

**SPECIFICATION**  
**SMOKESTOP® DH120**  
**ACTIVE SMOKE CURTAIN BARRIER ASSEMBLIES**

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**In accordance with:**

BS EN 12101-1:2006

BS EN 13501-4

**Period of Fire Resistance:**

120 minutes (2 hours) integrity

**Classification:**

DH120

**Certification:**

Complete barrier assemblies are certified by an independent accredited certification body operating to ISO/IEC 17065:2012.

Complete barrier assemblies are certified with an independent accredited certification body operating an accredited UKAS scheme for installation, commissioning and servicing.

**Product Name and Model:**

SmokeStop® DH120 active smoke curtain barrier assemblies

**General description:**

An electrically operated SmokeStop® DH120 active smoke curtain barrier assembly used to form a virtually continuous barrier against smoke.

SmokeStop® DH120 active smoke curtain barrier assemblies comprise a metallic fabric wound on to a steel roller, powered by an internal 24V dc electric motor, enclosed within a 1.2 mm (0.047 in) Stainless Steel box.

A bottom bar is fitted to the bottom edge of the curtain providing tension to the curtain with sufficient weight for the curtain to 'fail-safe by gravity'.

The 24V motor contains an electromagnetic brake to arrest motion of the curtain when in the open position.

The SmokeStop® DH120 active smoke curtain barrier assemblies have been tested to the requirements of BS EN 12101:2006, Annex B for 'Reliability and response times' (1000 cycles on primary power and an additional 50 cycles using back-up power; closing speed of 0.15m/s).

The SmokeStop® DH120 active smoke curtain barrier assemblies have been tested to the requirements of BS EN 12101:2006, Annex C for 'Permeability of materials to smoke' (0.3m<sup>3</sup>/h/m<sup>2</sup>).

The SmokeStop® DH120 active smoke curtain barrier assemblies have been tested to the requirements of BS EN 12101-1:2006, Annex D for 'Temperature/Time Resistance Tests' (120 minutes integrity).

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**Operation:**

SmokeStop® DH120 active smoke curtain barrier assemblies commence movement upon initiation of BMS alarm or power or system failure, and fully deploy to the fire operational position within the range of velocities of 0.06 m/s to 0.15 m/s using the unique VarioSpeed™ function.

Operating speeds are site adjustable without altering the bottom bar mass. Speeds may be dictated by those authorities having jurisdiction for 'safety in use' according to the location, nature or function of each unit.

In the event of a mains supply power failure, the curtain is retained in the open position for a pre-determined period (nominally 30 minutes), using battery back-up power. During this period, the SmokeStop® DH120 active smoke curtain barrier assembly will deploy on receipt of a signal. At the end of the period, the Barrier assembly will deploy.

**Curtain Material:**

The curtain material type is EFP™ A1, which is a stainless steel wire reinforced glass fabric. It has an area weight of 665g/m<sup>2</sup> -5%, +10%.

**Optional Extras:**

- Voice warning:  
Audio or spoken multi message facility when mains or emergency power is available.
- Beam protection and obstruction warning:  
A beam detector, with delay timer which will sound in the event of any obstruction being placed in the barrier drop line when mains or emergency power is available.
- Visual alert system:  
Light warning system when mains or emergency power is available.
- Split drop delay:  
To partially deploy to pre-determined level to permit escape, and initial smoke containment. After delay fully deploys to its fire operational position when mains, or emergency power is available.
- Emergency retract:  
Touch button retract facility for multi-escape and emergency service ingress/egress when mains or emergency power is available.

**Manufacturers:**

Subject to compliance with all requirements set out in this specification, manufacturers offering products may be incorporated into the work are limited to the following:

Coopers Fire Limited, Ignis House, Houghton Avenue, Waterlooville Hampshire, PO7 3DU, United Kingdom. Tel +44 (0)23 9245 4405, Fax: +44 (0)23 9249 2732, Email: [sales@coopersfire.com](mailto:sales@coopersfire.com), Web: <http://www.coopersfire.com>

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**Warranty:**

The manufacturer shall submit a written warranty for a period of one (1) year. If any part of the works of this section, including design, fabrication or installation are sublet to any party, such party shall provide a collateral warranty equivalent to the warranty.

**Product certification, performance and/ or testing:**

- Complete SmokeStop® DH120 active smoke curtain barrier assemblies are certified by an independent accredited certification body operating to ISO/IEC 17065:2012.
- Complete SmokeStop® DH120 active smoke curtain barrier assemblies are certified with an independent accredited certification body operating an accredited UKAS scheme for installation, commissioning and servicing.
- Complete SmokeStop® DH120 active smoke curtain barrier assemblies have been tested for fire resistance to BS EN 1634-1. The Barrier assembly achieved 120 minutes Integrity.
- Complete SmokeStop® DH120 active smoke curtain barrier assemblies have passed tests to BS EN 12101:2006, Annex B for 'Reliability and response times'.
- Complete SmokeStop® DH120 active smoke curtain barrier assemblies have passed tests to BS EN 12101:2006, Annex C for 'Permeability of materials to smoke'.
- Motor(s) used within SmokeStop® DH120 active smoke curtain barrier assemblies have passed elevated temperature operational tests to BS 8524-1:2013, Annex G.

**Approving standards:**

The following standards apply to this product:

- BS EN 12101-1:2006, Smoke and heat control systems: Part 1 – Specifications for smoke barriers
- BS 476 Pt 6; Fire propagation
- BS 476 Pt 7; Surface spread of flame
- BS EN ISO 1716:2010; Determination of the heat of combustion for building products
- BS EN 13823:2010; Reaction to fire test for building products
- BS 6853:1999 Annex D.8.4; Methods for measuring smoke density
- BS 6853:1999: Annex B.2; Determination of weighted summation of toxic fume
- BS EN 14184-1:2011; Determination of formaldehyde – Part 1: Free and hydrolysed formaldehyde
- BS 8524-1:2013, Annex G, "Test method for reliability of motor operation at elevated temperatures"
- BS EN ISO 9001:2015, Quality management system
- BS EN ISO 14001:2015, Environmental management system