



## **SERIES 'A' & 'AA' ROLLER DOORS INSTALLATION GUIDE**

***THESE INSTRUCTIONS ARE PROVIDED FOR USE BY  
EXPERIENCED INSTALLERS OF GARAGE DOORS  
BY UNDER-TAKING THE INSTALLATION OF THIS  
DOOR, THE INSTALLER UNDERSTANDS THE  
DANGERS ASSOCIATED WITH THE INSTALLATION.  
Steel-Line Garage Doors IS NOT RESPONSIBLE FOR  
ANY AND ALL LIABILITY RESULTING IN THE INJURY  
AND OR DEATH DERIVED FROM AN IMPROPER  
INSTALLATION.***



## GENERAL WARNING!

To install this door safely, several pre-cautions must be taken. For safety of all concerned, pay heed to the warnings and instructions given below.



### **SPECIAL SAFETY WARNINGS OR REMARKS IN THIS MANUAL ARE INDICATED WITH THIS SYMBOL. PLEASE READ WARNINGS CAREFULLY.**

- Please read this installation manual completely prior to installation. It is very important to install this door correctly in order to achieve proper and safe operation.
- The Steel-Line Series 'A' door weight, depending on size, can be as much as 93kg (205lbs) & Steel-Line Series 'AA' roller door weight, depending on size, can be as much as 158kg (348lbs) and the forces generated in the springs are generally equal to the door weight. Proper care must be taken not to release those forces violently as it could result in serious physical injury.
- All the components which have been supplied are designed for this specific roller door. Replacement or adding additional components may have an adverse effect on the performance, safety and the guarantee of the door.
- Shaft of door is under strong spring tension. Do not attempt to loosen U-bolts on shaft while under tension, without ensuring a suitable pipe wrench is locked onto shaft and wedged against wall, or held securely while loosening the U-bolt. Otherwise the sudden release of the spring forces will result in severe risk of injury.
- All instructions are given as if viewing the door from inside looking out.

July 2017 – Importance of Installer inspection of opening construction highlighted. Technical data sheet added as Appendix. Door weights & spring force note added.

# SECTION 1: Pre-Installation Checks

**A Roller Door is designed to be fitted behind the opening so the following dimensions and conditions need to be checked, before fully unpacking the door for installation.**

**Refer Appendix at back of this guide for Roller Door Technical Data Sheet.**

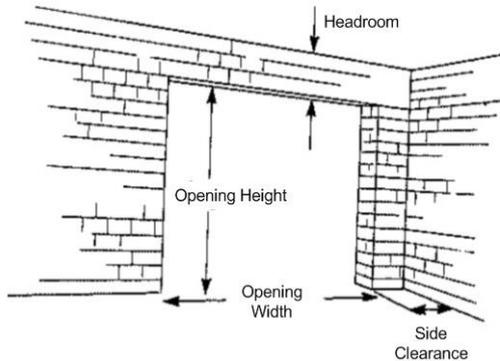
**1. Opening Width:** Check that the curtain supplied overlaps the daylight opening width by a minimum of:

- a) 25mm each side for doors supplied with 25mm deep tracks ('A' Doors)
- b) 50mm each side for doors supplied with 50mm deep tracks ('AA' Doors)

**2. Side Clearance:** The minimum side clearances are:

| Door Type   | Manual Door (per side) | Motorised Door (driven side only) |
|-------------|------------------------|-----------------------------------|
| Series 'A'  | 90mm                   | 120mm *                           |
| Series 'AA' | 125mm                  | 150mm *                           |

\* Based on "Boss" RD11 roller door operator supplied by Steel-Line. Check motor instructions to confirm minimum side room required.



**3. Opening Height:** Your door will fit any opening height up to that stated on the label.

**4. Headroom:** A minimum clearance between the underside of the lintel and the ceiling. This varies with height of the opening. See Chart below:

| Door Height                        | Minimum Headroom * (mm) |
|------------------------------------|-------------------------|
| 1200 - 2100mm (3 panel doors only) | 430                     |
| 2200 - 2600mm                      | 480                     |
| 2700 - 3000mm                      | 510                     |

\* This clearance must extend for a minimum of 500mm back from the opening. The headroom stated above is minimum required if whole door is to be hidden from view from outside the garage. It is possible to use less headroom than stated, but there will be a corresponding reduction in door daylight open height.

## 5. Structural Condition of Opening:



**IT IS THE INSTALLER'S RESPONSIBILITY TO ENSURE THE AREA AROUND THE OPENING IS STRONG ENOUGH TO SUPPORT THE DOOR.**

The lintel and jamb surface where the door is to be fitted must be flush and reasonably smooth. Small irregularities are acceptable.

## 6. Fitting Notes:

- a) For doors over 2.5m wide it is recommended that 2 people are available for fitting.
- b) **THE DOOR MUST BE FITTED SQUARE AND LEVEL, IRRESPECTIVE OF THE SHAPE OF THE OPENING. ON NO ACCOUNT, SHOULD ANY COMPENSATION BE MADE TO DOOR TO SUIT AN IRREGULAR OPENING.**
- c) Ensure all necessary tools are at hand before starting.
- d) The door package and its contents should be checked for obvious damage before removal of wrapping. The package should contain:
  - i). The curtain rolled up and wrapped.
  - ii). One pair of tracks. These come in standard lengths.
  - iii). One pair of brackets.
  - iv). One accessory bag containing most of the hardware required to fit the door.

*NB: Some of the hardware fixings supplied may not be suitable for fixing curtain brackets to opening substrate, particularly AA Series doors. The installer should select suitable fixings to suit substrate and curtain size and weight.*

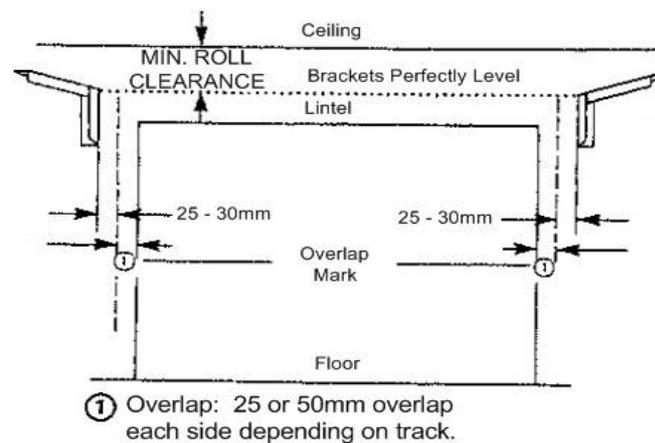
**IF THERE IS ANY OBVIOUS DAMAGE, OR PARTS MISSING, YOUR STEEL-LINE SUPPLIER SHOULD BE CONTACTED IMMEDIATELY.**

## SECTION 2: Installation



**Do not cut packaging around rolled curtain until instructed in step 3.**

- 1. Mark Door Position:** From the pre-installation check you have determined that door supplied fits the opening correctly. Mark curtain overlap (25mm or 50mm) at each side of opening so that positions of the support brackets can be chosen (see figure below)



- 2. Fix Brackets:** Using the appropriate fixings to suit opening substrate, fit the main support brackets to the lintel 25mm – 30mm outside the curtain overlap marks (see figure above). For motorised doors the side the motor is on should have a clearance of 40 – 50mm. These two brackets **must** be level with each other. One method of checking level is with long clear plastic tube filled with water. Level should be checked where shaft will be on bracket when curtain fitted. The minimum dimension from ceiling to top of bracket should be set per following table.

| Specified Door Height (mm)       | Minimum Roll Clearance (mm) | Minimum Distance From Underneath Lintel to Top of Bracket |
|----------------------------------|-----------------------------|---|
| 1200 – 2100 (3 panel doors only) | 235                         | 195   |
| 2200 - 2600                      | 260                         | 220   |
| 2700 - 3000                      | 275                         | 235   |

If daylight opening height is less than stated door height and more headroom is available than that shown above, then these dimensions can be adjusted accordingly.

**NB:** For motorised doors check the motor instructions for the dimension required from edge of curtain (curtain overlap) to inside of the bracket for motorised side only.

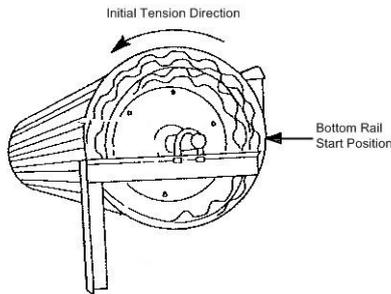
- 3. Mount Door To Brackets:** Ensure that there is no loose packing etc. inside the door. Whilst door is on the floor rotate shaft  $\frac{1}{4}$  turn and let go to allow the shaft to centre itself through the

roll. Fit shaft clamps leaving 1mm gap between clamp and drum wheel. Check shaft length does not foul any obstructions. Cut down if necessary. Lift the door onto the brackets and secure by fitting the U-bolts over the shaft and through the slots in the top of the bracket.



**Do not use bracket as a lifting device as it is not designed for lifting.**

Fit the washers and nuts, finger tight at this stage. Ensure the door is central in the opening by lifting slightly and moving sideways if necessary. If curtain requires moving centralise curtain on shaft by rocking curtain back and forth while axle is fixed. Rotate the shaft, in direction shown for initial tension, until the bottom rail is level with the shaft at back of rolled curtain. Tighten the U-bolt nuts securely while ensuring gap between rolled curtain and head wall is approximately 20mm – 30mm and even on both sides. Pre-tension the door by rotating



the door 1¼ turns in the direction shown. While holding the curtain, carefully cut and remove the strapping/packaging and slowly pull the curtain down to the floor. Standing inside the garage, remove cardboard banding tape. Then carefully allow curtain to re-roll itself ensuring bottom rail stays level and the curtain rolls up evenly. With approximately 0.5 metre left un-rolled, take piece of cardboard packing, or a soft wood chock (about 300 – 400mm long), and wedge it between door curtain and door roll to prevent the door from winding up due to the initial

tension that you have just applied.



**Warning: Before tracks are fitted be very careful not to allow curtain to roll up unaided as damage and injury may result.**

4. **Cut And Fit Tracks:** Track length is determined by required door opening height (to underneath of track stop). Cut each track to this dimension (if necessary) by removing any surplus from the bottom of the track. *Rule: Series “A” Track Length = Opening Height Dimension + 190mm; Series “B” Track Length = Opening Height Dimension + 150mm.*

NB: Dimension from underneath track stop to top of horizontal edge of curtain bracket should be equal on each side.

Bend out lead-ins in top of track and position track over curtain edge allowing it to slide fully into track slot. For Series “A” doors locate first lug/cleat about 150 - 200mm off floor and fix to jamb using appropriate fixing to suit jamb substrate. Fix top lug/cleat about 350 - 400mm from top of track/guide while third lug/cleat should be fixed in-between the two. All fasteners should be fitted just loose.

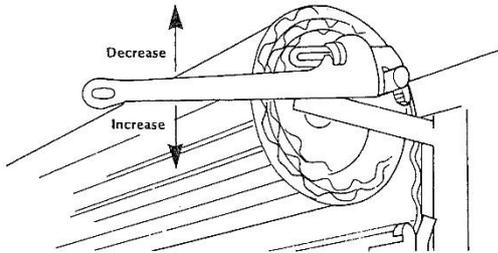
For Series “AA” doors the tracks have cleats welded into position, fix bottom cleat first as above, followed by top cleat, then the ones in between.

Push track against jamb and ensure it is vertical and allow approximately 2mm running clearance per side at black locking bar clip on curtain edge.



**Note: The extreme top edge of track must not be higher than the horizontal leg of support brackets otherwise door will be difficult to close.**

5. **Adjust Tracks:** Remove the cardboard packaging/wooden chock and carefully pull the door down to the floor ensuring it runs freely. If it does not, reposition the tracks as necessary.
6. **Adjust Door Tension:** The initial tension already put in the springs may either be too great or too little, making the door feel either light or heavy. The ideal tension will be where the door is just a little heavy in the down position ensuring that it stays down and just a little light in the up position ensuring that it stays up. It should not try to open or close on its own from half open position.



If you need to adjust spring tension you will probably need an assistant to help carry out the adjustment. First roll the door up and tie a rope around the whole door in the centre. This will prevent the door from running down if you accidentally lose tension. Slacken off the nuts of the U-bolt on one end. One U-bolt will retain the tension **so long as the door is fully open**. Fit a set of large self locking grips or pipe wrench to the shaft on this end, remembering that the shaft will try to turn in the decrease tension

direction. While holding the grips/wrench tightly, have your assistant slacken off the U-bolt nuts on the other end. Increase or decrease the tension as required by rotating the shaft no more than 1/4 of a turn at a time. Your assistant can now tighten the U-bolt at the other end. Tighten the U-bolt at your end as well and carefully try the door again. If necessary repeat this operation until the tension is just right.



**Never alter door tension unless door is in up position and roped. When tensioning, never stand with face in line with pipe wrench, or self locking grips.**

7. **Cut Lock Holes:** Put the door in the down position so that the bottom rail seal is just in contact with the floor but not fully compressed. Mark the top of the locking bars in the face of the track that they will pass through. Drill a 10mm hole in each track such that the top of this hole is in line with the mark. Drill another 10mm hole immediately under the first hole and join the two holes together with a square file to form a rectangle for the ends of the locking bars to pass through. Ensure that any sharp edges are removed. Check that lock bars pass freely through slots when door fully closed.
8. **Confirm Door Operates Correctly:** The installation is now complete. Operate the door several times and confirm that it opens and closes freely. See next section below if problems occur.

If an automatic operator is fitted the curtain should be pinned prior to setting up the operator, by putting suitable length screws through curtain layers and into drum wheel at each end of curtain, to lock curtain in place prevent potential conning occurring due to operator driving curtain from one end.

## SECTION 3: Problem Checks

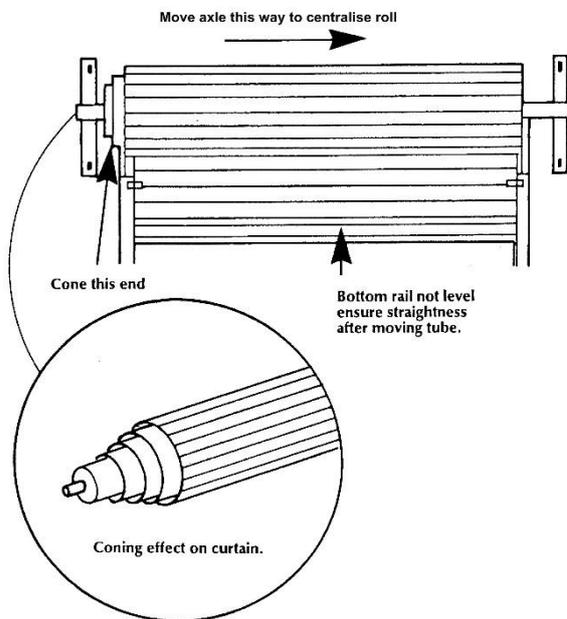
### 1. Difficult To Operate In Either Direction:

- Check curtain not jamming in the tracks.
- Check running clearance in the tracks ( $\approx 2\text{mm}$  per side).
- Check tracks are vertical, parallel with each other and clean. Lubricate with silicon spray only.

### 2. Difficult To Close OR Open: Decrease OR increase spring tension (see Step 6 above).

### 3. Track/Shaft Relationship: If the door is very difficult to close the last 600mm, check the tracks are fitted in correct relationship to the brackets and that the shaft is correct distance from wall (20mm – 30mm gap between opened curtain and wall) i.e. repeat Step 4.

### 4. Coning: If the curtain rolls up un-evenly (*cones out at one end*) and the bottom rail appears out of parallel with door roll and tracks, confirm the following:

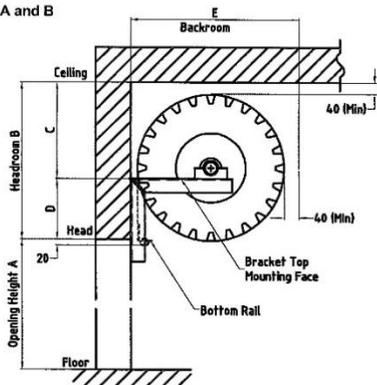


- Brackets are level with each other.
- Shaft is correctly centralised in roll (refer Step 3). If brackets are level, removing coning by moving shaft through the roll in opposite direction to coning.

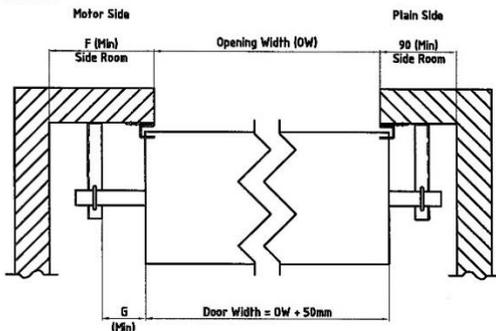
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## STEEL-LINE DOMESTIC ROLLER DOORS

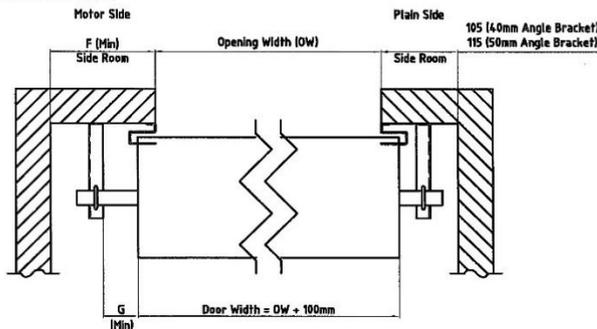
Elevation View  
Series A, AA and B



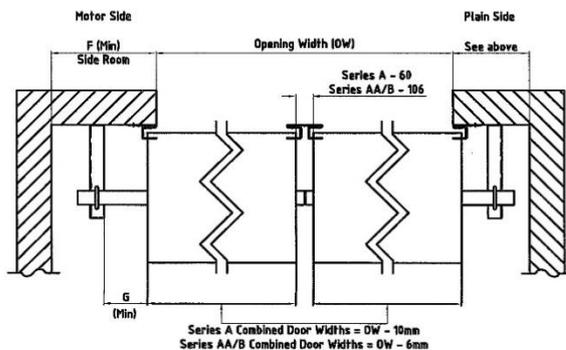
Plan View  
Series A



Plan View  
Series AA and B



Plan View  
Mullion Pair



### Series A Standard Roller Doors For curtain widths up to 3430mm (Max. Ht 3000)

| Minimum dimensions (mm) | Dim 'A' = Opening height |           |           |
|-------------------------|--------------------------|-----------|-----------|
| Dim 'A'                 | 1200-2100                | 2200-2600 | 2700-3000 |
| Dim 'B'                 | 430                      | 480       | 510       |
| Dim 'C'                 | 235                      | 260       | 275       |
| Dim 'D'                 | 195                      | 220       | 235       |

| Minimum backroom required (mm) |     |     |     |
|--------------------------------|-----|-----|-----|
| Dim 'E'                        | 450 | 500 | 530 |

| Minimum side room for motor (mm) |          |           |
|----------------------------------|----------|-----------|
| Motor:                           | Boss RD1 | Boss RD11 |
| Dim 'F'                          | 130      | 120       |
| Dim 'G'                          | 30       | 45        |

### Series AA Standard Roller Doors For curtain widths greater than 3430mm (Max. Ht. 3000)

| Minimum dimensions (mm) | A = Opening height |           |
|-------------------------|--------------------|-----------|
| Dim 'A'                 | 2200-2600          | 2700-3000 |
| Dim 'B'                 | 480                | 510       |
| Dim 'C'                 | 260                | 275       |
| Dim 'D'                 | 220                | 235       |

| Minimum backroom required (mm) |     |     |
|--------------------------------|-----|-----|
| Dim 'E'                        | 510 | 540 |

| Minimum side room for motor (mm) |                                     |           |
|----------------------------------|-------------------------------------|-----------|
| Motor:                           | Boss RD1 (Max. 12.5m <sup>2</sup> ) | Boss RD11 |
| Dim 'F'                          | 155                                 | 150       |
| Dim 'G'                          | 30                                  | 45        |

### Series B Roller Doors For curtain widths 3100 to 5500mm

| Minimum dimensions (mm) | Dim 'A' = Opening height |           |           |
|-------------------------|--------------------------|-----------|-----------|
| Dim 'A'                 | 3000-3300                | 3600-4200 | 4800-5100 |
| Dim 'B'                 | 510                      | 540       | 570       |
| Dim 'C'                 | 275                      | 290       | 305       |
| Dim 'D'                 | 235                      | 250       | 265       |

| Minimum backroom required (mm) |     |     |     |
|--------------------------------|-----|-----|-----|
| Dim 'E'                        | 540 | 570 | 600 |

| Minimum side room for operator (mm) |                                |                                      |
|-------------------------------------|--------------------------------|--------------------------------------|
| Operator:                           | Direct or Planetary Gear Drive | Boss RD11 (max. 16.5m <sup>2</sup> ) |
| Dim 'F'                             | 170                            | 150                                  |
| Dim 'G'                             | 65                             | 45                                   |

Notes: 1. Top mounting face of the wall bracket should be level with the track top or higher. Values in the tables indicate the minimum space required. If there is insufficient headroom at the site, the bottom of the curtain roll may infringe the height of opening.

2. Other brands of motors may increase/decrease side room noted above. Please refer to motor's owners manual for clearance/s required.

STEEL-LINE GARAGE DOORS HAS A CONTINUOUS PROGRAM OF PRODUCT DEVELOPMENT AND RESERVES THE RIGHT TO CHANGE SPECIFICATIONS AT ANY TIME WITHOUT NOTICE.

U.S. DIMENSIONS IN MILLIMETRES

|   |             |                               |                  |
|---|-------------|-------------------------------|------------------|
| 2 REDRAWN & REVISED.  |             |                               |                  |
| REV   | DESCRIPTION | DATE                          |                  |
| STEEL - LINE GARAGE DOORS<br>ACN 124 164 003 ABN 52 124 164 003<br>http://www.steel-line.com.au |             | PROJECT<br>ROLLER DOOR        |                  |
| DATE 9/7/2014   |             | TITLE<br>TECHNICAL DATA SHEET |                  |
| DRAWN BS  | CHECKED     |                               |                  |
| APPROVED & DATE   | SIZE A4     | DRAWING NO. RollerDoorTDS     | REV. SHEET 2 1/1 |
| FILE S-L/Projects/RD General  |             |                               |                  |