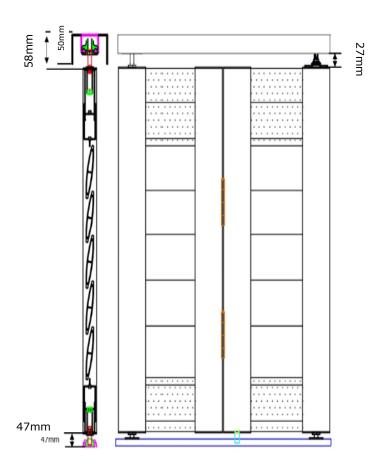


HARDWARE



Mount top track directly to opening.

Fascia is supplied as L angle for front and rear and attached after.



BYPASS SHUTTERS

Bypass tracking is ideal for sliding glass doorways. Utilizing an overhead track system attached to the panels and floor tracks, panels slide horizontally across the opening. Panels can be ordered as single panels.

Bypass Open - Panels pass each other with louvres open or closed.

Bypass Close - Louvres **MUST** be closed to allow panels to pass each other.

TRACKING INCLUSIONS

Tracking is charged at a lineal metre rate and includes fascia and standard hardware. The maximum length supplied in ONE piece is 3657mm.

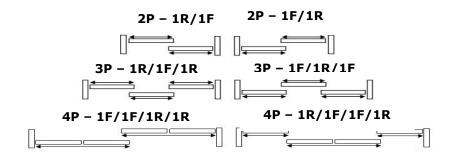
Kit Includes loose:

- Top track
- 2x fascias (1x front, 1x rear with no returns)
- Wheel carriers and plates assembled in tracks (1 per panel)
- o Floor track and bottom guides

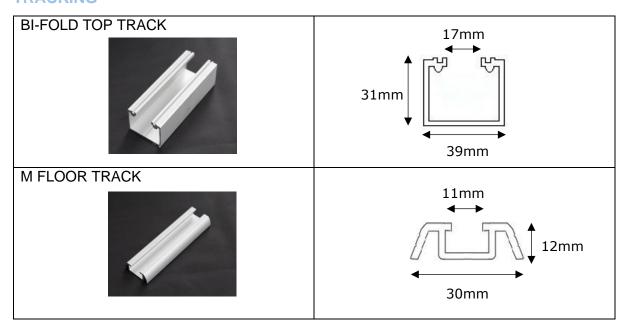
PANEL CONFIGURATION

SINGLE PANELS

Maximum panel width is 1500mm in Bypass close position. Panels are not supplied with light block for Bypass open and are not available with centre stiles, or in co-joined panel layouts.



TRACKING



HARDWARE



Bottom Guide Foot



50mm x 20mm Fascia



Bottom Guide



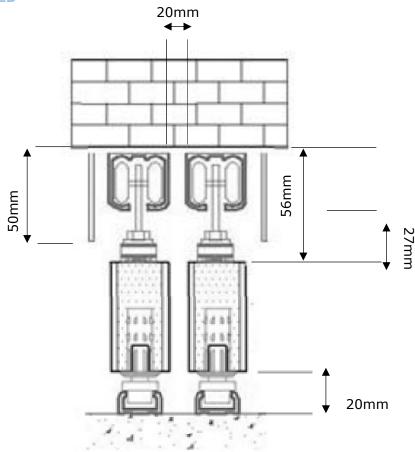


Top Hanger



INSTALLATION (INSIDE MOUNT)

BYPASS CLOSED



FIXED LOUVRES / SCREENING

Louvres can be fixed in a non-moveable position for panels to be used as privacy screening, in both horizontal and vertical positions.

Assembled in top and bottom channel with square side posts or flat side frames. Standard or custom colour.

The maximum panel width is 2500mm and the maximum panel height is 3500mm.



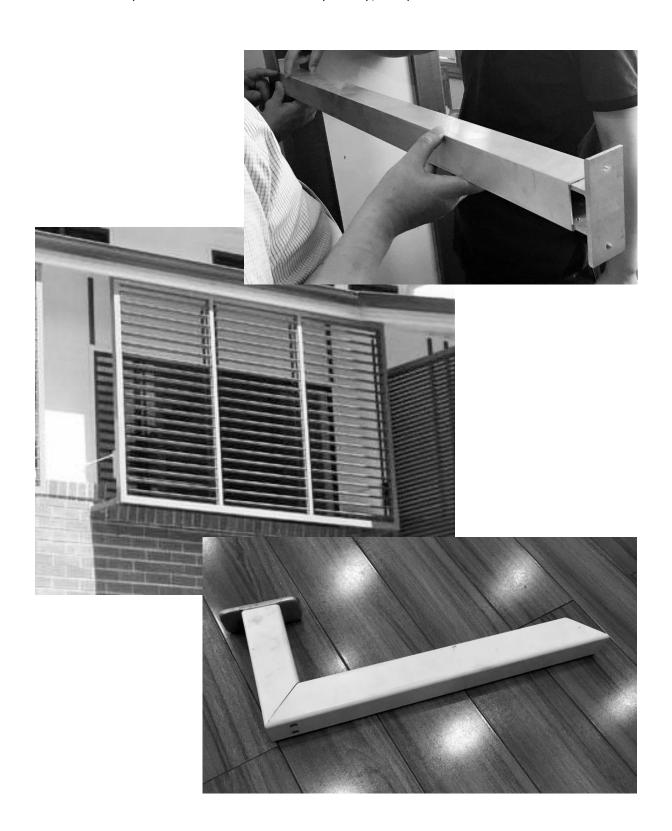




STAND OUT BRACKET AND POST

Stand out brackets are perfect for mounting panels in a fixed position, with operational louvres or fixed for screening. Can also be used to create fixing frame over balustrades, alfresco areas, under sloping roofs etc.

50mm x 50mm post and sleeve bracket sold separately, and powder coated to match shutters.



MARKETING ESSENTIALS

\$299.00+GST



ELEMENT 13 GLOSS BROCHURE
E13 - BROCHURES
FREE UP TO 50 COPIES
38c EACH (FREIGHT FEES APPLY)



USE, CARE AND MAINTENANCE OF ELEMENT 13 SHUTTERS

Element 13 Shutters are unsurpassed for quality in appearance and structure and are manufactured to last. Like all home furnishings however, they need proper care and regular maintenance in order to prolong their life.

OPERATING ELEMENT 13 SHUTTERS:

- Before opening hinged panels or operating sliders or Bi-Folds, ensure louvres are closed to prevent damage.
- When sliding Bypass panels, ensure louvres are closed to prevent louvres from clashing.
- When opening Bi-Folds, start in the centre or the end of the stack, and stack the panels together as you go.
- Magnetic catches are installed on framed installations to help compensate for movement of panels within the frame.
- Do not force or slam hinged shutters closed as this will cause damage to both the shutter and the framework.
- o Never swing or place any weight on the shutter.
- On not put your hands through the louvres to gain access to window openings as this will place strain on the louvres that will not be covered under warranty.
- When adjusting louvres by hand, move two louvres simultaneously and stop if you feel any resistance.
- Never tilt one louvre on its own as you may cause damage to the clear view mechanism or louvre.

MAINTAINING ELEMENT 13 SHUTTERS:

- Rotate louvres daily
- Keep any tracks free of dirt and grit weekly. Use a <u>silicone spray</u> lubricant if necessary
- Regularly clean louvres with a soft damp cloth to remove dust on internal applications, and hose down on external applications
- Element 13 shutters may be cleaned with mild dishwashing liquid and a soft cloth,
 or a mild base household cleaner for more difficult dirt and stains
- o External shutters should be hosed down regularly and washed with a mild soap solution to remove air pollutants and salt residue in coastal areas
- o Always rinse afterwards with fresh water so that the contact time of the cleaning solution is kept to a minimum
- NEVER USE alcohol, silicon-based sprays, solvents, chlorine-based cleaners, steel wool, scourers, or abrasive cleaners on shutters as they may affect the surface appearance
- o Do not use undue weight or pressure on the louvres whilst wiping
- If any louvres come loose, use the tension screw to tighten again (located at the side of the shutter panel)

NOTE:

Details contained herein are provided as a matter of general information and does not constitute as specific advice. You should seek your retailer's advice to ensure that any information or suggestion meets your specific requirements.

CLAIMING UNDER WARRANTY

When claiming under this Warranty to Windoworld Decor, you must:

- 1. Contact the original dealer if your purchase was not directly made through Windoworld Décor.
- The original dealer MUST submit a Warranty Request by email to Windoworld Décor clearly outlining the related order number, the item number(s), the panel number(s), and the issue.
- 3. All claims must be substantiated with **proof** of the error or defect. This can be done by attaching a photograph to your claim.

*NOTE - Please ensure you have a photograph of the **entire window/shutter** and also a **close up/detailed** photograph of the problem, sufficient to identify the problem. If the problem exists on more than one panel, you must supply a **photograph for each shutter panel**.

- 4. Send the completed request to blindorders@windoworldecor.com.au
- The Warranty Request will be assessed by Windoworld Décor and if accepted as a defect
 of material or labour, will be processed and sent onto the factory of manufacture for resupply or repaired or replaced in-house with Windoworld Décor depending on stock
 availability.
- 6. If the request is confirmed as a defect the order will be deemed a *Rework and recorded as the original order number with an RW prefix to identify it as a rework. If the request is not confirmed as a defect, it will be recorded as the original order number with an RO prefix to identify it as a **Re-Order.
- *A **Rework** is considered to be any order for repair, replacement, partial replacement, or parts that relate to a previous order, where the factory is at fault. Windoworld Décor is responsible for the cost of the replacement or parts required to complete the warranty claim.
- **A **Re-Order** is considered to be any order for repair, replacement, partial replacement, or parts that relate to a previous order, where the customer/dealer is at fault. The customer/dealer is responsible for the cost of the repair, replacement or parts required to complete the warranty claim.

Your claim cannot be actioned if:

- 1. The Warranty Request is made via telephone.
- 2. The Warranty Request does not detail measurements, the cause and effect, the original order information and does not include the relevant photographs.
- 3. The original order has not been paid for in full in accordance with the purchase order.

WARRANTY AND REPAIR

Windoworld Décor's Warranty and Rework Policy covers the repair or replacement of Element 13 shutters from the date of purchase, if found to be defective in materials or workmanship for shutter panels properly installed and maintained in residential dwellings for the periods below.

Extrusion: 10 years

Metal Components: 10 years

Powder Coat Colour Fastness: 10 years

This warranty is in addition to any other statutory obligations required in the State or Territory of the premises, and supersedes all other warranties, both expressed and implied. We warrant these products free from defects within the following Acceptable Standard Guidelines:

- If a defect is visible with the naked eye in natural daylight at a distance of 1.5 metres, it is not acceptable
- If a defect is not visible with the naked eye in natural daylight at a distance of 1.5 metres, it is acceptable

WHAT IS WINDOWORLD DÉCOR'S RESPONSIBILITY?

We guarantees that we will repair or replace at our sole discretion any parts or items deemed to be suffering from a defect. We, where possible, will repair or replace any product using identical components. If Windowolrd Décor designs and/or styles have been altered or upgraded, we will replace any components suffering from a defect with a part or product of comparable quality and value.

PRODUCT USE

The warranty is ex-factory and restricted to supply only. This warranty is only valid for the original purchaser or first end user and is at the sole discretion of Windoworld Décor's management. The warranty excludes any shipping, labour or other associated costs with the installation, re-installation and removal of shutters or parts and all liability for consequential or incidental damages from any cause whatsoever, and does not include:

- Normal wear and tear
- o Installation damage to the window(s) or premises
- Damage resulting from misuse or abuse
- o Installation/use of the product outside the Windoworld Décor's specification guidelines
- Use of components not supplied by Windoworld Décor
- o Any alterations made to the original shutter panels as supplied
- o Incorrect or insufficient care, cleaning, and maintenance
- Damage resulting from fire, flood, or other natural disasters or Acts of God

RIGHTS UNDER STATE LAW

This warranty shall be governed under the Laws of Australia. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

To replace or repair the product is at the sole discretion of Windoworld Décor.

Windoworld Décor is not responsible for the removal, reinstallation nor shipping charges associated with the warranty service.