

## ESCALATOR

### Fire Resisting Roller Shutters

**B**olton Gate's Escalator horizontal shutter is ideally suited to provide fire compartmentation between floors of a shop or store where escalators, travelators or stairwells entail a floor aperture. Available in various configurations, the design parameters are versatile allowing the shutter to be incorporated within light wells, plant rooms or special tank covers. The Escalator shutter has been successfully fire tested satisfying the requirements of BS 476 Part 22 for stability and integrity up to 4 hours and has been certified by LPCB. Prior to delivery, each shutter is assembled, pre wired and factory tested to eliminate commissioning problems.

#### **STANDARD SPECIFICATION**

##### **Curtain**

The shutter curtain is constructed from curved section galvanised steels laths with malleable iron endlocks. The laths are connected at each end to the heavy-duty drive chain ensuring smooth running in the side guides. A bottom rail is fitted to provide complete closure.

##### **Shutter Box**

Constructed from suitable mild steel endplates fitted with bearing wheels for roller and gears with securing angles for bolting to the floor. The sides of the box are clad with steel sheets to complete the fire resisting assembly. The roller barrel onto which the curtain is coiled is mounted on a central shaft which is retained in bearings and incorporates a patented constant tension spring mechanism to ensure even coiling.

##### **Side Guides**

Fabricated from mild steel plates designed for fitting to supporting balustrades or masonry sidewalls. A section of the guide top plate is removable for maintenance purposes.

##### **Finish**

Mainly galvanised with mild steel parts factory painted with one coat of priming paint.

##### **Electrical Operation**

The motor drive is designed to suit a 400 volt 3 phase 50 Hz mains supply which has instantaneous automatic changeover to standby generator (by others) in the case of power failure. Each shutter is provided with a control panel incorporating a constant pressure close button, a momentary open button and an emergency stop button. Controls can be arranged to receive signals from remote alarm equipment and provide a timed interface to the main escalator controls. The control panel is normally mounted onto the shutter box. Emergency manual operation is by removable crank handle.

Normal operation for night security purposes is by push button control. In the event of a fire, the shutter is activated by an



incoming signal and following a time delay, moves to the fully closed position.

##### **Safety Features**

To prevent closure with passengers on the escalator, a photocell is fitted which stops the shutter for a pre set time delay after which the shutter continues to the fully closed position.

##### **MAXIMUM SIZES**

Certified by LPCB for sizes up to 5 metres wide by 15metres long. Larger shutters are available subject to individual assessment.

##### **SPEED OF OPERATION**

Approximately 10 metres per minute.

##### **WEIGHTS**

Shutter box: 450 kgs per linear metre.

Curtain: 24 kgs per m<sup>2</sup>.

Guides: 40 kgs per linear metre.

##### **OPTIONS**

- Balustrades for side guide support.
- Fire resisting cladding for balustrades.
- Smoke and heat detectors.
- Audio/visual panels.
- 24 volt D.C. motor and battery standby equipment.
- Polyester powder coated finish to a range of BS and RAL colours.
- Brush strips to the side guides.
- Horizontal version (without curved guides) available

