

SECURITY GRILLES

GUARDIAN FIRE SHUTTERS – E60-240

KEY FEATURES

GUARDIAN INDUSTRIAL DOORS

45 Progress Road
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Essex SS9 5PR

01702 558758
mail@guardiandoors.com
www.guardiandoors.com

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GUARDIAN FIRE SHUTTERS – E60-240

OVERVIEW

A vertically arranged fire resistant roller shutter.

SPECIFICATIONS	
Performance	Up to 240 mins fire integrity BS 476: Part 22 (1987).
Arrangement	Vertical roller shutter
Online Information	Learn More

DIMENSIONS	
Opening Height:	Maximum size approx 28 m^2 See size charts for more info.
Opening Width:	
Shutter Weight:	35 kg/m^2

ACCREDITATIONS	
CE-marked 01 May 2005:	Product Standard BS EN 1634-1 (2000) - Manufacture and installation.
BS EN 12604 (2000)	Mechanical aspects - Requirements.
BS EN 12453 (2001)	Safety in use of power operated doors - Requirements.

CURTAIN
Interlocking galvanised steel laths, 75mm in depth, with solid curved profile restrained laterally by endlocks riveted to both ends on alternate laths. Alternatively, a 50mm flat lath is available to smaller sizes.

BARREL
Mild steel tube finished with one coat rust inhibitive primer.

BOTTOM RAIL
Reinforced with a steel angle rail forming an inverted 'T'.

COIL CASING
BS EN 12453 1.2mm galvanised sheet steel coil casing as standard.

GUIDES
Constructed from 50mm or 63mm galvanised guide mounted on 75mm x 50mm galvanised steel angles. Slotted guides and punched bottom hole to allow for expansion requirements. Nylon washers will be required for fixing detail.

ENDPLATES
3mm-6mm (depending on curtain size/ weight) mild steel plates finished with one coat rust inhibitive primer.

OPERATION
240 Volt single-phase operator with low voltage GUARDIAN Fireman Keyswitch (24Volt), supplied with manual override for use in the event of emergency opening. Controlled through the Guardian (FDI) Control Panel linked to the fire alarm system, allowing the shutter to open/close through an auxiliary signal, with the option of an essential supply or battery backup package. NB. Must be fitted to a 13amp rated / non-switched, fused, maintained spur unit.

FINISH
Standard finish is galvanised steel curtain and guides with non-galvanised components lacquered. Door curtain, guides and coil casing can be supplied BS EN 12206-1 polyester powder coated (PPC) to our standard BS and RAL colour range Normal powder coverage of 40 microns. Non-standard colours are available on request - this may increase lead time and cost.

ACCESSORIES
Battery Back Up Unit: Principally the tube motor fire shutter requires a maintained supply. If this cannot be achieved, then effectively the shutter will require a battery backup unit. If under fire conditions there is a power failure, the shutter must have a means of ensuring closure, the unit provided will give the facility for at least one operation under fire conditions.

RELEASE MECHANISMS
Fire relay and key switch (requires maintained supply, battery backup needed if no maintained supply. Fire relay, key switch and fusible link if no fire alarm. Alternatively advanced FDI panel with combined heat and smoke detector.

Fire Relay: FDI basic Principally the commonly used means of release, A volt free signal is required from the fire alarm. This connects to our FDI or fire door interface basic unit. Upon activation shutter powers into the closed position.

Fusible Link Release: On activation, the link which is a soldered link, separates and releases at 64 degrees centigrade, in effect the temperature release of the link creates a signal to the relay which in turn powers the door down.

Advanced Fire Door interface panel Audio Visual Warning (FDI advanced): Principally this unit is designed to delay the closing of the fire shutter and give two stages to the close cycle; generally, the fire alarm is linked to the audio-visual unit and from the audio visual unit straight into the key switch. There is no need for a separate relay, there is already a relay in the FDI advanced. On activation from the fire alarm the unit starts to "flash & sound", this unit contains a programmable timer which effectively delays the signal to the relay in the panel to close the door.

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STRUCTURAL RECOMMENDATION

The structure supporting the rolling door-set must be a fire-resistant separating element (to B.S. 476: part 20,21,22: 1987), having a fire resistance greater or equal to that required of the door-set itself. It must be capable of supporting the door-set for the required fire resistance period without compromising the fire performance of the door-set.

In addition, consideration must be given to the loads imposed by the various door-set components, i.e. endplates and barrel support brackets.

It is recommended, that a critical temperature of 400 0C and steel sections with an Hp/A value below 230m –1 are used for designing fire resistant steel supporting sections. Where rolling shutters are fixed to masonry supporting elements, the masonry elements must be capable of providing a fire resistance in terms of the insulation, integrity and load bearing capacity criteria of B.S. 476: Part 21: 1987 equal to or greater than the fire resistance rating (integrity) of the rolling shutter assembly.

Shutters fitted to a timber stud partition / steel framed partitions are acceptable for up to 60 minutes fire resistance, to a tested opening size of 2750mm wide X 3250 high. The opening must be capable of carrying the weight of the shutter and be equal or greater than the fire resistance of the roller shutter assembly.

Safety Bearings (Fire Shutters) – Risk Assessment Effectively if the sole intended use of the shutter is as a "fire shutter" i.e. the shutter will be in the closed position, or, it will remain in the open position and close only under fire conditions then a safety bearing would not be required. If the shutter is also to be used in a conventional manner, then there must be a consideration that under safe working practises and Health & Safety in the work place "all upward moving doors must be provided with an effective means of protecting them from falling back and causing injury".

OPTIONS

GENERAL
- Protective bollards
- Angle Protection

SAFETY
- Warning lights
- Battery backup
- Reflected photoelectric cell
- S/R photoelectric cell
- Wired safety pressure edge

OPERATION & CONTROLS
- Push button
- Fire brigade switch
- Biometric controls
- Access control relay
- Fire door interface panel
- RFID radio controls
- Remote Control - Hold to run
- GSM Access
- Software/network connection
- Wind sensor
- Sun sensor
- Fire alarm activation

ACTIVATION
- Standard Fire Door Interface Panel
- FCP03 Audio Visual Panel
- EMC3B Audio Visual Panel
- Smoke & Heat Detector
- Fusible Link

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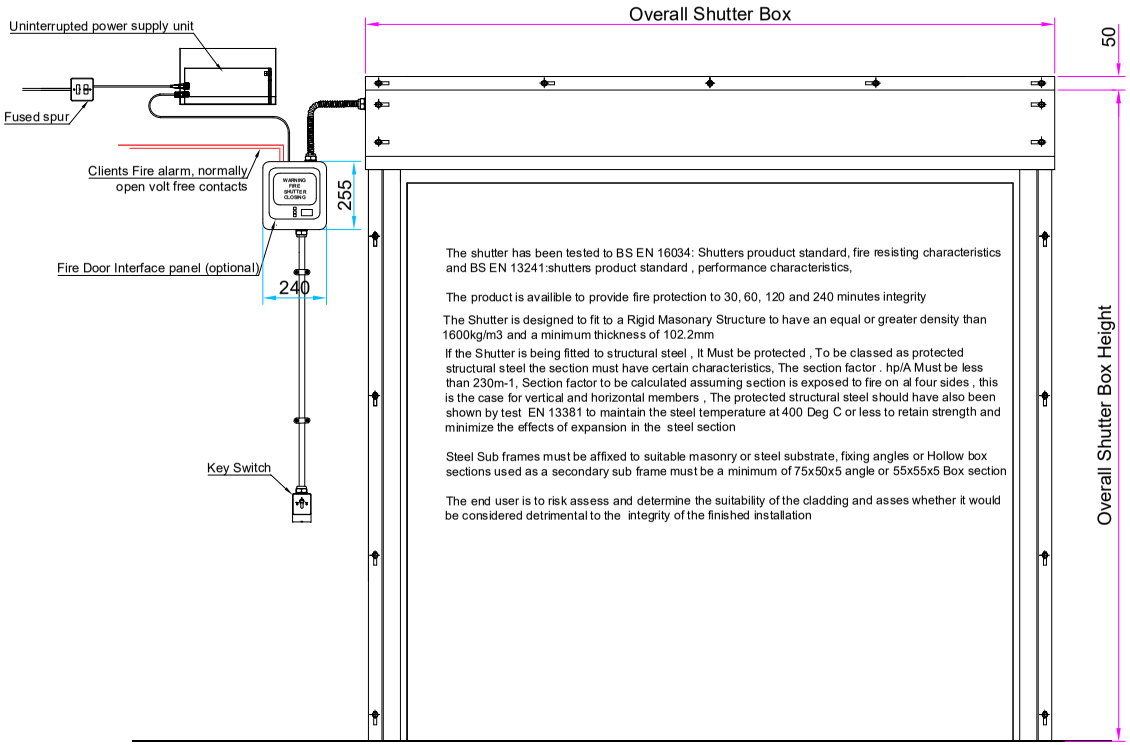
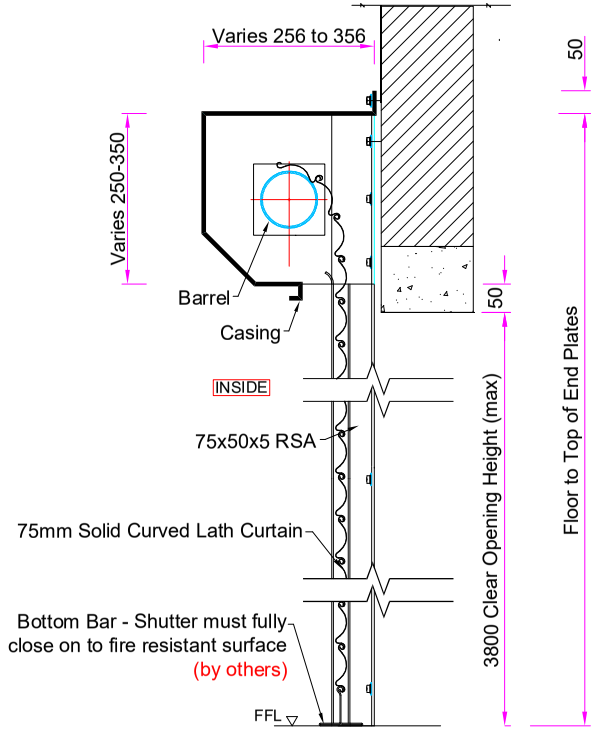
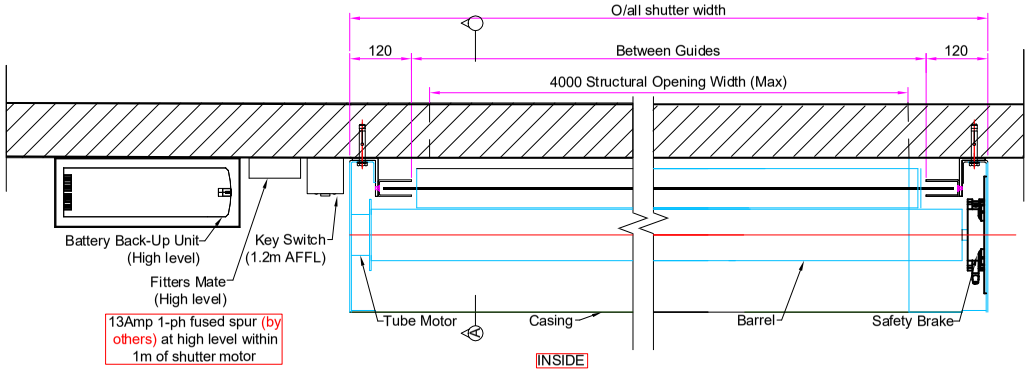


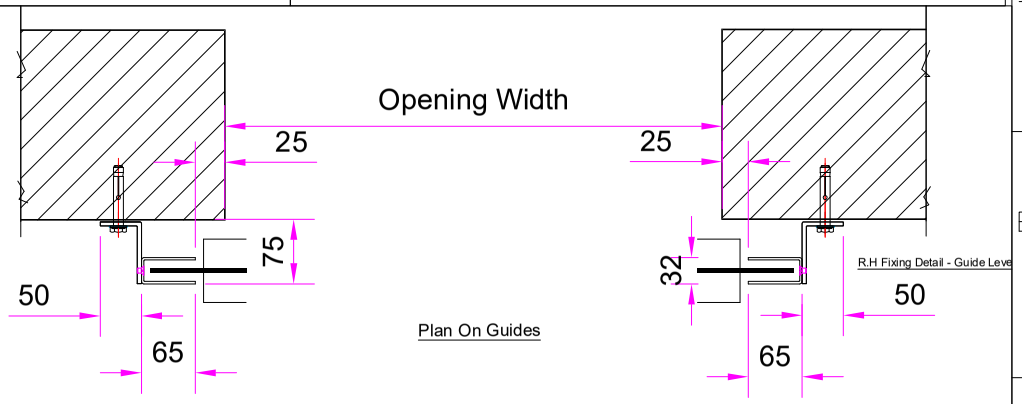
Elevation as Viewed from Inside



Section A-A



Plan View At Barrel Level



Plan On Guides

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DRAWN	CHK'D	APP'D	DATE	SCALE
PT				

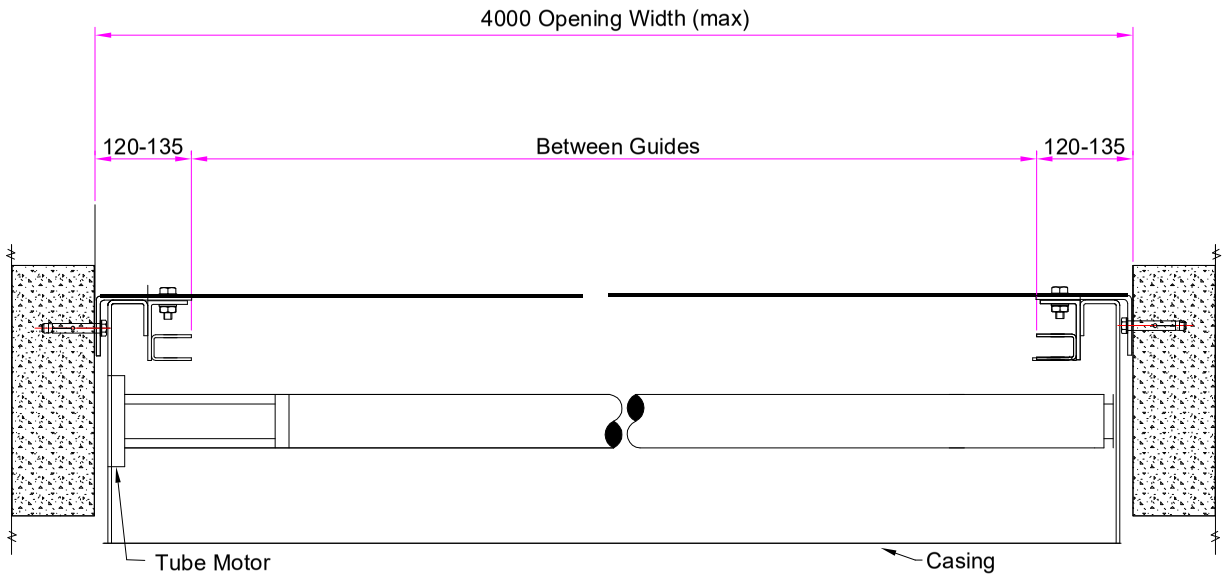
TITLE

E60-240 Tube Motor Fire Shutter
Face Fitted

Job No: E60-240 FF

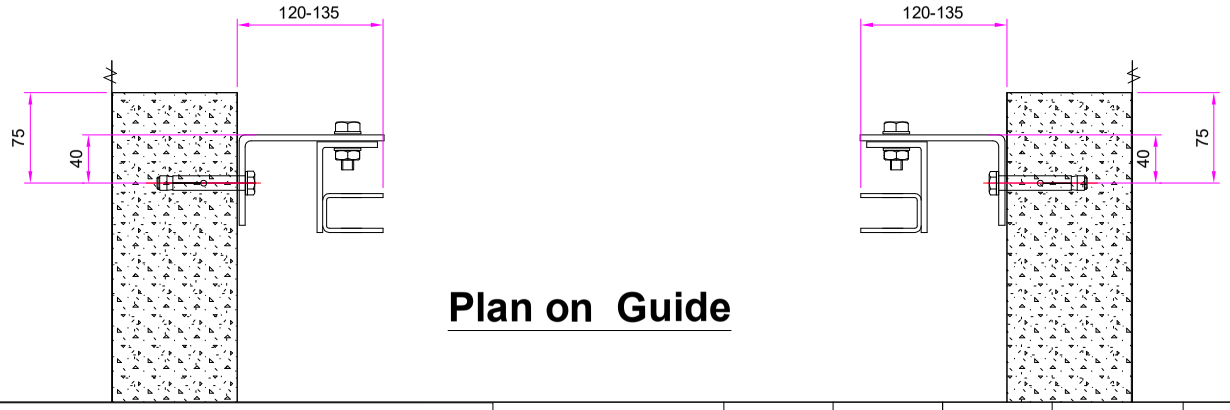
Guardian maintains a policy of progressive design and we reserve the right to modify specifications without prior notice or alteration to this drawing

ISSUE	DATE	APP'D

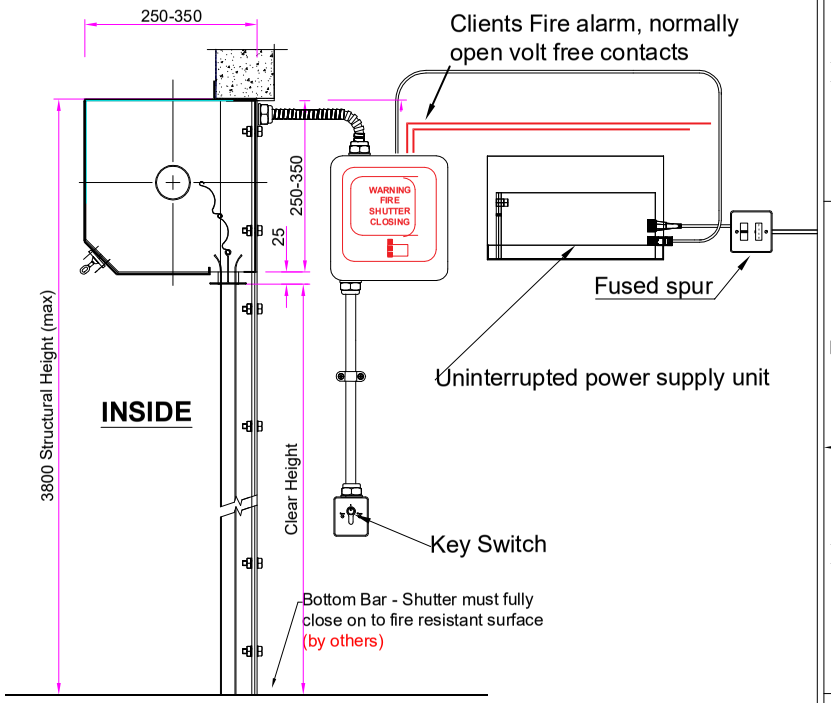


13Amp 1-ph fused spur (by others) at high level within 1m of shutter motor

PLAN VIEW INSIDE



Plan on Guide



SECTION

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PT				

TITLE

E60-240 Tube Motor Fire Shutter
Fitted im Between

Job No: E60-240 RF

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ISSUE	DATE	APP'D