

ISSUE: SH-01-003



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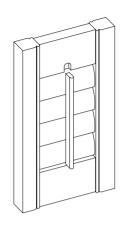
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| <ul> <li>Tilt Rod, Louvre Size &amp; Style</li></ul>   |

# **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.

### **Quick Glance**

| Туре          |  | Basswood   | Cedar  | Aluminium   | PVC   |
|---------------|--|--|--|---|---|
| Louvres       | Louvre Size  | 47.6mm (aerofoil<br>only), 64mm, 89mm,<br>114mm (aerofoil &<br>flat blade) | 68mm, 90mm   | 89mm  | 64mm, 89mm, 114mm   |
| Tilt Bar      | Tilt Bar Position<br>Clear View  | Centre, Left or Right<br>Yes   | Centre, Left or Right<br>Yes   | N/A<br>Yes  | Centre, Left or Right<br>Yes  |
| Style         | Hinged<br>Bi-fold<br>Straight Sliding<br>Fixed Louvres (ventilated)<br>Fixed Louvres (non-ventilated)<br>Special Shape Shutters  | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes                                     | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes   | Yes<br>Yes<br>Yes<br>Yes<br>No  | Yes<br>Yes<br>Yes<br>Yes<br>No  |
| Stile Options | Square<br>Rabbet<br>D-mould  | Yes<br>Yes<br>Yes  | Yes<br>Yes<br>Yes  | Yes<br>No<br>Yes  | Yes<br>Yes<br>Yes   |
| Hardware      | Tracking Systems<br>Hardware   | Yes<br>Yes   | Yes<br>Yes   | Yes<br>Yes  | Yes<br>Yes  |
| Frame Options | Stiles<br>Mid-rail<br>Light Stop<br>Hang Strips<br>L Frames<br>Z Frames<br>T Post<br>U Channel<br>Corner Post<br>Bay Window Post | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes         | Yes<br>Yes<br>Yes<br>Yes<br>Painted Only<br>Yes<br>Painted Only<br>Painted Only<br>Yes | Yes<br>Yes - constructed from Basswood<br>No<br>Yes<br>No<br>Yes<br>Yes<br>*Yes - constructed from Basswood<br>*Yes - constructed from Basswood | Yes<br>Yes - constructed from Basswood<br>* Yes - constructed from Basswood<br>Yes<br>Yes<br>Yes<br>* Yes - constructed from Basswood<br>* Yes - constructed from Basswood<br>* Yes - constructed from Basswood |
| Finish        | Stained<br>Oiled<br>Lacquered<br>Painted<br>Powder coated  | Yes<br>No<br>No<br>Yes, Stnd colours<br>or custom<br>No                    | No<br>Yes<br>Yes<br>Yes, Stnd colours<br>or custom<br>No                               | No<br>No<br>No<br>Yes, Stnd colours only  | No<br>No<br>No<br>Yes, Stnd colours<br>or custom<br>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.<br>Cedar is recognized for its natural beauty and physical  |
| The characteristics are a fine straight grain material with<br>an even texture, consistent colour and low resin content.   | properties such as its distinguishing aroma, rich colour,<br>durability, insulating properties, workability and acous-<br>tics.   |
| Basswood has good finishing properties, accepts oil-<br>based paint and exterior stain for longer finishes.  | Cedar has exceptionally good finishing properties,<br>accepts exterior paint, lacquer and oil. Gives long service<br>with little maintenance and is ideal around moist areas.   |
| Aluminium Overview   | PVC Overview  |
| The hard wearing powder coated Aluminium shutter can<br>be used internally, but is particularly suited for external<br>applications. A range of standard colours are available or<br>if requested aluminium shutters can be painted to match<br>any Resene colour from the Resene chart. | PVC shutters look like our wooden shutters but offer<br>a longer life span and a more affordable price tag. Will<br>not absorb moisture, delaminate, split, crack and are<br>excellent for kitchens and bathrooms where moisture<br>may be a problem. |

### **Finishes**

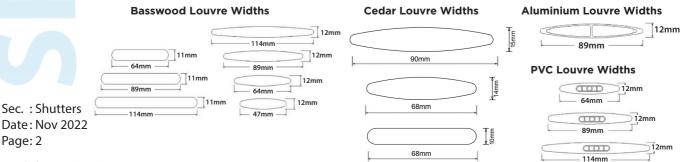
Basswood comes in a range of standard stain and painted colour options or custom colour of your choice. PVC comes in Standard paint colours or can be custom painted. Alumiunium is available in standard power coated colours only. Cedar finishes can be oiled, lacquered or painted. Colour on actual shutters 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,<br>Butter-120, Super White-130, Pearl White-131, Egg-<br>shell-132, Pearl-133, Bristle Half-134, Antique White-136,<br>White On White-137, Black-020                                    |  | Nature-200, Oak-205, Rose-216,<br>Mahogany-220, Black Walnut-230,<br>Desert-252, Ash-253, Gumnut-254,<br>Maple-256, Coffee Bean-258 |
| PVC                            | White-101, Snow-105, Swiss Coffee-107, Creamy-110,<br>Butter-120, Super White-130, Pearl White-131, Egg-<br>shell-132, Pearl-133, Bristle Half-134, Antique White-136,<br>White On White-137, Black-020<br>or custom painted to any Colour |  | N/A   |
| Aluminium -<br>(Powder Coated) | Pearl White-PC-1, Birch-PC-B-2, Black-PC-B-3, Silver-<br>PC-B-4  |  | N/A   |
| Finish/Colours                 | Lacquered  | Oiled  | Painted   |
| Cedar                          | Light to Medium<br>Medium to Dark<br>Natural   | Light to Medium<br>Medium to Dark<br>Natural | Colour match to any Resene Colour<br>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.* 



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### 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

|                  | 1   |  | 1   |
|------------------|---|--|---|
| Туре             |   | Basswood   | Cedar   |
| Louvres          | Louvre Size   | 47.6mm (Aerofoil only),<br>64mm, 89mm, 114mm (Flat<br>Blade or Aerofoil) | 68mm (Flat blade),<br>68mm, 90mm (Aerofoil)                                     |
| Tilt Bar         | Tilt Bar Position<br>Clear View   | Centre, Left or Right<br>Yes   | Centre, Left or Right<br>Yes  |
| Style            | Hinged<br>Bi-fold<br>Straight Sliding<br>Fixed Louvres (ventilated)<br>Fixed Louvres (non-ventilated)<br>Special Shape Shutters | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes                                   | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes  |
| Stile<br>Options | Square<br>Rabbet<br>D-mould   | Yes<br>Yes<br>Yes  | Yes<br>Yes<br>Yes   |
| Hard-<br>ware    | Tracking Systems<br>Hardware  | Yes<br>Yes   | Yes<br>Yes  |
| Frame<br>Options | Stiles<br>Mid-rail<br>Light Stop<br>Hang Strips<br>L Frames<br>Z Frames<br>T Post<br>U Channel<br>Corner Post                   | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes              | Yes<br>Yes<br>Yes<br>Yes<br>Painted Only<br>Yes<br>Painted Only<br>Painted Only |
| Finish           | Stained<br>Oiled<br>Lacquered<br>Painted<br>Powder coated   | Yes<br>No<br>No<br>Yes<br>No   | No<br>Yes<br>Yes<br>Yes<br>No   |



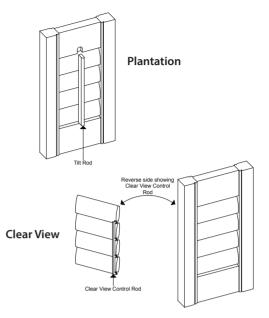
## Tilt Rod. Louvre Size. Louvre Style.

### **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.



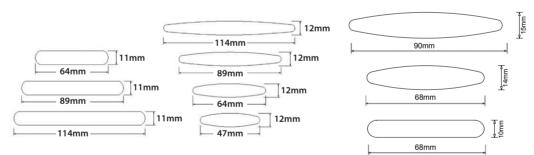
### Louvre Size and Tensioning Screw

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**

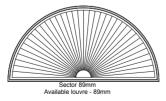
#### Cedar Louvre Widths



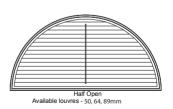
### Louvre Style for Special Shape Shutters

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

uvre Size







|   | Туре     | Option                              | Available Louvre Size                        |
|---|----------|-------------------------------------|--|
|   | Basswood | Sector 89<br>Full Open<br>Half Open | 89mm<br>50mm, 64mm, 89mm<br>50mm, 64mm, 89mm |
| , |          |                                     |  |

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

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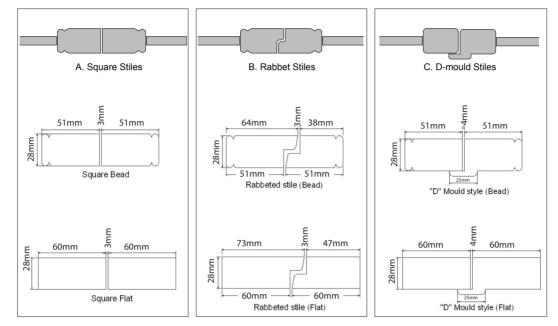
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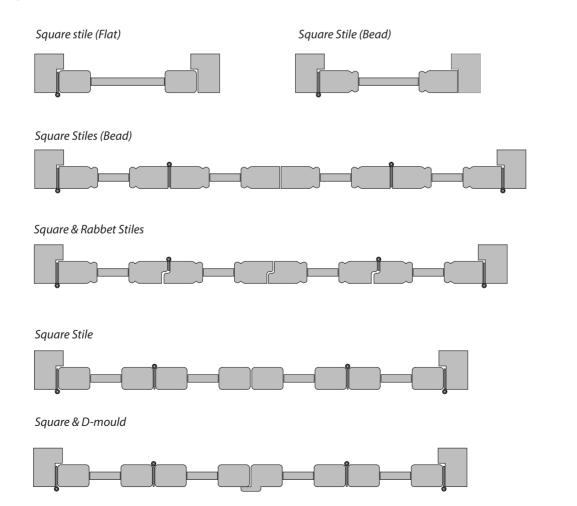
## Stile options

### 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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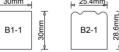
## - Light stop & Mount types, Square frames & Mount types

Light Stop

| Shutter Type         | Туре       | Frame Options                        |       | Benefit   |
|----------------------|------------|--------------------------------------|-------|---|
| Basswood<br>or Cedar | Light Stop | A4, A9,                              |       | Provides a light block where panels are hinged. |
|                      | Squa       | Inside Mount<br>are Frame Back Frame | A9 SU | Etame Height / Order Height                     |
|                      | Fran       | ne Width / Order Width               |       |   |

#### Square Frame

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



28.6mm

Inside Mount Square Frame Back Frame

Frame Width / Order Width

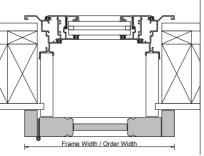
Outside Mount Square Frame Back Frame



Inside Mount Square Frame

Frame Width / Order Width

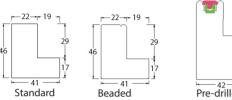
Outside Mount Square Frame



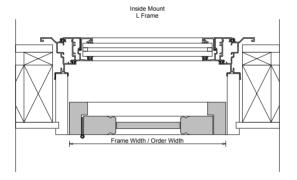
## - L Frames & Mount types, T-Posts & Mount types

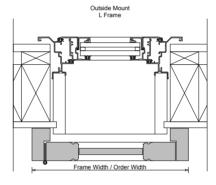
#### L Frame

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



37 Pre-drilled





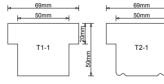
### T Post

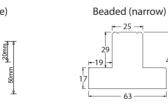
| Shutter Type            | Туре   | Frame Options  | Benefit  |
|-------------------------|--------|--|--|
| Basswood<br>or<br>Cedar | T Post | T1-1 Standard (wide),<br>T2-1 Beaded (wide),<br>Standard (narrow)<br>Beaded (narrow) | T Posts are used to provide hanging options for single and<br>multiple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

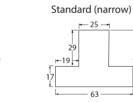
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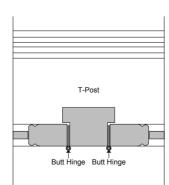
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T1-1 Standard (wide) T2-1 Beaded (wide)







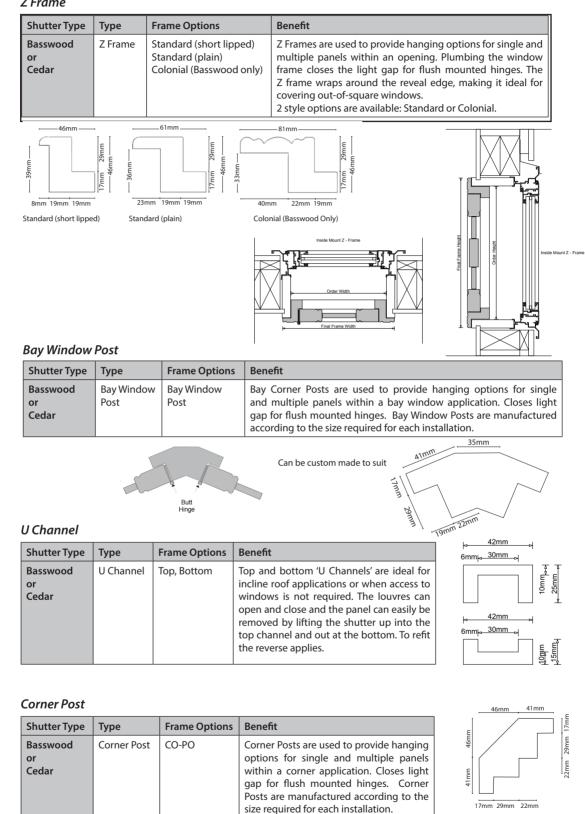






## Z Frames, U Channel, Corner Post & Mount types

Z Frame



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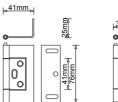
Inside Mount Corner Post

## 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.

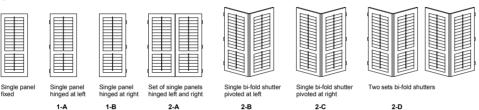


Steadman Hinge



Butt Hinge

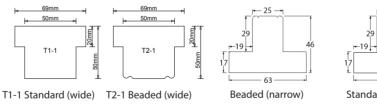


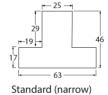


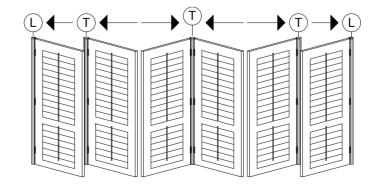
#### L Frame and T Post Hinged

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.









L Frame & T Post hinge options





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

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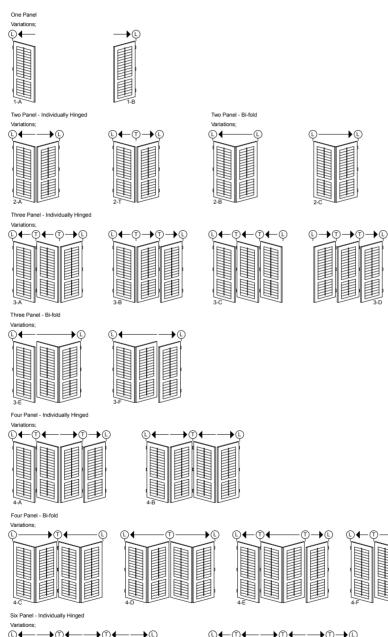
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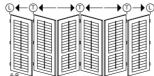
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### L Frame and T Post Hinged - cont.

### 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                             |





∢€ →©

Six Panel - Bi-fold 

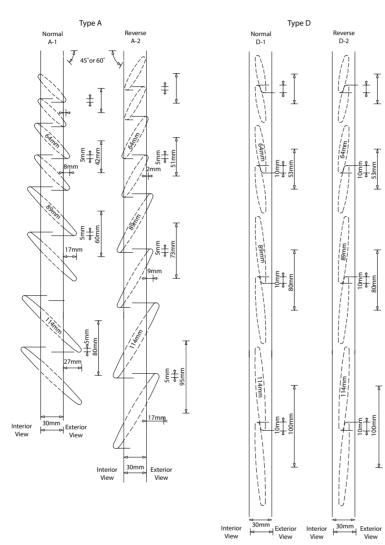
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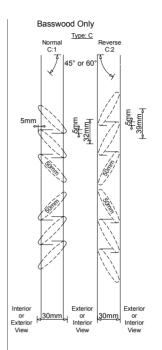
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## Fixed Shutters

### **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).

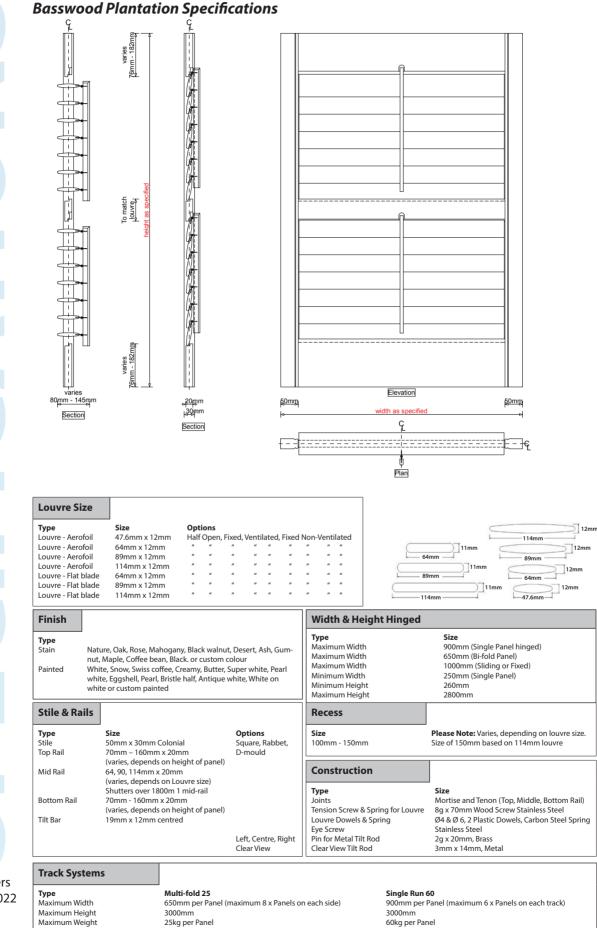
|   | <u>Type A</u>   |   | <u>Type C</u>  |  | <u>Type D</u>   |  |  |
|---|---|---|--|--|---|--|--|
|   | Normal<br>A-1   | Reverse<br>A-2  | Normal<br>C-1  | Reverse<br>C-2   | Normal<br>D-1   | Reverse<br>D-2   |  |
| Stile (Basswood)<br>Stile (Cedar)<br>Louvres (Basswood)Aerofoil<br>Louvres (Basswood)Flat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



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#### **Plantation Specifications**

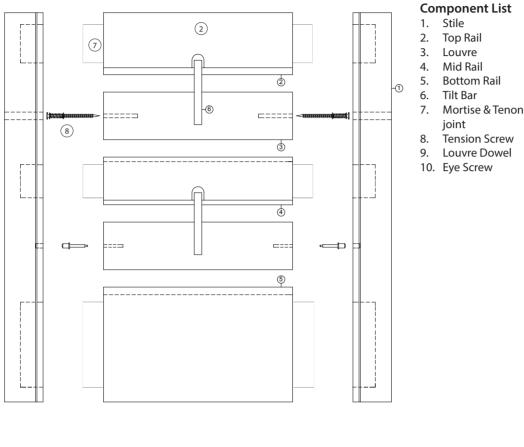


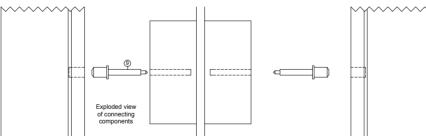
Window

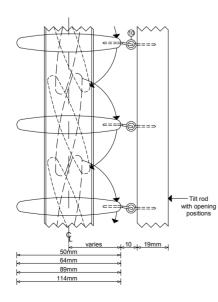
# **Basswood Shutters**

## Plantation Construction

### **Basswood Plantation Construction**







#### Construction

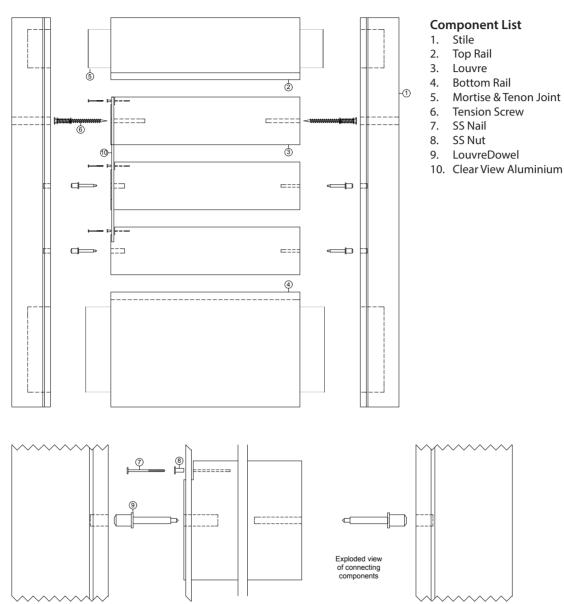
The Basswood shutter is constructed using a mortise and tenon joint to join the stiles, middle rail and bottom rail together as one frame. As the shutter height and rail size increase so does the size of the mortise and tenon joint. This strengthens, braces and prevents the frame from twisting, bowing 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.





## **Basswood Shutters**

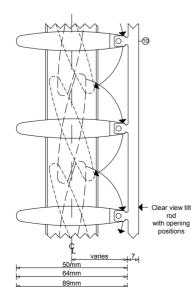
## Plantation Clear View Construction



### **Basswood Clear View 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.



114mm

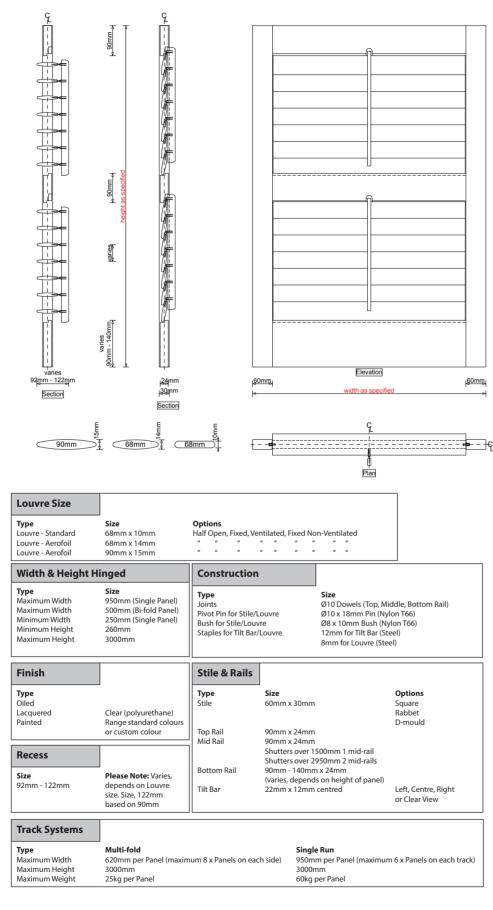
### Sec. : Shutters Date: Dec 2017 Page: 14

www.window-treatments.co.nz

# **Cedar Shutters**

## - Cedar Plantation Specifications

### **Cedar Plantation Specifications**



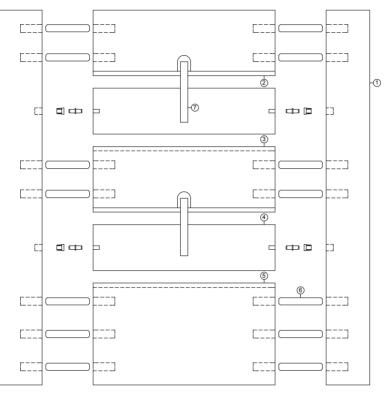




Window

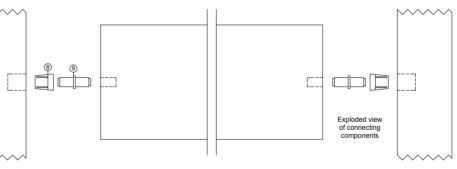
## Cedar Plantation Construction

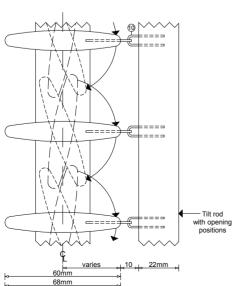
### **Cedar Plantation Construction**



#### **Component List**

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





90mm

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.

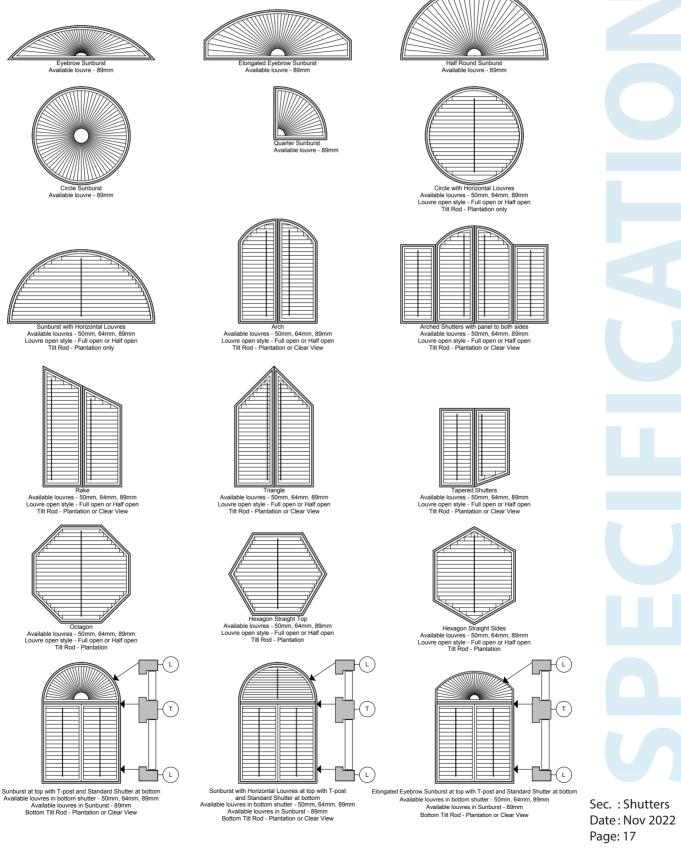
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## Special Shape Shutters

### **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)



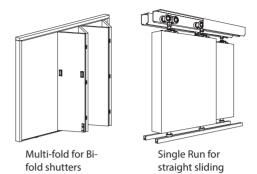


#### Hardware Technical - Tracking systems, Hinges

### Hardware Overview

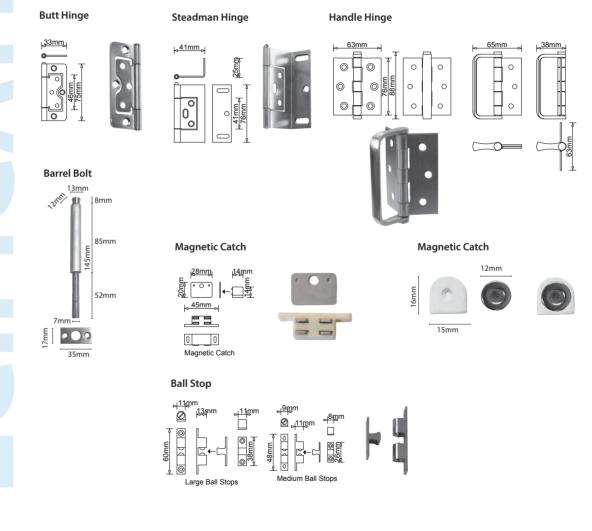
#### **Tracking Systems**

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<br>Brass, Bright Brass | Square, Rabbet, T Post, L Frame            |  |  |
|                 | Steadman Hinge | Stainless Steel, Silver, Cream, White, Black, Antique<br>Brass, Bright Brass | Hang Strip, protruding past window opening |  |  |
|                 | Handle Hinge   | Stainless Steel  | Bi-fold, assists panel movement            |  |  |
| Sec. : Shutters | Barrel Bolt    | Stainless Steel  | Bi-fold, Sliding, Panel                    |  |  |
| Date: Dec 2017  | Ball Stops     | Brass, Chrome  | Securing Fixed Panel                       |  |  |
| Page : 18       | Magnetic Catch | Brown, White, Black  | Securing Bi-fold Panel                     |  |  |

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## Hardware Technical - Sliding Single Run

#### Application

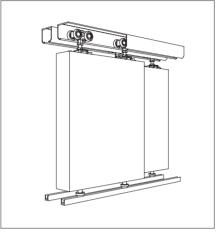
- Widely used in lighter commercial and industrial applications
- To cover any width of opening, any number of panels can be used
- To accommodate different building designs, panels can slide to one or both sides
- Hinged panel for easy access may be incorporated into a sliding panel
- Where panels are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

#### **Panel Specification**

Track System: Single Run (individual Panels) Max Panel Height: Basswood 3000mm 2700mm Cedar 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 avail | able in mill or clear anodised finish. |

Door Stop : 20DS (Stainless Steel)

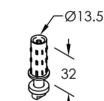
Hangers (2 per door) :

: 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

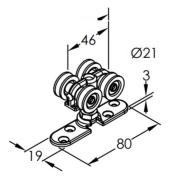




where ideas unfold

No. 20DS DOOR STOP

No. 801S GUIDE



No. 57EN HANGER



No. 92 THRESHOLD





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)

| Basswood | 2500mm            |
|----------|-------------------|
| Cedar    | 2500mm            |
| Basswood | 700mm             |
| Cedar    | 750mm             |
|          | Cedar<br>Basswood |

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

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

steel parts are zinc dichromated.

nylon and stainless steel.

4000mm, 6000mm

Guide

Threshold

| naidware specification                  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Track - punched for soffit fitting: 80A |  |  |  |  |  |  |
| : Aluminium                             |  |  |  |  |  |  |
| : 2000mm, 3000mm, 4000mm, 6000mm        |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| : 21EPNC Steel, Zinc dichromated, Nylon |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| : 21EPNC Steel, Zinc dichromated, Nylon |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| : 20DS (Stainless Steel)                |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| : 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

: No. 801S

: No. 92

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

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



0



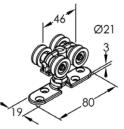
No.21EPNC Top Pivot

No. 21EPNC **PIVOT** 



No. 20DS DOOR STOP

No. ADP1/60 Bracket



No. 57EN HANGER

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Ø13.5



No. 801S GUIDE





#### 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 aluminiumi s 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 mid-rail. A clear view metal tilt rod is used placed on the reverse 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<br>Clear View  | N/A<br>Yes  |
| Style                                     | Hinged<br>Bi-fold<br>Straight Sliding<br>Fixed Louvres (ventilated)<br>Fixed Louvres (non-ventilated)<br>Special Shape Shutters  | Yes<br>Yes<br>Yes<br>Yes<br>No  |
| Stile Options Square<br>Rabbet<br>D-mould |  | Yes<br>No<br>Yes  |
| Hardware                                  | Tracking Systems<br>Hardware   | Yes<br>Yes  |
| Frame Options                             | Stiles<br>Mid-rail<br>Light Stop<br>Hang Strips<br>L Frames<br>Z Frames<br>T Post<br>U Channel<br>Corner Post<br>Bay Window Post | Yes<br>Yes<br>*Yes - constructed from Basswood<br>No<br>Yes<br>No<br>Yes<br>Yes<br>*Yes - constructed from Basswood<br>*Yes - constructed from Basswood |
| Finish                                    | Stained<br>Oiled<br>Lacquered<br>Painted<br>Powder coated  | No<br>No<br>No<br>Yes   |



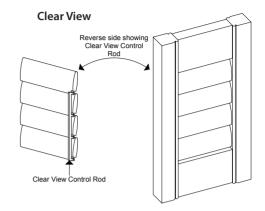
## Tilt Rod, Louvre Size, Louvre Style,

### 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 | 89mm |
|--------------------|-------------|-----------|------|
| 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.

Aluminium Square Stile 60.2mm 60.2mm

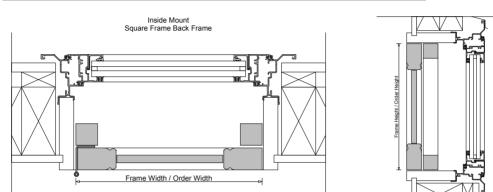
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## - Light stop, L frames, T frames & Mount types

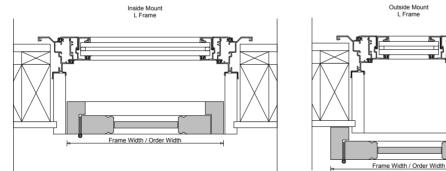
### Light Stop

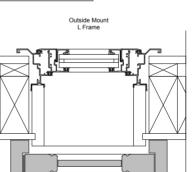
| Shutter Type | Туре       | Frame Options | Benefit   | varies |
|--------------|------------|---------------|---|--------|
| Aluminium    | Light Stop | Varies        | Provides a light block where panels are hinged. Note: constructed from Basswood | Varies |



#### L Frame

| Shutter Type | Туре    | Frame Options | Benefit  | I <del>~</del> −19,3−−−1  |
|--------------|---------|---------------|--|---|
| Aluminium    | L Frame | Standard      | L Frames are used to provide hanging<br>options for single and multiple panels for<br>outside and inside mount applications using<br>a Butt or Steadman hinge. Using a standard<br>frame with a Steadman hinge allows you<br>to protrude the panel past the window<br>opening. This gives you the ability to hang<br>the shutter panel square in the frame and<br>closes light gap for flush mounted hinges.<br>Ideal when there is no architrave in the<br>opening. | ₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩<br>₩ |





### T Post

| T Post       |        |               |  |              | _ |                  |
|--------------|--------|---------------|--|--------------|---|------------------|
| Shutter Type | Туре   | Frame Options | Benefit  |              |   | 50mm             |
| Aluminium    | T Post | Standard      | T Post are used to provide hanging options<br>for single and multiple panels for outside<br>and inside mount applications using a Butt<br>hinge. Gives you the ability to hang the<br>shutter panel square in the frame. The T<br>Post closes the light gap for flush mounted<br>hinges. Ideal when there is no architrave in<br>the opening. Available as Standard. | 18mm<br>50mm |   | ()<br>  <br>19mm |







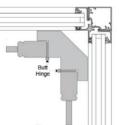
## - U Channel, Corner Post, Bay Window Post & Mount types, **Panel Types**

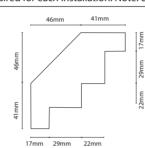
| U Channel |
|-----------|
|-----------|

| U Channel    |           |               |  | ŀ      | 38mm |     |                     |
|--------------|-----------|---------------|--|--------|------|-----|---------------------|
| Shutter Type | Туре      | Frame Options | Benefit  |        |      |     | Tain                |
| Aluminium    | U Channel | Top, Bottom   | Top and bottom 'U Channels' are ideal<br>for incline roof applications or when<br>access to windows is not required. The<br>louvres can open and close and the | 47.8mm |      |     | Top<br>U Channel    |
|              |           |               | panel can easily be removed by lifting<br>the shutter up into the top channel<br>and out at the bottom. To refit the<br>reverse applies.                       | 24mm   | 2    | 6mm | Bottom<br>U Channel |

### **Corner** Post

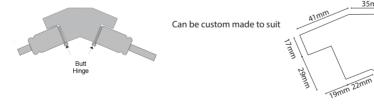
| Shutter Type | Туре        | Frame Options | Benefit  |
|--------------|-------------|---------------|--|
| Aluminium    | Corner Post | Corner Post   | Corner Posts are used to provide hanging options for single and<br>multiple panels within a corner application. Closes light gap for flush<br>mounted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





### **Bav Window Post**

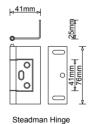
| Shutter Type | Туре               | Frame Options      | Benefit   |  |
|--------------|--------------------|--------------------|---|--|
| Aluminium    | Bay Window<br>Post | Bay Window<br>Post | Bay Corner Posts are used to provide hanging options for single<br>and multiple panels within a bay window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



### **Panel Types & Hinging Options**

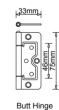
Panel types refers to the variations of each type of shutter; single panel fixed, single panels hinged, bi-folds, L Frame, T Post, Straight sliding, and bi-foldomg variations.

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.



35mm

38mm





Single pane fixed Single panel hinged at left

Single bi-fold shutter

2-C

pivoted at right

2-D

Single panel hinged at right Set of single panels hinged left and right 2-A

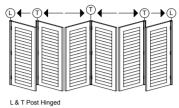
| Single bi-fold shutter<br>pivoted at left | : |
|---|---|
| 2-B                                       |   |

Two sets bi-fold shutters

## 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 multiple panels within an opening or outside the opening window (see examples below).



| Key |  |
|-----|--|
|     |  |

| <b>T</b> means | Panel is hinged from a T Post<br>or closes onto a T Post   |  |
|----------------|--|--|
| <b>L</b> means | Panel is hinged from a L Frame<br>or closes onto a L Frame |  |
|                | Panel direction to the right                               |  |
| ← means        | Panel direction to the left                                |  |

One Panel variations:



Two Panel individually hinged & Two Panel bi-fold variations:  $\mathbb{Q} \leftarrow \mathbb{Q} \leftarrow \mathbb{Q} \rightarrow \mathbb{Q}$   $\mathbb{Q} \leftarrow \mathbb{Q} \leftarrow \mathbb{Q}$ 

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Three Panel individually hinged variations:

| ©←₽←₽→₽ | ₽←₽→₽→₽ | ₽←₽←₽←₽ | Ů→Ů→Ů→Ĉ |
|---------|---------|---------|---------|
|         |         |         |         |
|         |         |         |         |
|         |         |         |         |
|         |         |         |         |

Three Panel bi-fold variations:

| ©←>© | ©←──→ |
|------|-------|
|      |       |
|      |       |
|      |       |
|      |       |
|      |       |

Four Panel individually hinged variations:

| ℚ←⊕←→⊕→₽ | ₽←→₽←→₽ |
|----------|---------|
|          |         |
|          |         |

Four Panel bi-fold variations:

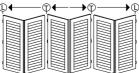
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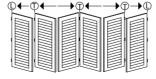
Six Panel individually hinged variations:

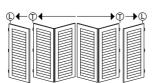
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Six Panel bi-fold variations:

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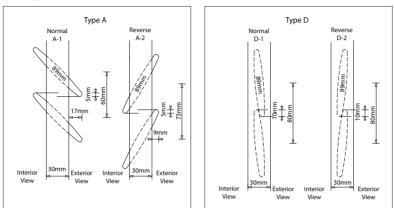
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## Fixed Louvre Shutters, Overview specifications

### **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.



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

### **Overview Aluminium Shutter Specifications:**

| Louvre Size  |   |                      |  |                                     |
|--|---|----------------------|--|-------------------------------------|
| Туре   | Size  | Options              |  |                                     |
| Louvre - Aerofoil  | 89mm x 11mm   | Half Open, Fixed, V  | entilated, Fixed Non-Ventilated                                    |                                     |
| Width & Height   | Hinged  |                      |  |                                     |
| <b>Type</b><br>Maximum Width<br>Maximum Width<br>Minimum Width | <b>Size</b><br>1100mm (Single Panel)<br>700mm (Bi-fold Panel)<br>300mm (Single Panel) |                      |  |                                     |
| Minimum Height<br>Maximum Height                               | 300mm<br>2700mm<br>Note: Shutters over 1800   | mm in height will be | constructed with a mid-rail  |                                     |
| Finish   |   | Stile & Rails        |  |                                     |
| <b>Type</b><br>Powder Coated                                   | <b>Colours</b><br>Silver, Satin black, Pearl<br>white, New birch                      | <b>Type</b><br>Stile | Size<br>60mm x 30mm  | <b>Options</b><br>Square<br>D-mould |
| Recess   |   | Top Rail<br>Mid Rail | 25mm x 78.6mm<br>25mm x 81.6mm<br>Shutters over 1.800mm 1 mid-rail |                                     |
| <b>Size</b><br>122mm   | Louvre size 89mm  | Bottom Rail          | 72.4mm - 141mm x 25mm<br>(varies, depends on height of panel)      |                                     |
|  |   | Tilt Rod             | Rebated on reverse side of panel                                   | Clear View only                     |

Sec. : Shutters Date : Dec 2017 Page : 26 **Type** Maximum Width

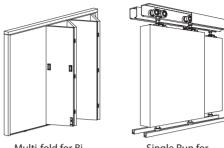
Maximum Height

## 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.

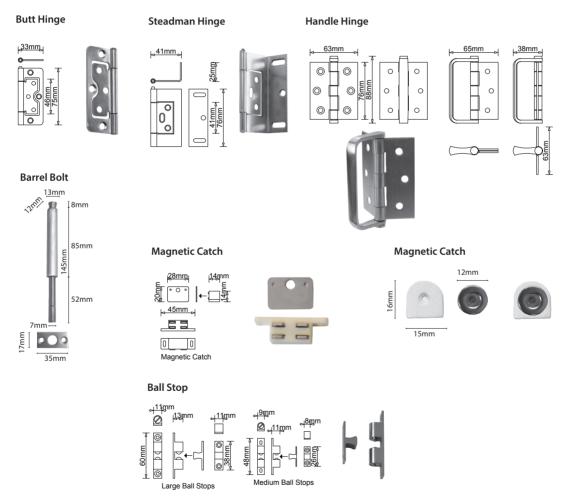


Multi-fold for Bifold shutters



#### 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<br>Brass, Bright Brass | Square, Rabbet, T Post, L Frame            |
| Steadman Hinge | Stainless Steel, Silver, Cream, White, Black, Antique<br>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                     |



## Hardware Technical - Sliding Single Run

#### Application

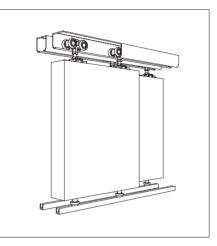
- Widely used in lighter commercial and industrial applications
- To cover any width of opening, any number of panels can be used
- To accommodate different building designs, panels can slide to one or both sides
- Hinged panel for easy access may be incorporated into a sliding panel
- Where panels are 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: 80AMaterial: AluminiumStandard lengths: 2000mm, 3000mm, 4000mm, 6000mmAluminium 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.

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

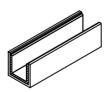


No. 20DS DOOR STOP



No. 52EN/4-A INTERMEDIATE HANGER





No. 21ER-A END GUIDE No. 94PPA CHANNEL





## 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: 80AMaterial: AluminiumStandard lengths: 2000mm, 3000mm, 4000mm, 6000mm

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

Door Stop

: 20DS (Stainless Steel)

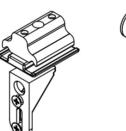
Hanger Set:End Hanger: 52EN-AIntermediate Hanger: 52EN/4-AStainless Steel hangers are fitted with nylon wheels on<br/>precision stainless steel ball race bearings. Vertical adjustment<br/>is simple and positive.

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

Channels : 94PPA Aluminium channel, available in 2100mm, 3000mm, 4000mm



No. 94PPA CHANNEL



No. 21EP-A PIVOT

No. 52EN/4-A

INTERMEDIATE

HANGER









No. 21ER-A END GUIDE



Vindo

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| www.winc | low- | treat | tmen | ts.co.n |
|----------|------|-------|------|---------|







#### 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<br>Clear View  | Centre, Left or Right<br>Yes   |
| Style         | Hinged<br>Bi-fold<br>Straight Sliding<br>Fixed Louvres (ventilated)<br>Fixed Louvres (non-ventilated)<br>Special Shape Shutters  | Yes<br>Yes<br>Yes<br>Yes<br>No   |
| Stile Options | Square<br>Rabbet<br>D-mould  | Yes<br>Yes<br>Yes  |
| Hardware      | Tracking Systems<br>Hardware   | Yes<br>Yes   |
| Frame Options | Stiles<br>Mid-rail<br>Light Stop<br>Hang Strips<br>L Frames<br>Z Frames<br>T Post<br>U Channel<br>Corner Post<br>Bay Window Post | Yes<br>Yes<br>* Yes - constructed from Basswood<br>Yes<br>Yes<br>Yes<br>* Yes<br>* Yes - constructed from Basswood<br>* Yes - constructed from Basswood<br>* Yes - constructed from Basswood |
| Finish        | Stained<br>Oiled<br>Lacquered<br>Painted<br>Powder coated  | No<br>No<br>No<br>Yes, Standard colours or custom colours<br>No  |



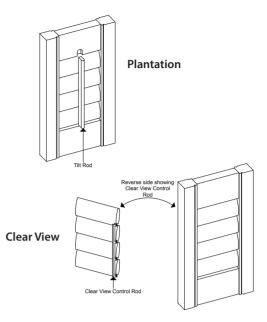
## Tilt Rod, Louvre Size, Louvre Style,

### 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.

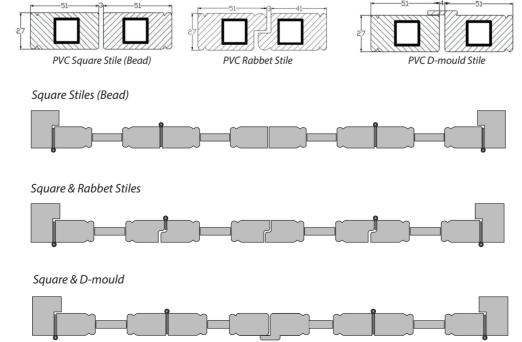
| PVC Louvre Widths: | 12mm<br>64mm |
|--------------------|--------------|
|                    | 12mm         |
|                    | 12mm         |

### 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

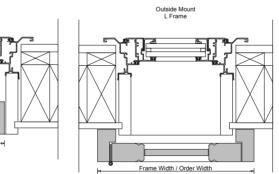
| Shutter Type | Туре       | Frame Options   | Benefit   |                            |
|--------------|------------|---|---|----------------------------|
| PVC          | Light Stop | A4, A9, mm Varies<br>Note: constructed from<br>Basswood not PVC | Provides a light block where panels are hinged. | A4                         |
|              |            | Inside Mount<br>Juare Frame Back Frame                          |   | Frame Health LOrder Health |

#### L Frame

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



Frame Width / Order Width



### T Post

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



Window

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

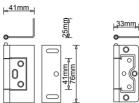
| PVC                       | Туре                  | Frame Options                                   | Benefit  |
|---------------------------|-----------------------|---|--|
| FVC                       | Z Frame               | TP Plain<br>TP Colonial<br>TP Fancy<br>TP Texas | Z Frames are used to provide hanging options for single at<br>multiple panels within an opening. Plumbing the windo<br>frame closes the light gap for flush mounted hinges. T<br>Z frame wraps around the reveal edge, making it ideal t<br>covering out-of-square windows.<br>4 style options are available   |
| Foulf and Haddi           | Inside Mount Z - Fran |   | Image: state wide       Im |
| U Channel<br>Shutter Type | Туре                  | Frame Options                                   | Benefit Top  |
| PVC                       | U Channel             |   | Top and bottom 'U Channels' are ideal for<br>incline roof applications or when access to<br>windows is not required. The louvres can open<br>and close and the panel can easily be removed<br>by lifting the shutter up into the top channel<br>and out at the bottom. To refit the reverse<br>applies. Note: U Channels are constructed<br>from Basswood not PVC  |
| Corner Post               | II                    | I.  | Bottom   |
| сі и <b>т</b>             | Туре                  | Frame Options                                   | Benefit  |
| Shutter Type              |                       | 1   |  |
| PVC                       | Corner Post           | Corner Post                                     | multiple panels within a corner application. Closes light gap f<br>flush mounted hinges. Corner Posts are manufactured accordin  |
|                           | Butt                  | Corner Post                                     | Corner Posts are used to provide hanging options for single and<br>multiple panels within a corner application. Closes light gap f<br>flush mounted hinges. Corner Posts are manufactured accordin<br>to the size required for each installation. Note: Corner posts a<br>constructed from Basswood not PVC<br>All measurements vary<br>depending on<br>application  |
| PVC                       | Butt                  | Corner Post                                     | multiple panels within a corner application. Closes light gap f<br>flush mounted hinges. Corner Posts are manufactured accordin<br>to the size required for each installation. Note: Corner posts a<br>constructed from Basswood not PVC   |
| PVC<br>Bay Window         | Post                  | Frame Options                                   | multiple panels within a corner application. Closes light gap f<br>flush mounted hinges. Corner Posts are manufactured accordin<br>to the size required for each installation. Note: Corner posts a<br>constructed from Basswood not PVC<br>All measurements vary<br>depending on<br>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.



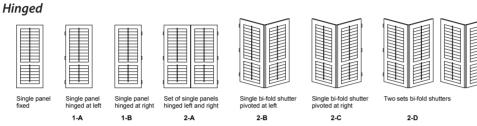
Butt Hinge

Steadman Hinge



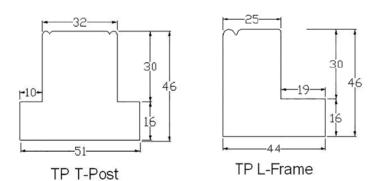
Window

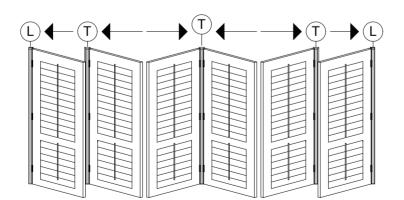




### L Frame and T Post Hinged options

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).





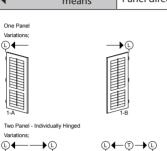


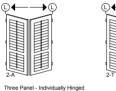
## Panel types - Hinged, L Frame & T Post Hinged - Contd.

### L Frame and T Post Hinged - cont.

## Key

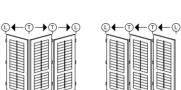
| T means | Panel is hinged from a T Post or closes onto a T Post   |  |
|---------|---|--|
| L means | Panel is hinged from a L Frame or closes onto a L Frame |  |
| means   | Panel direction to the right                            |  |
| • means | Panel direction to the left                       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





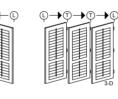
| Variations;  |               |      |
|--------------|---------------|------|
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Two Panel - Bi-fold

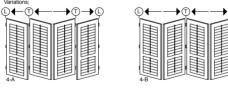
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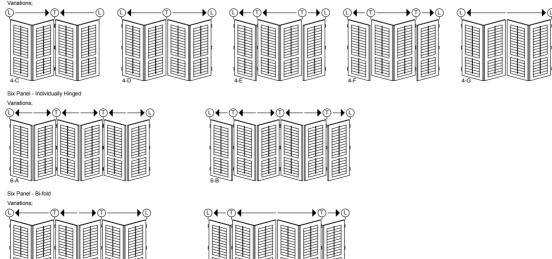
) (

3-A Three Panel - Bi-fok Variations;

Four Panel - Individually Hinged



Four Panel - Bi-fold Variations:



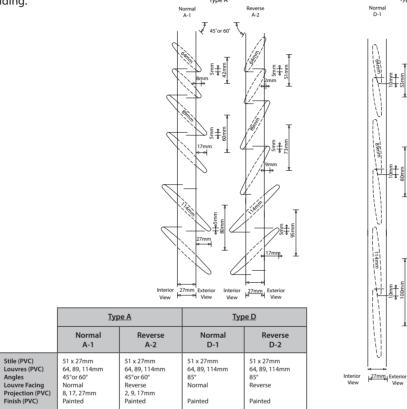
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## Fixed Louvre Shutters, Overview specifications

### **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 Type D building. Type A Reverse D-2



Painted

### **Overview PVC Shutter Specifications:**

Painted

| Louvre Size                                    |   |   | Recess  |  |
|--|---|---|---|--|
| <b>Type</b><br>Louvre - Aerofoil               | Size Options<br>64mm x 11mm Half Open, Fixed, Ven<br>89mm x 12mm<br>114mm x 12mm  | tilated, Fixed Non-Ver                    | tilated Size<br>80mm - 150mm  | Please Note:<br>Varies, depends on Louvre size |
| Finish   |   |   |   |  |
| <b>Type</b><br>Painted                         | Colours Standard colours:<br>White, Snow, Swiss coffee, Creamy, Butter,<br>or Custom Colour   | Super white, Pearl wi                     | nite, Eggshell, Pearl, Bristle half, Antique  | white, White on white                          |
| Width & Height                                 | Hinged  | Stile & Rails                             |   |  |
| <b>Type</b><br>Maximum Width                   | <b>Size</b><br>750mm (Single Panel)   | <b>Type</b><br>Stile                      | Size<br>60mm x 30mm   | <b>Options</b><br>Square<br>D-mould            |
| Maximum Width<br>Minimum Width                 | 500mm (Bi-fold Panel)<br>300mm (Single Panel)   | Top Rail<br>Mid Rail                      | 70mm - 150mm x 20mm<br>(varies, depends on height of panel)<br>82.6mm x 20mm  |  |
| Minimum Height<br>Maximum Height               | 300mm<br>2400mm<br>Note: Shutters over 1500mm in height<br>will be constructed with a mid-rail  | Mid Kall<br>Bottom Rail<br>Tilt Mechanism | 82.6mm x 20mm<br>Shutters over 1500mm 1 mid-rail<br>70mm - 150mm x 20mm<br>(varies, depends on height of panel)<br>Tilt Rod 15.8mm x 12.5mm<br>Clear view concealed | Tilt Rod (centered, left, right)<br>Clear View |
| Track Systems                                  |   |   |   |  |
| <b>Type</b><br>Maximum Width<br>Maximum Height | Multi-fold<br>500mm per Panel (maximum 8 x Panels o<br>2400mm<br>Note: Shutters over 1500mm in height wil<br>structed with a mid-rail | n each side) 900m<br>2400                 | <b>e Run</b><br>m per Panel (maximum 6 x Panels on e<br>m<br>Shutters over 1500mm in height will b  | -  |

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27mm Exterior View

Interio View

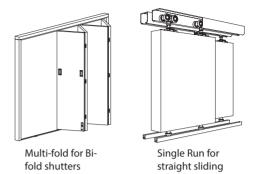


## • Hardware Technical - Tracking systems, Hinges

### Hardware Overview

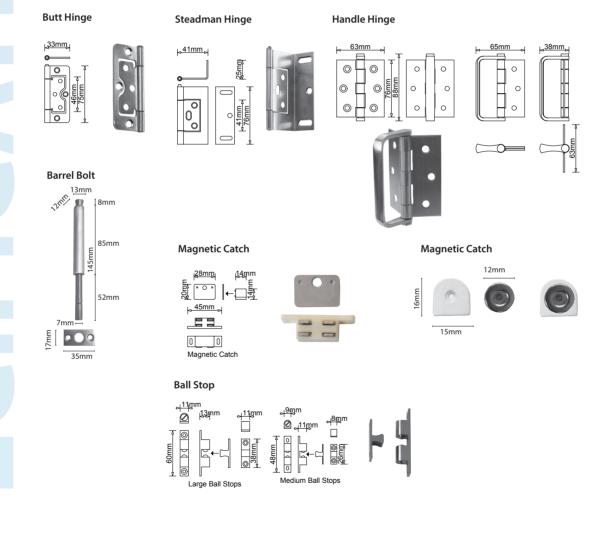
#### **Tracking Systems**

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<br>Brass, Bright Brass | Square, Rabbet, T Post, L Frame            |
| Steadman Hinge | Stainless Steel, Silver, Cream, White, Black, Antique<br>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

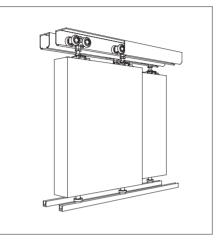
- Widely used in lighter commercial and industrial applications
- To cover any width of opening, any number of panels can be used
- To accommodate different building designs, panels can slide to one or both sides
- Hinged panel for easy access may be incorporated into a sliding panel
- Where panels are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



where ideas unfold

#### 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)

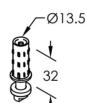
Hangers (2 per door) :

: 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.

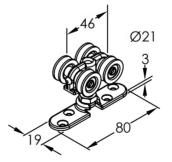
: No. 801S Guide Spring loaded guide, nylon body and tip with stainless steel shaft and spring. Designed to slide in the No. 92 Threshold





No. 20DS DOOR STOP

No. 801S GUIDE



No. 57EN HANGER



No. 92 THRESHOLD





## 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 opening.

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

steel parts are zinc dichromated.

nylon and stainless steel.

4000mm, 6000mm

Guide

Threshold

| 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

: No. 801S

: No. 92

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

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





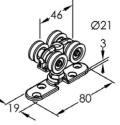
No.21EPNC **Top Pivot** 

No. 21EPNC **PIVOT** 



No. 20DS DOOR STOP

No. ADP1/60 Bracket



No. 57EN HANGER



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No. 801S GUIDE



No. 92 THRESHOLD