

National Building Specification Smoke Safe D120

Product Reference:

Smoke Safe D120

ASB Automatic Smoke Curtain

SSB Static Smoke Barrier

Certified Performance

Smoke Safe D120 curtain material achieves a resistance to smoke at 600°C for a minimum of 120 minutes, achieving a DA classification as detailed in EN12101-1:2005 & A1:2006.

Approved Standards:

EN12101-1:2005 & A1:2006

Annex D - Fire test

Annex B - Cycle test

Annex C - Smoke Leakage to Fabric.

Description:

The Smoke Safe D120 is an electrically operated automatic smoke barrier, to be used to form a continuous barrier against smoke produced in a fire. It is the most discreet automatic curtain available; designed to be installed in commercial properties, such as shopping centers, airports, and positioned to push smoke towards a ventilation system.

Product Performance:

Complete product tested to (BS) EN12101-1:2005 and achieved a rating of DA (600°C, above 120 minutes) and is ASB 1 and ASB 3 classified.

Designed to operate for 2000 cycles at normal ambient temperatures in the range of 0°C to 60°C and to withstand hot air and smoke at temperatures up to 600°C for over 120 minutes once only.

General Description:

The curtain head box is manufactured from 1.2mm zintec steel, the enclosure is rated at the same temperature as the curtain fabric. Removable cover plates are incorporated to allow access to the curtain rollers. Standard head box sizes are 180mm x 180mm larger head boxes may be required where the curtain drop is in excess of 3m. A suitably weighted bottom bar is provided to prevent deflection and ensure correct operation under gravity.

The roller is constructed from tube, each of which incorporates a 24volt D.C motor. The fabric curtain is manufactured from stainless steel reinforced glass fibre fabric. The fabric has a nominal weight of 455g/m² and is tested to withstand temperatures of up to 600°C for a period of 120 minutes.

The smoke curtain 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 with the gravity fail safe system, the curtain automatically unwinds to its operational position

Control System:

The panel model number is FC- 01 GFS and is classified within the following EU Directives: Low Voltage Directive 2006/95/EC and Electromagnetic Compatibility Directive 2004/108/EC.

Under normal operating conditions the curtains would be held in the retracted position via the motors operating at low voltage. Upon activation of the fire alarm the control panel will remove the supply voltage and the curtain will descend under the power of gravity in a controlled manner. A dynamic braking system housed in the motor control circuit controls the speed of descent of the curtain, this is electronically synchronised on overlapping curtains with a common bottom bar.

To retract the curtain the control panel supplies 24v to the motor and the motors drive the curtains to the upper position. As the bottom bar hits the curtain head box the limits setting holds the bottom bar in the retracted position.

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

Optional Extra's

Side Guides

Smoke Safe D120 is also available with side guides where a high degree of deflection is likely.

Split Drop Delay:

An optional braking system is available to allow a two stage descent during gravity deployment. Partial descent to a predetermined level to permit preliminary escape and initial smoke containment, after delay the barrier descends to full operational position.

Visual Alert System:

Standard localized light or strobe light.

Smoke Safe D120 – Single Curtain Drawing

