FireCurtains UK
Global Fire Control Solutions

Smoke & Fire Curtains Ltd
9 Brook Street, Syston, Leicester, LE7 1GD
t: +44 (0)330 0539660
e: enquiries@firecurtainsltd.com
w: www.firecurtainsltd.com

National Building Specification
Smoke Safe D120

Product Reference:
Smoke Safe D120

Approved Standards:
BS EN 12101-1:2005+A1:2006

Description:
The Smoke Safe D120 is an electrically operated active smoke barrier, to be used to form a continuous barrier against smoke produced in a fire. With its discreet design it is used in the build environment such a as but not limited to large retail premises, shopping centre's, airports etc. and is designed to limit the lateral spread of smoke and/or to channel smoke towards ventilation systems.

Product Performance:
Complete product tested to BS EN 12101-1:2005+A1:2006 achieving an integrity performance of above 120 minutes at 600°C and is classified in accordance with BS EN 13501-4:2007+A1:2009 as $D_{600}A$ for category ASB 1 and ASB 3.

Designed to operate for 3 000 cycles at normal ambient temperatures in the range of 0°C to 60°C.

General Description:
The Active Smoke Barrier head box is manufactured from 1.2 mm zintec steel with removable cover plates allowing access to the fabric curtain rollers. Standard head box sizes are 180 mm x 180 mm with 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, which incorporates a 24Vdc motor. The fabric curtain is manufactured from glass fibre fabric. The fabric weight is approx. 455 g/m^2 and is tested to withstand temperatures of up to 600°C for a period of 120 minutes.

The Active Smoke Barrier 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 Active Smoke Barrier unwinds to its fire operational position by gravity.

Global Fire Control Solutions

Smoke & Fire Curtains Ltd
9 Brook Street, Syston, Leicester, LE7 1GD
t: +44 (0)330 0539660
e: enquiries@firecurtainsltd.com

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

Under normal operating conditions the Active Smoke Barrier would be held in the retracted position via motor operating at low voltage. Upon activation of the fire alarm the control panel will remove the supply voltage and the Active Smoke 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 Active Smoke Barrier the control panel supplies 24Vdc to the motor which drives the Active Smoke 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 Active Smoke Barrier remains in the retracted position for 24 hrs. The curtain will remain fully operational until the battery low voltage cut off facility reads a voltage of 21V, the Active Smoke Barrier will then safely descend under gravity to its fire operational position.

Optional Extra's

Split Drop Delay:
An optional braking system is available to allow a two-stage descent during deployment. Partial descent to a predetermined level to permit preliminary escape and initial smoke containment, after the delay the Active Smoke Barrier descends to its fire operational position.

Visual Alert System:
Flashing beacon and sounder are can be connected to via the control panel and provide a warning when the Active Smoke Barrier is about to descend. When the fire alarm is triggered the Active Smoke 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 Active Smoke Barrier descending and/or retract the Active Smoke 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.