SYSTON DOORS

ESTABLISHED 1920

TUBE MOTOR OPERATED FIRE SHUTTER

ATTRACTIVE, SPACE FRIENDLY AND FIRE RESISTANCE UP TO 240 MINUTES

FIRE RESISTING

CE

WHAT IS A FIRE RESISTING ROLLING SHUTTER?

A traditional single skin fire resisting rolling shutter looks and operates in a similar way to a standard steel rolling shutter. The physical differences are that the materials used are heavier and there are more fixings required. Syston Doors can also provide alternative physical fire shutter products as shown in this brochure.

Fire Shutter Structural Recommendations

The structure supporting the rolling shutter must be a fire resistant separating element (to BS1634-1:2014 or BS476 Part 22, 1987), having a fire resistance equal or greater than that required of the rolling shutter itself and must be capable of supporting the rolling shutter for the required fire resistance period without compromising the fire performance of the rolling shutter. Consideration must be given to the loads imposed by the various rolling shutter components, i.e. end plates and the barrel support brackets.

Fixing to Masonry Openings

Opening to be constructed from masonry, reinforced concrete or dense concrete blocks (7 Nm and above) and have a fire resistance equal or greater to that of the door.

Lightweight and hollow blocks are NOT suitable.

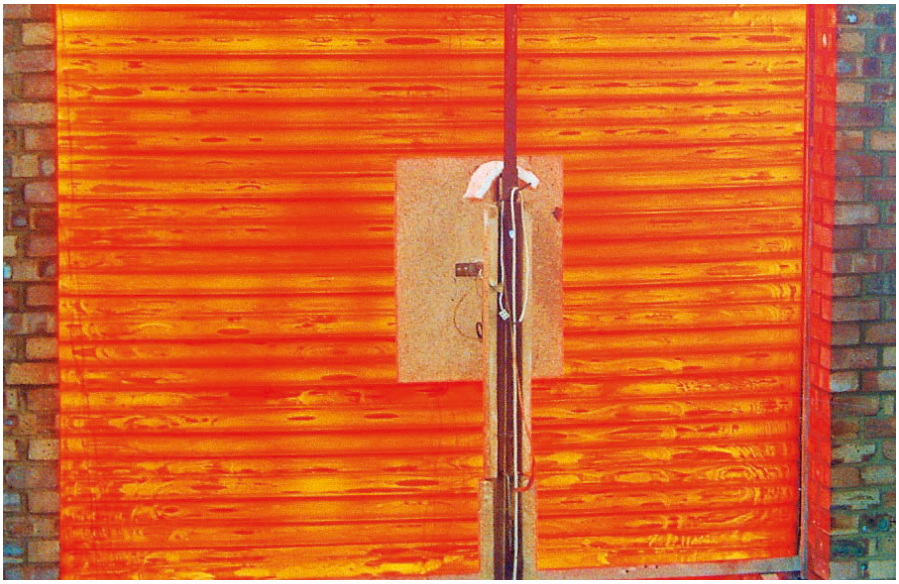
All concrete/masonry elements must be designed in accordance with BS5628: Part 3:1985 and have a density of > 600kg/m^3. Lintels spanning the structural opening should comply with BS8810: Part 1:1997. Client to ensure that openings are plumb and square and that the structure will accept rawlbolt type fixings without cracking.

Subject to the fire shutter being fitted to a flat surface, gaps of up to 6mm are acceptable (for a distance of 150mm), but if, due to an uneven structural finish, larger gaps are apparent, they must be sealed with a suitable fire retardant material, e.g. plaster, fire retardant mastic seal (non-intumescent). Syston Doors do not include this sealing.

Fixing to Steel Openings

Where fire resisting rolling shutters are fitted to steel, the steel must be insulated and thermal bridging effects considered where insulation has been breached.

It is recommended that a critical steel temperature of 400˚C and steel sections with an Hp/A below 230m-1 are used for designing fire resisting steel supporting structures.



Fixing to Timber Partitions

Fire resisting rolling shutters can be fixed to non-loadbearing timber framed or steel framed partitions (with suitable timber inserts all round) up to 2750mm wide x 3250mm high, (maximum area 10m^2), for up to 60 minutes under cover of BRE test certificate FG 7941 N. The opening must be capable of carrying the weight of the shutter and be equal or greater than the fire resistance of the rolling shutter assembly.

It is most important that the Contractor adheres to the opening construction details, as these are also covered by the assessment and as such become the CONTRACTOR'S RESPONSIBILITY.

Fire testing

We do not as standard include for a return journey involving a fire test after the original installation. We can include this at extra cost.

Maintenance

Please note that it is a requirement under Regulatory Reform (Fire Safety) Order 2005, that fire resisting Rolling Shutters are tested every six months from installation. Full width access should therefore be maintained to the shutter to enable this to be carried out.

Syston Doors can offer routine testing and maintenance contracts on application. If no contract is entered into we cannot take any responsibility for the working condition of the shutters after the guarantee period.

Fire Shutters over fire exits and escape routes

Appendix B of the Buildings Regulations Approved Document B states that roller shutters across a means of escape should only be released by a heat sensor, such as a fusible link or electric heat detector, in the immediate vicinity of the door. Closure of shutters in such locations should not be initiated by smoke detectors or a fire alarm system, unless the shutter is also intended to partially descend to form part of a boundary to a smoke reservoir.

Note

Removable guides, bottom rubber seals, brush seals, safety edges and wicket gates cannot be fitted to fire shutters.

Tube Motor Fire Rolling Shutter

For commercial and industrial applications.internal tubular operated motor and clean linear design provides a stylish solution to fire safety demands.

Choosing fire shutters has always been about selecting the right one for the job - and nothing else. But all that's about to change because the Fire Shutter has been developed to enable the a aesthetics of the application to be taken into consideration.

Compliance

The is fire tested in accordance with BSEN 16034:2014. Mandatory UK CE marking in accordance with BSEN 13241-1:2003.
Constructed to WARRES No. 421972.
See separate Specification Sheets for all other testing certification..

Release Mechanisms

Fire relay & key switch (requires maintained supply, battery back up needed if no maintained supply).

Fire Relay

Principally the commonly used means of release, the characteristics mimic the use of the solenoid on the conventional fire shutter, again linked to the fire alarm, the shutter rather than closing manually through the gearbox will of course be powered down. A volt free signal is required from the fire alarm.

Fusible Link Release

This product can no longer use a Fusible Link switch to release the shutter. If these is no fire alarm system, then you need the Industrial Fire Shutter.

Audio Visual Warning (FDI)

Principally this unit is designed to delay the closing of the fire shutter; generally the fire alarm is linked to the audio visual unit and from the audio visual straight into the key switch. There is no need for a separate relay; there is already a relay in the FDI.

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.

Size Parameters

Please see separate charts with this brochure for size parameters for different fixing structures and hourly ratings.

The shutters are generally intended for protection of a range of openings in masonry/concrete, steel, steel stud or timber partitions.

The opening must be fire rated to suit and be capable of carrying the weight of the shutter.

Where the shutters are used to protect serveries it is assumed that the counter is composed of non-combustible material and the counter is of sufficient width to ensure that the bottom rail movement under heating cannot result in the rail overhanging the counter.

Shutters over 3500mm wide will have traditional 75mm curved laths. Shutters under 3500mm clear width will have 50mm guides and shutters over this width will have 65mm guides.

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 back up unit.

Fundamentally 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.

Paint Finish Option

To compliment the asthetics of your application, this product can be powder coated to any BS or RAL colour (subject to availability).

SIZES AVAILABLE

TUBE MOTOR - 1 HOUR RATED

1 HOUR

FIXING TO FLEXIBLE/TIMBER STUD CONSTRUCTED OPENINGS

OVERALL WIDTH

OVERALL HEIGHT	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000
700																						
900																						
1100																						
1300																						
1500																						
1700				50mm flat lath or 75mm traditional (curved) laths																		
1900																						
2100																						
2300																						
2500																						
2700																						
2900																						
3100					75mm traditional (curved) laths																	
3300																						
3500																						
3700																						

FIXING TO STEEL/MASONRY CONSTRUCTED OPENINGS ONLY

OVERALL WIDTH

OVERALL HEIGHT	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600	5800
700																										
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3900																										
4100																										
4300																										
4500																										

50mm flat lath
(optional extra)

75mm traditional (curved) laths

TUBE MOTOR - 2 HOUR RATED

FIXING TO STEEL/MASONRY CONSTRUCTED OPENINGS ONLY

OVERALL WIDTH

OVERALL HEIGHT	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000
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3700																						

TUBE MOTOR - 4 HOUR RATED

FIXING TO STEEL/MASONRY CONSTRUCTED OPENINGS ONLY

OVERALL WIDTH

OVERALL HEIGHT	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
700																
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3300																
3500																
3700																
3900																

Surface Key Switch

Flush Rocker Switch (optional extra)

Flush Key Switch (optional extra)

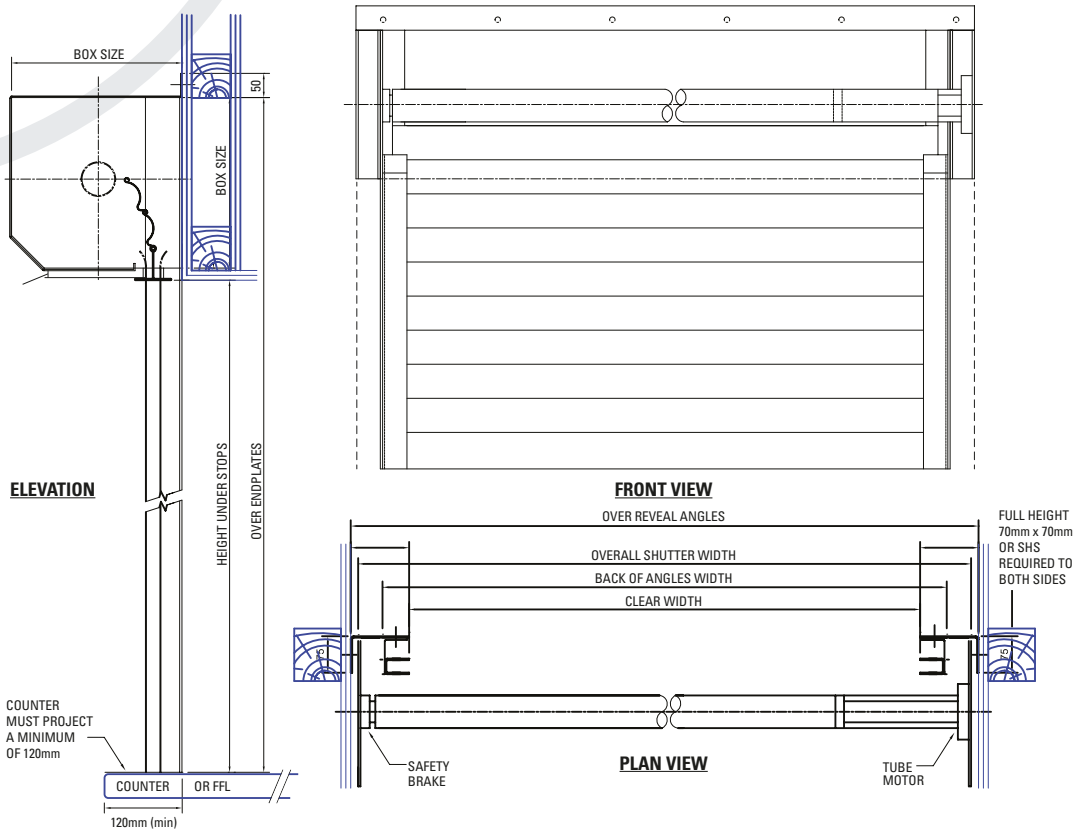
Battery Back Up

Fire Shutter Relay

Audio Visual Warning Panel

TECHNICAL INFORMATION

TUBE MOTOR FIRE SHUTTER
REVEAL FIX FITTED TO TIMBER



TUBE MOTOR FIRE SHUTTER

Shutter Box Sizes:	
Clear height (under stops)	Box
Subject to Clear Height	255 x 255mm
Subject to Clear Height	305 x 305mm
Subject to Clear Height	350 x 350mm

FITTED WITHIN FIRE SHUTTERS

Reveal Angle Sizes:
Subject to Opening Width

Guide Fixing Angle:	75mm x 50mm x 5mm
Guides:	50 or 65mm Channel
Bottom Rail:	Double Formed

Included as Standard:

- Lath - 76mm Solid GALV (50mm lath optional extra)
- Normal Coil
- Keyswitch
- Easy Fit Relay
- Hood
- Battery Back-Up Unit C/W BRKT
- Safety Bearing
- Manual Override

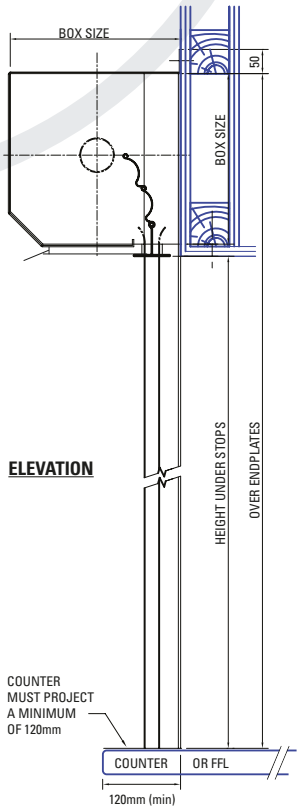
Fire Rating:	60 minutes
Structure:	Timber, Fire Rated Plasterboard
Handling:	Left Hand or Right Hand Motor
Weight:	36 kgs Per Sq Metre Approx

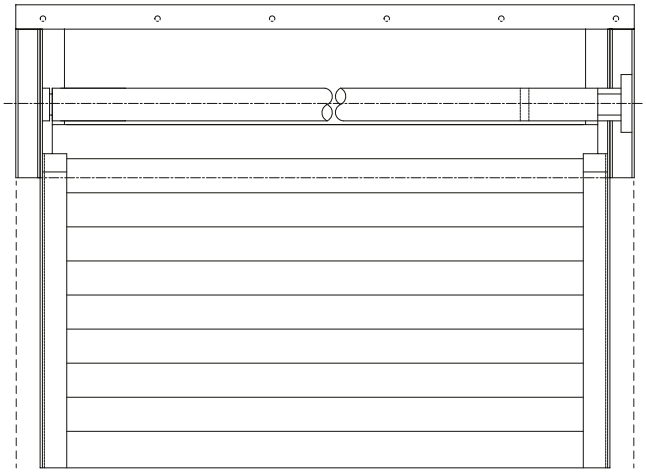
Key:
Components supplied by Syston Doors
Structure already in situ

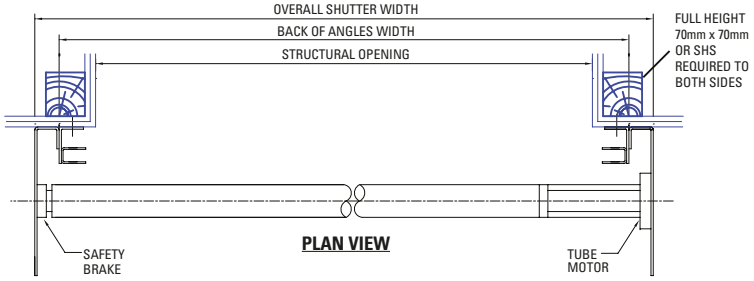
All openings must be capable of carrying the weight of the fire Shutter and be equal or greater than the fire resistance of the fire shutter assembly.

NOTE:
Indicative drawing only
Box size could change due to height & width

TUBE MOTOR FIRE SHUTTER
FACE FIT TO FLEXIBLE TIMBER STUD







TUBE MOTOR FIRE SHUTTER

Shutter Box Sizes:	
Clear height (under stops)	Box
Subject to Clear Height	255 x 255mm
Subject to Clear Height	305 x 305mm
Subject to Clear Height	350 x 350mm

Guide Fixing Angle:	75mm x 50mm x 5mm
Guides:	50 or 65mm Channel

Bottom Rail:	Double Formed

Included as Standard:

- Lath - 76mm Solid GALV (50mm lath optional extra)
- Normal Coil
- Keyswitch
- Easy Fit Relay
- Hood
- Battery Back-Up Unit C/W BRKT
- Safety Bearing
- Manual Override

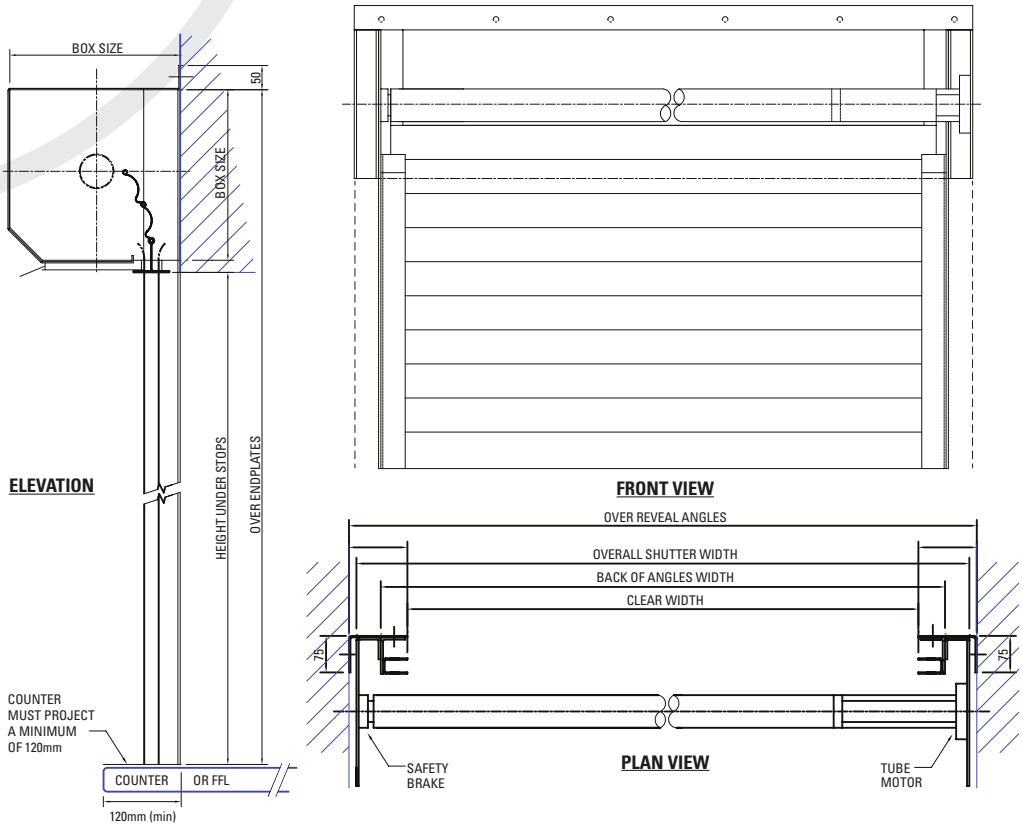
Fire Rating:	60 minutes
Structure:	Timber, Fire Rated Plasterboard
Handling:	Left Hand or Right Hand Motor
Weight:	36 kgs Per Sq Metre Approx

Key:
Components supplied by Syston Doors
Structure already in situ

All openings must be capable of carrying the weight of the fire Shutter and be equal or greater than the fire resistance of the fire shutter assembly.

NOTE:
Indicative drawing only
Box size could change due to height & width

TUBE MOTOR FIRE SHUTTER
REVEAL FIX FITTED TO MASONRY OR STEEL



TUBE MOTOR FIRE SHUTTER

Shutter Box Sizes:	
Clear height (under stops)	Box
Subject to Clear Height	255 x 255mm
Subject to Clear Height	305 x 305mm
Subject to Clear Height	350 x 350mm

FITTED WITHIN FIRE SHUTTERS

Reveal Angle Sizes:	
Subject to Opening Width	

Guide Fixing Angle:	75mm x 50mm x 5mm
Guides:	50 or 65mm Channel
Bottom Rail:	Double Formed

Included as Standard:

- Lath - 76mm Solid GALV (50mm lath optional extra)
- Normal Coil
- Keyswitch
- Easy Fit Relay
- Hood
- Battery Back-Up Unit C/W BRKT
- Safety Bearing
- Manual Override

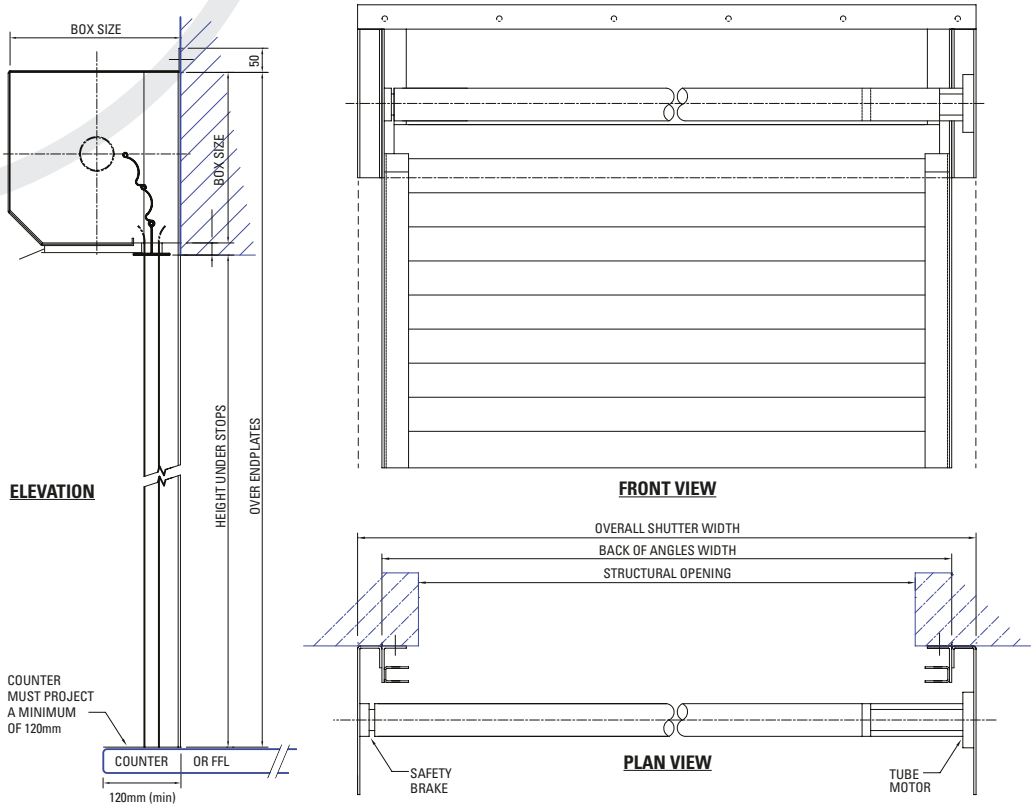
Fire Rating:	60/120/240 minutes
Structure:	Steel, Masonry
Handling:	Left Hand or Right Hand Motor
Weight:	36 kgs Per Sq Metre Approx

Key:
Components supplied by Syston Doors
Structure already in situ

All openings must be capable of carrying the weight of the fire Shutter and be equal or greater than the fire resistance of the fire shutter assembly.

NOTE:
Indicative drawing only
Box size could change due to height & width

TUBE MOTOR FIRE SHUTTER
FACE FIT TO MASONRY OR STEEL



TUBE MOTOR FIRE SHUTTER

Shutter Box Sizes:	
Clear height (under stops)	Box
Subject to Clear Height	255 x 255mm
Subject to Clear Height	305 x 305mm
Subject to Clear Height	350 x 350mm

Guide Fixing Angle:	75mm x 50mm x 5mm
Guides:	50 or 65mm Channel
Bottom Rail:	Double Formed

Included as Standard:

- Lath - 76mm Solid GALV (50mm lath optional extra)
- Normal Coil
- Keyswitch
- Easy Fit Relay
- Hood
- Battery Back-Up Unit C/W BRKT
- Safety Bearing
- Manual Override

Fire Rating:	60, 120 or 240 minutes
Structure:	Masonry or Steel
Handling:	Left Hand or Right Hand Motor
Weight:	36 kgs Per Sq Metre Approx

Key:
Components supplied by Syston Doors
Structure already in situ

All openings must be capable of carrying the weight of the fire Shutter and be equal or greater than the fire resistance of the fire shutter assembly.

NOTE:
Indicative drawing only
Box size could change due to height & width

FIRE RESISTING RANGE

In addition to our Tubular Motor operated fire shutter we offer a full range of fire resisting rolling shutters, Fire & Smoke Curtains, Acoustic Rolling Shutters, and Fire Rated Steel Doorsets.

'JM' FIRE ROLLING SHUTTER

Designed for larger openings for both commercial and industrial applications.

BS1634 & BS8524 FIRE & SMOKE CURTAINS

Discreet and lightweight, yet with a performance equivalent to fire shutters for both commercial and industrial applications.

FIRE STOPPER ACOUSTIC FIRE SHUTTER

Fire Stopper Acoustic has a dB rating and is suited for serveries and all other applications where reduction in sound is required.

FIRE RATED STEEL DOORSETS

We offer Fire Rated Steel Doors with fire ratings up to 240 minutes with many hardware, vision panel and fire rated louvre options.

dhf Raising Standards Advancing Safety

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