



*Smoke curtain  
Fire curtain*

*Materials  
recommended for fixed  
and automatic fire  
and smoke protection*

*Sheat*

Picture with courtesy of AVAPS

*Smoke curtain*

A smoke curtain in a building will guide the smoke, which consists of gas and small particles sent into the air by burning materials, to an extraction system within a building and effectively protect people from exposure to dangerous smoke as well as limit damage and the further spread of fire. A fixed smoke curtain or an automatic smoke curtain separates an area and keeps the smoke from spreading from one area to another. Silicone or PU coated woven glass fabric is used as a standard material to withstand a fire resistance temperature of 600 °C for 60 minutes of exposure to fire.

*Fire curtain*

A fire curtain in a building creates a fire-resistant barrier and protects and separates a part or a section of a building from fire or smoke damage. A fire is a part of fire safety measure. The fire curtain is either fixed or it automatically drops and separates the area when activated by a fire. Compared to a smoke curtain, it includes a coated glass fabric with a stainless steel wire insert as an additional safety measure to offer protection from sudden impacts and to withstand a fire resistance temperature of 1100 °C for 120 minutes or more of fire exposure.

*Applications*

As Fire curtains or smoke curtains in shopping malls, retail centers, hotels, car parks, offices, hospitals, airport hanger's, public buildings, theatres, railway stations, metro stations, tunnels, marine fire curtains, draft screens in tall buildings as well as for passive fire protection, heat protection including insulations, special applications for medical facilities and many more applications.

*Carrier materials and coating*

*Smoke curtain*

High quality woven glass fabric ( 430 g / m<sup>2</sup> ) or panama weave fabric coated with 40 g of silicone each side, has a thickness of 0.4 mm and total weight 510 g / m<sup>2</sup>  
High-quality woven glass fabric ( 430 g / m<sup>2</sup> ) coated with 20 g polyurethane each side, has a thickness of 0.4 mm and total weight 470 g / m<sup>2</sup>

*Fire curtain*

High quality 67% woven E-Glass and 33% stainless steel wire fabric ( 630 g / m<sup>2</sup> ) or panama weave fabric coated on one side or both sides with 25 g of Polyurethane, has an approximate thickness of 0.7 mm and total weight of 680 g / m<sup>2</sup>

*Key facts*

- Excellent fire properties
- Excellent Fire resistance properties ( 60 mins, 120 mins )
- Anti-bacterial, anti-fungal, and dew resistant
- High heat reflection due to aluminium pigment
- No smoke leakage
- High integrity due to the wire weaves
- Excellent mechanical properties
- High cut resistance and flexibility
- Available width: approx. 100 / 125 / 150 cm
- Colour: grey

*The standard material complies with the following standard*

- Complied with Euro class EN 13501 - 1 + A1: 2009
- Material of limited combustibility in accordance with Approved Documents B of the building regulation of United Kingdom ( equivalent to A 2 )
- BS 467 part 6 1989 and BS 476 part 7 1987

*Fabric will meet to the following test when it is tested as a full system:*

- BS EN 12101 - 1: 2005 + A1:2006  
Smoke and heat control systems Specification for smoke barriers
- BS EN 1634 - 1: 2008  
Monitoring of air temperature
- BS EN 1634 - 3: 2004  
Fire resistance, smoke control tests
- BS EN 1364 - 1:1999  
Fire resistance tests for non-loadbearing elements Walls
- BS 8524 - 1: 2013  
Active fire curtain barrier assemblies and specification
- BS 5234 - 2: 1992  
Partitions ( including matching linings )  
Specification for performance requirements for strength and robustness including methods of test

Other national and international standard tests will be conducted if requested by the customer. The manufacturer of a complete system is responsible for the use and suitability of our materials for specific applications in the mentioned areas.  
The provided information applies to the delivery status; processing guarantee within 24 months under normal conditions.

