

Shutters



Sec.: Shutters Date: Apr 2024



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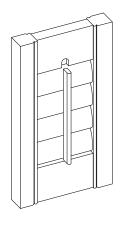
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Shutters - Introduction



Opening Window:



Window Treatments' traditional European styled shutters includes both interior shutters (used on the inside of a house or building) and exterior shutters (used on the outside of a structure). Depending on your application, shutters can be constructed from either Basswood, Cedar, Aluminium or PVC.

Shutters may be used for a variety of reasons: visibility and airflow, including controlling the amount of sunlight that enters a room, to provide privacy, security and to enhance the aesthetics of a building or terrace access adding to the practicality and mood of any interior or exterior.

Shutters can be either fixed permanently in place, hinged, bi-fold or sliding and come with various types of hardware and tracking systems. Depending on your requirements, shutters can be fitted inside or outside of the window opening and can be supplied with various types of frames (Z, L, T, rectangle or square). Shutters can be configured in a single tier unit that has one shutter top to bottom of a window opening as well as multiple tiers. Multiple tier units feature separate shutters on each tier which allows the top shutters to be opened independently from the bottom shutters. Café type shutters refers to shutters

that only cover the lower portion of a window. Full height shutters are made with a horizontal divider (midrail) which separates the upper and lower portions of the shutter. With operable louvred shutters this gives greater control as the louvres above the mid-rail can be operated independently from the louvres below the mid-rail.

Window Treatments' shutters consist of a frame of vertical stiles and horizontal rails (top, middle and bottom). Set within this frame, louvres can be adjustable or fixed within the shutter frame. Full height shutters are made with a mid-rail which separates the upper and lower portions of the shutter. A tilt bar is used for adjusting louvre position and to keep the louvres in a uniform position. Alternatively a Clear View metal tilt rod is placed on the reverse side of the shutter allowing for cleaner lines in the front. The Clear View system is commonly used for sliding shutter applications as this decreases light gap measurements and allows each shutter leaf to sit closer to one another.

Ouick Glance

Туре		Basswood	Cedar	Aluminium	PVC
Louvres	Louvre Size	47.6mm (aerofoil only), 64mm, 89mm, 114mm (aerofoil & flat blade)	68mm, 90mm	89mm	64mm, 89mm, 114mm
Tilt Bar	Tilt Bar Position Clear View	Centre, Left or Right Yes	Centre, Left or Right Yes	N/A Yes	Centre, Left or Right Yes
Style	Hinged Bi-fold Straight Sliding Fixed Louvres (ventilated) Fixed Louvres (non-ventilated) Special Shape Shutters	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes No	Yes Yes Yes Yes Yes No
Stile Options	Square Rabbet D-mould	Yes Yes Yes	Yes Yes Yes	Yes No Yes	Yes Yes Yes
Motorised Option		Yes	Yes	Yes	Yes
Hardware	Tracking Systems Hardware	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Frame Options	Stiles Mid-rail Light Stop Hang Strips L Frames Z Frames T Post U Channel Corner Post Bay Window Post	Yes	Yes Yes Yes Yes Yes Painted Only Yes Painted Only Painted Only Yes	Yes Yes **Ves - constructed from Basswood No Yes No Yes Yes **Yes - constructed from Basswood *Yes - constructed from Basswood	Yes Yes * Yes - constructed from Basswood * Yes - constructed from Basswood Yes Yes Yes Yes * Yes - constructed from Basswood
Finish	Stained Oiled Lacquered Painted Powder coated	Yes No No Yes, Stnd colours or custom No	No Yes Yes Yes, Stnd colours or custom No	No No No No Yes, Stnd colours only	No No No Yes, Stnd colours or custom No

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Shutters - Material Type, Finishes, Louvre Size,

Material Type

Window Treatments' Shutter range is available in Aluminium, PVC and two types of wood, Basswood and Cedar both of which come from sustainable forests and are renowned as the most durable hardwood and softwood timbers for manufacturing shutters (this is due to their resistance to warping, fine grains, durability and acceptance of a variety of finishes).

Basswood Overview	Cedar Overview
Basswood is a hardwood, durable and lightweight.	Cedar is an exceptional wood with many characteristics. Cedar is recognized for its natural beauty and physical
The characteristics are a fine straight grain material with an even texture, consistent colour and low resin content.	properties such as its distinguishing aroma, rich colour, durability, insulating properties, workability and acous-
Basswood has good finishing properties, accepts oilbased paint and exterior stain for longer finishes.	tics. Cedar has exceptionally good finishing properties, accepts exterior paint, lacquer and oil. Gives long service with little maintenance and is ideal around moist areas.
Aluminium Overview	PVC Overview
The hard wearing powder coated Aluminium shutter can be used internally, but is particularly suited for external applications. A range of standard colours are available or if requested aluminium shutters can be painted to match any Resene colour from the Resene chart.	PVC shutters look like our wooden shutters but offer a longer life span and a more affordable price tag. Will not absorb moisture, delaminate, split, crack and are excellent for kitchens and bathrooms where moisture may be a problem.

Finishes

Basswood comes in a range of standard stain and painted colour options or custom colour of your choice. PVC comes in Standard paint colours or can be custom painted. Alumiunium is available in standard power coated colours only. Cedar finishes can be oiled, lacquered or painted. Colour on actual shutters may vary slightly from samples provided, due to natural colour variance in the wood species and paint age.

Finish/Colours	Painted	Stained
Basswood	White-101, Snow-105, Swiss Coffee-107, Creamy-110, Butter-120, Super White-130, Pearl White-131, Egg- shell-132, Pearl-133, Bristle Half-134, Antique White-136, White On White-137, Black-020	Nature-200, Oak-205, Rose-216, Mahogany-220, Black Walnut-230, Desert-252, Ash-253, Gumnut-254, Maple-256, Coffee Bean-258
PVC	White-101, Snow-105, Swiss Coffee-107, Creamy-110, Butter-120, Super White-130, Pearl White-131, Egg- shell-132, Pearl-133, Bristle Half-134, Antique White-136, White On White-137, Black-020 or custom painted to any Colour	N/A
Aluminium - (Powder Coated)	Pearl White-PC-1, Birch-PC-B-2, Black-PC-B-3, Silver-PC-B-4	N/A
		1

Finish/Colours	Lacquered	Oiled	Painted
Cedar	Light to Medium Medium to Dark Natural	Light to Medium Medium to Dark Natural	Colour match to any Resene Colour Chart

Louvre Size and Tensioning Screw

Various size louvres are available with a choice of two profiles. The first is elliptical in shape, sculptured where the louvre is thicker in the middle and tapered to the front and back. An elliptical louvre is stronger than the alternative traditional flat 68mm louvre. For technical data, refer to pages 14, 15, 16, 17, 18, 19, 20, 21.

For Basswood shutters, we have a unique tensioning screw which is used to adjust the tension of the louvres. This comes into its own specifically for full height shutters where adjusting the tensioning screw allows the movement of louvres with ease. For technical data, refer to page 18.

Basswood Louvre Widths Cedar Louvre Widths Aluminium Louvre Widths 12mm 114mm 89mm 90mm 64mm **PVC Louvre Widths** 12mm 89mm 64mm 68mm 47mm 114mm Œ D 12mm 89mm

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12mm

COD

114mm



Introduction

Basswood and Cedar Shutters may be used for a variety of reasons: visibility and airflow, controlling the amount of sunlight that enters a room, privacy, security and the ability to enhance the aesthetics of a building or terrace access adding to practicality and mood of any interior. Window Treatment's traditional European styled Basswood & Cedar shutters are an aesthetically pleasing and versatile window management system. Cedar is recognized for its natural beauty, rich colour, durability, insulating properties and acoustics. Basswood is a hardwood which is durable, lightweight and has a fine straight grain material with an even texture, consistent colour and low resin content. Both Cedar and Basswood have good finishing properties which accept oil based paint and exterior stain for long lasting finishes.

Basswood & Cedar Shutters can be either fixed permanently in place, hinged, bi-fold or sliding depending on your preference and application. Louvres can be adjustable or fixed within the shutter frame. Full height shutters are made with a mid-rail which separates the upper and lower portions of the shutter, with operable louvre shutters this gives greater control as the louvres above the mid-rail can be operated independently from the louvres below the mid-rail. A tilt bar is used for adjusting louvre position and to keep louvres in uniform position. Alternatively a clear view metal tilt rod is placed on the reverse side of the shutter allowing you to adjust all louvres position by tilting one louvre. This also allows for cleaner lines on the front of the shutter and helps to decrease light gap measurements on sliding shutter applications.



Quick Glance

Туре		Basswood	Cedar
Louvres	Louvre Size	47.6mm (Aerofoil only), 64mm, 89mm, 114mm (Flat Blade or Aerofoil)	68mm (Flat blade), 68mm, 90mm (Aerofoil)
Tilt Bar	Tilt Bar Position Clear View	Centre, Left or Right Yes	Centre, Left or Right Yes
Style	Hinged Bi-fold Straight Sliding Fixed Louvres (ventilated) Fixed Louvres (non-ventilated) Special Shape Shutters	Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes
Stile Options	Square Rabbet D-mould	Yes Yes Yes	Yes Yes Yes
Motorised Option		Yes	Yes
Hardware	Tracking Systems Hardware	Yes Yes	Yes Yes
Frame Options	Stiles Mid-rail Light Stop Hang Strips L Frames Z Frames T Post U Channel Corner Post	Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Painted Only Yes Painted Only Painted Only
Finish	Stained Oiled Lacquered Painted Powder coated	Yes No No Yes No	No Yes Yes Yes No

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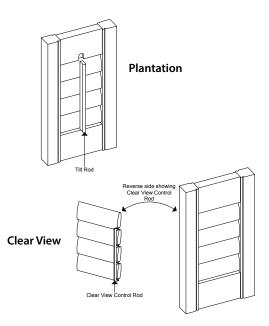
Tilt Rod, Louvre Size, Louvre Style,

Tilt Rod Control Position: Plantation

Standard position for the tilt bar control on Plantation shutters is centred within the frame. Alternatively, the tilt bar can be positioned off-centred left or right. The off-centred option is mainly used for bi-fold panels to allow the panels to fold onto each other without hitting the tilt bar. A tilt rod (in conjunction with a hooked push pole) is also used for high/out of reach and special shaped shutters.

Clear View

The Clear View control option for Basswood and Cedar shutters is a metal tilt rod rebated into the side of the louvre blade on the reverse side of the panel. This allows for cleaner lines and a clear view through the shutter once the louvres are opened or closed. The standard Clear View tilt bar position is on the hinged stile side of the louvre blades. The Clear View option is also used for sliding shutter applications as this decreases light gap measurements and allows each shutter panel to sit closer to one another reducing the depth of the shutters when stacked.



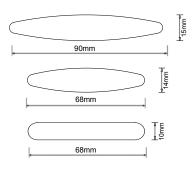
Louvre Size and Tensioning Screw

Various size louvres are available with a choice of two profiles. The first is an areofoil blade which is elliptical in shape (i.e. thicker in the middle and tapered to the front and back). An aerofoil louvre is stronger than the alternative traditional flat blade 68mm louvre. Note Flat blade is not available in 50mm louvre size.

For Basswood shutters, we have a unique tensioning screw which is used to adjust the tension of the louvres. This comes into its own specifically for full height shutters where adjusting the tensioning screw allows the movement of louvres with ease.

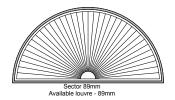
Basswood Louvre Widths

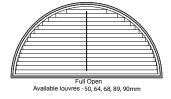
Cedar Louvre Widths

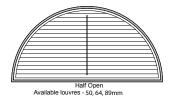


Louvre Style for Special Shape Shutters

For Basswood and Cedar special shape shutters, Window Treatments supplies 3 louvre style options. Note Flat blade is not available in 50mm louvre size.







Туре	Option	Available Louvre Size
Basswood	Sector 89 Full Open Half Open	89mm 50mm, 64mm, 89mm 50mm, 64mm, 89mm

Туре	Option	Available Louvre Size
Cedar	Full Open	68mm, 90mm

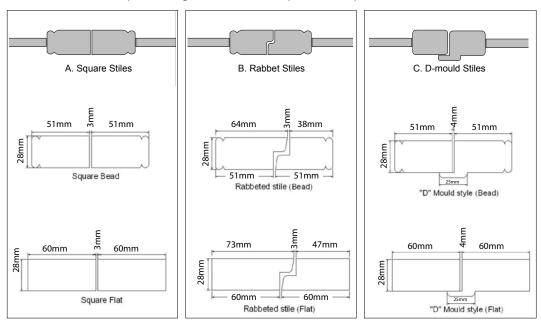
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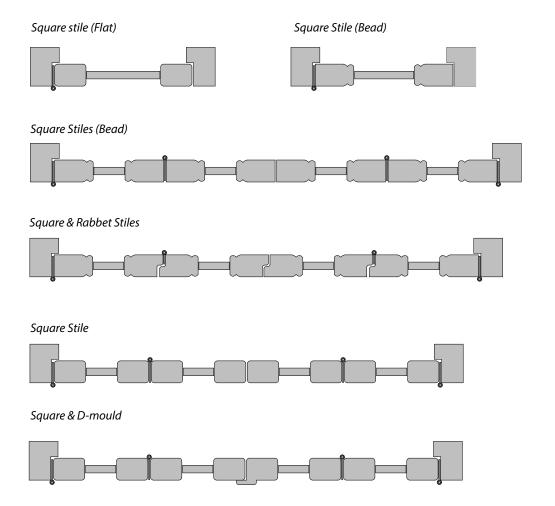
Stile options

Stiles

Window Treatments supplies 3 stile options: Square, Rabbet, and D-mould. For light gaps, Rabbet or D-mould stiles are used to provide a light block where two panels overlap or interlock.



Please Note: If there is only one panel then only square stile is available. When the shutter has 2 panels connected with hinges, all stile options are available.



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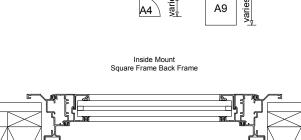


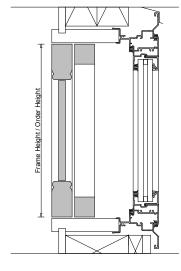
varies

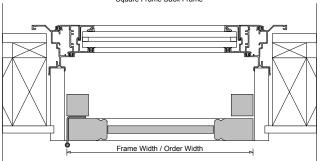
Light stop & Mount types, Square frames & Mount types

Light Stop

Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	Light Stop	A4, A9,	Provides a light block where panels are hinged.

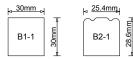


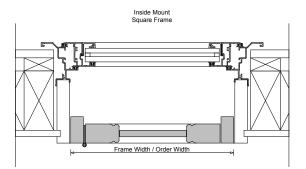


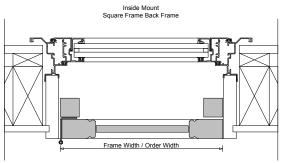


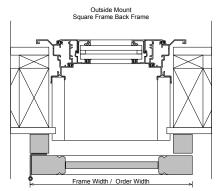
Square Frame

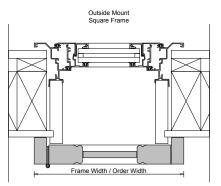
Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	Square Frame	B1-1 Standard, B2-1 Beaded	2 Style options are available: Standard and Beaded. Our Standard square frame is best suited to an outside mount application. Our Beaded square frame is best suited to an inside mount application. Using our Standard square frame with a Steadman hinge allows you to protrude the panel past the window opening, giving the ability to hang the shutter panel square in the frame.











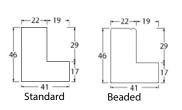
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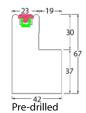


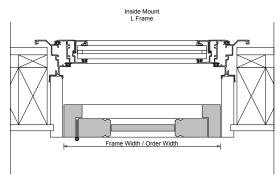
■ L Frames & Mount types, T-Posts & Mount types

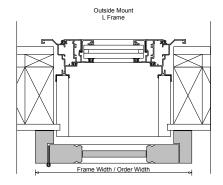
L Frame

Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	L Frame	Standard, Beaded, Predrilled	L Frames are used to provide hanging options for single and multiple panels for outside and inside mount applications using a Butt or Steadman hinge. Using Standard and Beaded L Frames with a Steadman hinge allows you to protrude panel past window opening. This gives you the ability to hang the shutter panel square in the frame and closes light gap for flush mounted hinges. Ideal when there is no architrave in the opening.





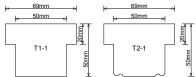


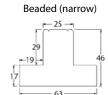


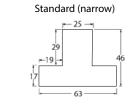
T Post

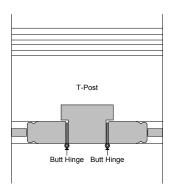
Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	T Post	T1-1 Standard (wide), T2-1 Beaded (wide), Standard (narrow) Beaded (narrow)	T Posts are used to provide hanging options for single and multiple panels for outside and inside mount applications using a Butt hinge. They give you the ability to hang the shutter panel square in the frame. The T Post closes the light gap for flush mounted hinges. Ideal when there is no architrave in the opening.

T1-1 Standard (wide) T2-1 Beaded (wide)









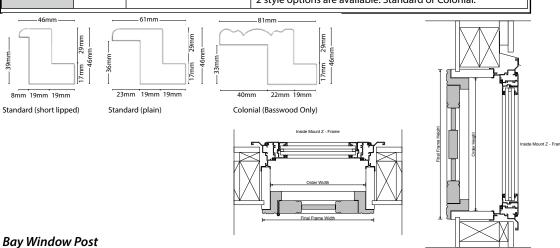
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Z Frames, U Channel, Corner Post & Mount types

Z Frame

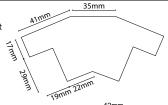
Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	Z Frame	Standard (short lipped) Standard (plain) Colonial (Basswood only)	Z Frames are used to provide hanging options for single and multiple panels within an opening. Plumbing the window frame closes the light gap for flush mounted hinges. The Z frame wraps around the reveal edge, making it ideal for covering out-of-square windows. 2 style options are available: Standard or Colonial.



Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	Bay Window Post	Bay Window Post	Bay Corner Posts are used to provide hanging options for single and multiple panels within a bay window application. Closes light gap for flush mounted hinges. Bay Window Posts are manufactured according to the size required for each installation.

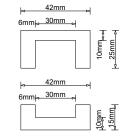


Can be custom made to suit



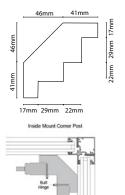
U Channel

Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	U Channel	Top, Bottom	Top and bottom 'U Channels' are ideal for incline roof applications or when access to windows is not required. The louvres can open and close and the panel can easily be removed by lifting the shutter up into the top channel and out at the bottom. To refit the reverse applies.



Corner Post

Shutter Type	Туре	Frame Options	Benefit
Basswood or Cedar	Corner Post	CO-PO	Corner Posts are used to provide hanging options for single and multiple panels within a corner application. Closes light gap for flush mounted hinges. Corner Posts are manufactured according to the size required for each installation.



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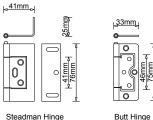


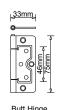
Panel types - Hinged, L Frame & T Post Hinged

Panel Types

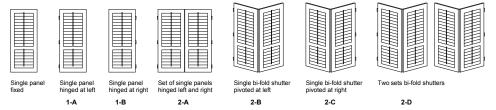
Panel Types refers to the variations of each type of shutter: single panel fixed, single panel hinged, bi-folds, L Frame and T Post, straight sliding and bi-fold track variations.

The type of hinge used for a single panel, bi-fold, L Frame and T Post and for Rabbet stiles applications is a Butt hinge. However, if you require your panel to protrude past the window opening, a Steadman hinge is required hinged from a hang strip.





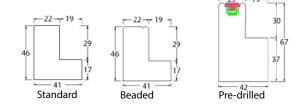
Hinged



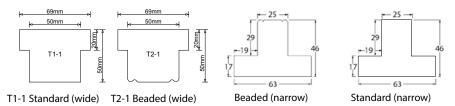
L Frame and T Post Hinged

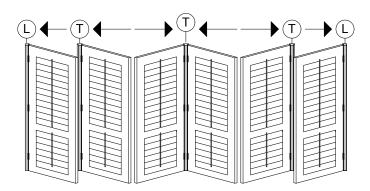
When tracks are not feasible, L Frame and T Posts are used to provide hanging options for single and multiple panels within an opening or outside the opening window.

Basswood & Cedar (L Frame)



Basswood & Cedar (T Post)





L Frame & T Post hinge options

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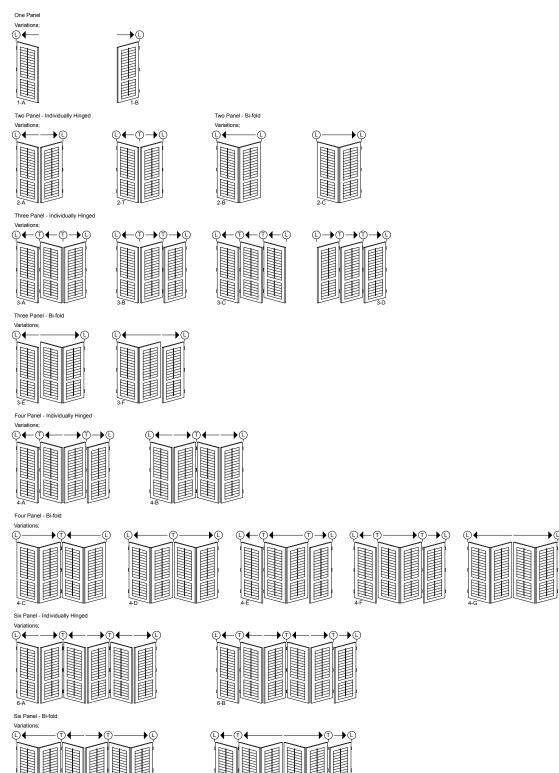


■ Panel types - Hinged, L Frame & T Post Hinged - Contd.

L Frame and T Post Hinged - cont.

Key

T means	Panel is hinged from a T Post or closes onto a T Post
L means	Panel is hinged from a L Frame or closes onto a L Frame
means	Panel direction to the right
← means	Panel direction to the left



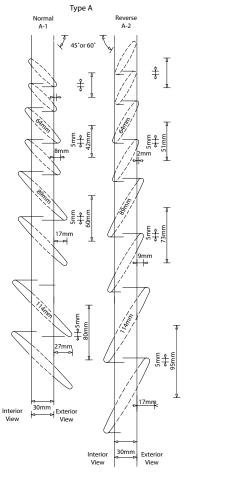
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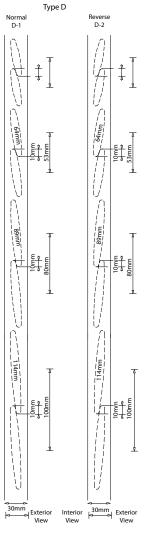


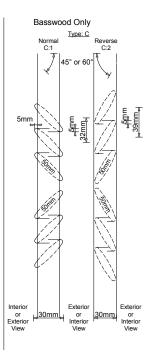
Fixed Shutters

Fixed Shutters

Fixed louvres are permanently open (ventilated) or permanently shut (non-ventilated). Permanently open means that there is always ventilation while blocking line of sight. Fixed louvres may be employed for a variety of reasons: to control the amount of sunlight that enters a room, to provide privacy and security, protect against weather, unwanted intrusion or damage and to enhance the aesthetics of a building.







Variations

The Basswood and Cedar fixed louvre products have many variations such as projections front or back, louvres enclosed within the Stile dimension, louvre angles 45° or 60°, louvre facing up or down, and various louvre sizes: 50mm (aerofoil only), 64mm, 68mm, 89mm & 114mm (aerofoil and flat blade).

	Type A		Тур	e C	<u>Type D</u>		
	Normal A-1	Reverse A-2	Normal C-1	Reverse C-2	Normal D-1	Reverse D-2	
Stile (Basswood)	50 x 30mm	50 x 30mm	50 x 30mm	50 x30mm	50 x 30mm	50 x 30mm	
Stile (Cedar)	60 x 30mm	60 x 30mm			60 x 30mm	60 x 30mm	
Louvres (Basswood)Aerofoil	50, 64, 89, 114mm	50, 64, 89, 114mm	50mm	50mm	50, 64, 89, 114mm	50, 64, 89, 114mm	
Louvres (Basswood)Flat Blade	64, 89, 114mm	64, 89, 114mm			64, 89, 114mm	64, 89, 114mm	
Louvres (Cedar)	68, 90mm	68, 90mm	45°or 60°	45°or 60°	68, 90mm	68, 90mm	
Angles	45°or 60°	45°or 60°	Normal	Reverse	85°	85°	
Louvre Facing	Normal	Reverse			Normal	Reverse	
Projection (Basswood)	4, 8, 17, 27mm	0, 2, 9, 17mm					
Projection (Cedar)	8, 9, 17mm	0, 3, 9mm	Painted, Stained	Painted, Stained			
Finish (Basswood)	Painted, Stained	Painted, Stained			Painted, Stained	Painted, Stained	
Finish (Cedar)	Painted, Oiled or	Painted, Oiled or			Painted, Oiled or	Painted, Oiled or	
	Lacquered	Lacquered			Lacquered	Lacquered	
Note: For Flat blade louvres							
(both Basswood & Cedar) add							
2mm to above Projection sizes							

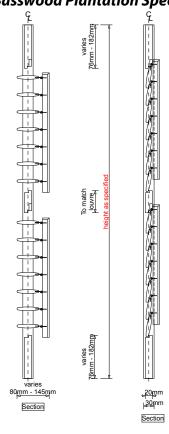
Sec. : Shutters Date: Nov 2022

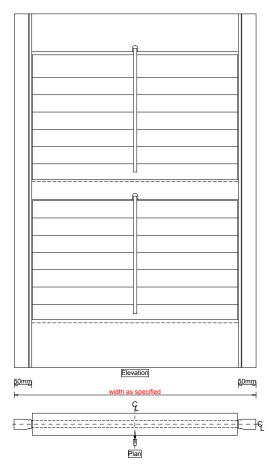


Basswood Shutters

Plantation Specifications

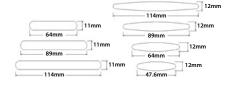
Basswood Plantation Specifications





Louvre Size

47.6mm x 12mm Louvre - Aerofoil Half Open, Fixed, Ventilated, Fixed Non-Ventilated Louvre - Aerofoil 64mm x 12mm Louvre - Aerofoil 89mm x 12mm Louvre - Aerofoil 114mm x 12mm Louvre - Flat blade 64mm x 12mm Louvre - Flat blade Louvre - Flat blade 89mm x 12mm 114mm x 12mm



Please Note: Varies, depending on louvre size.

Size of 150mm based on 114mm louvre

Finish

Type Stain

Nature, Oak, Rose, Mahogany, Black walnut, Desert, Ash, Gumnut, Maple, Coffee bean, Black. or custom colour White, Snow, Swiss coffee, Creamy, Butter, Super white, Pearl white, Eggshell, Pearl, Bristle half, Antique white, White on Painted

white or custom painted

Width & Height Hinged

900mm (Single Panel hinged) 650mm (Bi-fold Panel) Maximum Width Maximum Width Maximum Width 1000mm (Sliding or Fixed) Minimum Width 250mm (Single Panel) Minimum Height Maximum Height 2800mm

Stile & Rails

Туре

Options 50mm x 30mm Colonial Square, Rabbet, Top Rail 70mm – 160mm x 20mm (varies, depends on height of panel)

Mid Rail 64, 90, 114mm x 20mm (varies, depends on Louvre size) Shutters over 1800m 1 mid-rail **Bottom Rail** 70mm - 160mm x 20mm

(varies, depends on height of panel) Tilt Bar 19mm x 12mm centred

Construction

Clear View Tilt Rod

100mm - 150mm

Recess

Size

Left, Centre, Right Clear View

Туре Mortise and Tenon (Top, Middle, Bottom Rail) 8g x 70mm Wood Screw Stainless Steel Tension Screw & Spring for Louvre Louvre Dowels & Spring Ø4 & Ø 6, 2 Plastic Dowels, Carbon Steel Spring Stainless Steel Eve Screw Pin for Metal Tilt Rod 2g x 20mm, Brass

Track Systems

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Multi-fold 25

Type Maximum Width 650mm per Panel (maximum 8 x Panels on each side) Maximum Height 3000mm Maximum Weight 25kg per Panel

Single Run 60 900mm per Panel (maximum 6 x Panels on each track) 3000mm 60kg per Panel

3mm x 14mm, Metal

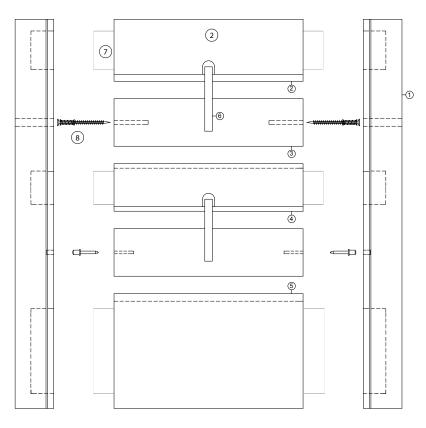
ISSUE: SH-07-003

Basswood Shutters

Window Treatments

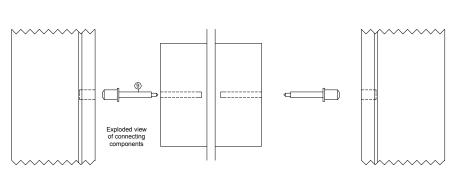
Plantation Construction

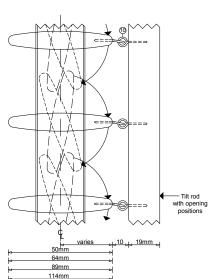
Basswood Plantation Construction



Component List

- 1. Stile
- 2. Top Rail
- 3. Louvre
- 4. Mid Rail
- 5. Bottom Rail
- 6. Tilt Bar
- 7. Mortise & Tenon joint
- 3. Tension Screw
- 9. Louvre Dowel
- 10. Eye Screw





Construction

The Basswood shutter is constructed using a mortise and tenon joint to join the stiles, middle rail and bottom rail together as one frame. As the shutter height and rail size increase so does the size of the mortise and tenon joint. This strengthens, braces and prevents the frame from twisting, bowing or sagging. The louvres are mounted to the stile using the louvre dowel components, the tilt bar is then mounted to the louvres with the eye screws. The tension screw is then mounted through the stile into the louvre and tensioned. The mid rail must be used when the shutter is over 1800mm in height. This is designed to give greater strength to the shutter frame. The benefit of the mid rail option is that it allows the shutter louvres to have two sections at different angles for privacy, light and airflow. Maximum panel height for Basswood shutters with a mid rail is 2800mm, without a mid rail maximum height is 1800mm.

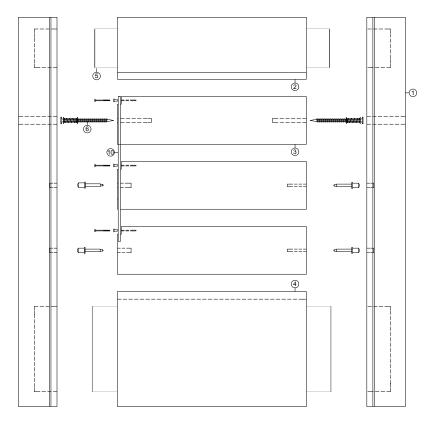
Sec.: Shutters Date: Dec 2017



Basswood Shutters

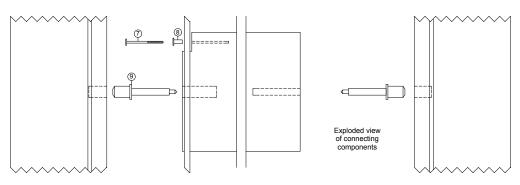
Plantation Clear View Construction

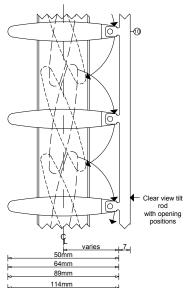
Basswood Clear View Construction



Component List

- 1. Stile
- 2. Top Rail
- 3. Louvre
- 4. Bottom Rail
- 5. Mortise & Tenon Joint
- 6. Tension Screw
- 7. SS Nail
- 8. SS Nut
- 9. LouvreDowel
- 10. Clear View Aluminium





Construction

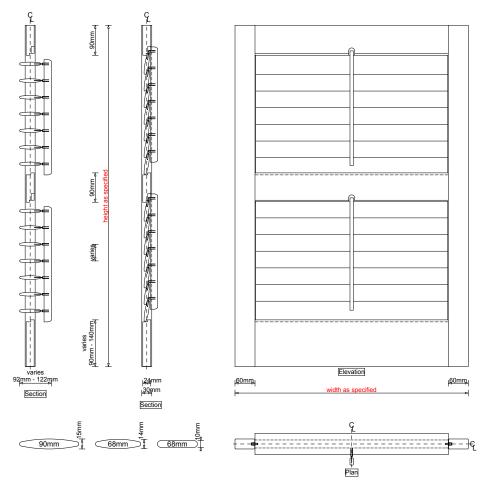
The Clear View shutter is constructed the same way as the standard Plantation shutter with the exception of the tilt bar which is replaced with the Clear View metal tilt rod option. This tilt bar is rebated into the side of the louvre blade (on the reverse side of the panel) allowing for cleaner lines with unobtrusive view through the shutter when the louvres are open or closed. This option is ideal for sliding shutter applications as this decreases light gap measurements and allows each shutter panel to sit closer to one another.

Cedar Shutters

Window Treatments

Cedar Plantation Specifications

Cedar Plantation Specifications



Louvre Size										
Туре	Size	Opt	ions							
Louvre - Standard	68mm x 10mm	Half	Open	Fixed,	Venti	lated,	, Fixed	Non-	Vent	ilated
Louvre - Aerofoil	68mm x 14mm	"	"	"	"	"	"	"	"	
Louvre - Aerofoil	90mm x 15mm	"	"	"	"	"	"	"	"	"

Width & Height Hinged	Construction	
Type Size Maximum Width 950mm (Single Panel) Maximum Width 500mm (Bi-fold Panel) Minimum Width 250mm (Single Panel) Minimum Height 260mm Maximum Height 3000mm	Type Joints Pivot Pin for Stile/Louvre Bush for Stile/Louvre Staples for Tilt Bar/Louvre	Size Ø10 Dowels (Top, Middle, Bottom Rail) Ø10 x 18mm Pin (Nylon T66) Ø8 x 10mm Bush (Nylon T66) 12mm for Tilt Bar (Steel) 8mm for Louvre (Steel)

Finish		Stile & Rails		
Туре		Туре	Size	Options
Oiled		Stile	60mm x 30mm	Square
Lacquered	Clear (polyurethane)			Rabbet
Painted	Range standard colours			D-mould
	or custom colour	Top Rail	90mm x 24mm	
		Mid Rail	90mm x 24mm	
Recess			Shutters over 1500mm 1 mid-rail Shutters over 2950mm 2 mid-rails	
Size	Please Note: Varies.	Bottom Rail	90mm - 140mm x 24mm	
92mm - 122mm	depends on Louvre		(varies, depends on height of panel)	
92111111 - 122111111	size. Size, 122mm based on 90mm	Tilt Bar	22mm x 12mm centred	Left, Centre, Right or Clear View

Track Systems		
Туре	Multi-fold	Single Run
Maximum Width	620mm per Panel (maximum 8 x Panels on each side)	950mm per Panel (maximum 6 x Panels on each track)
Maximum Height	3000mm	3000mm
Maximum Weight	25kg per Panel	60kg per Panel

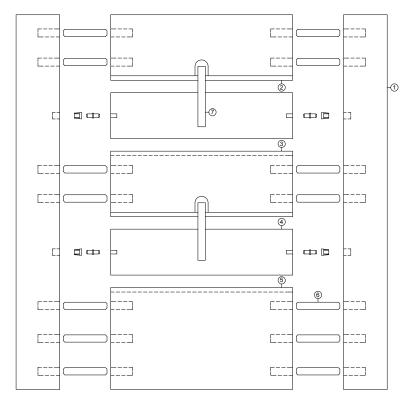
Sec. : Shutters Date : Dec 2017



Cedar Shutters

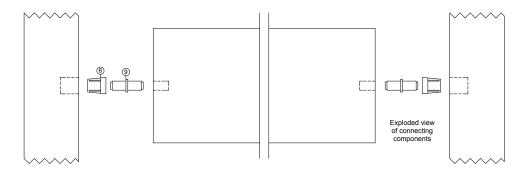
Cedar Plantation Construction

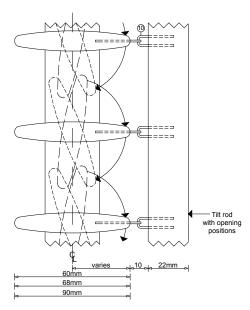
Cedar Plantation Construction



Component List

- Stile
- Top Rail 2.
- Mid Rail 3.
- Louvre 4.
- 5. **Bottom Rail**
- **Dowel Joint**
- Tilt Bar 7.
- **Pivot Bush** 8.
- 9. **Pivot Pin**
- 10. Staples





Construction

The Cedar shutter is constructed using hardwood dowelled joints and water based glue that are glued in place to join the stiles, middle rail and bottom rail together as one frame. The dowel size is Ø10mm. All rails have 2 dowels which strengthens, braces and prevents the frame from twisting, bowing or sagging. The louvres are mounted to the stile using the louvre pivot pin and stile bush components. The tilt bar is then mounted to the louvres with staples. A mid-rail must be used when the shutter is over 1500mm in height. This is designed to give greater strength to the shutter frame. Mid rails also allow the shutter louvres to have two sections at different angles for privacy, light and airflow. If the shutter is over 2950mm in height, two mid rails will be necessary.

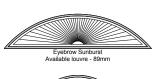
Sec. : Shutters Date: Dec 2017

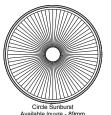


Special Shape Shutters

Special Shape Shutters

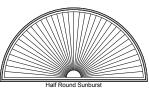
Shaped panels are designed to cover architecturally or irregular designed windows or openings. Their main attraction is the ability to follow the shape of these openings, keeping the integrity of the design. (note: not available in Basswood 50mm Flat Blade)





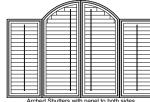








Circle with Horizontal Louvres Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open Tilt Rod - Plantation only

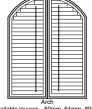


Arched Shutters with panel to both sides Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open

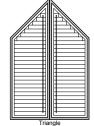


Sunburst with Horizontal Louvres Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open Tilt Rod - Plantation only

Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open Tilt Rod - Plantation or Clear View



Arch Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open Tilt Rod - Plantation or Clear View



Triangle
Available louvres - 50mm, 64mm, 89mm
Louvre open style - Full open or Half open
Tilt Rod - Plantation or Clear View



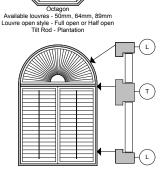
Tapered Shutters
Available louvres - 50mm, 64mm, 89mm
Louvre open style - Full open or Half open
Tilt Rod - Plantation or Clear View



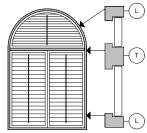
Hexagon Straight Top Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open Tilt Rod - Plantation



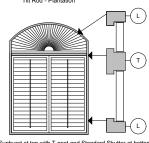
Hexagon Straight Sides Available louvres - 50mm, 64mm, 89mm Louvre open style - Full open or Half open Tilt Rod - Plantation



Sunburst at top with T-post and Standard Shutter at bottom Available louvres in bottom shutter - 50mm, 64mm, 89mm Available louvres in Sunburst - 89mm Bottom Tilt Rod - Plantation or Clear View



Sunburst with Horizontal Louvres at top with T-post and Standard Shutter at bottom Available louvres in bottom shutter - 50mm, 64mm, 89mm Available louvres in Sunburst - 89mm Bottom Tilt Rod - Plantation or Clear View



Elongated Eyebrow Sunburst at top with T-post and Standard Shutter at bottom Available louvres in bottom shutter - 50mm, 64mm, 89mm Available louvres in Sunburst - 89mm Bottom Tilt Rod - Plantation or Clear View

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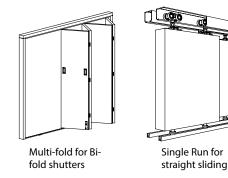


Hardware Technical - Tracking systems, Hinges

Hardware Overview

Tracking Systems

Window Treatments supplies two tracking systems: Multifold for bi-fold shutters, and Single Run for straight sliding shutters. For special applications Window Treatments can supply various track options to suit your requirements.



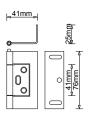
Depending on the type of shutter installation, Butt Hinge and Steadman Hinge are the standard hinges. For special applications, Window Treatments also supplies various hinge options such as Handle hinges to suit your requirements.

Butt Hinge

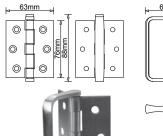


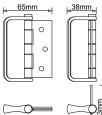


Steadman Hinge



Handle Hinge

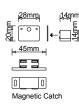




Barrel Bolt



Magnetic Catch





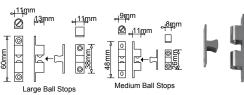
Magnetic Catch







Ball Stop



Туре	Colours Available	Suitable for		
Butt Hinge	Stainless Steel, Silver, Cream, White, Black, Antique Brass, Bright Brass	Square, Rabbet, T Post, L Frame		
Steadman Hinge	Stainless Steel, Silver, Cream, White, Black, Antique Brass, Bright Brass	Hang Strip, protruding past window opening		
Handle Hinge	Stainless Steel	Bi-fold, assists panel movement		
Barrel Bolt	Stainless Steel	Bi-fold, Sliding, Panel		
Ball Stops	Brass, Chrome	Securing Fixed Panel		
Magnetic Catch	Brown, White, Black	Securing Bi-fold Panel		

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Window Treatments

Hardware Technical - Sliding Single Run

Application

- Widely used in lighter commercial and industrial applications
- To cover any width of opening, any number of panels can be used
- To accommodate different building designs, panels can slide to one or both sides
- Hinged panel for easy access may be incorporated into a sliding panel
- · Where panels are fitted externally, a canopy is recommended

Brio® where ideas unfold

Panel Specification

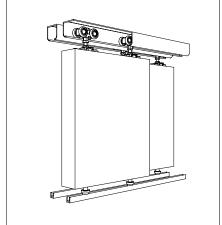
Track System: Single Run (individual Panels)

Max Panel Height: Basswood 3000mm

Cedar 2700mm

For ease of operation it is recommended that the panel width should not exceed 75% of the panel height.

Panels for interior use can be of flush construction or glazed. Panels for industrial applications should be framed, ledged and braced.



Hardware Specification

Track : 80A Material : Aluminium

Standard lengths: 2000mm, 3000mm, 4000mm, 6000mm Aluminium track available in mill or clear anodised finish.

Door Stop : 20DS (Stainless Steel)

Hangers (2 per door) :

Interior : No. 57EN Hamger

Hangers supplied with fixing plate and nylon tyred precision bearings. Vertical adjustment is simple and positive. Nylon tyre wheel hangers should not be used on installation involving temperatures exceeding 80°C.

temperatures exceeding oo e.

Guide : No. 801S

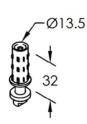
Spring loaded guide, nylon body and tip with stainless steel shaft

and spring.

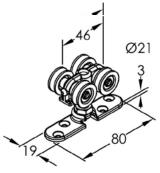
Designed to slide in the No. 92 Threshold



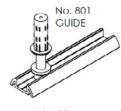
No. 20DS DOOR STOP



No. 801S GUIDE



No. 57EN HANGER



No. 92 THRESHOLD



Sec.: Shutters Date: Dec 2017



Hardware Technical - Multi-fold

Application

- Suitable for residential and light commercial folding shutters with all panels of equal width. Panels can fold to one or both sides of the opening
- Pivot hardware enables a folding exterior shutter to be designed using equal width panels with no cutting down of the panel adjacent to the post.
- To cover any width opening, any number of folding untits can be used.



Panel Specification

Track System: Multi-fold (individual leaves)

Max Leaf Height: Basswood 2500mm

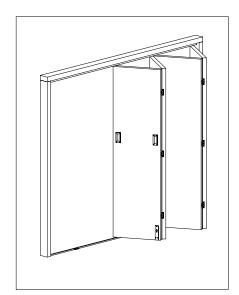
Cedar 2500mm

Max Leaf Width: Basswood 700mm

Cedar 750mm

Units of up to six panels can be pivoted to each side of the

A guide system across the floor must be used on units of three panels or more. Floating units consist of four to six panels. Shutters should be constructed to provide secure fitting for the pivot sets, hangers, hinges and guides.



Hardware Specification

Track - punched for soffit fitting: 80A Material : Aluminium

Standard lengths : 2000mm, 3000mm, 4000mm, 6000mm

Top Pivot Assembly : 21EPNC Steel, Zinc dichromated, Nylon

Bottom Pivot : 21EPNC Steel, Zinc dichromated, Nylon

Door Stop : 20DS (Stainless Steel)

Hangers : No. 57EN Hanger

The hanger is fitted with four nylon tyred ballrace wheels. The adjustment bolt is attached to the top plate and secured in place with a blocking clip which allows easy installation. All

steel parts are zinc dichromated.

: No. 801S Guide

Spring loaded guide for use with No.92 Threshold. Guide is

nylon and stainless steel.

Threshold : No. 92

Threshold, aluminium, available in 2100mm, 3000mm,

4000mm, 6000mm



No.21EPNC **Top Pivot**



No. 21EPNC **PIVOT**



No. 20DS DOOR STOP



No. ADP1/60 Bracket

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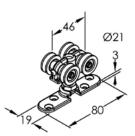
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Ø13.5

No. 801S **GUIDE**



No. 92 **THRESHOLD**



No. 57EN **HANGER**



Introduction

Window Treatment's traditional European styled Aluminium shutters are an aesthetically pleasing and versatile window management system suitable for both interior and exterior applications. The hardwearing powder coated aluminium is available in four baked enamel colours; silver, satin black, pearl white and new birch.

Aluminium shutters may be used for a variety of reasons: visibility and airflow, controlling the amount of sunlight that enters a room, privacy, security and the ability to enhance the aesthetics of a building or terrace access adding to practicality and mood of any interior or exterior area. They can be either fixed permanently in place, hinged, bi-fold or sliding depending on your preference and application. Louvres can be adjustable or fixed within the shutter frame. Full height shutters are made with a mid-rail which separates the upper and lower portions of the shutter, with operable louvre shutters this gives greater control as the louvres above the mid-rail can be operated independently from the louvres below the midrail. A clear view metal tilt rod is used placed on the reverse side of the shutter allowing you to adjust all louvres at once by simply tilting one louvre on the front side of the shutter. The clear view mechanism provides cleaner lines, perserves the view and helps to decrease light gap measurements on sliding shutter applications. Note that a front mounted tilt bar can not be used on our aluminium shutters.



Quick Glance

Туре		Aluminium
Louvres	Louvre Size	89mm
Tilt Bar	Tilt Bar Position Clear View	N/A Yes
Style	Hinged Bi-fold Straight Sliding Fixed Louvres (ventilated) Fixed Louvres (non-ventilated) Special Shape Shutters	Yes Yes Yes Yes No
Stile Options	Square Rabbet D-mould	Yes No Yes
Motorised Options		Yes
Hardware	Tracking Systems Hardware	Yes Yes
Frame Options	Stiles Mid-rail Light Stop Hang Strips L Frames Z Frames T Post U Channel Corner Post Bay Window Post	Yes Yes Yes - constructed from Basswood No Yes No Yes Yes Yes Yes Yes Yes Yes Yes - constructed from Basswood *Yes - constructed from Basswood
Finish	Stained Oiled Lacquered Painted Powder coated	No No No No Yes

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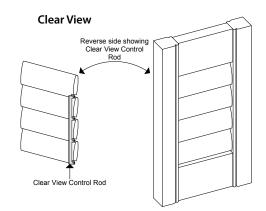
Tilt Rod, Louvre Size, Louvre Style,

Tilt Rod Control Position:

Clear View

The Clear View control for Aluminium shutters is a metal tilt rod rebated into the side of the louvre blade on the reverse side of the panel. This allows for cleaner lines and a clear view through the shutter once the louvres are opened or closed.

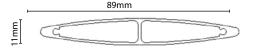
The standard Clear View tilt bar position is on the hinged stile side of the louvre blades. Aluminium shutters that are installed in hard to reach places will come with a hooked pole and have a small eyelet screwed into the bottom louvre which allows the louvres to be repositioned easily using the pole provided. The Clear View mechanisim when used in sliding shutter applications decreases the light gap measurements and allows each shutter panel to sit closer to one another reducing the depth of the shutters when stacked.



Louvre Size and Type

Aluminium shutters are available in an areofoil blade which is elliptical in shape (i.e. thicker in the middle and tapered to the front and back).

Туре	Size	Thickness
Aluminium Aerofoil	89mm x 11mm	1.4mm

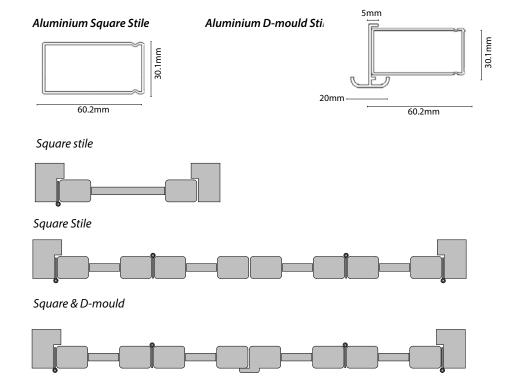


Louvre Style for Special Shape Shutters

Special shapes are not available in Aluminium shutters. Please refer to our Basswood and Ceadr Shutter sections if special shapes are required.

Stiles

Window Treatments supplies 2 stile options for Aluminium shutters: Square, and D-mould. D-mould stiles are used to provide a light block where two panels overlap or interlock.



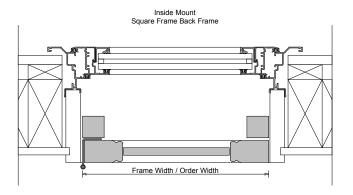
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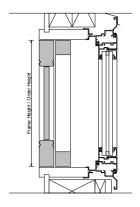


Light stop, L frames, T frames & Mount types

Light Stop

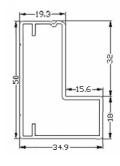
Shutter Type	Туре	Frame Options	Benefit	varies
Aluminium	Light Stop	Varies	Provides a light block where panels are hinged. Note: constructed from Basswood	varies 4

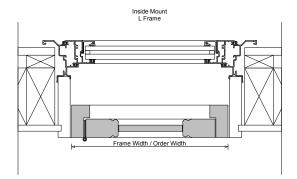


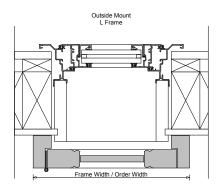


L Frame

Shutter Type	Туре	Frame Options	Benefit
Aluminium	L Frame	Standard	L Frames are used to provide hanging options for single and multiple panels for outside and inside mount applications using a Butt or Steadman hinge. Using a standard frame with a Steadman hinge allows you to protrude the panel past the window opening. This gives you the ability to hang the shutter panel square in the frame and closes light gap for flush mounted hinges. Ideal when there is no architrave in the opening.

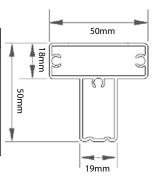






T Post

Shutter Type	Туре	Frame Options	Benefit
Aluminium	T Post	Standard	T Post are used to provide hanging options for single and multiple panels for outside and inside mount applications using a Butt hinge. Gives you the ability to hang the shutter panel square in the frame. The T Post closes the light gap for flush mounted hinges. Ideal when there is no architrave in the opening. Available as Standard.



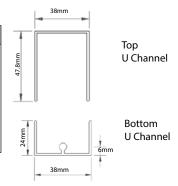
Sec. : Shutters Date: Dec 2017



U Channel, Corner Post, Bay Window Post & Mount types, **Panel Types**

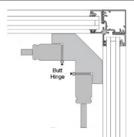
U Channel

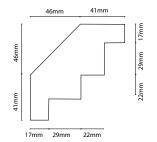
Shutter Type	Туре	Frame Options	Benefit
Aluminium	U Channel	Top, Bottom	Top and bottom 'U Channels' are ideal for incline roof applications or when access to windows is not required. The louvres can open and close and the panel can easily be removed by lifting the shutter up into the top channel and out at the bottom. To refit the reverse applies.



Corner Post

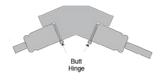
Shutter Type	Туре	Frame Options	Benefit
Aluminium	Corner Post	Corner Post	Corner Posts are used to provide hanging options for single and multiple panels within a corner application. Closes light gap for flush mounted hinges. Corner Posts are manufactured according to the size required for each installation. Note: constructed from Basswood



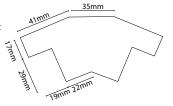


Bay Window Post

Shutter Type	Туре	Frame Options	Benefit
Aluminium	Bay Window Post	Bay Window Post	Bay Corner Posts are used to provide hanging options for single and multiple panels within a bay window application. Closes light gap for flush mounted hinges. Bay Window Posts are manufactured according to the size required for each installation. Note: constructed from Basswood



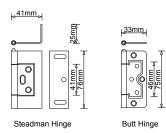
Can be custom made to suit

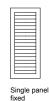


Panel Types & Hinging Options

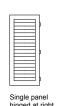
Panel types refers to the variations of each type of shutter; single panel fixed, single panels hinged, bi-folds, L Frame, T Post, Straight sliding, and bi-foldomg variations.

The type of hinge used for a single panel, bi-fold, L frame and T post applications is a butt hinge. However if you require your panel to protrude past the window opening then a Steadman hinge is required hinged from a hang strap.





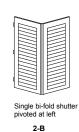
1-A

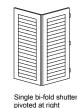


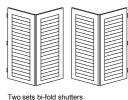
1-B



2-A







2-C

2-D

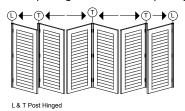
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Panel Types & Hinging options contd.

L Frame and T Post Hinged options

When tracks are not feasible, L frame and T Posts are used to provide options for single and mutliple panels within an opening or outside the opening window (see examples below).

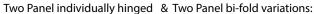


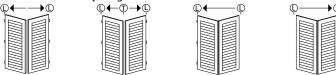
Key
T m

T means	Panel is hinged from a T Post or closes onto a T Post
L means	Panel is hinged from a L Frame or closes onto a L Frame
means	Panel direction to the right
← means	Panel direction to the left

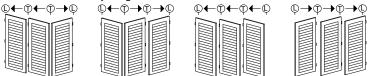
One Panel variations:



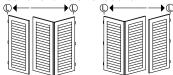




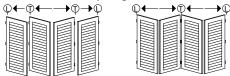
Three Panel individually hinged variations:



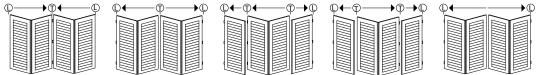
Three Panel bi-fold variations:



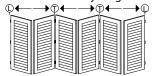
Four Panel individually hinged variations:

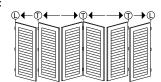


Four Panel bi-fold variations:

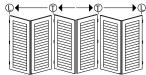


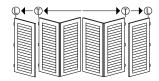
Six Panel individually hinged variations:





Six Panel bi-fold variations:





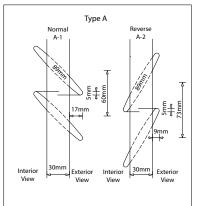
Sec. : Shutters Date: Dec 2017

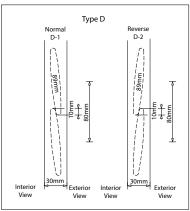


Fixed Louvre Shutters, Overview specifications

Fixed Shutters

Fixed louvres are permanently open (ventilated - Type A) or permanently shut (non-ventilated - Type D). Permanently open means that there is always ventilation while blocking line of sight. Fixed louvres may be employed for a variety of reasons: to control the amount of sunlight that enters a room, to provide privacy and security, protect against weather, unwanted intrusion or damage and to enhance the aesthetics of a building.





	Type A		<u>Type D</u>	
	Normal A-1	Reverse A-2	Normal D-1	Reverse D-2
Stile (Aluminium) Louvres (Aluminium) Angles Louvre Facing Projection (Aluminium) Finish (Aluminium)	60 x 30mm 89mm 45°or 60° Normal 17mm Powder coated	60 x 30mm 89mm 45°or 60° Reverse 9mm Powder coated	60 x 30mm 89mm 85° Normal Powder coated	60 x 30mm 89mm 85° Reverse Powder coated

Overview Aluminium Shutter Specifications:

Type Size Options
Louvre - Aerofoil 89mm x 11mm Half Open, Fixed, Ventilated, Fixed Non-Ventilated

Width & Height Hinged

Type Size
Maximum Width 1100mm (Single Panel)
Maximum Width 700mm (Bi-fold Panel)
Minimum Width 300mm (Single Panel)

Minimum Height 300mm
Maximum Height 2700mm
Note: Shutters over 1800mm in height will be constructed with a mid-rail

Finish		Stile & Rails		
Type Powder Coated	Colours Silver, Satin black, Pearl white, New birch	Type Stile	Size 60mm x 30mm	Options Square D-mould
Recess		Top Rail Mid Rail	25mm x 78.6mm 25mm x 81.6mm Shutters over 1.800mm 1 mid-rail	
Size 122mm	Louvre size 89mm	Bottom Rail	72.4mm - 141mm x 25mm (varies, depends on height of panel)	
		Tilt Rod	Rebated on reverse side of panel	Clear View only

Track Systems		
Type Maximum Width Maximum Height	Multi-fold 700mm per Panel (maximum 8 x Panels on each side) 2700mm Note: Shutters over 1800mm in height will be constructed with a mid-rail	Single Run 1200mm per Panel (maximum 6 x Panels on each track) 2700mm Note: Shutters over 1800mm in height will be constructed with a G mid-rail

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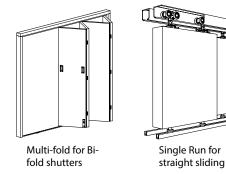


Hardware Technical - Tracking systems, Hinges

Hardware Overview

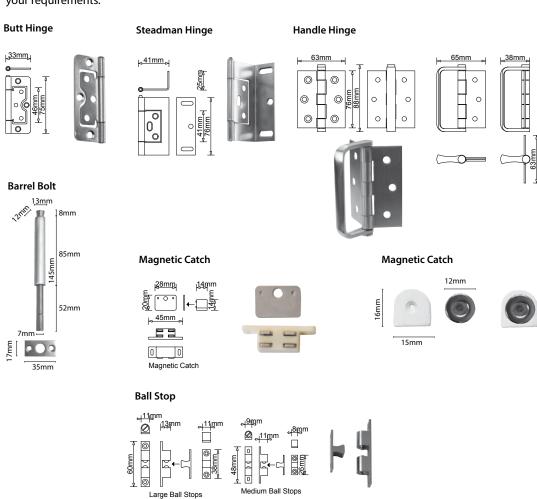
Tracking Systems

Window Treatments supplies two tracking systems: Multifold for bi-fold shutters, and Single Run for straight sliding shutters. For special applications Window Treatments can supply various track options to suit your requirements.



Hinges

Depending on the type of shutter installation, Butt Hinge and Steadman Hinge are the standard hinges. For special applications, Window Treatments also supplies various hinge options such as Handle hinges to suit your requirements.



Туре	Colours Available	Suitable for	
Butt Hinge	Stainless Steel, Silver, Cream, White, Black, Antique Brass, Bright Brass	Square, Rabbet, T Post, L Frame	
Steadman Hinge	Stainless Steel, Silver, Cream, White, Black, Antique Brass, Bright Brass	Hang Strip, protruding past window opening	
Handle Hinge	Stainless Steel	Bi-fold, assists panel movement	
Barrel Bolt	Stainless Steel	Bi-fold, Sliding, Panel	
Ball Stops	Brass, Chrome	Securing Fixed Panel	
Magnetic Catch	Brown, White, Black	Securing Bi-fold Panel	

Sec.: Shutters Date: Dec 2017



Hardware Technical - Sliding Single Run

Application

- · Widely used in lighter commercial and industrial applications
- To cover any width of opening, any number of panels can be used
- To accommodate different building designs, panels can slide to one or both sides
- Hinged panel for easy access may be incorporated into a sliding panel
- · Where panels are fitted externally, a canopy is recommended



Panel Specification

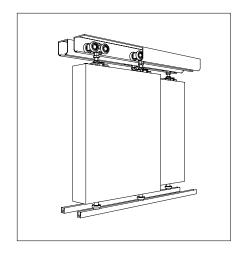
Track System: Single Run (individual Panels)

Max Panel Height: 2700mm

For ease of operation it is recommended that the panel width should not exceed 75% of the panel height.

Panels for interior use can be of flush construction or glazed. Panels for industrial applications should be framed, ledged and braced.

Aluminium panels should be constructed of box section, chanel or angle framing, well braced and clad with flat or corrugated sheets.



Hardware Specification

Track: 80A Material: Aluminium

Standard lengths : 2000mm, 3000mm, 4000mm, 6000mm Aluminium track available in mill or clear anodised finish.

Door Stop : 20DS (Stainless Steel)

Hanger sets : No. 52EN/4-A

Stainless Steel hangers are fitted with nylon wheels on precision stainless steel ball race bearings. Vertical adjustment is simple and positive.

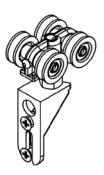
Guide : No. 21ER-A With precision stainless bearing.

Channels

Aluminium & Polypropylene 94PPA Mill or clear anodised Standard lengths : 2000mm, 3000mm, 4000mm, 6000mm



No. 20DS DOOR STOP



No. 52EN/4-A INTERMEDIATE HANGER



No. 21ER-A END GUIDE



No. 94PPA CHANNEL

Sec. : Shutters Date: Dec 2017 Page: 28

Hardware Technical - Multi-fold

Application

- Suitable for residential and light commercial folding shutters
- Leaves can be either end folding or centre folding
- Leaves can fold to one or both sides of the opening
- Pivot hardware enables an end folding internal partition to be designed using standard width panels with no need to reduce the width of the leaf adjacent to the post.
- To cover any width opening, any number of folding untits can be used.

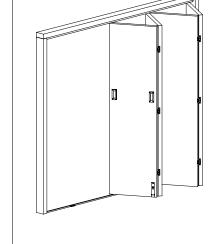


Panel Specification

Track System: Multi-fold (individual leaves)

Max Leaf Height: 2700mm Max Leaf Width: 700mm

Designed to suit aluminium folding screens with all panels of equal width. Panels can fold to one or both sides of the openingt. Pivot hardware enables an end folding internal partition to be designed using standard width panels with no need to reduce the width of the leaf adjacent to the post. All stainless steel hardware components are located inside the aluminium stile's recess for flush and secure fitting.



Hardware Specification

Track - punched for soffit fitting: 80A : Aluminium Material

Standard lengths : 2000mm, 3000mm, 4000mm, 6000mm

Pivet Sets :21EP-A Adjustable Top & Bottom Pivot

: 20DS (Stainless Steel) **Door Stop**

Hanger Set

End Hanger :52EN-A Intermediate Hanger : 52EN/4-A

Stainless Steel hangers are fitted with nylon wheels on precision stainless steel ball race bearings. Vertical adjustment

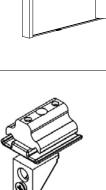
is simple and positive.

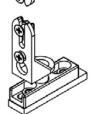
:21ER-A Guide With precision Stainless steel Bearing.

: 94PPA

Aluminium channel, available in 2100mm, 3000mm, 4000mm,

6000mm









No. 52EN/4-A INTERMEDIATE **HANGER**





No. 52EN-A

END HANGER

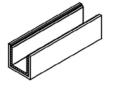
No. 21ER-A **END GUIDE**



No. 20DS DOOR STOP



Date: Dec 2017



No. 94PPA CHANNEL











Sec. : Shutters Date: Dec 2017



Introduction

Window treatments traditional European styled PVC Shutters are the perfect interior window management system. PVC Shutters look like our Basswood shutters but offer a longer life span and more affordable price tag. PVC shutters will not absorb moisture, delaminate, split, crack and are excellent for kitchens and bathrooms where moisture may be a problem.

PVC Shutters may be used for a variety of reasons: visibility and airflow, controlling the amount of sunlight that enters a room, provide privacy and security and enhance the aesthetics of a building or terrace access adding to the practicality and mood of any interior.

PVC Shutters can either be fixed permanently in place, hinged, bi-fold or sliding depending on your preference and application. Louvres can be adjustable or fixed within the shutter frame. Full height shutters are made with a horizontal divider (mid-rail) which separates the upper and lower portions of the shutter. With operable louvre shutters this gives greater control as the louvres above the mid-rail can be operated independently from the louvres below the mid-rail. A tilt bar is used for adjusting louvre position and to keep louvres in uniform position. Alternatively a clear view metal tilt rod is placed on the reverse side of the shutter allowing you to adjust all louvres position by tilting one louvre. This also allows for cleaner lines on the front of the shutter and helps to decrease light gap measurements on sliding shutter applications.



Quick Glance

Туре		PVC	
Louvres	Louvre Size	64mm, 89mm, 114mm	
Tilt Bar	Tilt Bar Position Clear View	Centre, Left or Right Yes	
Style	Hinged Bi-fold Straight Sliding Fixed Louvres (ventilated) Fixed Louvres (non-ventilated) Special Shape Shutters	Yes Yes Yes Yes Yes No	
Stile Options	Square Rabbet D-mould	Yes Yes Yes	
Motorises Options		Yes	
Hardware Tracking Systems Hardware		Yes Yes	
Frame Options	Stiles Mid-rail Light Stop Hang Strips L Frames Z Frames T Post U Channel Corner Post Bay Window Post	Yes Yes * Yes - constructed from Basswood * Yes - constructed from Basswood Yes Yes Yes Yes Yes * Yes - constructed from Basswood	
Finish Stained Oiled Lacquered Painted Powder coated		No No No Yes, Standard colours or custom colours No	

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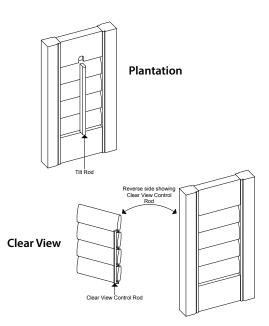
Tilt Rod, Louvre Size, Louvre Style,

Tilt Rod Control Position: Plantation

Standard position for the tilt bar control on Plantation shutters is centred within the frame. Alternatively, the tilt bar can be positioned off-centred left or right. The off-centred option is mainly used for bi-fold panels to allow the panels to fold onto each other without hitting the tilt bar. A tilt rod (in conjunction with a hooked push pole) is also used for high/out of reach and special shaped shutters.

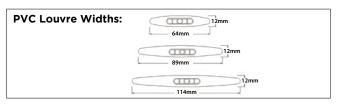
Clear View

The Clear View control option for PVC shutters is a metal tilt rod rebated into the side of the louvre blade on the reverse side of the panel. This allows for cleaner lines and a clear view through the shutter once the louvres are opened or closed. The standard Clear View tilt bar position is on the hinged stile side of the louvre blades. The Clear View option is also used for sliding shutter applications as this decreases light gap measurements and allows each shutter panel to sit closer to one another reducing the depth of the shutters when stacked.



Louvre Size and Type

PVC shutters are available in three sizes of areofoil blade which is elliptical in shape (i.e. thicker in the middle and tapered to the front and back). Louvre blades are reinforced with aluminium inserts.

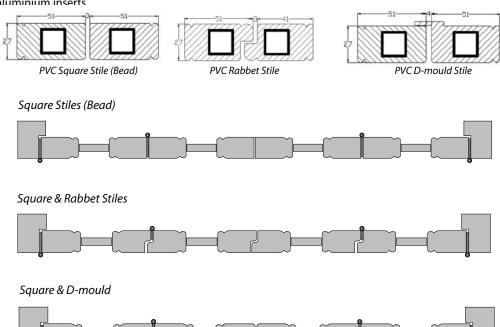


Louvre Style for Special Shape Shutters

Special shapes are not available in PVC shutters. Please refer to our Basswood and Ceadr Shutter sections if special shapes are required.

Stiles

Window Treatments supplies three stile options for PVC shutters: Square, Rabbet and D-mould. D-mould stiles are used to provide a light block where two panels overlap or interlock. PVC stiles are reinforced with aluminium inserts.



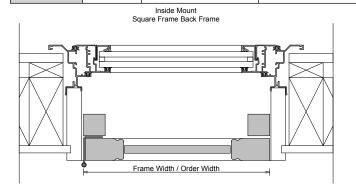
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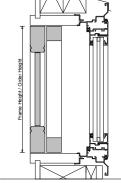
Light stop, L frames, T frames & Mount types

Light Stop

Shutter Type	Туре	Frame Options	Benefit
PVC	, ,	A4, A9, mm Varies Note: constructed from Basswood not PVC	Provides a light block where panels are hinged.



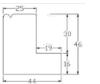




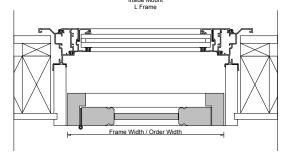
L Frame

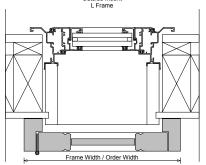
Shutter Type	Туре	Frame Options	Benefit
PVC	L Frame	Beaded (standard - PVC) or Flat (constructed from Basswood)	L Frames are used to provide hanging options for single and multiple panels for outside and inside mount applications using a Butt or Steadman hinge. Using a Beaded standard frame or Flat frame with a Steadman hinge allows you to protrude the panel past the window opening. This gives you the ability to hang the shutter panel square in the frame and closes the light gap for flush mounted hinges. Ideal when there is no architrave in the opening.





Flat (constructed from Basswood)





T Post

Shutter Type	Туре	Frame Options	Benefit
PVC	T Post	Beaded (standard - PVC) or Flat (constructed from Basswood)	T Posts are used to provide hanging options for single and multiple panels for outside and inside mount applications using a Butt hinge. Gives you the ability to hang the shutter panel square in the frame. The T Post closes the light gap for flush mounted hinges. Ideal when there is no architrave in the opening. 2 options Beaded or Flat.

T-Post

Beaded (standard - PVC)

Flat (constructed from Basswood)





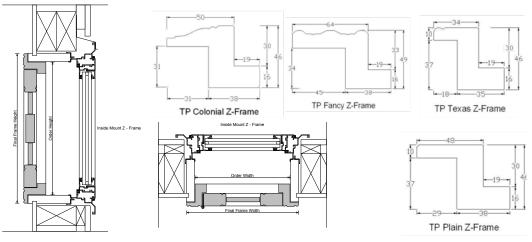
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Z Frame, U Channel, Corner Post, Bay Window Post& Mount types

Z Frame

Shutter Type	Туре	Frame Options	Benefit
PVC	Z Frame	TP Plain TP Colonial TP Fancy TP Texas	Z Frames are used to provide hanging options for single and multiple panels within an opening. Plumbing the window frame closes the light gap for flush mounted hinges. The Z frame wraps around the reveal edge, making it ideal for covering out-of-square windows. 4 style options are available



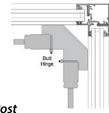
U Channel

Shutter Type	Туре	Frame Options	Benefit
PVC	U Channel	Top, Bottom	Top and bottom 'U Channels' are ideal for incline roof applications or when access to windows is not required. The louvres can open and close and the panel can easily be removed by lifting the shutter up into the top channel and out at the bottom. To refit the reverse applies. Note: U Channels are constructed from Basswood not PVC

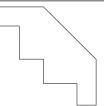


Corner Post

Shutter Type	Туре	Frame Options	Benefit
PVC	Corner Post	Corner Post	Corner Posts are used to provide hanging options for single and multiple panels within a corner application. Closes light gap for flush mounted hinges. Corner Posts are manufactured according to the size required for each installation. Note: Corner posts are constructed from Basswood not PVC



All measurements vary depending on application



Bay Window Post

Shutter Type	Туре	Frame Options	Benefit
Aluminium	Bay Window Post	Bay Window Post	Bay Corner Posts are used to provide hanging options for single and multiple panels within a bay window application. Closes light gap for flush mounted hinges. Bay Window Posts are manufactured according to the size required for each installation. Note: Bay window posts are constructed from Basswood not PVC

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All measurements vary depending on application



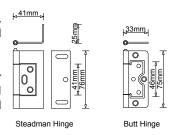


Panel types - Hinged, L Frame & T Post Hinged

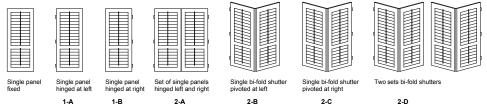
Panel Types

Panel Types refers to the variations of each type of shutter: single panel fixed, single panel hinged, bi-folds, L Frame and T Post, straight sliding and bi-fold track variations.

The type of hinge used for a single panel, bi-fold, L Frame and T Post and for Rabbet stiles applications is a Butt hinge. However, if you require your panel to protrude past the window opening, a Steadman hinge is required hinged from a hang strip.

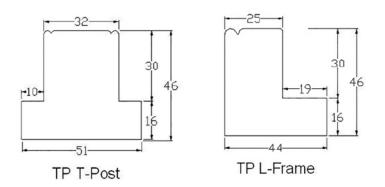


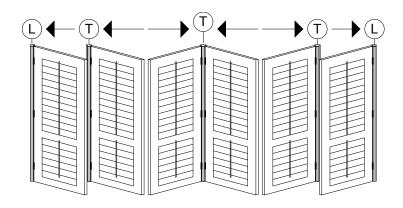
Hinged



L Frame and T Post Hinged options

When tracks are not feasible, L frame and T Posts are used to provide options for single and mutliple panels within an opening or outside the opening window (see examples below).





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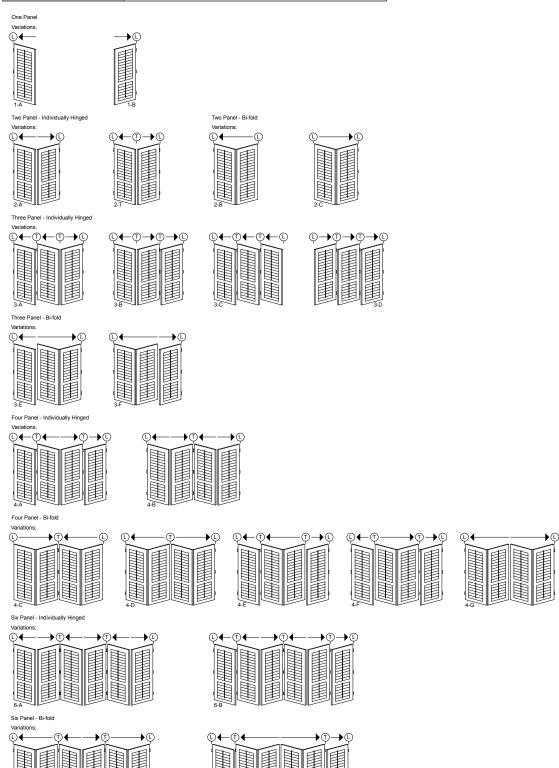


■ Panel types - Hinged, L Frame & T Post Hinged - Contd.

L Frame and T Post Hinged - cont.

Key

T means	Panel is hinged from a T Post or closes onto a T Post	
L means	Panel is hinged from a L Frame or closes onto a L Frame	
means	Panel direction to the right	
← means	Panel direction to the left	



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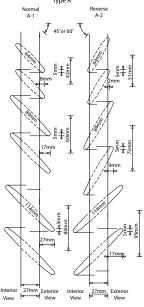
Fixed Louvre Shutters, Overview specifications

Fixed Shutters

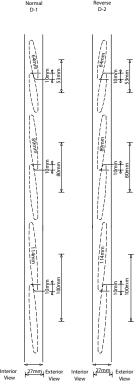
Fixed louvres are permanently open (ventilated - Type A) or permanently shut (non-ventilated - Type D). Permanently open means that there is always ventilation while blocking line of sight. Fixed louvres may be employed for a variety of reasons: to control the amount of sunlight that enters a room, to provide privacy and security, protect against weather, unwanted intrusion or damage and to enhance the aesthetics of a building.

Type A

Type D



	Type A		<u>Type D</u>	
	Normal A-1	Reverse A-2	Normal D-1	Reverse D-2
Stile (PVC) Louvres (PVC) Angles Louvre Facing Projection (PVC) Finish (PVC)	51 x 27mm 64, 89, 114mm 45° or 60° Normal 8, 17, 27mm Painted	51 x 27mm 64, 89, 114mm 45°or 60° Reverse 2, 9, 17mm Painted	51 x 27mm 64, 89, 114mm 85° Normal	51 x 27mm 64, 89, 114mm 85° Reverse Painted



Overview PVC Shutter Specifications:

Louvre Size		
Type Louvre - Aerofoil	Size 64mm x 11mm 89mm x 12mm 114mm x 12mm	Options Half Open, Fixed, Ventilated, Fixed Non-Ventilated

Recess	
Size	Please Note:
80mm - 150mm	Varies, depends on Louvre size.

Finish	
Type Painted	Colours Standard colours: White, Snow, Swiss coffee, Creamy, Butter, Super white, Pearl white, Eggshell, Pearl, Bristle half, Antique white, White on white or Custom Colour

Width & Height Hinged		
Type Maximum Width	Size 750mm (Single Panel)	
Maximum Width	500mm (Bi-fold Panel)	
Minimum Width	300mm (Single Panel)	
Minimum Height Maximum Height	300mm 2400mm Note: Shutters over 1500mm in height will be constructed with a mid-rail	

Stile & Rails		
Туре	Size	Options
Stile	60mm x 30mm	Square D-mould
Top Rail	70mm - 150mm x 20mm (varies, depends on height of panel)	
Mid Rail	82.6mm x 20mm Shutters over 1500mm 1 mid-rail	
Bottom Rail	70mm - 150mm x 20mm (varies, depends on height of panel)	
Tilt Mechanism	Tilt Rod 15.8mm x 12.5mm Clear view concealed	Tilt Rod (centered, left, right) Clear View

Track Systems		
Туре	 Multi-fold	Single Run
Maximum Width Maximum Height	500mm per Panel (maximum 8 x Panels on each side) 2400mm Note: Shutters over 1500mm in height will be con- structed with a mid-rail	900mm per Panel (maximum 6 x Panels on each track) 2400mm Note: Shutters over 1500mm in height will be constructed with a mid-rail

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Hardware Technical - Tracking systems, Hinges

Hardware Overview

Tracking Systems

Window Treatments supplies two tracking systems: Multifold for bi-fold shutters, and Single Run for straight sliding shutters. For special applications Window Treatments can supply various track options to suit your requirements.





straight sliding

Depending on the type of shutter installation, Butt Hinge and Steadman Hinge are the standard hinges. For special applications, Window Treatments also supplies various hinge options such as Handle hinges to suit your requirements.

Butt Hinge

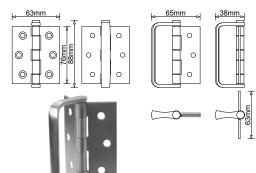




Steadman Hinge



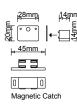
Handle Hinge



Barrel Bolt



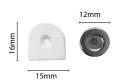






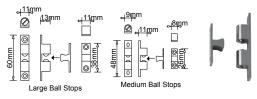


Magnetic Catch





Ball Stop



Туре	Colours Available	Suitable for
Butt Hinge	Stainless Steel, Silver, Cream, White, Black, Antique Brass, Bright Brass	Square, Rabbet, T Post, L Frame
Steadman Hinge	Stainless Steel, Silver, Cream, White, Black, Antique Brass, Bright Brass	Hang Strip, protruding past window opening
Handle Hinge	Stainless Steel	Bi-fold, assists panel movement
Barrel Bolt	Stainless Steel	Bi-fold, Sliding, Panel
Ball Stops	Brass, Chrome	Securing Fixed Panel
Magnetic Catch	Brown, White, Black	Securing Bi-fold Panel

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Hardware Technical - Sliding Single Run

Application

- Widely used in lighter commercial and industrial applications
- To cover any width of opening, any number of panels can be used
- To accommodate different building designs, panels can slide to one or both sides
- Hinged panel for easy access may be incorporated into a sliding panel
- Where panels are fitted externally, a canopy is recommended

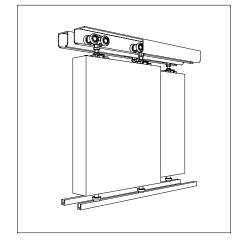
Panel Specification

Track System: Single Run (individual Panels)

Max Panel Height: 2400mm

For ease of operation it is recommended that the panel width should not exceed 75% of the panel height.

Panels for interior use can be of flush construction or glazed. Panels for industrial applications should be framed, ledged and braced.



Hardware Specification

Track :80A Material : Aluminium

: 2000mm, 3000mm, 4000mm, 6000mm Standard lengths Aluminium track available in mill or clear anodised finish.

Door Stop : 20DS (Stainless Steel)

Hangers (2 per door) :

: No. 57EN Hamger Interior

Hangers supplied with fixing plate and nylon tyred precision bearings. Vertical adjustment is simple and positive. Nylon tyre wheel hangers should not be used on installation involving temperatures exceeding 80°C.

: No. 801S

Guide

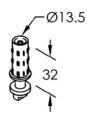
Spring loaded guide, nylon body and tip with stainless steel shaft

and spring.

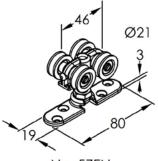
Designed to slide in the No. 92 Threshold



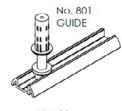
No. 20DS DOOR STOP



No. 801S **GUIDE**



No. 57EN **HANGER**



No. 92 THRESHOLD



Date: Dec 2017



Hardware Technical - Multi-fold

Application

- Suitable for residential and light commercial folding shutters with all panels of equal width. Panels can fold to one or both sides of the opening
- Pivot hardware enables a folding exterior shutter to be designed using equal width panels with no cutting down of the panel adjacent to the post.
- To cover any width opening, any number of folding untits can be used.



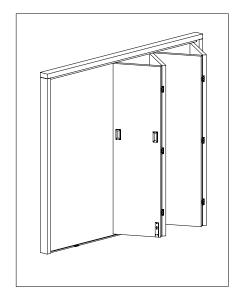
Panel Specification

Track System: Multi-fold (individual leaves)

Max Leaf Height: 2400mm Max Leaf Width: 500mm

Units of up to six panels can be pivoted to each side of the

A guide system across the floor must be used on units of three panels or more. Floating units consist of four to six panels. Shutters should be constructed to provide secure fitting for the pivot sets, hangers, hinges and guides.



Hardware Specification

Track - punched for soffit fitting: 80A Material : Aluminium

Standard lengths : 2000mm, 3000mm, 4000mm, 6000mm

Top Pivot Assembly : 21EPNC Steel, Zinc dichromated, Nylon

Bottom Pivot : 21EPNC Steel, Zinc dichromated, Nylon

Door Stop : 20DS (Stainless Steel)

Hangers : No. 57EN Hanger

The hanger is fitted with four nylon tyred ballrace wheels. The adjustment bolt is attached to the top plate and secured in place with a blocking clip which allows easy installation. All

steel parts are zinc dichromated.

: No. 801S Guide

Spring loaded guide for use with No.92 Threshold. Guide is

nylon and stainless steel.

Threshold : No. 92

Threshold, aluminium, available in 2100mm, 3000mm,

4000mm, 6000mm



No.21EPNC **Top Pivot**



No. 21EPNC **PIVOT**

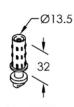


No. 20DS DOOR STOP



No. ADP1/60 Bracket

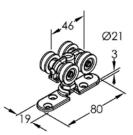
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No. 801S **GUIDE**



No. 92 **THRESHOLD**



No. 57EN **HANGER**

Motorised Shutters



A Shutter 12v Motor Upgrade is available and is particularly useful where shutters are installed in "out of reach" places such as skylights and high gable-end windows.

- · Shutter motors can also be installed onto existing shutters and on all types (Basswood, PVC, Aluminium & Cedar).
- The 12v rechargeable battery motor operates the louvre tilt only.
- Shutter Motors are white
- · Charging of the battery is either by connecting a charger to the detachable battery and or, connecting a solar panel which is fixed onto or close to the glass. See figure 2 (next page)
- · The shutters motors are controlled by a 15-channel remote allowing multiple shutters to be controlled with one remote.

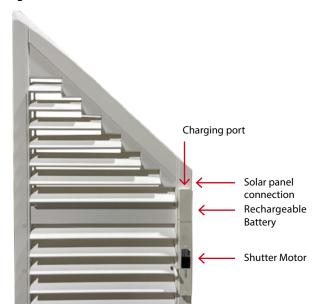
· Rectangular shaped shutters:

- The motor is fitted onto the stile facing the glass, so it is not easily seen from the inside. See figure 1
- The motor is fitted to the shutter stile on the opposite side to the Clear View Tilt Rod.
- The minimum height of the shutter panel to accommodate a Shutter Motor is 400mm

· For Raking (sloping) shutters:

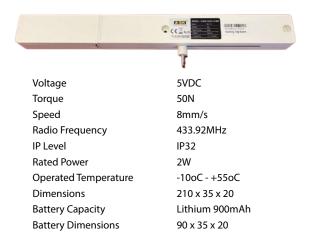
- The motor is fitted onto the stile facing the glass so it is not easily seen from the inside. See figure 1
- The motor can only be fitted to the short side of the panel. The clear View Tilt Rod is always fitted to the long side of the panel. See figure 1
- The minimum height of the short side of the shutter panel to accommodate a Shutter Motor is 400mm

Figure 1



- The motor and battery are always fitted to the short side of a raking shutter
- In the example above, the rechargeable battery sits on top of the motor. If the motor is fitted to the opposite side of the shutter, the rechargeable battery sits under the motor

Shutter Motor AM20 Specifications

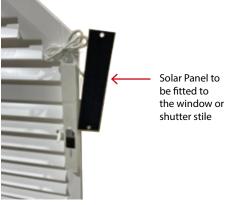


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Motorised Shutters

Figure 2





Dimensions 250 x 60 x 12 Cable Length 1m

Figure 3



Shutter panels with a Clear view Tilt bar can be joined together if requested to allow one motor to operate a shutter which has a midrail

- Shutter panels with a Clear View tilt bar can be joined together if requested to allow one motor to operate a shutter panel which has a mid-rail. See figure 3
- Shutter Panels with a Plantation Tilt Bar cannot be joined so a panel with a mid-rail requires two motors.

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