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# Shutter Specification Guide FSC Paulownia, Basswood, UPVC

A little about our materials

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## **Paulownia Hardwood**

Paulownia is a lightweight, strong and fast-growing hardwood sourced from Northern Asia. The widely spaced growth rings in the timber mean it offers slightly less density than Basswood, so to compensate for this we treat it with a gesso coating (acrylic polymer base) prior to it going through our refined painting process.

Paulownia offers excellent dimensional stability due to its engineered core which greatly reduces the possibility of warping. It's fine grain texture, knot-free appearance and low oil content make it the perfect timber for staining and painting.

We use Paulownia for all parts of the shutter including frame, stile, top and bottom rails, louvres and mid rails. Paulownia is fully FSC Certified meaning it comes from a certified sustainable source.

## **Basswood Hardwood**

Basswood is often called Linden Wood, Limewood or Tilia Wood - a common timber in Northern America. It offers exceptional stability and tightly spaced growth rings.

Basswood, being a high-density hardwood, offers additional strength over Paulownia making it perfect for high access areas or large installations. It offers excellent dimensional stability due to its engineered core which greatly reduces the possibility of warping. A high quality, lightweight hardwood offering a smooth and consistent grain; making it perfect for painting.

All of our wooden shutters use mortice and tenon joinery, and undergo an extensive kiln drying process, prior to being machined.

## **UPVC Waterproof**

More suited for wet rooms or areas of moisture our UPVC core composite shutter offers a smoother finish (being man-made) and will out last any wood shutter. Unlike timber, UPVC shutters are resistant to moisture so can be installed in any room.

They have an excellent temperature operating range, will never warp, peel or flake. In addition they are perfectly suitable for areas where hygiene is important.

New technology in our painting process allows for UPVC to be finished in the same high grade paint finish - meaning no matter if you choose a solid wood or a waterproof shutter, to the naked eye the finish will be consistent.

Available in any colour and includes marine grade stainless steel hinges as standard to prevent rusting.



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## General Information

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### Ordering Portal

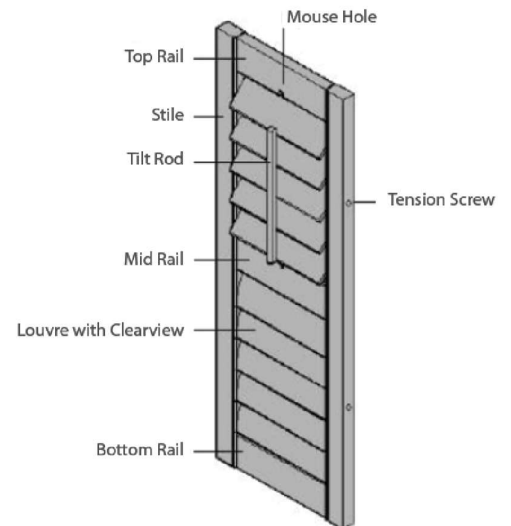
#### **Mid Rails**

When entering a shutter higher than 1800mm a midrail will be required. The midrail height is always measured from the bottom of the shutter up to the centre of the midrail.

You will be asked on the ordering portal to choose between the midrail height being critical or non-critical. The default setting is non-critical which means that the top and bottom rails of the panel will be even sizes. However, be aware that the midrail position may be altered by up to 25.4mm in either direction.

If critical is selected the centre of the midrail will be positioned at the requested height but the sizes of the top and bottom rails will most likely be different to each other. By selecting critical there is no guarantee which rail will be the largest and it is likely the shutter will have uneven top and bottom rails.

Please note that our UPVC range does not have the option for critical. All midrails will be treated as noncritical.



#### **Top and Bottom Rail Size**

For wooden shutters the maximum height for top and bottom rails is 150mm, the minimum height is 76mm. For PVC shutters the maximum height for top and bottom rails is 117mm, the minimum height is 76mm.

As the spacing of the louvres is fixed the top and bottom rail height will vary depending on the overall height of the shutter. It's therefore important that if you have multiple shutters in one room, it is best to keep the height the same for all shutters.

#### **Control Method**

Centre Tilt Rod - A traditional plantation tilt rod positioned in the centre of the louvre.

Off Set Rod - A traditional plantation tilt rod offset 25mm from the edge of the louvres on the hinged side of the panel.

Clearview – A discreet aluminium profile rod, positioned on the back of the panel along the side of the louvres on the hinged side of the panel. Please note that the rod will be painted in the same colour as the shutters, however for stained shutters this will be metal.



Dependent on the number of louvres, the Clear View Rod may require a split:

Louvre Size	Full Height Shutter (no midrail)	Full Height Shutter (with midrail)
47mm	Split if over 1000mm	Split if over 1000mm
63mm	Split if over 1050mm	Split if over 1050mm
76mm	Split if over 1200mm	Split if over 1200mm
89mm	Split if over 1200mm	Split if over 1200mm
114mm	Split if over 1300mm	Split if over 1300mm

### **Configuration (Layout Code)**

When ordering shutters you will be asked for the layout code. This determines how your shutter is manufactured. e.g. LLRR would be two panels folding together to the left, with two panels folding together to the right.

- L = Hinged left
- R= Hinged right
- T= T post
- B = Bay post
- C = Corner Post



Please note that where panels meet, panels will always open right over left unless specifically ordered as left over right in the item notes.

A maximum of 3 panels can be hinged together (multi-fold). This means that the maximum possible amount of panels without T posts or a track will have a panel configuration of LLLRRR

### **Maximum and Minimum Shutter Sizes**

The maximum height of a shutter with a 50.8mm stile is 3000mm (above 1800mm) must have a midrail. More than 2500mm must have 2 midrails. The maximum height for a shutter with a 38.1mm stile is 1500mm.

Please take note of the below minimum and maximum panel widths.

	50.8mm Stile	38.1mm Stile
Minimum Height	300mm	300mm
Minimum Width	190mm	190mm
Maximum Width of Single Panel (L or R)	850mm	800mm
Maximum Width of Bi-Fold Panel (LL or RR)	650mm	600mm
Maximum Width of Multi-Fold Panel (LLL or RRR)	550mm	450mm

\*\*Please note UPVC Is only available in single and bi-folding panels.

### **Tolerances**

With Made to Measure products there are tolerances within specification – If your shutters exceed this please contact us and we will rectify this for you.

### **Width:**

The width of the panels can be plus or minus 1mm per panel.

Height:

The height of the panels can be plus or minus 1.5mm from order height.

Mid-rail location:

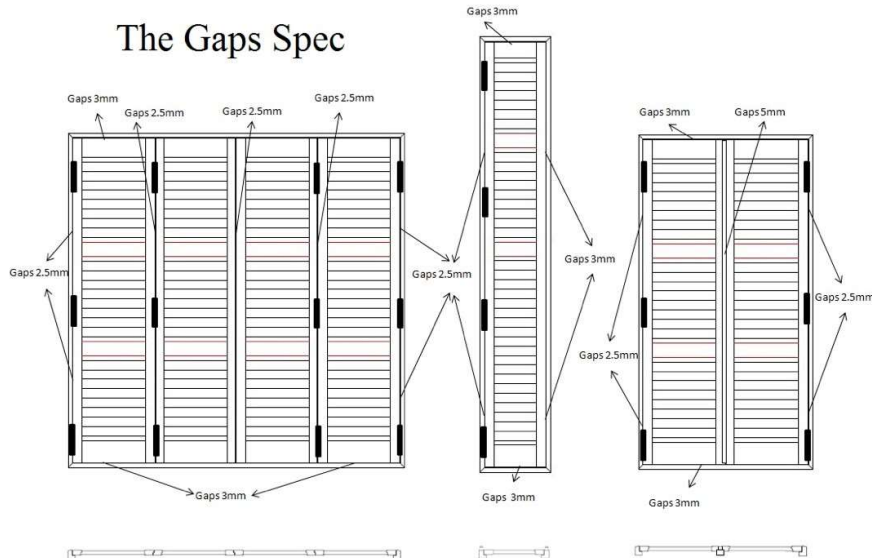
Standard mid rail width is 76.2mm - If the mid rail position is not 'critical' it may vary in width 25.4mm

UPVC Shutters always have a 'Non-Critical Midrail'

### **T Posts:**

May vary up to 1mm - This is dependent on the panel widths detailed above.

### **Gap Tolerances:**





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### **Deliveries**

Our standard lead time is 10 weeks from the date of order.

In around 3/5 weeks we will provide you with a delivery start date we aim to deliver within 5 working days from this date.

You will receive a further email closer to the date of delivery notifying you of a 'Scheduled Delivery Start Date'. You should allow up to 5 working days from this date to receive your orders.

### **Frames Sides**

By default, a 4-sided frame will be suggested for all shutters. If a Z frame is selected, you will have the option of a Sill to the bottom. A sill is a Z frame with the lip cut off to form a L frame. If 'No' is selected for any of the frame sides a 20x20mm light block batten will be included.

### **Build Outs**

If you have requested a build out on an L frame, we will use a larger size and cut it down to your exact measurements. E.g. If a L60 is ordered with a 20mm build out we will use an L90 and remove 10mm. Build outs will always come fixed to the back of the frame and painted together to ensure a better finish. You can request a build out to be separate by entering 'built-out separate' in the item notes when placing your order.

If build out has been requested on an item, it will be manufactured with the same number of sides you have selected. E.g. if you have selected a 4-sided frame, the build out will be added to all 4 sides. If you require a build out different to this, you should order battens separately.

### **French Cut Outs**

By default, our French cut outs will be manufactured with a light block board behind the cut out as shown to the right. If you do not want this, please tell us in the manufacturing notes.

Be aware of the handle position and allow sufficient clearance for the light block board to avoid cutting on site.

You can request the light block board to be recessed from the frame to allow clearance for the door handle in the manufacturing notes. E.g. 'Please remove 30mm of light block board on French cut out.'

### **Battens**

Battens are available up to 3000mm length with a minimum height of 3mm. All battens are supplied in Hardwood (no PVC battens available).

### **Colours**

All our Shutters are available in all TS colours – They are all also available in custom colours which is £100 per order.

Paulownia Wood is available in Stained finishes. Please note this uplifts the cost by 10%. Basswood and UPVC are not available in Stained Finishes.



### **Shaped Shutters**

When ordering shaped shutters on the ordering portal you will be asked to upload an attachment. This is to show us the shape required and measurements. If you do not upload a draft of the shape required, you will receive an email from the team asking for a drawing.

When ordering shaped shutters, keep measurements symmetrical wherever possible. Any asymmetry can result in uneven numbers of louvres functioning on opposing panels.

Please note shaped shutters are still subject to minimum and maximum panel widths and can add 2 weeks to your lead time.

There are no curved shapes available in UPVC.

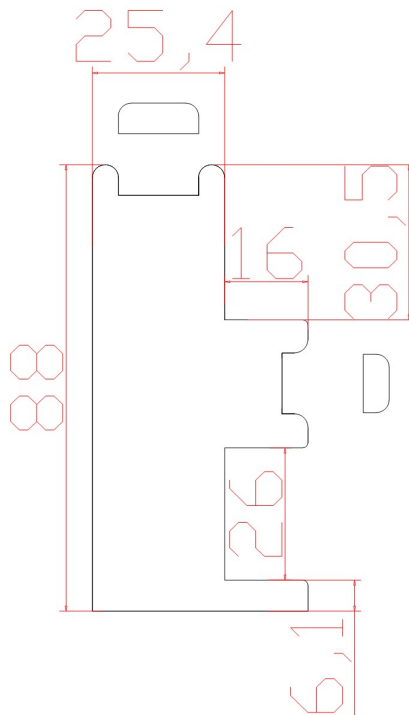
### **Shutters with Blackout Blinds**

The maximum width for blackout blinds is 1400mm. If the width is more than this you will need to use a T post.

This blind is only available in a White Polyester Fiber.

Our current frame type for this is a BL90 (see diagram below).

You can also purchase a blackout blind on its own in a 'U Channel' to fit behind any shutter required.





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### **Warranty**

We provide a 10-year warranty across all shutters.

This is protected against the specification included within this document.

### **Rework Requests**

We benchmark faults at a visible distance with the naked eye of 1.2 meters.

Shutters are a handmade product therefore you should expect natural characteristics of a handmade process. In particular, small knots and grain pattern areas are a natural characteristic of wooden shutters, and as such as not considered imperfections.

You will need to submit photographic evidence of the marks/damage. It is important to take photos as the shutter comes out of the packaging and not after so we can confirm that the damage has not been caused during installation.

If something is the wrong size, make sure you take photos with a tape measure showing the problem clearly.

You can send all damage reports over manually via email. Please ensure you include Order number as Subject, Item number, Panel number and details of which part is affected.

If photographs are not submitted the cost will be your own.

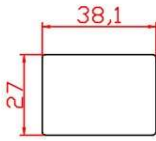
### **Cancellations**

Once your order has been marked as 'In Manufacture' no cancellations will be accepted.

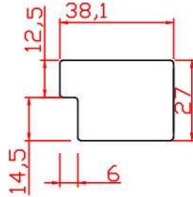
## Stile Options

We have a range of stiles available to suit a variety of windows. For shutters above 1500mm height, you must use a 50.8mm stile to ensure structural stability. UPVC Shutters are only available in 50.8mm stiles.

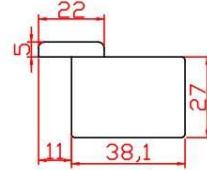
### 38.1mm Stiles



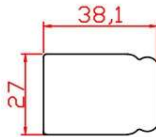
Butt Flat  
Stile (FS 38.1)



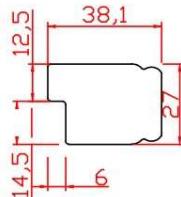
Rebated Flat  
Stile (RFS 38.1)



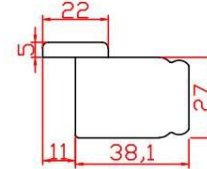
Astragal Flat  
Stile (DFS 38.1)



Butt Beaded  
Stile (BS 38.1)

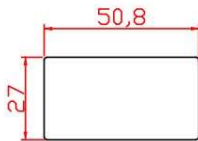


Rebated Beaded  
Stile (RBS 38.1)

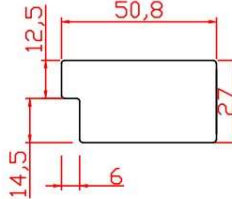


Astragal Beaded  
Stile (DBS 38.1)

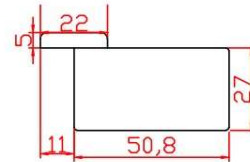
### 50.8mm Stiles



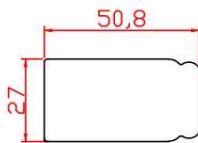
Butt Flat  
Stile (FS 50.8)



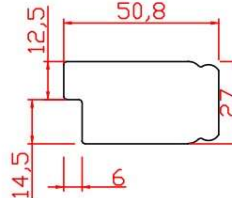
Rebated Flat  
Stile (RFS 50.8)



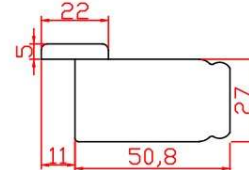
Astragal Flat  
Stile (DFS 50.8)



Butt Beaded  
Stile (BS 50.8)

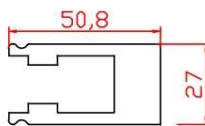


Rebated Beaded  
Stile (RBS 50.8)

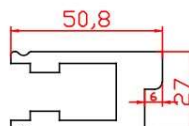


Astragal Beaded  
Stile (DBS 50.8)

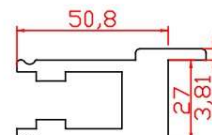
### PVC 50.8mm Stiles



Butt Beaded  
Stile PVC



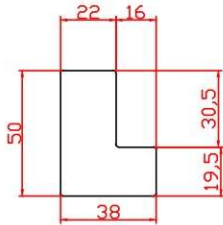
Rebated Beaded  
Stile PVC



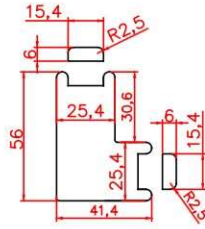
Astragal Beaded  
Stile PVC

## Wooden Frame Options

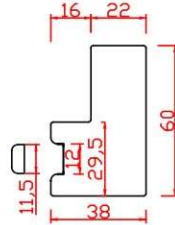
We have a range of frames available – Most are available across all materials and options. L70 is only available in Wood Options. Side Fix Frames are not available for Special Shapes.



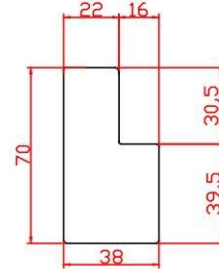
L50



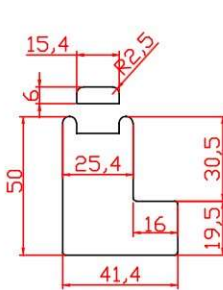
L50 MF



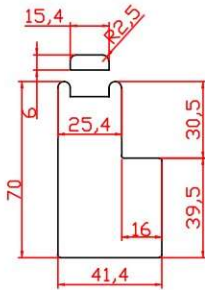
L60 SF



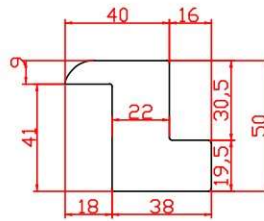
L70



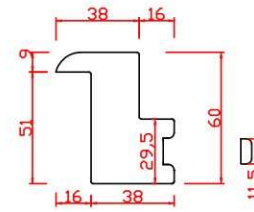
F50



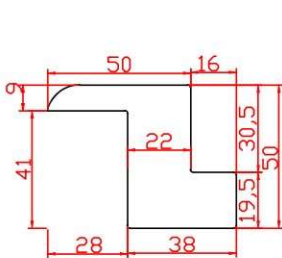
F70



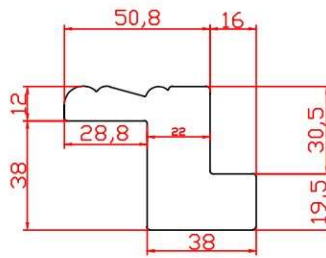
Z40



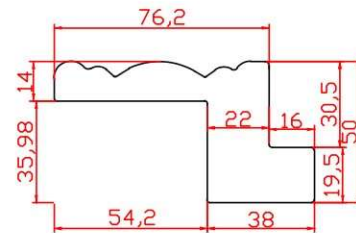
Z40 SF



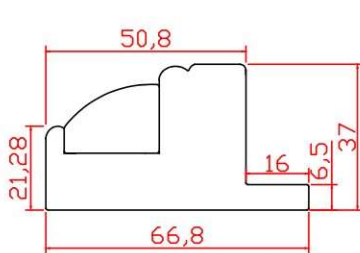
Z50



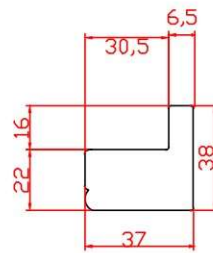
Z2BS



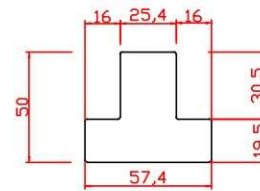
Z3CS



D50

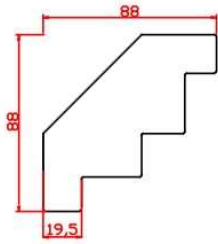


D50 Sill Plate

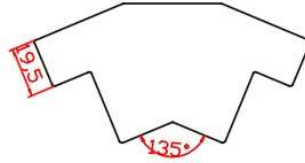


T Post 50mm

## Bay and Corner Posts



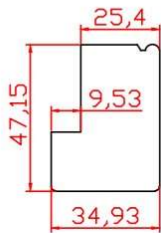
Corner Post



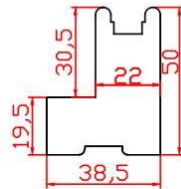
Bay Post

## PVC Frame Options

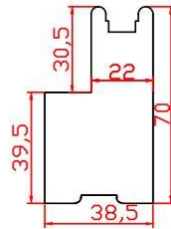
We offer a range of recess, flush and face mounted frame options.



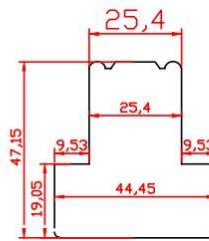
L50 PVC



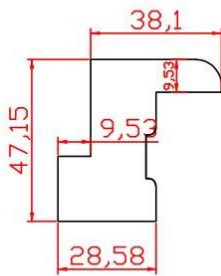
F50 PVC



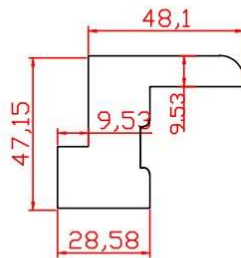
F70 PVC



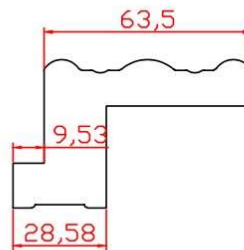
T Post 50mm



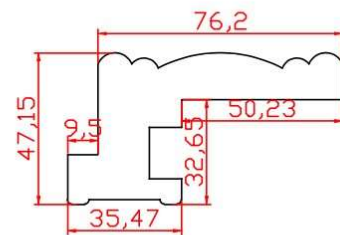
Z40 PVC



Z50 PVC



Z2BS PVC



Z3CS PVC

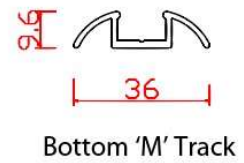
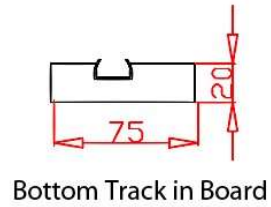
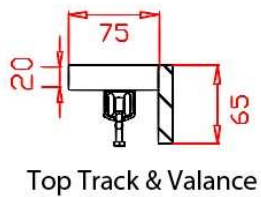
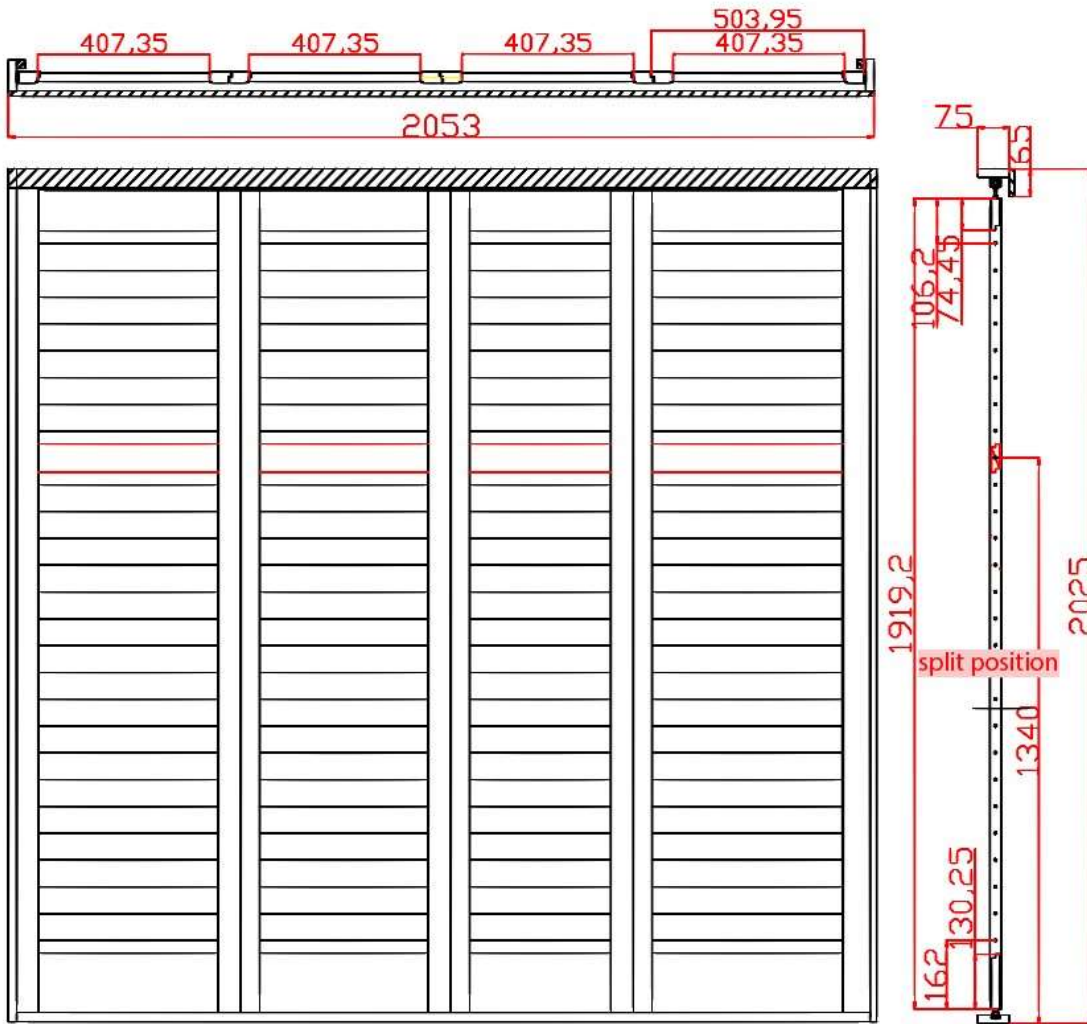


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### **Bi-Fold Tracked Shutters**

Please note the following specification for tracked shutters.

- Max Panel Height: 3000mm (above 1800mm must have a mid rail, above 2500mm must have 2 midrails)
- Minimum Panel Width: 190mm
- Maximum Panel Width: 850mm
- For the base of a tracked shutter, you have options – track in board or M track. Please see diagrams below. Track in board is recommended if fitting over carpets or if you are unable to fix into the floor.
- Panels must be in even numbered groups. E.g. LLLLRRRR or LLRR. But not LLLRR.
- The side of the tracked shutter will be supplied with a separate light block as per diagram below.



## Tilt Rods

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Please see images below showing different tilt rod styles dependent on material.



Traditional Tilt Rod - Off Centre or Centre



Clearview Rod - Paulownia



Clearview Rod - Basswood



Clearview Rod - PVC