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# INSTALLATION PROCEDURE & MAINTENANCE

## **INDUSTRIAL/LARGER ALUMINIUM ROLLER SHUTTERS**

**STADIUM ALUMINIUM ROLLER GRILLE** - Ultra Strong 19mm All Aluminium, provides increased flexibility in high level security for external (Shutter) and internal (Shop Front Door) applications and is the product of choice for areas where high air flow and vision is required. Designed to suit openings up to 4.5m high and up to 8.0 meters wide for motorized operation.

**ARCADE 3** – Ultra strong 118mm Aluminium Roller Shutter which provides greater options especially in retail shop front sector. Designed to suit openings up to 4.5m high and up to 10.0 meters wide for motorised operation.

Q100 STEEL ROLLER SHUTTER – Roll formed 100mm slat from Galvanized Steel. The Heavy Duty Steel Slat is designed to withstand the wear and tear of industrial and commercial applications with minimal maintenance. The rolled slat can be replaced individually should the damaged occur. The roll formed Guide Channel has Nylon Rubber to minimize the noise that comes from the interlocking slats. Q100 Steel Roller Shutter can be Hand Chain operated or Electric operated.



- Installation of Roller Shutter Door should only be undertaken by experienced Installer/Technician.
- Never allow anybody to be in close proximity when installing this door.
- Before commencing installation, ensure that the structure is suitable to carry the load of the door during operation. Consult the Structural Engineer/Builder of the project.

## **TOOLS REQUIRED**

- Steel Tape
- Spirit Level
- Screw Drivers
- Drill Gun
- Drill Bits
- Ladder/Scaffoldings
- Grinder
- Riveter
- Wrench
- Pliers
- Welding Machine (Depending on the site condition)

## PERSONAL PROTECTIVE EQUIPMENT

- Eye protection
- Hand Gloves
- Safety Shoes
- High Visibility Clothing
- Hard Hat
- Ear Plugs
- Full Face Mask (for Welding Works)

## **PACKING LIST**

- Angle Bracket 2 off
- Motor Bracket (Drive Side) 1 Off Electric Operated
- End Bracket (Tension Side) 1 off Electric Operated , 2 off Manual Operated
- Fixing Bolts/Screws As sorted
- Guides 2 off
- Guide Lugs
- Drum Assembly with Capstan Wheel 1 off
- Rolled Slats/Curtain 1 off
- Door Operator (optional) 1 off if Electric Operated
- Controllers (For Electric Operated only) 1 off if Electric Operated

## **STEP 1: MEASUREMENTS/CHECKLISTS**

Before installation, confirm the following:

- CHECK DAYLIGHT WIDTH & DRUM WIDTH
  - Drum length approximately 250mm longer than the Daylight Opening Width.
- CHECK HEAD ROOM

Head Room must be minimum of 650mm

Daylight Height must be levelled

CHECK SIDE NIB

If shutter is electric operated, Drive Side must be minimum of 400mm, Non-Drive Side must be minimum of 240mm (as shown in Figure 1)

If shutter is manual operate, nib width for both sides is 240mm (As shown in Figure 2)

#### **STEP 2: INSTALLATION**

Determine the angle bracket location.

Behind Wall Fixing\*

The horizontal distance between face of angle bracket and door opening follows following:

If shutter is electric operated, the horizontal distances between face of angle bracket and door opening (shown in Figure 3) are

For Drive Side:  $L_d$  = Drum Overlap + 60mm For Non-Drive Side  $L_{nd}$  = Drum Overlap + 40mm

Where: Drum Overlap = <u>Drum Length – Daylight opening width</u>

2

If shutter is manual operated, the horizontal distances between face of angle bracket and door opening (shown in Figure 4) are the same for both side, which is:

L = Drum Overlap + 40mm

Mark out Bracket positions 200mm above lintel to bottom of the Angle Bracket vertically (as shown in Figure 5)

- Using a level (Laser) to line up the top of the two (2) Angle Brackets, fit the Angle Bracket (it is critical that the two (2) Angle Brackets are levelled).
- Bolt end bracket to the outside of angle bracket either one side of angle bracket if manual operated. If electric operated, bolt Motor Bracket to the outside face of the Angle Bracket at drive side.
- Remove Capstan Wheel from Drum Shaft and fit non drive bracket to drum shaft then replace capstan onto drum shaft.
- Lift Drum Assembly up and slide Drive Side Drum Shaft into Drive Side Bracket, position End Side Bracket and bolt to outside of Angle Bracket.
- If the shutter is electric operated, bolt Motor to the Motor Bracket to the outside of the Bracket, fit drive sprocket to motor and line it up with drum sprocket and tighten grub screws, fit drive chain to motor and drum sprockets and tension. Fit Hand Chain to motor.
- Lift curtain into position under the drum (ensure the curtain is the right way around) and suspend in slings (2 off approximately 700mm from each end).

- Rotate drum in the up direction so that the bolts for fixing the curtain to are 9 o'clock (looking from drive side). Remove the nuts and lift the curtain up by leaning over the drum and fit the mini slats to the drum and replace the nuts and tighten.
- Rotate the drum (Motor if power connected, hand chain or electric drill with bolt fitted to
  rear of motor) in the open or up direction until the curtain is fully wound on with the bottom
  rail just below the lintel (while winding curtain on, ensure that it stays straight), remove the
  sling.
- Tension the door by turning the capstan wheel from the top and away from the wall, 2 complete turns.
- Install the guides (tracks) by sliding the track up and over the bottom rail and curtain. The
  track should be approximately 10mm back from the opening and vertical. If tracks are fitted
  to steel, they should be stitch welded (30-40mm) starting 200-300mm from top and a
  maximum of 700mm between stiches. If tracks are fixed to concrete or bricks, the lugs
  should be fitted to the track starting 250-300mm from the top and maximum spacing of
  700mm.

## **STEP 3: TESTING & SETTING THE LIMIT**

- Setting the limits on the controller.
- Turn power supply on.
- Press DOWN Button to check motor is going in the right direction. If not, refer to next step.
   (To change direction of motor drive, press and hold STOP button then press SET button three
   (3) times and SET button should start flashing, release ALL buttons. Press and hold STOP button until SET button flashes quickly then release. Check Direction again by pressing DOWN button. If correct, return to setting of limits).
- Press and hold STOP button now and press the SET button three (3) times and the SET button should be flashing.
- Press the DOWN button and the door should travel down and take your finger off the down button when the door touches the floor.
- Press the SET button and should flash quickly, the bottom limit is set. When SET is flashing
  normally, you can now set the open limit by pressing and holding the UP or OPEN button
  until the door is in the required open position.
- Press the SET button again and it should flash quickly and then flashing stop. If this happens, the limits are set.

#### **MAINTENANCE**

- Regularly clean the Curtain with cloth and water.
- Avoid using chemicals to prevent from discoloration.
- Regularly check for foreign materials build up on the guides.

## NOTES:

For Orders, please use the lay-out sheet, input all the details.

\* STADIUM ALUMINIUM ROLLER GRILLE, ARCADE 3 & Q100 STEEL ROLLER SHUTTER are generally behind Wall Fixing.

## **SUPPORT DRAWINGS**

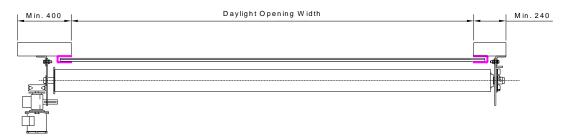


Figure 1 Plan View (Electric Operated)

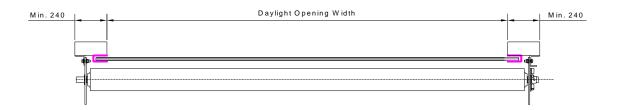


Figure 2 Plan View (Manual Operated)

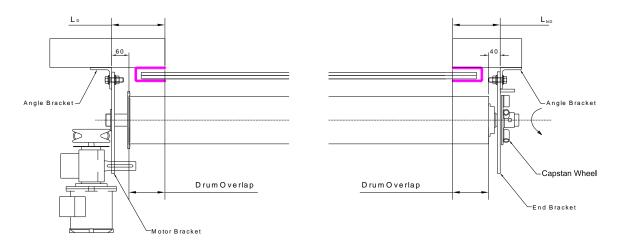


Figure 3 Plan View Details (Electric Operated)

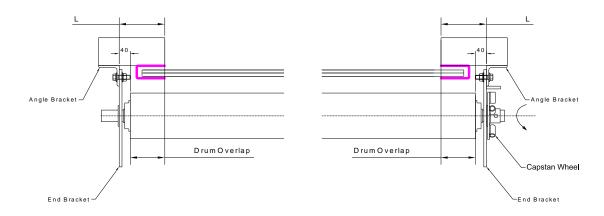


Figure 4 Plan View - Details (Manual Operated)

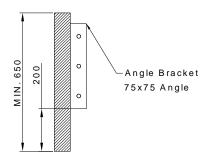
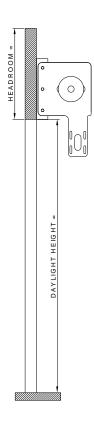


Figure 5. Heading – Section View

## LAY OUT SHEET





Please tick appropriate box. PRODUCT			
☐ Arcade 3	☐ Solid	☐ Multi holed	☐ Slotted
☐ Stadium Grille			
☐ Q-100	☐ Solid	☐ Multi Holed	☐ Slotted
<u>OPERATION</u>			
☐ Motorise	(☐ Left Hand ☐ Right Hand), view inside looking out (VILO)		
<u>FIXING</u>			
☐ Behind Mount			
COLOUR			
☐ Powder Coat (Standard Colourbond Range) Specify colour			
<u>ASSEMBLY</u>			
☐ On drum	☐ Off drum		
<u>DELIVERY ADDRESS</u>			