

Smoke containment systems prevent the movement of smoke and heat from one area to another. These often take the form of physical barriers such as smoke curtains. Smoke curtains are generally used either to create a smoke reservoir by containing and limiting the travel of smoke, to channel smoke in a predetermined direction, or to prevent or retard smoke entry to another area or void.

Movable (as opposed to fixed) smoke curtains may be used where a fixed smoke curtain might be either impractical or aesthetically unacceptable.

The curtain comprises a flexible, heat resistant fabric, which is impervious to smoke and hot gases, wound round a circular tube. The tube contains an electric motor which holds the curtain retracted at ceiling level, and which unrolls the fabric automatically upon a signal from a fire detection system. A bottom bar is fitted to the bottom edge of the fabric to keep it taut and provide a suitable finish when the curtain is retracted.

The curtain material is 0.4 mm thick glass fibre with a weight of 455 g/m².

Smokemaster SM5 has been successfully tested and certified to EN 12101-1 in accredited third party test laboratories and is CE marked. The complete product has undergone two tests. One test was for 600°C for 120 minutes, thus the curtain achieves a D120 time/temperature class, in accordance with EN 12101-1. The other was for 1049°C for 60 minutes, thus the curtain achieves a DH120 rating. The fabric has been tested to EN 13501-1.

Its compact and flexible design offers many opportunities for modification to suit the requirements of the building. For instance Smokemaster is available with T- and corner pieces.

There are two types available.

The G (Gravity) version falls under gravity in a controlled manner to a predetermined level in a fire situation or on loss of power, in accordance with ASB 1/3 of EN 12101-1.

The D (Drive) version drives down in a controlled manner to a predetermined level upon receipt of a signal, in accordance with ASB 2/4 of EN 12101-1. It can also be driven down to an intermediate position, for instance over an escalator, where it is held at that position for some time before descending further.

Smokemaster is designed to be linked to a fire detection system.

Smokemaster is also available with side guides where a high degree of deflection is likely.

Smokemaster is delivered to site in a carefully pre-packaged consignment for ease of installation. Two bottom bars are available depending upon aesthetic requirements: the Industrial bottom bar and the Comfort bottom bar. The Comfort bottom bar is virtually invisible, and is available in any RAL colour.

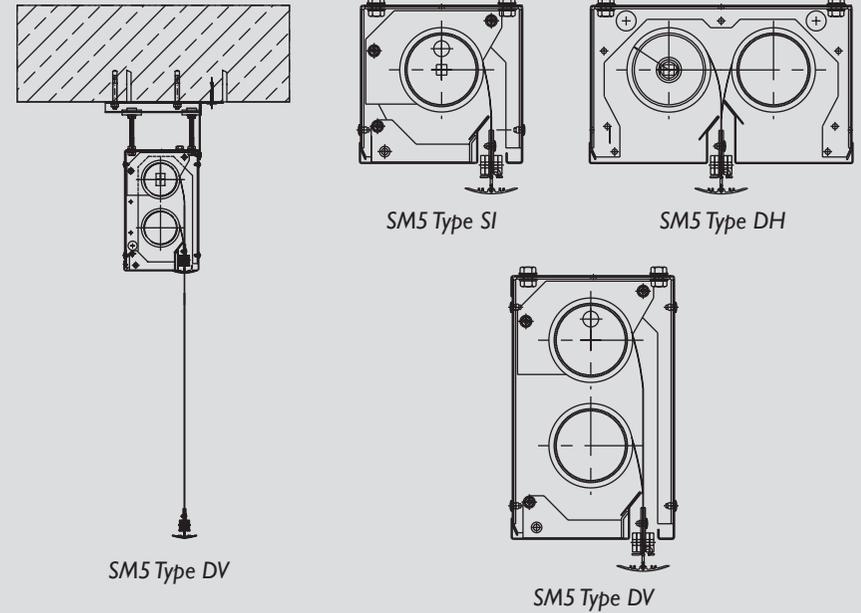
Smokemaster is available in three versions:

- 1 - Single units (type SI).
- 2 - Double vertical (type DV) units, where continuous runs with overlapped fabric to form a continuous barrier are required.
- 3 - Double horizontal (type DH) units, where there is a premium on space under the ceiling.

Overall available curtain lengths are from 1500mm to an infinite length, and drops are available from 500mm to 15000mm. Alternatively, single units are available with up to a 5000 mm length and with a maximum drop of 2750 mm. A requirement above these dimensions will be met by installing either double horizontal or double vertical units.

The roller assembly contains all the electronic components. All Smokemaster curtains require a 230V ac power source. With the D version an additional 24V dc source is required for the brake.

The technical details of the two different curtains can be seen on the right.

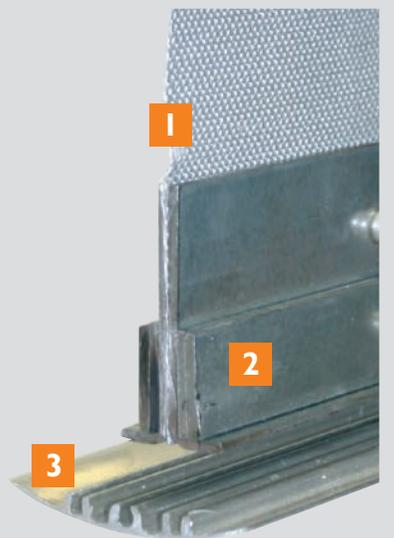


D VERSION		G VERSION	
Power supply	230 V AC / 50H	Voltage	48V DC
Power rating	126 W	Power	60 W
Current	0.55 A	Current	1.25 A
Torque	9.9 Nm/17 min-1	Holding power	5.8W
Protection class	IP 44	Unroll speed	0.15 m/s
Unroll speed	0.08 m/s	Force	28 Kg
		Protection class	IP 20

BOTTOM BAR

For either the Industrial or the Comfort version, a bottom bar is fixed to the lower edge of the fabric to assist in lowering the curtain, to reduce sideways movement of the fabric in air currents and to provide a neat finish when retracted.

- 1 - Non-flammable glass fibre cloth
- 2 - Extruded aluminium bottom bar
- 3 - Weight profile



Comfort bottom bar illustrated here

