

**SPECIFICATION**  
**FIREMASTER® NVS™ HORIZONTAL DUPLEX™**  
**ACTIVE FIRE CURTAIN BARRIER ASSEMBLIES**

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**In accordance with:**

BS EN 1634-1  
BS EN 14600  
BS 476 Pt 6  
BS 476 Pt7

**Period of Fire Resistance:**

120 minutes (2 hours) integrity

**Period of Radiation:**

15 minutes

**Certification:**

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

**Product Name and Model:**

FireMaster® NVS™ Horizontal Duplex™ active fire curtain barrier assemblies

**General description:**

An electrically operated FireMaster® NVS™ Horizontal Duplex™ active fire curtain barrier assembly used to form a virtually continuous barrier as a fire separating element.

*NOTE For ease of reference the FireMaster® NVS™ Horizontal Duplex™ active fire curtain barrier assembly has been referred to as “barrier assemblies” throughout the remainder of this specification.*

The barrier assemblies comprise a fire-resistant fabric wound on to a steel roller, powered by an internal 24V dc electric motor, enclosed within a 1.2 mm Mild Steel box.

The edges of the curtain are retained inside side guides, providing pressure resistance of at least 20Pa.

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

The barrier assemblies have been tested to the requirements of BS EN 14600:2005 for ‘Durability of Self-Closing’ (500 cycles on primary power and an additional 50 cycles using back-up power; closing speed of 0.1m/s).

The barrier assemblies have been tested to the requirements of BS EN 1634-1:2014 + A1:2018 for ‘Fire Resistance’ (120 minutes integrity).

The barrier assemblies have been tested to the requirements of BS EN 1634-1:2014 + A1:2018 for ‘Radiant Heat Flux’ (15 minutes).

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#### Operation:

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. At the end of the period, the Barrier assembly will deploy.

#### Curtain Material:

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

The curtain fabric offers dimensional stability and is non-combustible to BS EN 13501-1 + A1 – Reaction to Fire.

The fabric has passed testing to BS 476-6 (Method of test for fire propagation for products).

The fabric has passed testing to BS 476-7 (Method of test to determine the classification of the surface spread of flame for products).

The fabric has passed testing to BS EN 1634-1, BS EN 1363-1, BS EN 1362-2 and BS EN 1634-3 (Fire/Smoke Resistance)

The fabric has passed testing to BS EN ISO 1716 (Determination of the Heat of Combustion for Building Products)

The fabric has passed testing to BS EN 13823 (Reaction to Fire Tests – Single Burning Item)

The fabric has passed testing to HSG 248 (Analysis of Material for the presence of Asbestos)

The fabric has passed testing to BS EN 14184-1 (Textiles – Determination of Formaldehyde – Part 1: Free and hydrolysed formaldehyde (water extraction method).

The fabric has a Classification of Reaction to Fire Performance in accordance with EN 13501-1:2007 +A1:2009 of 'A1'.

#### 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.

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- 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

Email: [sales@coopersfire.com](mailto:sales@coopersfire.com), Web: <http://www.coopersfire.com>

#### **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 barrier assemblies are certified by an independent accredited certification body operating to ISO/IEC 17065:2012.
- Complete barrier assemblies have been tested for fire resistance to BS EN 1634-1. The Barrier assembly achieved 120 minutes Integrity and 15 minutes Radiation.
- Complete barrier assemblies have passed tests for durability to BS EN 12605 (500 cycles).
- Motor(s) used within 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 1634-1:2014 +A1:2018, Fire resistance and smoke control tests for door, shutter and, openable window assemblies and elements of building hardware. Fire resistance tests for doors, shutters and openable windows
- BS EN 1363-1:1999, Fire resistance tests – Part 1: General requirements

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- BS EN 13501-2:2003, Fire classification of construction products and building elements. Classification using data from fire resistance tests, excluding ventilation services rating
- BS EN 12605:2000, Industrial, commercial and garage doors and gates. Mechanical aspects. Test methods.
- BS EN 14600, Doorsets and openable windows with fire resisting and/or smoke control characteristics – Requirements and classification
- BS 8524-1:2013, Annex G, “Test method for reliability of motor operation at elevated temperatures”
- BS 476 Pt 6, Fire tests on building materials and structures. Method of test for fire propagation for products
- BS 476 Pt 7, Fire tests on building materials and structures. Method of test to determine the classification of the surface spread of flame of products
- BS EN ISO 9001:2008, Quality management system
- BS EN ISO 14001:2004, Environmental management system