

## Installation of Spring Loaded Shutter

Spring loaded shutters are lowered by pulling down on the bottom slat, and are raised under the tension of a spring in the shaft. The locking method is a central lock in the bottom slat with key.

### Shutters

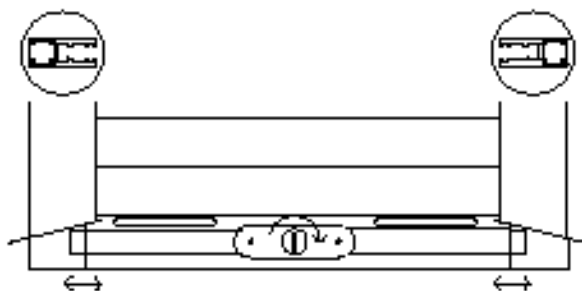
On arrival on-site with your shutter, your first job is to double check the overall width of your shutter in relationship to the aperture. Determine whether the shutter will be packed off away from the wall enough to clear any protrusions ie. door handles. Box section should be ordered at the time of the initial survey if the shutter might be obstructed by window features. If everything is correct you can continue.



Note! You will need to notch out a section inside the guide channel to receive the sliding section that will protrude out of the bottom slat....

### Bottom slat key lock

Spring loaded shutters include a transverse lock fitted into the bottom slat. The central key throws out locking bars which locate into the box section of the guide rail at each side.



1. Centralise the shutter over the width of the window by first measuring the complete shutter box, and then, using a tape measure, equalise that width across the wall above the window. Mark either end of the intended location of the shutter on the wall with a pencil.

2. Determine which guide channel will be the left hand guide, and which the right hand guide, then mark accordingly. Hold the guides up to the wall next to the pencil mark made when first measuring the width, and level down your guide with a spirit level. Mark down the wall with a pencil where the guides will be placed.

This will give you the markings on the wall of the exact overall width measurement of your shutter (double check.)

3. Having determined the overall location of the shutter, you need to determine the height. Place the guides back on to the pencil lines to the point at which they require to sit on the cill, then mark on the wall the top of the guides. Removing the guides you now need to run a level line across these marks to check that the box will sit level. At this point you may need to cut one of the guides down to ensure that they are indeed so. It is essential that the box does sit level according to a spirit level. The action of the roller shaft will be inhibited if this is not the case.

4. Both width and height have now been marked correctly. The guides must now be drilled, ready for fitting. You will need a 6.5mm steel drill bit and a 10mm steel drill bit.

Put the guides back up to the pencil marks and mark on the guide where you require your fixings to be (recommended fixings approx 100mm from top and bottom then fixings equalled out in between, minimum of 3 fixings; average of 300mm between fixings, maximum of 900mm between each.)

Your fixing hole should be drilled in the centre of the box section of the guide, drilling straight through both front and back of the guide with the 6.5mm bit, then drilling just the front of the guide with the 10mm bit so that the hole nearest the wall is the smaller one.

5. Put the guides back up to the pencil marks on the wall and mark through the holes you have drilled into the guides. This pencil mark will give you your fixing points on the wall itself. Remove the guides and drill the wall for your fixings (recommended drill bit 7mm masonry, screws 2inch 10s, and brown plugs.)

6. As long as there is headroom above the guides, you can now fix the guides to the wall, leaving the top screw loose to allow movement so that you can insert the pegs of the end plates in to the box section of the guide. Later, once the box, shaft and end-plate assembly has been located into the guide box section, you can tighten your top screw on the guide. If the box is in place you will need to put a fixing through the back of it, and in to the wall to secure it, using a 6.5mm steel bit through the aluminium and 7mm masonry bit through in to the wall. Guides, end-plates and box are now securely in place.

7. Lower the curtain into the guides by feeding the bottom of the curtain over the top of the shaft, then, when the curtain is half way, slide on your t-springs or autolocks. Once the curtain connections are on, carefully lower the curtain all the way down. You then need to rotate the shaft in the direction of the arrow to put tension on to the spring. Then connect the t-springs to the shaft by hooking them in to the slots. More tension may be required on the spring to assist the raising of the shutter; you can do this by disconnecting the top of the curtain from the shaft and manually rotating the shaft in the direction of the arrow. More turns on the shaft increases the amount of tension. It may take 2-3 attempts to achieve the right balance of raising and lowering the shutter. The locking fork supplied with the mechanism will hold it in place while the curtain is then attached to the shaft.

8. When you have achieved the right balance of tension, you can fit the pin-stops to the bottom rail. You will need a 5mm steel drill bit to drill straight through the bottom rail. Screw straight through these. The pins will stop the curtain from rolling up too far into the box when the it is raised.

NOTE! The holes that are drilled through the bottom rail should be no further down than 10mm from the top.

10. Fix the lid on using 4mm rivets drilling the holes with a 4.4mm steel drill bit. Easyfit recommends sealing all around the shutter with a silicone seal.