
SHUTTER INSTALLATION INSTRUCTIONS

OCTOBER 2016



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2 Key to Symbols/ Meanings:



WARNING! **Risk of personal injury!**

This is an important piece of safety advice which must be observed to avoid a risk of personal injury!



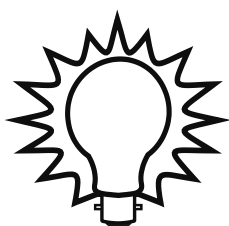
ATTENTION **Risk of material damage!**

This is an important piece of safety advice to avoid damaging the product you are installing!

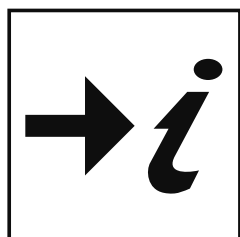


Operational check:

At this stage of the installation a component of the door, the operation of the door or the operator can be tested. This is very important as it can immediately identify an error which could take time to discover at a later stage.



Advice / Tip



Reference to further product information

Here a reference is made to another set of instructions which need to be used for installation of a particular component.

3 Warranty / Life Cycles

The warranty for this product is only granted if:

- **The installation is carried out by a competent installation engineer following these instructions.**
- **Only original parts are used.**
- **No additional objects are attached to the door.**
- **Regular maintenance checks are performed.**

For further details on the products warranties please refer to the products price list and our terms and conditions which are available upon on request.

To comply with the Construction Products Directive all products have been durability tested for a minimum of 11,000 cycles.

4 General Safety Advice

4.1 General Information



This document is intended for a qualified, trained installation engineer and should not be given to the owner of the door but should be kept by the installer.

To comply with the Construction Products Directive and the Machinery Directive the product must be installed in accordance with these instructions.

Please read all safety advice and relevant instructions carefully.

These installation instructions are intended for qualified and trained installation engineers. Installation, initial operation, servicing, repairs and dismantling of this product should only be carried out by a qualified and trained installation engineer.

When installing an electrically operated product ensure the mains power supply to the product is disconnected before any electrical connections are attempted.

Before operating a shutter you must always ensure that there are no persons or objects in the opening before and during the opening.

The shutter should only be operated when in view.

Upon completion of the installation the owner of the shutter must be trained how to operate the product safely paying special attention to the following points:

- **The shutter should only be operated when in view**
- **The operator should ensure there are no objects or persons in the opening before and during operation.**
- **The end user must read and follow the advice given in the operating and maintenance instructions.**
- **In the event of a malfunction the end user should follow the advice given in the operating and maintenance instructions and if applicable contact the installer.**

During the installation of the shutter you should follow safe working practices. Further advice is available from the Health and Safety Executive (HSE).

4.2 Repairing/ Dismantling / Maintenance

Always isolate the mains power before attempting any maintenance, repairs or dismantling. If you need to use the optional remote control during any maintenance, repairs or dismantling procedure you must engage the commissioning mode.

Before attempting to repair or dismantle a shutter you should check for the presence of any safety devices, for example:

- **Anti-fall back spring**
- **Anti-drop brake**
- **Bottom slat safety edge**
- **Safety photo cell**

Before attempting to remove an axle assembly which contains a spring you must release the tension in the spring.

When repairing or dismantling a shutter you should keep the opening and the surrounding area clear to prevent risk of injury to yourself and others.

When repairing or dismantling a shutter you should follow safe working practices. Further advice is available from the Health and Safety Executive (HSE).

Maintenance check list:

- **Curtain free running and clean**
- **All end locks are correctly and securely located in the curtain**
- **No debris in the guide rails**
- **Guide rails and end plates are securely fastened to the wall (check also the fascia if fitted)**
- **If applicable all axle collars and locking springs are in the correct original position**
- **Check action of applicable locking devices to ensure they are engaging correctly**
- **If applicable motor cable is correctly retained, has not been damaged or in danger of being damaged**
- **If a remote control has been supplied check the functionality of the safety devices**
- **If required view the service counter on the remote control**
- **If an anti-fall back spring is fitted check that the spring is under tension when the curtain is in the fully closed position. You should not be able to turn the spring shaft located in the u-cup.**
- **Check the operation of the manual override.**

Recommended service period

The recommended service period for a shutter which will operate on average two cycles per day is once every 12 months. If the shutter will perform a greater number of cycles per day the service period should be shortened accordingly. One cycle is a full open and close sequence.

5 Tools/ Fixings Required

This list of tools and fixings is a minimum guide, to be adapted for each installation.

- **Drill with pneumatic/hammer action to take the drill bits used below**
- **10mm & 22mm masonry bits up to 400mm long (or wall thickness)**
- **3, 4.2, 5, 10 & 13mm metal drill bits**
- **Countersunk posidrive type fixings or similar, with appropriate masonry drill bits and rawl plugs for guide rails and shutter box**
- **Guide rails and end plates require at least 2 1/2 inch 10s or 12s twin threaded screws with brown rawl plugs**
- **To secure the shutter box to the wall use at least 1 1/2 inch 8s screws with red plugs. A 250mm long masonry drill bit will be required**
- **Screw drivers and wire strippers**
- **4mm & 6mm Allen keys**
- **Pliers**
- **Tin Snips**
- **Metal files - round, half round and flat**
- **Spirit level**
- **Straight edge (square)**
- **Plastic hammer**
- **Tape measure**
- **Marker pen**
- **3 core and 4 core cable**
- **Junction box**
- **3 amp plug**
- **Surface trunking**
- **Motor test lead (YEC38400)**
- **Hacksaw**
- **Pop riveter with 4mm brown or white rivets**
- **Dust sheets**
- **Step ladders**
- **Workmate bench (optional)**
- **Silicone gun with brown, white or clear silicone**
- **If the fitting surface is not flat or there is a projecting door handle, painted timber may be required to form a sub frame. Alternatively 20/50 x 50mm aluminium packers or pieces of guide rail may be used**
- **If the shutter box is to fit up into a soffit, a circular saw or jigsaw will be needed to cut the soffit board.**

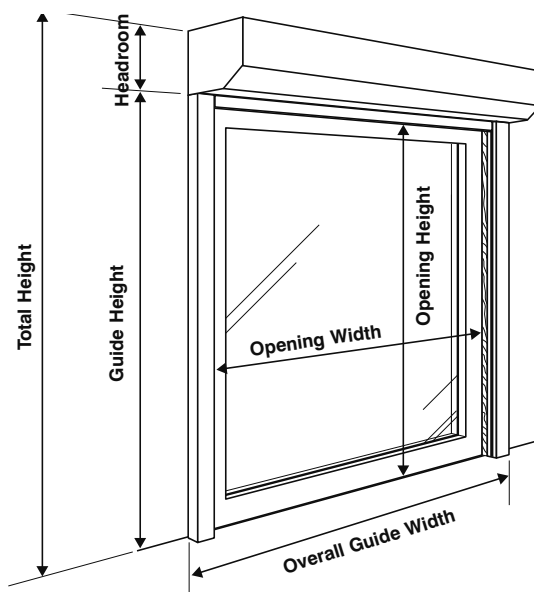
6 Preparation for the Installation

The structure of the opening must be adequate to take the weight of the door and suitable to take the appropriate fixings.



RISK OF MATERIAL DAMAGE Check that the opening is ready for installation. Surfaces should be flat and vertical to guarantee a parallel alignment of the guide rails. It is important that you check that the lintel does not bow inwards or have any projections that may catch on the curtain or could push the box back towards the curtain. If in doubt pack the guides and box out by at least 10mm.

Before you begin installing the shutter you should check that the shutter will not foul on any opening doors or windows or projecting door handles.



RISK OF MATERIAL DAMAGE Check the dimensions of the opening to ensure that the product supplied is the correct size to suit the opening. This must be done before removing any existing products and before you begin installation of the shutter.

To avoid damages to the box and the curtain unpack the components very carefully. We recommend using the packaging supplied as a protective mat.

Check the packages you have received to ensure you have received all the parts you require and they are in a satisfactory condition before you begin installation of the shutter.

7 Built-On-Shutters

7.1 Manual Belt Operation Parts List

General Parts

- Assembled shutter box (1 per shutter)
- Pair of guide rails (1 pair per shutter)
- Assembled curtain (1 per shutter)
- Installation instructions
- Operating & Maintenance instructions

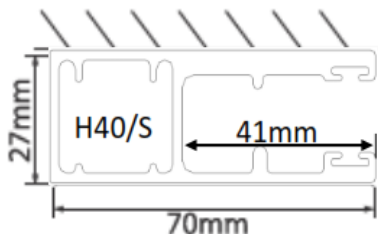
Operation Specific Parts

- Swivel belt winder / Geared belt winder (1 per shutter)
- Handle for geared belt winder (1 per shutter if geared belt winder required)
- Large belt roller (1 per shutter if shutter fitted externally)
- Belt tube (1 per shutter if shutter fitted externally)

Accessories are packed in a separate box.

If applicable angle & packer are usually packed with the guide rails.

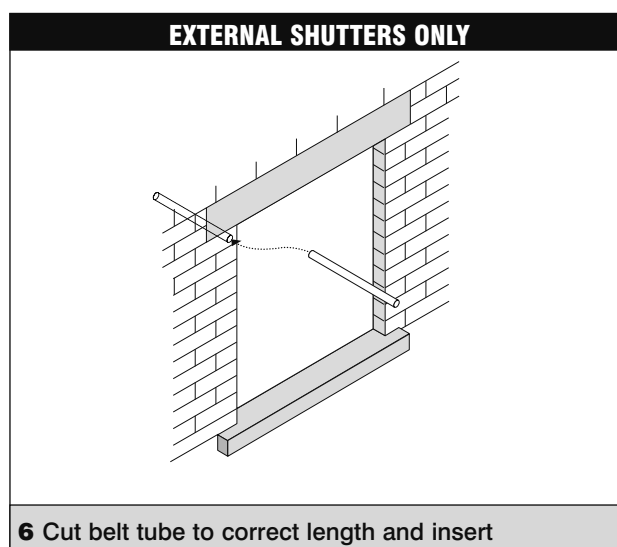
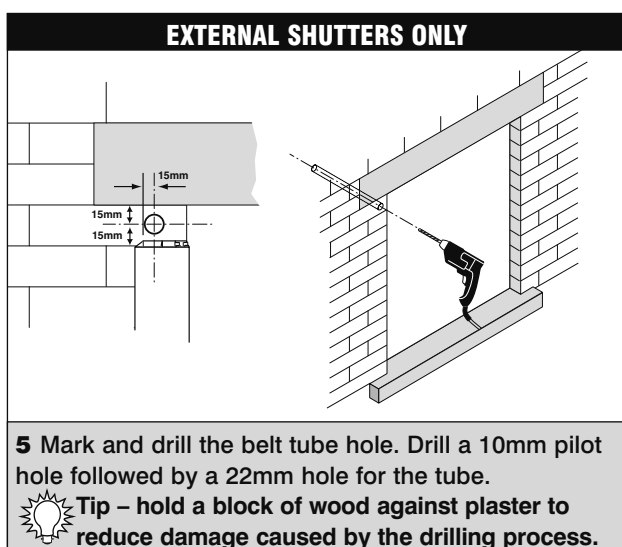
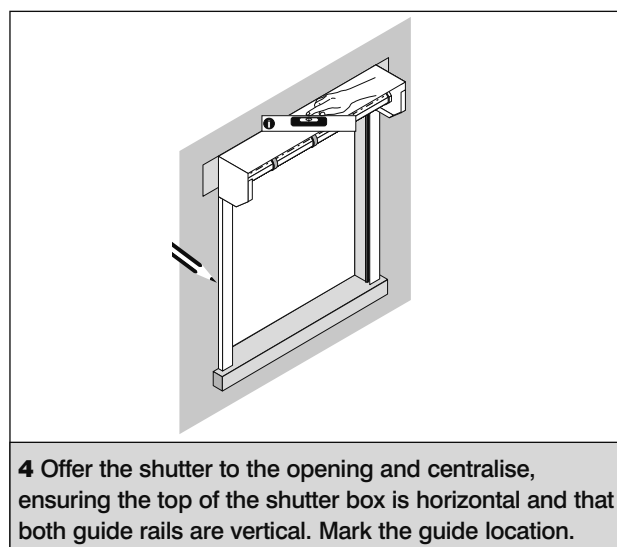
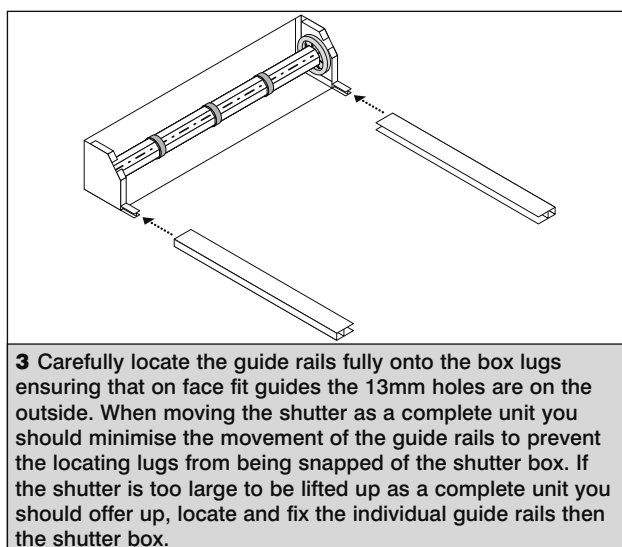
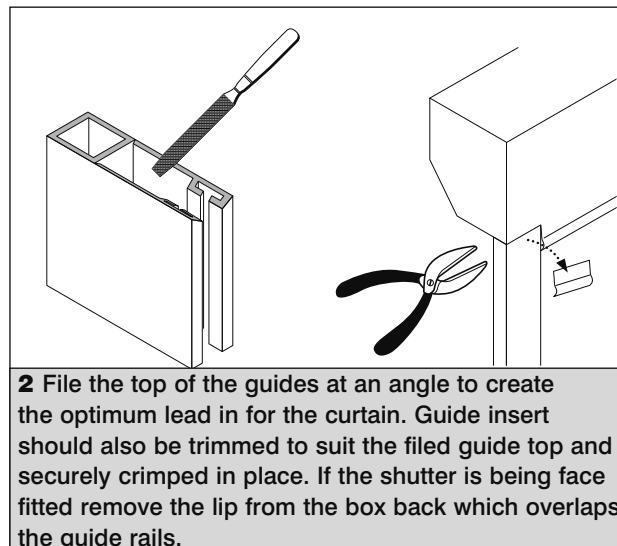
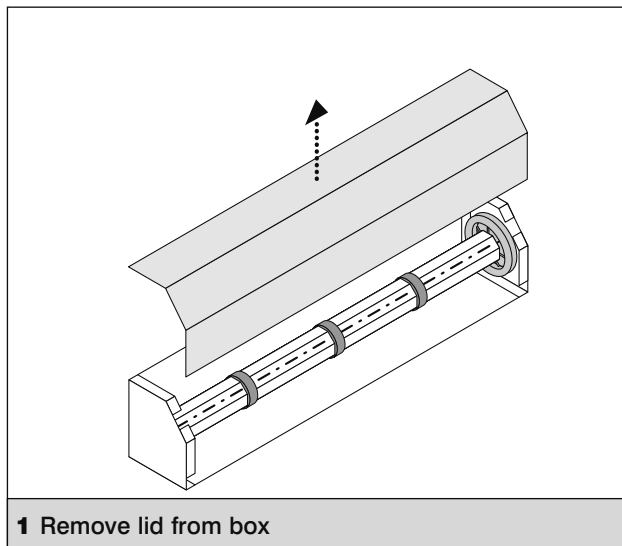
Guide to correct guide rail orientation



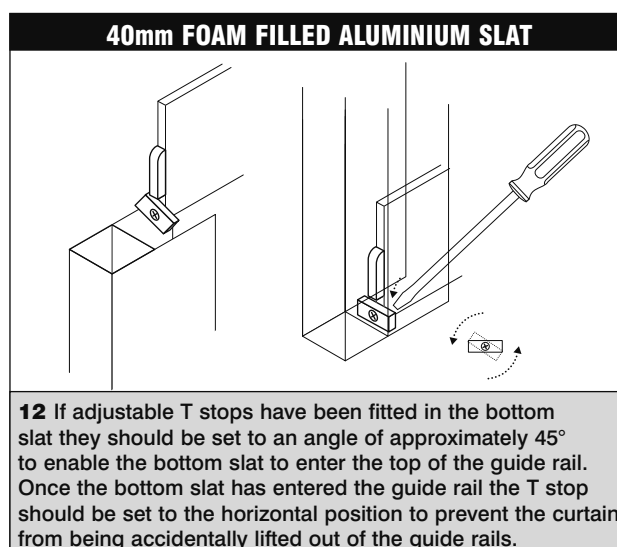
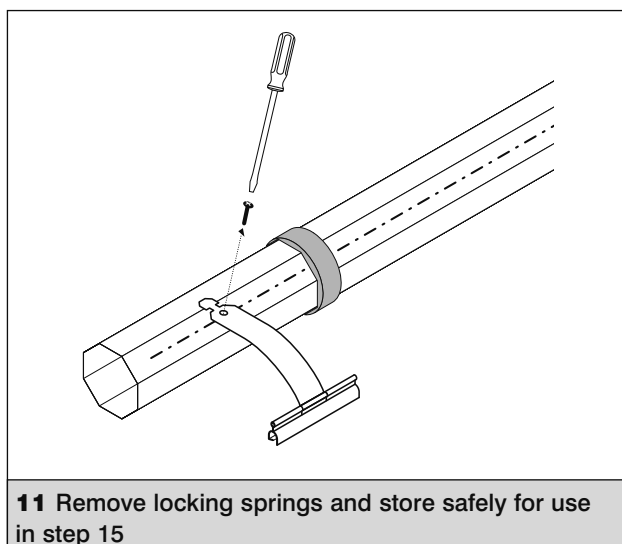
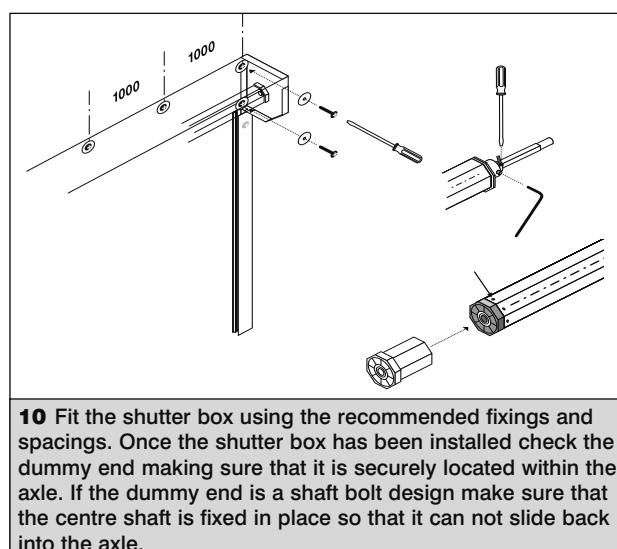
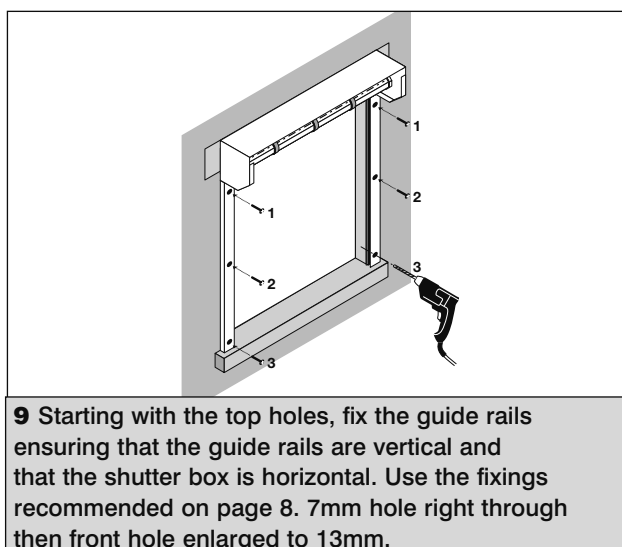
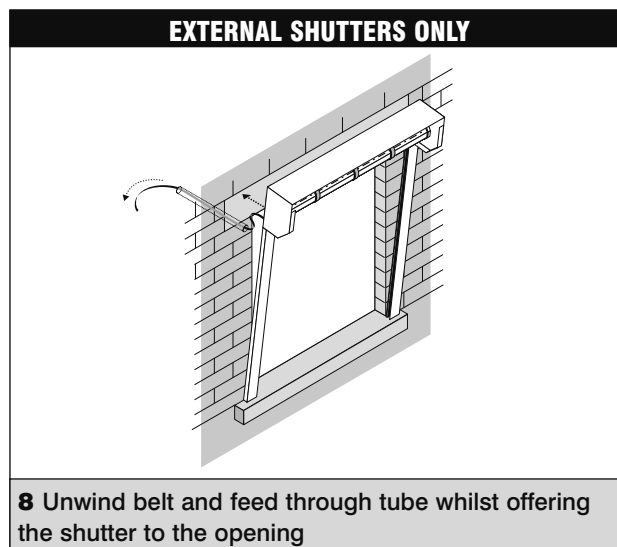
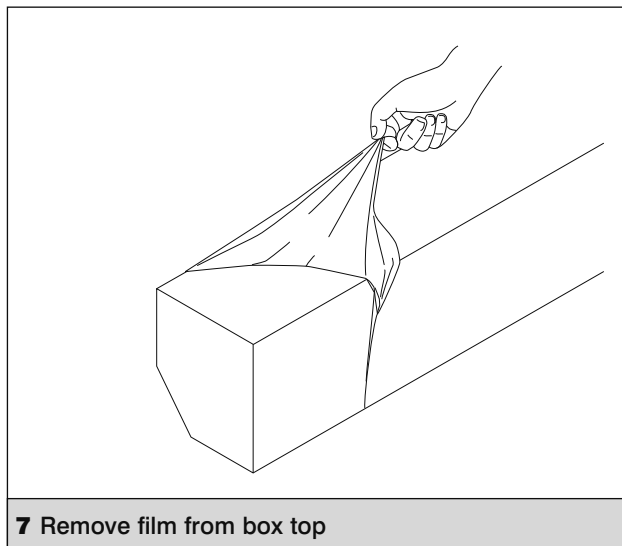
Certain guide rails have an internal and external face, due to their extrusion profile. These guide rails must be installed the correct way round. Please check the guide rails you have been supplied before you begin installing the shutter.

7.1 Manual Belt Operation Installation Instructions

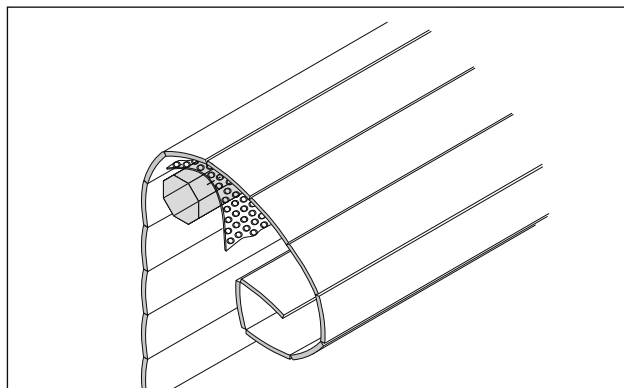
Before you begin installing the shutter please ensure you have read pages 4–9.



7.1 Manual Belt Operation Installation Instructions (cont.)



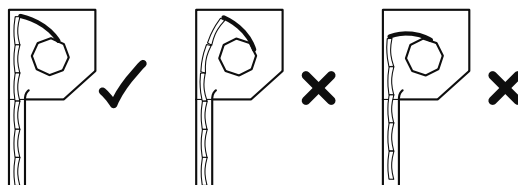
7.1 Manual Belt Operation Installation Instructions (cont.)



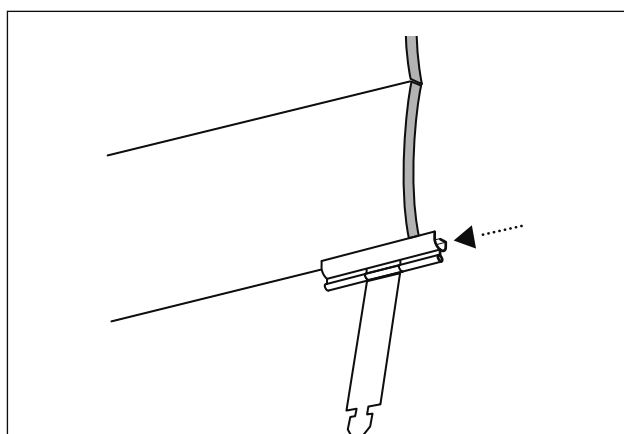
RISK OF MATERIAL DAMAGE!

13 Cover the axle with bubble wrap or a similar material to prevent the curtain from being damaged during the curtain loading process. Carefully load the curtain over the axle.

PLEASE NOTE LOCKING SPRINGS WILL NOT BE ATTACHED AT THIS STAGE, THIS IS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY

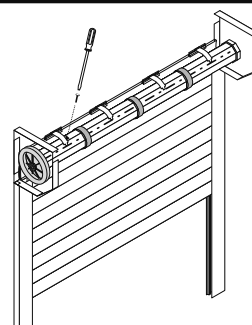


14 Check the curtain height. When pushed towards the back of the shutter box the curtain should finish just under the box top. If the curtain is too tall then slats should be removed to obtain the correct height. If the curtain finishes more than one slat beneath the shutter box top then the curtain is too short and the height must be increased in order for the shutter to lock correctly when fully down.



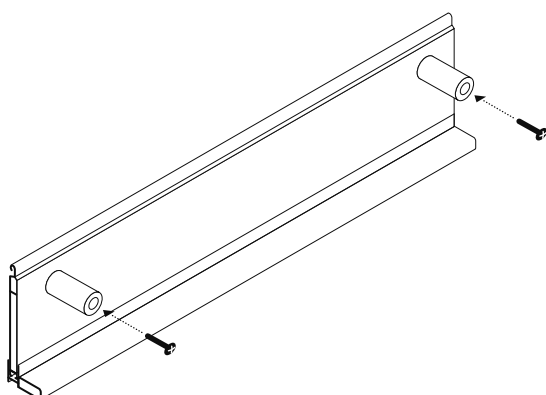
15 Load the locking springs onto the curtain

LOCKING SPRINGS NO. 8 X 1/4 PAN FLANGE POZI – TYPE C

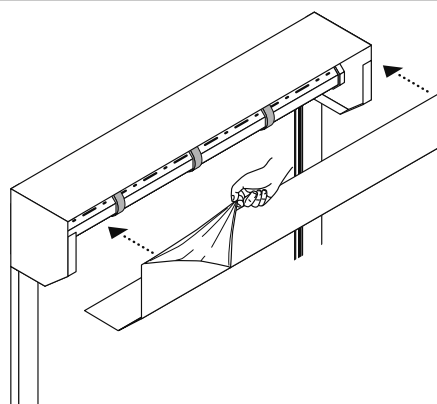


16 Before you attach the curtain to the axle you should determine where you will mount the winder then pull the belt wrapped around the drive wheel so that the belt will pass the winder by at least 400mm. Attach the locking springs to the axle using the screws supplied.

38mm EXTRUDED ALUMINIUM SLAT ONLY



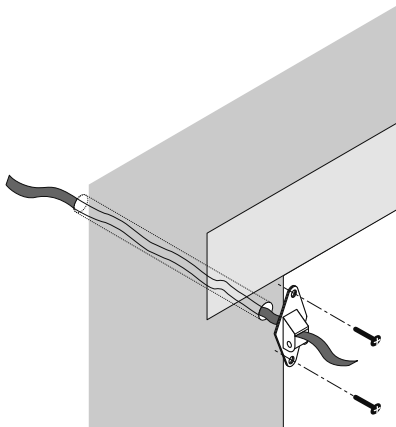
17 If stops or buffers have been supplied these can now be fitted to the bottom slat.



17 Remove the protective film from the box lid then fit the box lid to the shutter box. If the shutter is externally fitted the box lid should be fastened using appropriately coloured 4mm rivets.

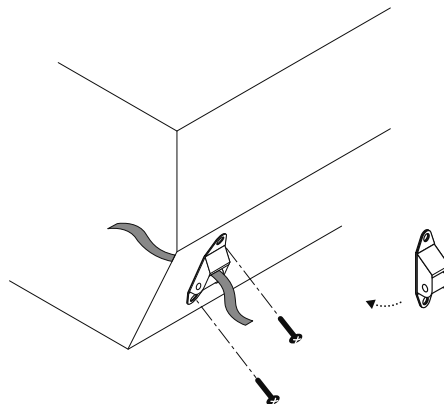
7.1 Manual Belt Operation Installation Instructions (cont.)

EXTERNAL SHUTTERS ONLY



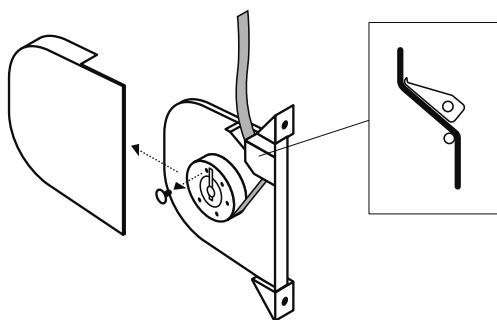
19 Slide roller on belt and mount on the internal wall.

INTERNAL SHUTTERS ONLY



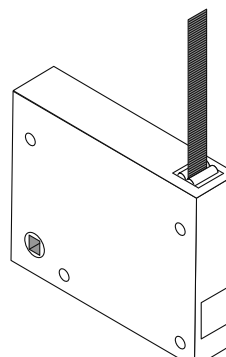
20 Slide roller on belt and mount.

SWIVEL BELT WINDER ONLY

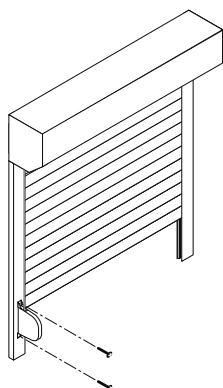


21 Load the belt into the winder. The belt will be supplied to the correct length. Pass the belt under the metal flap and between the chrome rollers. 500mm from the end of the belt cut a 10mm lengthways slit along the centre. Hook onto the pretensioned spring casing then release.

GEARED BELT WINDER ONLY

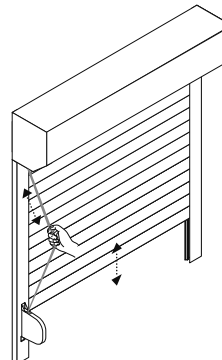


22 Load the belt into the winder. The belt will be supplied to the correct length. Take off the front of the winder, pass the belt between the rollers and fasten by knotting securely into the centre of the large cog. Reassemble the winder before fastening to the wall.



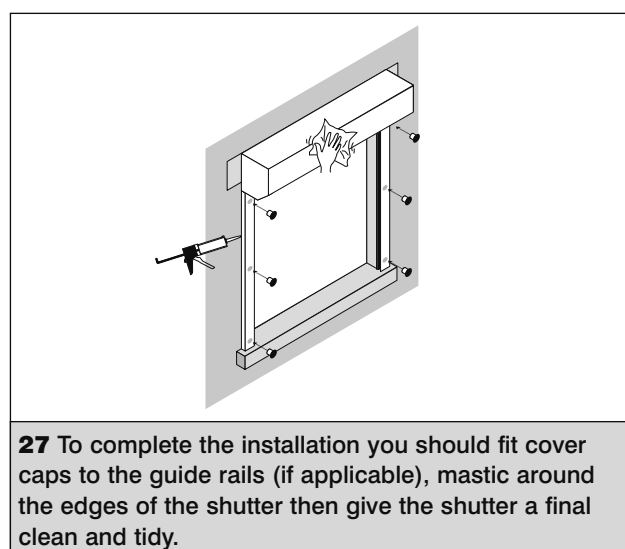
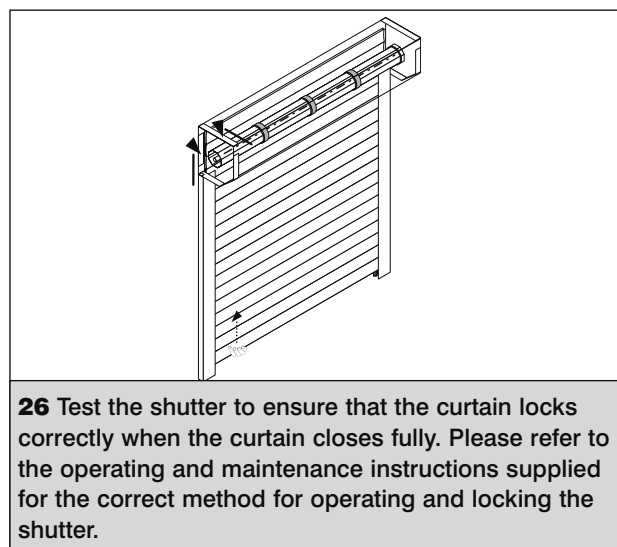
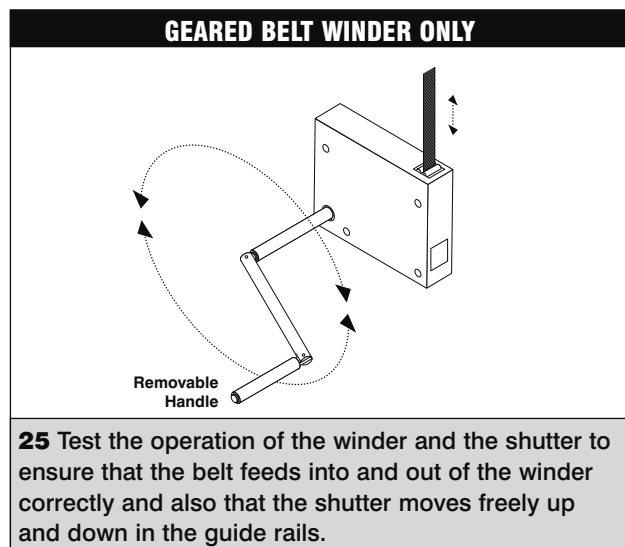
23 Mount the winder at a convenient height for operation either to the wall or to the guide rails as appropriate.

SWIVEL BELT WINDER ONLY



24 Test the operation of the winder and the shutter to ensure that the belt feeds into and out of the winder correctly and also that the shutter moves freely up and down in the guide rails.

7.1 Manual Belt Operation Installation Instructions (cont.)



Upon completion of the installation the owner of the shutter must be trained how to operate the product safely paying special attention to the following points:

- The shutter should only be operated when in view
- The operator should ensure there are no objects or persons in the opening before and during operation.
- The end user must read and follow the advice given in the operating and maintenance instructions.
- In the event of a malfunction the end user should follow the advice given in the operating and maintenance instructions and if applicable contact the installer.