



Global Fire Control Solutions

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National Building Specification
FireSafe PLUS

Product Reference:
Firesafe Plus
Automatic Fire Barrier

Approved Standards:
BS EN 1634-1:2008
BS EN 1363-1:1999
BS EN 1363-2:1999
BS EN 1634-3:2004
BS EN 13501-2:2007+A1:2009
BS EN 949

Description:
The FireSafe Plus is an electrically operated Automatic Fire Barrier, to be used to form a barrier against fire.

Product Performance:
Complete product tested to BS EN 1634-1:2008 achieving an Integrity (E) performance of 120 minutes and Irradiance (W) of 120 minutes and is classified in accordance with BS EN 13501-1:2007+A1:2009 as E120 EW120.

Designed to operate for 2 000 cycles at normal ambient temperatures in the range of 0°C to 60°C.

The Firesafe Plus can be provided to protect openings widths from 9 m to 6.6 m in height.

Classification Periods: 10, 15, 20, 30, 45, 60, 90 and 120

Table with 15 columns: R, E, I, W, t, t, -, M, S, C, IncSlow, sn, EF, r. Values: 120, 120

General Description:

The Automatic Fire Barrier head box is manufactured from 1.2 mm zintec steel with removable cover plates allowing access to the fabric curtain roller. Standard head box sizes are 180 mm x 180 mm larger head boxes where the fabric curtain drop is in excess of 3 m. A suitably weighted bottom bar is provided to prevent deflection and ensure correct operation under gravity.

The roller is constructed from a steel tube, each of which incorporates a 24Vdc motor. The fabric curtain is a stainless steel wire reinforced glass fabric, coated with a specially formulated intumescent filled silicone. When exposed to temperatures above 160°C the coating system will form an expanding carbonic char. The weight is approx. 1750 g/m² in its finished form. The fabric thickness is nominally 1.9 mm and the weave is an 8-shaft satin and is tested to withstand temperatures over 1000°C.

Side guides retain the fabric curtain edges and are installed either side to provide a seal between the fabric curtain and the surrounding construction.

The FireSafe Plus has fixing options to suit all types of ceiling configurations and can be integrated into either a suspended or a solid ceiling. It remains hidden until required. Upon receiving a signal from the fire detection system or on loss of power the Automatic Fire Barrier unwinds to its fire operational position by gravity.

Control System:

The control panel [model FC- 01 GFS] meets the following EU Directives: Low Voltage Directive 2006/95/EC and Electromagnetic Compatibility Directive 2004/108/EC.

Under normal operating conditions the Automatic Fire Barrier would be held in the retracted position via the motor operating at low voltage. Upon activation of the fire alarm the control panel will remove the supply voltage and the Automatic Fire Barrier will descend under gravity in a controlled manner. A dynamic braking system housed in the motor control circuit controls the speed of descent.

To retract the Automatic Fire Barrier the control panel supplies 24Vdc to the motor which drives the Automatic Fire Barrier to the upper position. As the bottom bar interfaces with the head box the limit setting holds the bottom bar in the retracted position.

Should the mains power fail to the control panel the supply is automatically switched to the integral standby battery. The Automatic Fire Barrier remains in the retracted position for 24 hrs. The Automatic Fire Barrier will remain fully operational until the battery low voltage cut off facility reads a voltage of 21V, the Automatic Fire Barrier will then safely descend under gravity to its fire operational position.

Optional Extra's

Split Drop:

An optional braking system is available to allow a stage descent during deployment. Partial descent to a predetermined level to permit preliminary escape and initial smoke containment at high level, after the delay the Automatic Fire Barrier descends to its fire operational position.

Smoke Seals

Located in the steel side guides and head box the smoke seals limit smoke leakage as the Automatic Fire Barrier fire curtain descends.

Delay on Alarm:

The control panel can be programmed to allow a timer delay on the alarm for a number minutes before the Automatic Fire Barrier descends to its fire operational position.

Beam Sensor

A beam sensor can be used as either a block sensor or an override; when the fire alarm activates and someone passes under the Automatic Fire Barrier the beam sensor can be wired to either stop or to retract the Automatic Fire Barrier. Please note that when used in isolation the beam sensor does not trigger a sound.

Emergency Retract Switches:

Hold on retract facility for escape and emergency service access.

Visual Alert System:

Flashing beacon and sounder can be connected via the control panel and provide a warning when the Automatic Fire Barrier is about to descend. When the fire alarm is triggered and the Automatic Fire Barrier deploys the beacon will flash with a sounder alert until the signal from the alarm is lost. Please note that when used in isolation the audio-visual unit does not stop the Automatic Fire Barrier descending or retract the Automatic Fire Barrier.

Smoke & Fire Curtains Ltd. has a policy of continuous product improvement. As such we reserve the right to change design and specifications without prior notice. Please check our website for the latest information.