# Steel Roller Grille

#### **Roller Grilles**



Steel Roller Grilles are designed to provide security for external applications where maximum vision and ventilation are important requirements. Typical applications include small car park entrances, security entrance dividers and markets.

#### **FEATURES**

- Vision
- Ventilation
- Heavy duty

#### **DOOR DIMENSIONS**

• Maximum Height: 4200mm\*

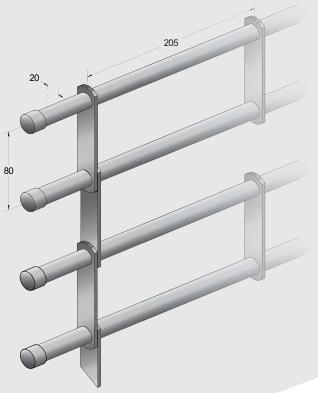
Maximum Width: 8000mm\*

\*Total size must not exceed 21m<sup>2</sup>.

**NOTE:** In special applications, Steel Roller Grilles may be designed to suit larger sizes, consult manufacturer for further information.

#### **RECOMMENDED SPECIFICATIONS**

Steel Roller Grille with 20mm diameter aluminium tubes (containing 16mm diameter inner steel tube) and vertical steel links as manufactured by Airport Doors. The Roller Grille operates by means of a flexible grille curtain winding onto an overhead drum and guided in vertical door quides.



© Copyright 2015 Czapp Pty Ltd trading as Airport Doors. In line with Airport Doors' research and development program, Airport Doors reserves the right to change specifications at any time without notice.



### **Steel Roller Grille**

#### Roller Grilles

#### **CURTAIN**

The Steel Roller Grille curtain is manufactured from horizontal tubes spaced vertically at 80mm centres and connected by zinc coated 3mm thick vertical steel links spaced at 205mm centres, to form a brick-like pattern. The horizontal tubes consist of an inner galvanised steel tube of 16mm diameter and an outer aluminium sleeve of 20mm diameter. The ends of the tubes are fitted with nylon end caps to provide smooth operation within the door guide.

#### **FINISH**

The steel roller grille is available in anodised or powder coated finish with zinc coated vertical links. The door guides are galvanised steel and all other components (drum and support brackets, etc.) are prime coated.

#### **BOTTOM RAIL**

The bottom rail is manufactured from 2.2mm thick by 123mm high specially extruded heavy duty aluminium section. Roller Grilles over 6500mm in width use a steel box section bottom rail. The bottom rail reinforces the Roller Grille curtain and can be fitted with a PVC bottom weather seal when specified.

#### **DOOR GUIDES**

The door guides are manufactured from 2.5mm thick roll-formed galvanised steel with a depth of 76mm.

#### **DRUM & SPRING ASSEMBLY**

The drum consists of a seamless or spiral welded, cylindrical tube revolving around a central steel axle and encasing helical torsion springs matched to suit door size and weight. The springs are rolled from high grade spring wire and tempered. The drum is designed to provide minimal deflection over the door width.

#### **DRUM SUPPORT BRACKETS**

Steel Roller Grille drum support brackets are manufactured from mild steel plate with a minimum thickness of 8mm.

#### FIXING REQUIREMENTS

The building construction (typically steel or concrete) must be structurally sound and have adequate strength to support the Roller Grille and its fixing requirements. Consult manufacturer for further details.

#### LOCKING

Chain operated Steel Roller Grilles are fitted with a steel chain lock designed to accommodate a padlock. As an optional extra, chain operated roller grilles can also be fitted with two shoot-bolts. Shoot-bolts are fitted internally to each end of the bottom rail. Padlocks not included.

Electric operated (motorised) doors are to be secured by the motor and its controls.

**NOTE:** If optional shoot-bolts are fitted to a motorised roller grille, a cut out switch for each shoot-bolt must be fitted.

#### **MULLIONS (OPTIONAL)**

Centre door mullions can be used for wide openings to create multiple door installations. Centre door mullions of either a sliding or fixed type (as specified), are manufactured from mild steel plate with a standard width of 300mm. A sliding mullion is manually operated by disengaging top and bottom latches and sliding to one side of the doorway on an overhead sliding track fixed to the underside of the lintel. A fixed type mullion is not removable and is fixed to the floor and lintel.

#### **OPERATION**

Steel Roller Grilles operate by means of a flexible curtain, winding onto an overhead drum and guided in vertical door guides. They are installed to the inside face of an opening and overlap the nibs and lintel ('behind-fix'). Steel Roller Grilles are available in chain operation or motorised.

#### **CHAIN OPERATION**

Gearing is fitted to one end of the Roller Grille and matched to suit the door size and weight. The curtain is opened and closed by hand chain via a reduction gear mechanism.

**NOTE:** Chain operation is not recommended for Steel Roller Grilles over  $20m^2$ .

#### **MOTORISATION**

Motorisation is via a geared electric motor and incorporates a standard reversing starter push-button station (control box) and emergency hand chain operation (in case of a power outage). The standard push-button station offers 'Up', 'Down' and 'Stop' functions.

Operator selection is dependent on the door size, door weight, availability of power and the door's application. Motorisation is available in three-phase (415v) as standard, or single-phase (240v) power.

The provision of adequate mains power supply and isolator or GPO (as required) to motor location is the responsibility of the client. Wiring from the isolator and commissioning of the door, motor controllers and any ancillary hardware is by client, unless otherwise stated in writing.

Optional extras, such as high cycle motorisation, battery back-up and access control accessories are available upon specification.

For further information see Door Operators & Accessories.

#### **IMPORTANT**

Steel Roller Grilles are not recommended in applications which are subject to corrosive environments such as, but not limited to coastal areas.

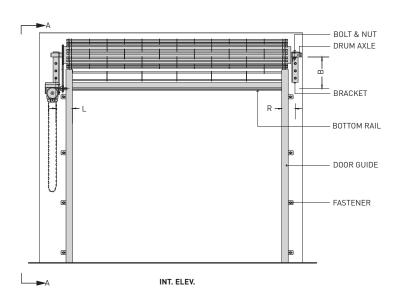
#### **OPTIONS**

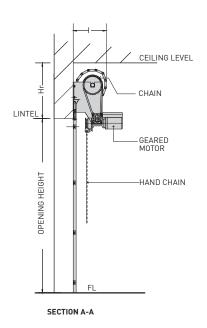
- Tapered Bottom
- Mullions: sliding or fixed
- Reverse roll

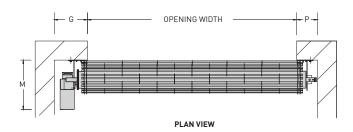


## **Steel Roller Grille**

### **Technical Specs: Roller Grilles**







CLEARANCE DETAILS									
HEIGHT UP TO	WIDTH UP TO 8m					DRIVEN END		PLAIN END	
	Hr	В	1	М	OPERATION	G	L	Р	R
2400	680	415	480	595	CHAIN OPERATION	300	200	250	170
3000	700	435	500	595	MOTORISATION (STD)	500	200	250	170
4200	750	475	525	595	MOTORISATION (INBOARD*)	250	180	250	170

#### Notes:

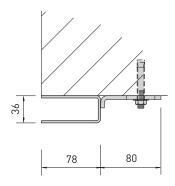
- Standard chain operated or motorised doors have the drive unit fitted outboard.
- \*Inboard motorisation is available when sufficient clearance is not available for standard motorisation. If fitted inboard, the drive unit fits partly within opening under drum/curtain. Add 150 to dimension M for inboard motorised doors.
- Door-stops on door guides are fitted on chain-operated shutters.
- Total door size must not exceed 21m².



# **Door Guides**

### **Technical Specs: Roller Grilles**

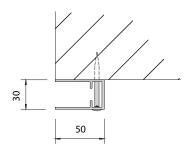
## STEEL ROLLER GRILLE STANDARD DOOR GUIDE



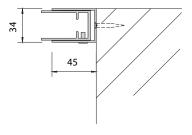
**STEEL GUIDE** 

## ALUMINIUM SECURITY ROLLER GRILLE STANDARD DOOR GUIDES

BEHIND WALL FIXING



BETWEEN WALL FIXING



**ALUMINIUM GUIDE** 

**ALUMINIUM GUIDE WITH TAKE UP CHANNEL**