

# INSTALLATION GUIDE



## Roller Door DOMESTIC (NON-CYCLONIC)



### IMPORTANT SAFETY WARNING

The process of installing a roller door can be very dangerous. Stratco strongly recommends the installation of any roller door be undertaken by a professional roller door installer only.

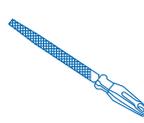
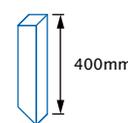
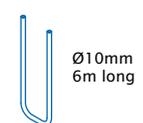
### BEFORE YOU START

Confirm that all of the materials listed on the delivery document have been supplied. Carefully read these instructions to ensure you are familiar with all the steps involved. Confirm you have the correct tools and equipment for the job as listed on the following pages.

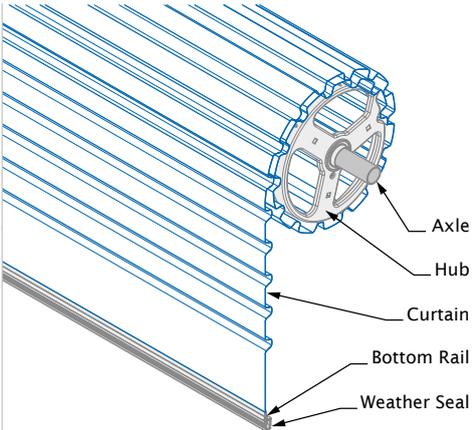
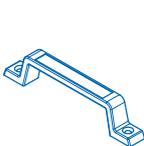
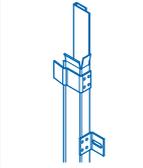
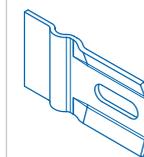
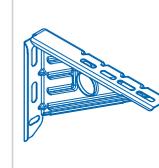
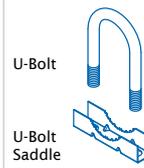
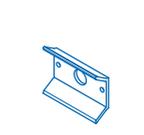
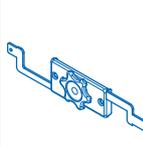
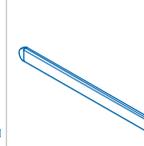
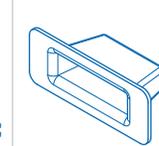
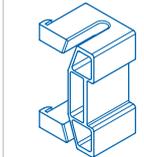
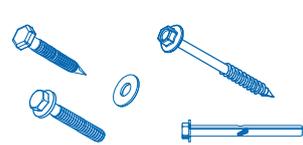
Stratco roller doors are suitable for installation at sites with wind classification N1, N2 or N3. Confirm the wind classification with local council or by using the Stratco Determining Wind Speed Design Guide available on the Statco website.

**NOTE:** Stratco assume no liability for injury or poor roller door performance if the roller door is not installed as per the installation instructions.

### TOOLS REQUIRED

							
Step Ladder x2	Hacksaw	Tape Measure	Spirit Level	Screw Driver Phillips Head	File	Socket Set	Adhesive Tape
							
Power Drill & Bits	Pipe Wrench (450mm long min.)	String Line	Permanent Marker	Stanley Knife	Soft Wood Chock	Clear Hose	Safety Equipment

## COMPONENTS

 <p>Roller Door Barrel</p>	 <p>Handle</p>	 <p>Roller Door Guide Track</p>	 <p>Roller Door Guide Clip</p>	 <p>Roller Door Axle Bracket</p>	 <p>U-Bolt U-Bolt Saddle</p> <p>U-Bolt Fixing</p>
	 <p>Faceplate</p>	 <p>Mechanism</p>	 <p>Bar</p>	 <p>Bar Cover</p>	 <p>Bar Retainer</p>
Roller Door Locking Components					
 <p>Refer Fastener Recommendations</p>	 <p>Washer</p>	 <p>Nut</p>	 <p>4x6mm</p>	 <p>N3 Wind Classification Only</p>	
<p>Axle Bracket &amp; Guide Clips</p>		<p>U-Bolt</p>		<p>Lock &amp; Handle Screws</p>	
Fasteners					
High Wind Guide Bracket					

## SAFETY CONTROL METHODS

**NOTE:** Stratco assume no liability if the roller door is not installed according to these installation instructions, or if the safety control methods listed are not followed.

As with all manual labour there is a risk of injury to the installers and any other people or animals in the work area of installation. To prevent potential injury please adhere to the following recommended safety measures;

**RISK:** Potential injury to installers or other people or animals located in work area during installation.

**PREVENTION:** Tidy the working area, at within a safe distance from the outside of the structure and for the area of installation inside the structure. Discourage animals and people not involved with the installation from loitering in the working area. Never undertake an installation in a working area that is deemed to be unsafe.

**RISK:** Physical injury due to heavy lifting.

**PREVENTION:** Always practice safe lifting techniques by keeping the back straight, lifting using the leg muscles instead of the back and avoid twisting. Use mechanical aids such as lifting stands, forklifts, cranes etc. when required. Always use a minimum of two people to lift the roller door barrel.

**RISK:** Falling from a height when using ladders, scissor lifts, scaffolding, etc.

**PREVENTION:** Check the suitability and placement of the ladder, scissor lift, scaffolding, etc. Never work off the top rung of the ladder.

**RISK:** Heavy components falling on a person or animal.

**PREVENTION:** Immediately fasten the door to the roller door axle brackets with the U-bolt and make sure that no one walks under the door when it is sitting unfastened on the roller door axle brackets.

**RISK:** Potential injury from sharp edges on components.

**PREVENTION:** Carefully follow all instructions in this installation guide and wear appropriate safety gear such as; wrist and ankle length clothing, enclosed shoes, gloves and safety glasses. Keep hands clear of pinch points, such as roller door panels.

**RISK:** Potential injury if stored energy in components or tools is released.

**PREVENTION:** Never underestimate the tension stored in the components, especially the tension in the spring. Ensure the roller door barrel is safely secured and the pipe wrench (minimum 400mm length) is fitted correctly during assembly. Keep arms and head clear of the pipe wrench at all times. To ensure there is no release of energy through the pipe wrench from the spring, make sure the correct bolts are tightened or loosened only as required.

**RISK:** Potential injury, or fire risk from using tools.

**PREVENTION:** Wear appropriate clothing for tool use and ear protection if using loud electric tools. Always have fire protection/ extinguisher available when using electric cutting tools. To prevent potential ignition by sparks, remove flammable liquids or materials as part of tidying the working area.

## FASTENER RECOMMENDATIONS

Different fastener types are required depending on the material the roller door components are being secured to. The Fastener Recommendations table indicates the minimum recommended fastener sizes for various material types and the installer shall ensure the appropriate fasteners are used.

For materials not indicated in the Fastener Recommendations table, or if alternative fasteners are selected, the installer shall determine the type of fixings required and seek the appropriate advice from the fastener manufacturer. In all cases, the installer must ensure the support material the door is being secured to is in suitable condition to adequately sustain the loads imposed by the roller door.

When fixing roller door componentry to concrete or brickwork, minimum fastener edge distances must be maintained in accordance with the anchor manufacturers recommendations and anchors shall be installed to manufacturers details.

### FASTENER RECOMMENDATIONS

Material	Fastener Type and Size	
	Axle Brackets	Guide Clips*
Solid Brick/Concrete or 3 Hole Hollow Brick	Two M10 masonry anchors and washers with minimum 50mm anchor embedment.	M6 screw style anchor bolts and washers with minimum 40mm anchor embedment.
Steel (minimum 1.2mm G500)	Two M10 bolts and washers or three 14-10 x 25mm self drilling screws with washers (14-20 screws for steel exceeding 3mm thickness).	14-10 x 25mm self drilling screws with washers (for fixing to steel exceeding 3mm thickness, 14-20 screws are required).
Timber	Two M10 bolts, two M10x50mm coach bolts or three 14-10x50 timber fixing screws with all fasteners requiring washers.	14-10 x 40mm timber fixing screws with washers.

\* The same fixings shall be used for high wind guide brackets.

## PRIOR TO INSTALLATION

The area around the opening where the roller door is to be installed must be checked for adequate clearance for all components.

Ensure the structure is sound and able to support the weight of the roller door. If there is uncertainty, delay the installation of the roller door and consult a professional builder or roller door installer.

Check the area around the opening where the roller door is to be installed and confirm the surface is smooth and free from any obstructions that will interfere with the installation or operation of the roller door.

- The roller door axle must be absolutely level once installed or the roller door will not operate smoothly. As a result the opening must also be level with the jambs running vertically in order to maintain a neat appearance and smooth operation. If the jambs are not perfectly vertical, extra side room will be required for the roller door components, or modifications will need to be made to the opening. In order to avoid gaps the floor also needs to be level, or given a rebate.

- The door height is limited by the length of the roller door guide tracks and head room available. If the length of the roller door guide tracks provided is greater than the length required for the door opening height, the tracks can be trimmed from the bottom to suit.

Once the door is installed, the opening height will be reduced by 80mm due to the handle location.

- The opening for the roller door must be at least 100mm smaller in width than the width of the roller door curtain, as the curtain overlaps the structure 50mm on each side.

- If the opening is more than 100mm smaller than the roller door curtain width, the roller door can still be installed with the resultant daylight opening being smaller, so long as the surrounding area is free to fix the components.

If the opening is wider than the roller door curtain, the opening will need to be reduced via the installation of door jambs that are flush with the structure on the inside.

- Space for the roller door components is required on either side of the opening. This sideroom is to be a minimum of 100mm from the opening edge, with the preferable distance being 125mm.

If a motor for an automatic roller door is to be installed either now or at a future date, the distance required on the side where the motor will be installed is 140mm from the opening edge.

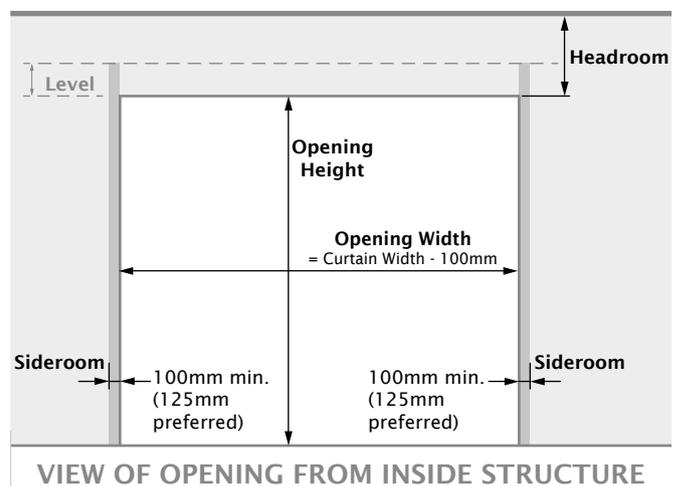


Figure 1

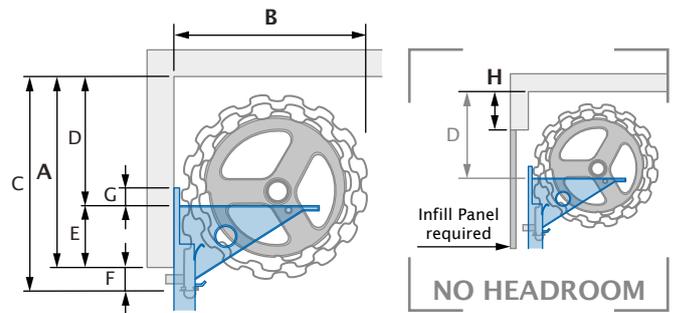
The space above the opening must leave enough headroom for the roller door barrel to be installed and operate free from any obstructions.

The headroom required varies depending on the height of the roller door to be installed and if the headroom is a restricted space.

- If the roller door is installed with a headroom greater than those listed in the Headroom Measurements table, the resulting daylight opening will be reduced.
- If the roller door is installed significantly below the top of the opening, a flashing will be required to act as a head infill panel to maintain aesthetics and prevent weather elements from entering the structure (Figure 2 - No Headroom).
- If the roller door axle bracket and barrel are installed higher than the distance specified from the top of the roller door guide tracks, the roller door curtain will not operate smoothly when entering the roller door guide tracks.

**NOTE:** It is not recommended that an automatic roller door opener be installed in a restricted headroom situation.

A piece of wood approximately 400mm long will be required during installation, ensure there is a piece at hand.



### HEADROOM MEASUREMENTS

Dimension	Normal Headroom		Restricted Headroom	
	2.2m or Less	Over 2.2m	2.2m or Less	Over 2.2m
A	350mm	370mm	315mm	335mm
B	460mm	460mm	460mm	460mm
C	430mm	450mm	395mm	415mm
D	230mm	250mm	230mm	250mm
E	120mm	120mm	85mm	85mm
F	80mm	80mm	80mm	80mm
G	0mm <sup>†</sup>	0mm <sup>†</sup>	35mm	35mm
H <sup>‡</sup>	N/A	N/A	Measure on site	Measure on site
Infill Panel <sup>†</sup>	N/A	N/A	Dim A - Dim H	Dim A - Dim H

#### NOTES:

<sup>†</sup> In situation of Normal Headroom, dimension G is zero as top of roller door guide track is level with top of axle brackets (shared D, E and G dimension line).

<sup>‡</sup> No Headroom is when dimension A is less than dimension D.

Figure 2

## INSTALLATION

### First Axle Bracket

Measure the door curtain width and mark on each side of the opening where the door curtain edge will be located. Continue the mark up to the top of the door opening.

Create a second mark at the top of the door opening, located another 10mm to 75mm from the curtain mark (Figure 3).

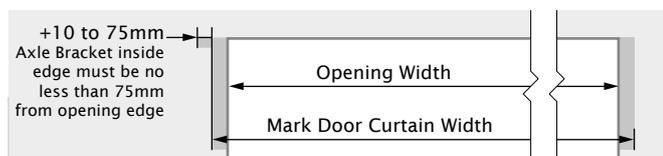


Figure 3

Refer to the Headroom Measurements table for the distance from the top of the door opening to the top of the axle bracket (Figure 4 - Dimension 'E'). Mark this location.

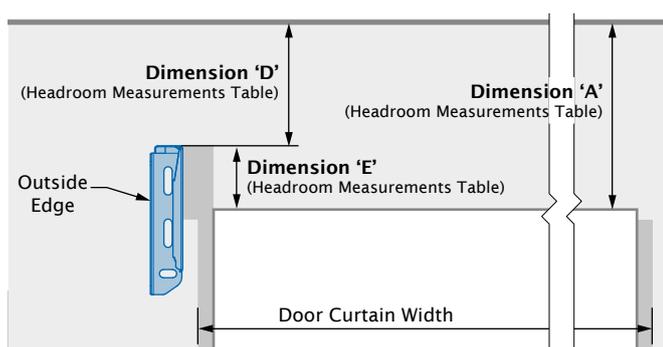


Figure 4

If the top of the door opening is not level, mark on the lowest side of the door opening.

If fitting axle brackets for a restricted headroom, take Dimension 'D' from the Headroom Measurements table and locate the top of the axle bracket from the roof or the lowest obstructions located above the door opening. Mark this location (Figure 4).

**NOTE:** If the headroom available is less than the dimensions listed in the Headroom Measurements table, follow the same steps as for a restricted headroom and install a flashing to act as a head infill panel (Figure 2 - No Headroom).

Place the axle bracket so the inside lip edge aligns with the marks made previously (Figures 4 and 5). Mark the position of the fastener holes to be drilled, one in the top slot on the axle bracket and the second in the bottom slot for bolted connections, or in all three holes for screwed.

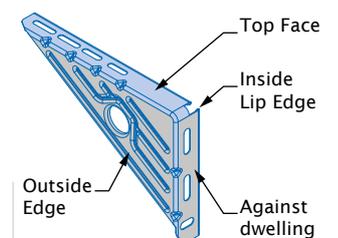


Figure 5

For bolts or anchors drill both holes before attaching the bracket.

See the Fastener Recommendations table for fasteners required for other material types.

## Second Axle Bracket

In order to locate and fix the second axle bracket, mark the same distance from the edge of the roller door curtain. Mark the location of the top of the axle bracket so it is in line with the top of the fixed axle bracket (Figure 6).

Use a laser level to ensure the top of the axle brackets are in line, alternatively use a clear hose filled with water to create a water level that is in line with the fixed axle bracket. Mark the location of the water on the section of wall where the second axle bracket is to be fixed.

Recheck that the brackets are level before fixing the second axle bracket using the same process as for the first.

**NOTE:** If the axle brackets are not level after installation, the roller door will not operate smoothly.

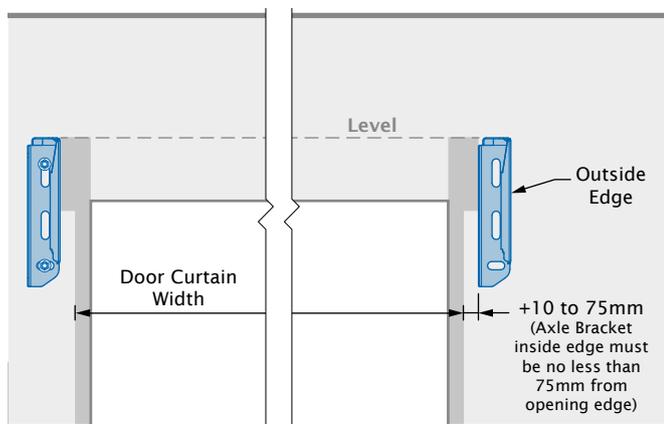


Figure 6

## Door Barrel

Confirm that the roller door axle is free and centred in the roller door barrel by rotating the axle a quarter turn and releasing, then rotating a quarter turn in the other direction and releasing. Once the centre is confirmed, mark its location on the axle against the hub.

Check the axle length will fit in the sideroom available. If the axle is too long, ensure the axle is free and centred before cutting the axle to suit the sideroom available.

Ensure the roller door barrel is oriented so the curtain will roll over the top of the barrel before travelling against the door opening.

Using a minimum of two adults, lift the roller door barrel onto the axle brackets and secure to the axle brackets with the U-bolts, U-bolt saddles, washers and nuts (Figure 7).

The roller door barrel at this point only needs to be secured enough to ensure it will not fall off the axle brackets.

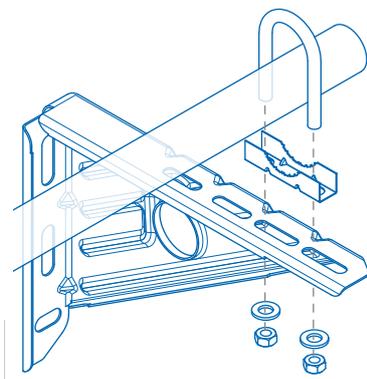


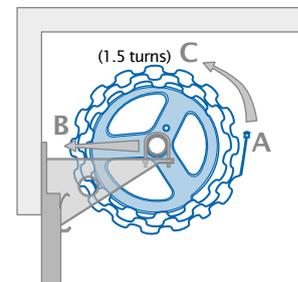
Figure 7

With the roller door barrel fixed loosely in place on the axle brackets, and while maintaining the centred position of the axle, locate the roller door barrel so it is central over the door opening.

To ensure the axle has remained centred, confirm the mark made previously on the axle remains located against the hub.

Rotate the roller door curtain and axle so the bottom rail at the end of the curtain is located at three o'clock (Figure 8 - Location A).

Push the axle and roller door barrel forward within the slots on the axle bracket so the U-bolt is located as close as possible to the opening (Figure 8 - Location B).



## BARREL POSITIONING & SPRING TENSIONING ON AXLE BRACKETS

Figure 8

Without over tightening, secure the nuts to fix the axle in place.

**NOTE:** Do not cut any packaging or the plastic around the barrel.

Confirm the end of the curtain is located at three o'clock and the U-bolts are tightly fixed.

Rotate the door 1.5 turns towards the opening (Figure 8 - Location C) in order to apply tension to the springs.

**NOTE:** Do not let go of the roller door barrel.

While an adult maintains a firm grasp on the roller door barrel to maintain the spring tension, have a second person cut the plastic wrap along the end of the curtain, being careful to not score or damage the roller door.

With the tension contained in the spring in mind, slowly and carefully pull the roller door curtain down far enough to insert the wooden chock (Figure 9). This will prop the bottom of the curtain away from the barrel, while maintaining spring tension.

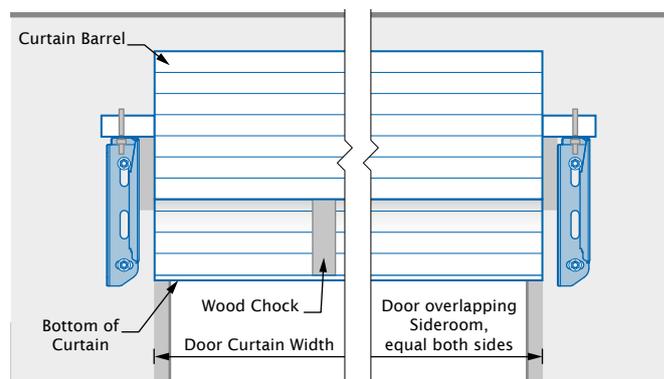


Figure 9

## Roller Door Guides

Ensure the roller door is still central in the door opening with the overlaps of roller door curtain against the sideroom still equal (Figure 9).

Confirm the roller door guide tracks are at the correct length by resting them against the door opening with the top of the roller door guide track located as shown in Figure 10. If the roller door guide tracks are too long, trim them from the bottom to suit the height required.

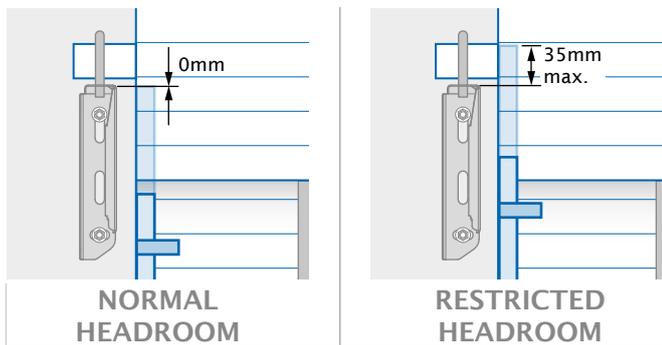


Figure 10

Slide all the guide clips into the roller door guide tracks so there are the same number of guide clips in each guide track, oriented as shown in Figure 11 - Guide Clips Orientation.

Locate a guide clip in each track to be 200mm from the bottom end of the guide track (Figure 11 - Guide Clips Spacing) and hold in place with adhesive tape. Space the remaining guide clips evenly at maximum 600mm centres up the length of the roller door guide track and temporarily fix with adhesive tape.

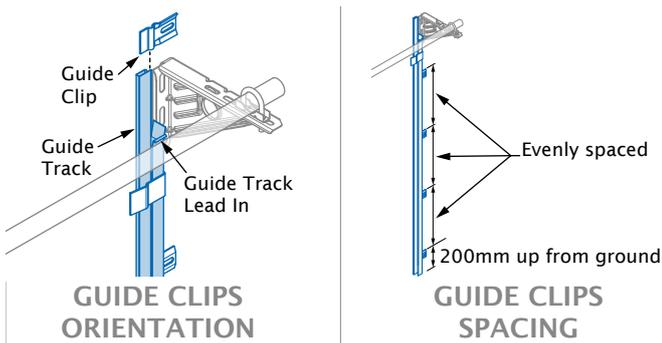
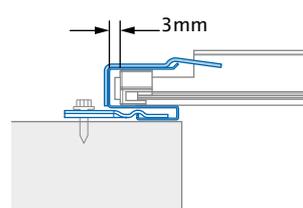


Figure 11

Position one roller door guide track over the structure wall, located so the roller door curtain sits inside the guide track with a 3mm space between the bottom rail guide block and the inside edge of the guide track (Figure 12).



GUIDE TRACK SPACING

Figure 12

Mark the hole location in the top fixed roller door guide clip before securing the clip with fasteners in accordance with the Fastener Recommendations table.

Confirm the roller door guide track is vertical each time before fixing each roller door guide clip.

Repeat roller door guide track installation for the remaining track, ensuring the top of the second track is level with the first and always remains vertical.

**NOTE:** If securing the roller door guide tracks to bricks, make sure to only fix the guide clips to secure bricks. It may be necessary to place packer behind the guide clips if the brickwork is uneven.

The chock can now be removed and the roller door slowly lowered to the ground while removing the plastic wrap. If necessary, reposition the guides to allow for the 3mm gap between the edge of the roller door curtain and the inside of the roller door guide track, as shown in Figure 12. This will aid in the easy operation of the roller door.

While confirming the smooth performance of the roller door, it might be necessary to adjust the lead in on the roller door guide track.

## High Wind Guide Brackets

For sites allocated as wind classification N3, in addition to the standard guide clips, high wind guide brackets are required to be installed adjacent each guide clip. High wind guide brackets shall be secured with two fasteners per bracket in accordance with the Fastener Recommendations table and Figure 13. If fixing to brickwork it is recommended a suitable timber member is anchored to the wall for fastening guide clips and high wind brackets.

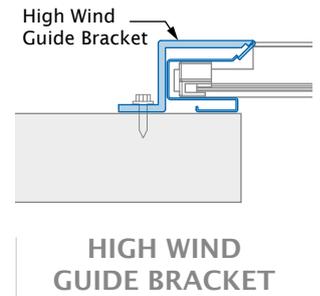


Figure 13

## Handle & Lock Mechanism

Install the handle to the outside of the roller door curtain with the screws, nuts and washers provided.

Raise the roller door curtain until the corrugation with the holes for the lock section is visible above the roller door guide tracks.

Follow the corrugation with the lock holes to the edge of the curtain and install the locking bar retainers so the nylon ribbon sits between the body and the legs and the feet hook over the edge of the curtain (Figure 14).

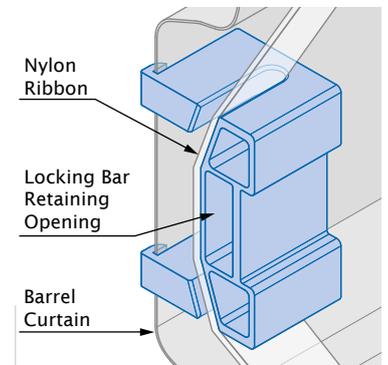


Figure 14

The locking bar retainers must be installed so they sit square against the edge of the roller door barrel curtain.

Install the faceplate to the outside of the roller door curtain. Fix the locking mechanism to the roller door curtain and faceplate from the inside by aligning the holes of each component and fixing with the mounting screws and washers.

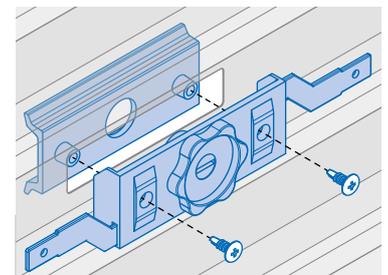


Figure 15

Lower the roller door into the closed position before sliding the round end of the locking bars through the locking bar retainer opening to rest against the roller door guide tracks (Figure 16).

Making sure the locking bars are horizontal, mark the position of the locking bars on the guide tracks.

Use the locking bar marks to cut a rectangular slot in each roller door guide track that is a maximum width of 10mm and maximum length of 25mm. The top of this slot must be level with the top of the corresponding locking bar.

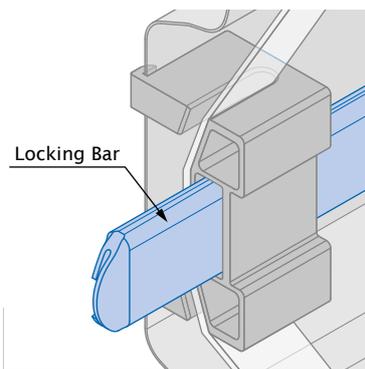


Figure 16

Ensure the locking bars travel smoothly through the slots in the roller door guide tracks before fixing the locking bar to the locking mechanism arm with 4x6mm screws.

**NOTE:** When the locking mechanism is set to the lock position, the locking bars must not continue more than 20mm past the roller door guide track (Figure 17). If the locking bars travel further than 20mm past the guide track, the locking bars require trimming.

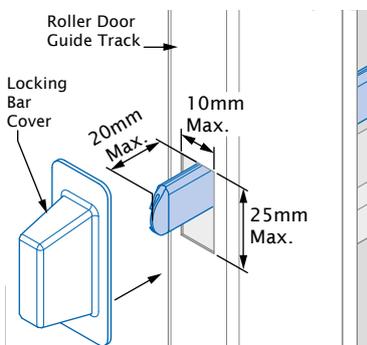


Figure 17

Clean the surface around the slot on the outside of the roller door guide tracks before sticking on the locking bar covers (Figure 17).

**NOTE:** The locking bar covers must be installed in order to prevent potential injury to fingers.

## Adjustments / Trouble Shooting

Raise and lower the roller door to check if any adjustments are required.

If the roller door is difficult to open and close, there might be something causing the door to jamb in the guides. Confirm that the locking bars and weather seal are the correct length for the door opening. Ensure there is enough clearance in the roller door guide tracks and they are vertical and clean of debris and oil.

If the door is only difficult opening and tends to drop without aid, the spring tension needs to be increased.

If the door is only difficult to close and tends to open without aid, the spring tension needs to be decreased.

If the roller door opens but the bottom of the roller door is angled with one side higher than the other, the possible causes are that the axle brackets are not level (see section Axle Brackets), the axle is not centralised (see section Door Barrel), or the roller door guide tracks are not installed vertically (see section Roller Door Guides).

If the issue is the axle brackets or the roller door guide tracks, they will need to be reinstalled correctly.

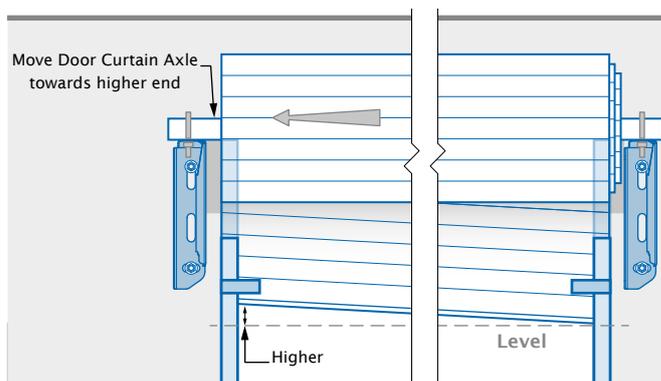


Figure 18

**NOTE:** The tension in the spring must always be kept in mind, as the tension is always a potential source of injury. Keep head and arms clear of the pipe wrench at all times.

If the issue is that the roller door barrel axle is not centralised in the barrel, return all of the roller door curtain to the roller door barrel and tie two ropes around the barrel at each end, approximately 300mm in from each end of the roller door barrel, as a safety precaution.

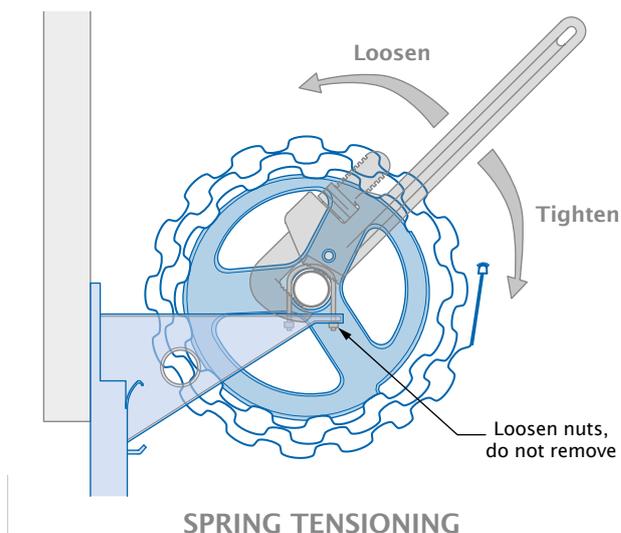
Loosen one U-bolt, without removing the nuts. Have an adult at each end holding the axle firmly in place with a pipe wrench before loosening the second U-bolt. Move the axle towards the roller door guide that has the higher side of the bottom rail and weather seal in order to straighten the door.

Secure one of the U-bolts before releasing the pipe wrench, then secure the second U-bolt.

If the roller door remains difficult to work or rattles over the guide track lead in, refer to the Roller Door Guides section.

## Tensioning the Spring

**NOTE:** Beware the tension in the spring as it is always a potential source of injury.



### SPRING TENSIONING

Figure 19

If the roller door barrel requires tensioning, return all of the roller door curtain to the roller door barrel and tie two ropes around either end, located approximately 300mm in from each end of the roller door barrel, as a safety precaution.

## CONTACT

**1300 165 165**

Have an adult at each end holding the axle firmly in place with a pipe wrench before loosening the U-bolts.

**NOTE:** Keep a firm grip on the wrench and keep head and arms clear of the pipe wrench handle.

To loosen the spring tension, rotate the axle so the pipe wrench handle travels over the roller door barrel (Figure 19).

To tighten the spring tension, rotate the axle so the pipe wrench handle travels under the roller door barrel (Figure 19).

Secure the U-bolts before releasing the pipe wrench.

Open and close the roller door to check if the tension is correct.  
If necessary, repeat the tensioning process.

## MAINTENANCE

### Curtain

Your Stratco roller door curtain will maintain its good looks for even longer with a simple wash and wipe down with a soft broom. Stratco Roller Doors are produced from the highest quality materials and will provide many years of service if the important recommendations set out in the Stratco 'Selection, Use and Maintenance' brochure are followed.

### Lock

The only time the lock requires maintenance is if the keyway becomes stiff. To resolve this issue apply powdered graphite. Do not apply grease or oil.

Only wash the faceplate with soapy water. Strong solvents might damage the surface.

Always remove the key before opening the roller door to avoid potential damage to the key, lock mechanism, or roller door curtain.

### Nylon Ribbon

Never apply grease or oil to the nylon ribbon as it will cause the smooth operation of the door to decline. To clean the nylon ribbon, wipe down the inside of the roller door guide tracks with mineral turps or methylated spirits, then spray with a silicone spray.

If the nylon ribbon is damaged, repair by sealing the loose ends with a lighted match.

### Spring Tension

The springs will loosen over the course of time. When installing the roller door, or adjusting the springs, it is possible to apply a small amount of extra tension to the roller door barrel to accommodate this natural easing of spring tension.

### Roller Door Operation

As part of good maintenance of your Stratco roller door, it is recommended that the operation of the roller door be checked every six months. Maintenance checks should be undertaken more frequently in areas of high salinity or extreme conditions.

The ease at which the roller door operates should be consistent over time. If changes are noticed in the operation of the roller door, confirm that the nylon ribbons have not slipped from the edge of the curtain and are now acting as a barrier in the roller door guides. Ensure the roller door is running easily in the roller door guide tracks and that the tracks have maintained their vertical position. Confirm the roller door guide tracks are free of debris or grease.

If the roller door guides are clear and vertical and the nylon ribbon is still attached to the roller door curtain, yet the operation of the door is still difficult, the roller door barrel requires maintenance.