

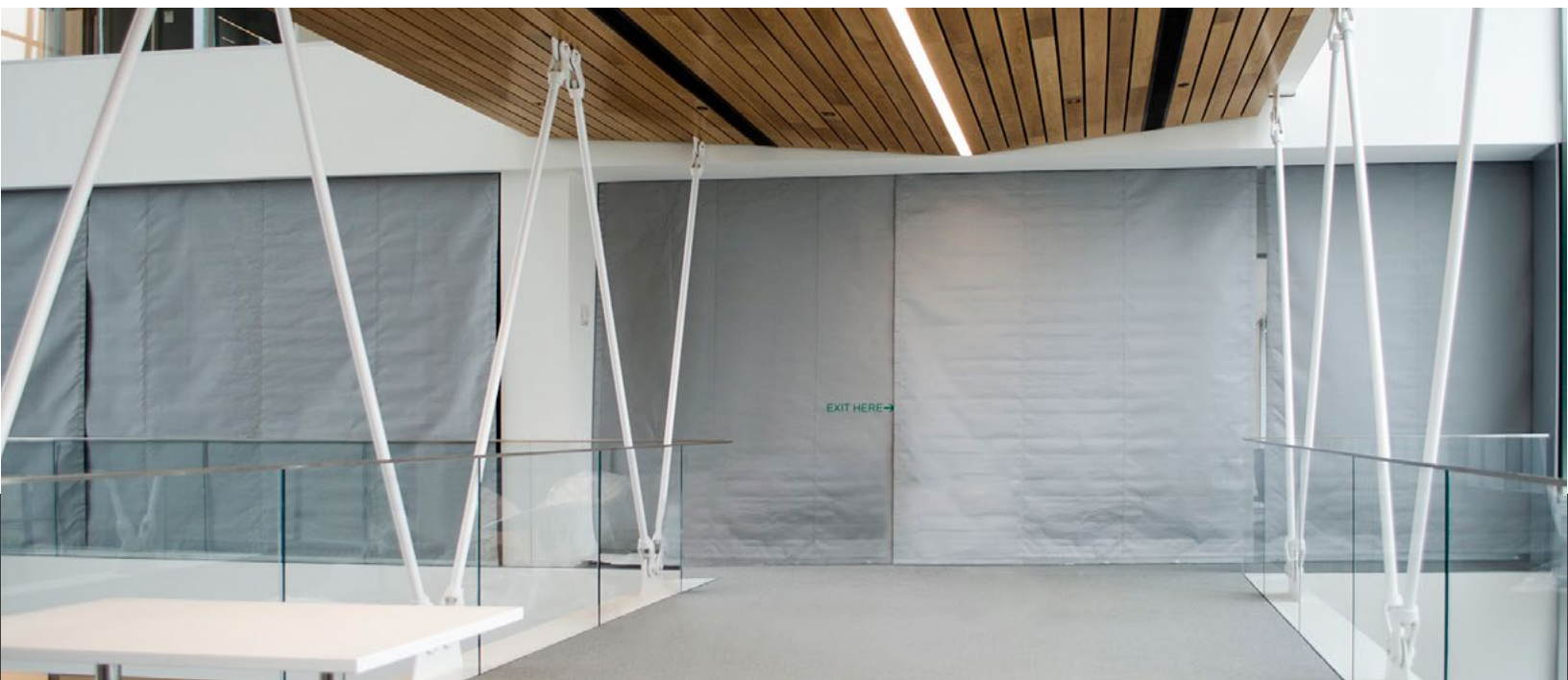
Smoke and Fire Curtains



SMOKE AND FIRE CURTAINS

Fire Curtain Technologies distributes a wide range of fire and smoke curtains to protect every type of building application.

Our fire and smoke protective curtains offer various solutions to architects, engineers, consultants and specifiers providing the ability to design complex buildings with open spaces in compliance with building regulations.



Beneficts

SMOKE CURTAINS



Cost effective smoke barrier



Increase the time available for occupant egress



Limit travel and overcooling of smoke, reducing the risk of cold smoke dropping to low level and obscuring egress pathways



Contain or channel smoke

FIRE CURTAINS



Seal off an area to contain fire and prevent it from spreading



Retain fire integrity in an emergency but allow complete freedom of passage when not in use.



Automatically deploy upon receipt of a signal from the fire-alarm panel, and automatically retracts when the signal has stopped

Features

Fire Curtain Technologies smoke and fire curtains are **fully tested and certified** to the latest fire regulations and building design technology.

Wide range of options: All system components (headboxes, fabric, bottom bars, drive systems) can be modified to fit project requirements.

All fire and smoke curtains can operate as an integrated part of a smoke control system

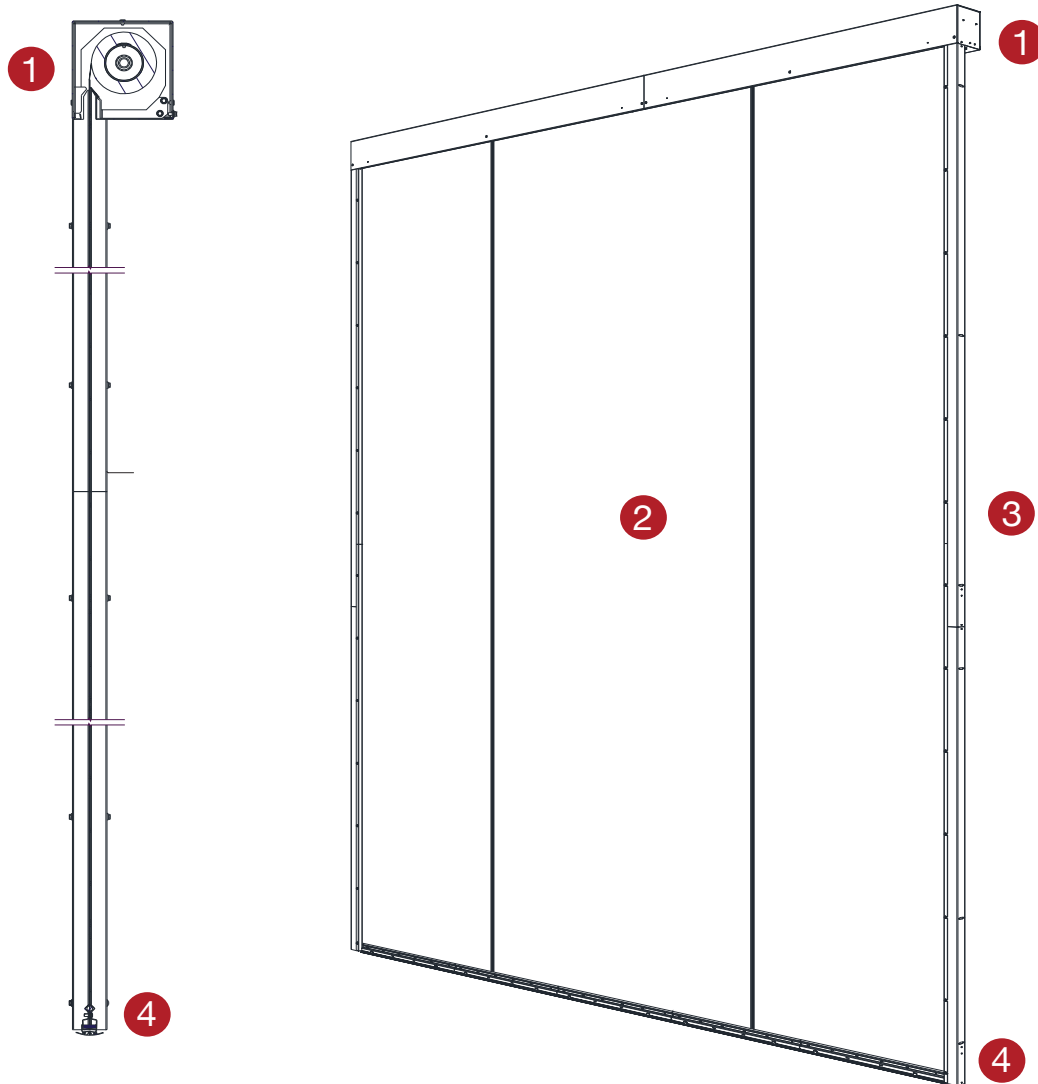
Gravity Fail-safe – Unwinds curtain to its operational position without the need for power.

Fire and Smoke curtains are manufactured under the ISO 9001.



Curtain Components

There are four main components: **1 Head box**, **2 Roller with fabric**, **3 Side guides**, and **4 Bottom bar**



Headbox

The headbox is made from galvanized steel and comprises stiffening brackets and a movable cover plate. Head boxes are pre-assembled to accommodate a roller or rollers easily.

Bottom Bar

The bottom bar consists of a profile made of a galvanized steel sheet. It's attached to the end of the cloth using rivets. It serves as a weight to deploy the curtain and ensures a tight seal against the floor.

Curtain Cloth

1-3 hour Flexible fire-resistant, heat-stabilize woven fiberglass fabric

Applications

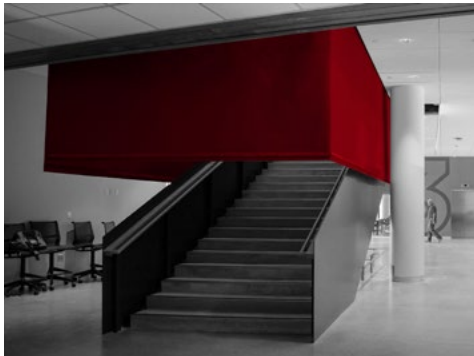


Opening Protective Fire Curtains

1-3 Hour Fire and Smoke curtains for openings in firewalls, atriums, exit stairs, and windows. Available in large sizes and cornering applications

Elevator Smoke and Fire Curtains

We offer 2 options for elevators: The GX smoke curtain with a transparent material and the SD fire curtain with a 3-hour fire rated material

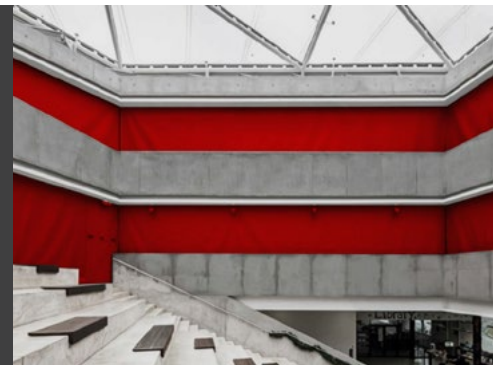


Deployable Smoke Curtain

Smoke curtains for engineered smoke evacuation systems. Partial or full deployment. Used primarily for smoke control at atriums and exit access stairways.

Atrium Smoke Barrier

Smoke and Fire curtains used for smoke containment and compartmentalization in atria, as part of an engineered smoke control system. Smoke curtains can be used as a component in exhaust or pressurization smoke control systems and additionally provide a 1-hour or 2-hour fire rating.



Fire Protective Smoke Curtain SD

The Smoke Sealed Curtain SD is an automatic, gravity-drop barrier designed to restrict the passage of smoke from spreading in case of a fire.



The Smoke Protective Curtain is designed to operate both independently or interface with a building Fire Alarm Control Panel (FACP).

The Smoke Curtain SD is certified and labeled to UL 10D and further certified to UL 1784.

The curtain consists of a roller covered with a fiberglass fabric which is incorporated into a galvanized steel housing. A simple signal from a fire alarm or detection device deploys the smoke curtain to restrict the passage of fire and smoke.

The Fire Curtain can be installed above the ceiling and remain hidden until it's needed.

APPLICATIONS:

The Smoke Curtain SD is ideal for atrium separations, and can also be used in openings that can lead to rapid smoke migration.



Tested by UL in accordance
with **UL 10D & UL 1784**

Fire rating:

1 hour - 1700°F	Glass fabric
3 hour - 1920°F	Glass fabric with coating and stainless-steel inlay

Materials class: **A2-s1, d0**

FD PIN SIDE GUIDES
with integrated seals

Manufactured in accordance
with ISO 9001:2008

The **roller unit** incorporates a motor, planetary gearbox, and control electronics with a microprocessor. The microprocessor monitors the resting position when rolled up and independently regulates the closing speed to a maximum of 0,15 m/s (6in / sec).

The **fabric** is silver grey and can be printed with custom signage per customer request.

The **housing** is equipped with specially developed reinforced brackets, that maintain integrity at high temperatures. The bottom of the housing is closed off with a panel that allows access of the entire length of the system. The unit can be configured with mounting brackets either for wall or ceiling mounting.

The system is equipped with **FD side guides**. Their special smoke sealing design ensures that the required compartmentalization is achieved and maintained.

The headbox and side guides can be polyester powder coated in all RAL colors. There are no visible fasteners either on the underside of the housing or on the front of the side guides.

A bottom bar is attached to the bottom of the curtain and serves to ensure that the curtain operates as designed and also that it remains stable when unrolling.

The **bottom bar** makes contact with the floor when the curtain is deployed, creating a smoke-tight seal with the building structure.

Fire Protective Curtain FA

1-3 Hour gravity-deployed fire barrier that maintains the integrity of a fire-rated wall in commercial buildings and is used in place of a fire door.



The fire curtain consists of a roller covered with a fiberglass fabric incorporated into a galvanized steel housing. Upon receiving a signal from the fire alarm system or on loss of power, the curtain will descend automatically, preventing fire from spreading from one area to another.

The Fire Protective Curtain is designed to operate both independently or interface with a building Fire Alarm Control Panel (FACP).

The Fire Curtain can be installed above the ceiling and remain hidden until it's needed.

APPLICATIONS:

The Fire Rated Curtain FA can be installed in openings in firewalls, atriums, Exit Stairs in nearly every kind of building, from residential to retail to industrial.

Fire resistance

Model FA1/60 1 hr fire rating

Model FA1/180 3 hr fire rating



Tested by UL in accordance with

UL 10D

Fire rating:

1 hour - 1700°F Glass fabric

3 hour - 1920°F Glass fabric with coating and stainless-steel inlay

Materials class: **A2-s1, d0**

PIN SIDE GUIDES
with integrated seals

Manufactured in accordance
with ISO 9001:2008

The roller unit incorporates a motor, planetary gearbox, and control electronics with a microprocessor. The microprocessor monitors the resting position when rolled up and independently regulates the closing speed to a maximum of 0,15 m/s (6in / sec).

The 3 Hr Fire Rated Woven Fiberglass Fabric is silver grey and can be printed with custom signage per customer request.

The housing is equipped with specially developed reinforced brackets, that maintain integrity at high temperatures. The bottom of the housing is closed off with a panel that allows access of the entire length of the system.

The unit can be configured with mounting brackets either for wall or ceiling mounting.

The curtain **headbox and side guides** can be polyester powder coated in all RAL colors.

There are no visible fasteners either on the underside of the housing or on the front of the side guides.

A bottom bar is attached to the bottom of the curtain and serves to ensure that the curtain operates as designed and also that it remains stable when unrolling.

The bottom bar makes contact with the floor when the curtain is deployed, creating a smoke-tight seal with the building structure.

Elevator Fire Curtain SD

This Fire Curtain is installed in front of elevator openings and deploys automatically to protect elevator shafts from vertical smoke migration.



The Fire Protective Smoke Curtain SD is an automatic, gravity-drop barrier with integrated seals that prevent fire and smoke from transferring from one part of a building to another.

The Fire-rated curtain SD operates automatically when connected to the Fire Alarm System.

The Fire Curtain can be installed above the ceiling and remain hidden until it's needed.

The curtain consists of a roller covered with a fiberglass fabric which is incorporated into a galvanized steel housing.

Fire resistance

Model FA1/60 1 hr fire rating
Model FA1/180 3 hr fire rating

The **roller unit** incorporates a motor, planetary gearbox, and control electronics with a microprocessor. The microprocessor monitors the resting position when rolled up and independently regulates the closing speed to a maximum of 0,15 m/s (6in / sec).

The **3 Hr Fire Rated Woven Fiberglass Fabric** is silver grey and can be printed with custom signage per customer request.

The **housing** is equipped with specially developed reinforced brackets, that maintain integrity at high temperatures. The bottom of the housing is closed off with a panel that allows access of the entire length of the system.

The unit can be configured with mounting brackets either for wall or ceiling mounting.

The curtain **headbox and side guides** can be polyester powder coated in all RAL colors.

There are no visible fasteners either on the underside of the housing or on the front of the side guides.

A bottom bar is attached to the bottom of the curtain and serves to ensure that the curtain operates as designed and also that it remains stable when unrolling.

The **bottom bar** makes contact with the floor when the curtain is deployed, creating a smoke-tight seal with the building structure.

Tested by UL in accordance with

UL 10D & UL 1784

Complies with:

2012 IBC Section 713.14.1

2009 IBC Section 708.14.1

2018 IBC Section 3006.1

2015 IBC Section 3006.1

Fire rating:

1 hour - 1700°F Glass fabric

3 hour - 1920°F Glass fabric with coating and stainless-steel inlay

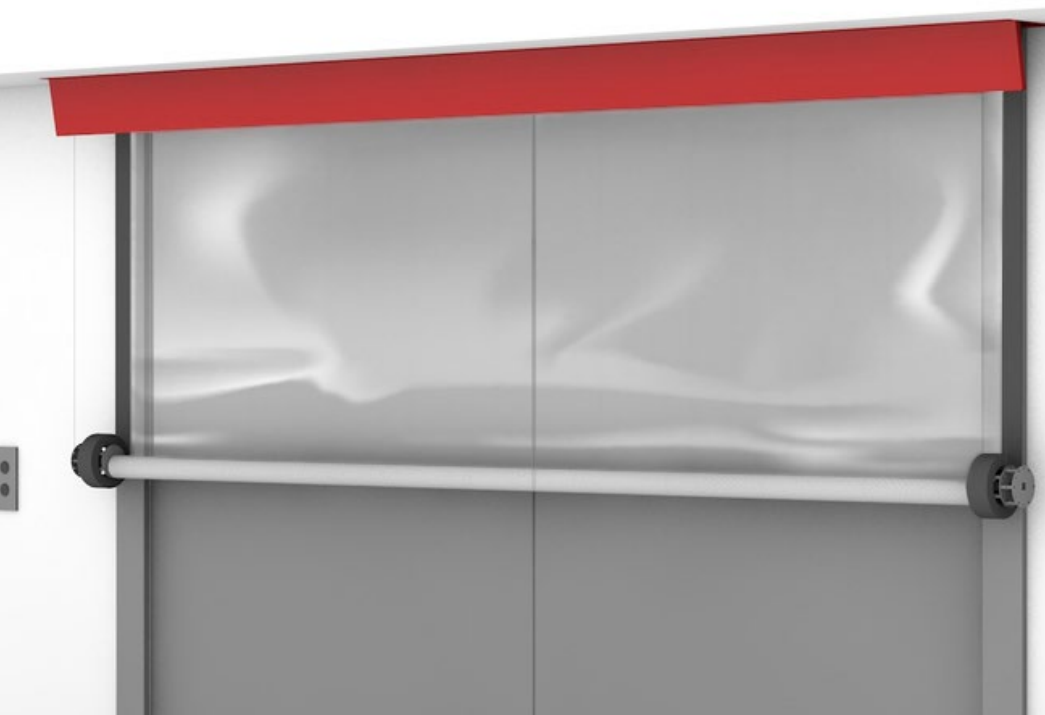
Materials class: **A2-s1, d0**

FD PIN SIDE GUIDES with integrated seals

Manufactured in accordance with ISO 9001:2008

Elevator Smoke Curtain GX

UL Tested Smoke Protective Curtain for elevator doors with a clear transparent material



The Smoke Curtain GX is designed for elevators to prevent the spread of smoke via elevator shafts to other levels.

The design is integrated into the space almost invisibly to create a visually appealing look.

The Elevator Smoke Curtain GX is tested to UL 1784

The automatic mechanism allows the housing flap to open and close automatically.

The flexible magnetic strips are attached to the edges of the fabric which then creates a tight seal with the auxiliary rails upon deployment.

Clear transparent material
Magnetic side guides
Integrated egress switch
Gravity-Fail safe system

Tested by UL in accordance with
UL 1784

Complies with:

2012 IBC Section 713.14.1

2009 IBC Section 708.14.1

2018 IBC Section 3006.1

2015 IBC Section 3006.1

NFPA 105

ASTM E84 (CAN/ULC-S102)

Temperature Resistance: **649°F/343°C**

DESIGN

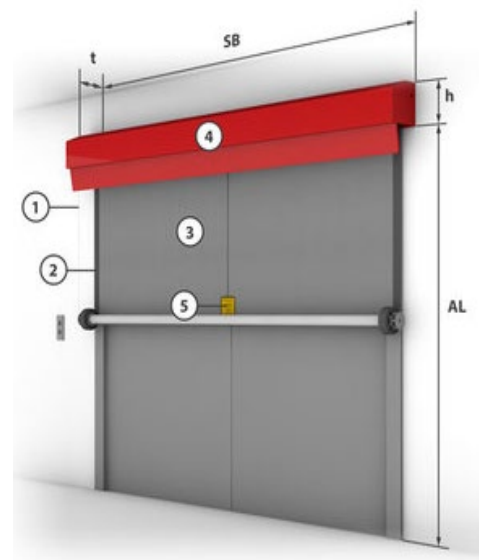
The system can be installed almost invisible in suspended ceilings, directly in front of the elevator openings.

- Easy installation and low maintenance
- Multiple benefits, but still available at an appealing price
- Translucent fabric with magnetic stripes on the edges (closing onto the elevator frame or auxiliary rails)
- Auxiliary rails powder-coated (optional)

BENEFITS

- Reliable and tested smoke protection in the event of an emergency
- Elevator curtains allow for egress and access after the system is activated
- No interference with elevator door operations
- Drive unit with fail-safe technology allows closing without auxiliary power.

- 1 Aramid Cables
- 2 Magnetic Strip
- 3 Clear Transparent Material
- 4 Housing
- 5 Integrated Egress Switch



Automatic Smoke Curtain SM5

Automatic, fail-safe smoke curtains are used where a fixed smoke curtains might be either impractical or aesthetically unacceptable.



The SmokeMaster SM5 is a **fail-safe** automatically deployable smoke and fire barrier with 1 hour fire resistance material rating, **DH60** per EN 1363-1 that encloses a space from wall to wall and from floor to ceiling.

The SM5 Automatic Smoke Curtain comprises a flexible, heat resistant fabric, which is impervious to smoke and hot gases, wound around 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.

APPLICATIONS:

The Deployable Smoke Curtain SM5 is used primarily for smoke control at atriums and exit access stairways.



Smoke Barrier Tested to **EN 12101-1**

1 Hour Fire Resistance Tested to
EN 1363-1

Heat resistance:

1 hr rating

2 hr rating

Smoke tightness tests

Materials class: **A2-s1, d0**

Complies with:

ASTM E119

NFPA 92

Manufactured in accordance
with ISO 9001:2008

The Smokemaster SM5 compact and flexible design offers many opportunities for modification to suit the requirements of the building. The Smokemaster compact and flexible design offers many opportunities for modification to suit the requirements of the building. Smokemaster SM5 is available with **T and corner pieces**.

Testing and certification

Smokemaster SM5 has been successfully tested and certified to EN 12101-1 in accredited third-party test laboratories and is CE marked.

The curtain material achieves a resistance to smoke and heat at 1850°F for a minimum of 120 minutes in accordance with EN 12101-1

Bottom Bar

Two bottom bars are available depending upon aesthetic requirements:

- **I Industrial** bottom bar
- **K Comfort** bottom bar (virtually invisible and is available in any RAL color)

For either the I or the K version, the 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.

Side guides

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

Fixed Draft Curtain SM-ST

Fixed Draft Curtains are used to contain and compartmentalize smoke that rises to the ceiling during a fire.



A fixed smoke curtain consists of several overlapping curtains attached together to provide a continuous run. They are connected to the building by means of clamps and angle pieces. The bottom of the cloth is weighted, ensuring that the curtain remains taut and reducing the amount of deflection through air currents.

APPLICATIONS:

Fixed Draft Curtains are used in warehouses, aircraft hangars, and large industrial plants to contain smoke that rises to the ceiling during a fire.

BENEFITS

- Assist the emergency services by containing or channelling the smoke into predetermined areas.
- Limit travel and overcooling of smoke, reducing the risk of cold smoke dropping to low level and obscuring vision.



Smoke curtain meets the requirements of **EN 12101-1**.

TESTING / CERTIFICATES

EC Certificate of Conformity 0672 – CPD
0146 time/temperature classification D120
0206 time/temperature classification DH 60
0207 time/temperature classification DH 120

Smoke tightness tests

Fire rating:

1 hour - 1700°F	Glass fabric
2 hour - 1850°F	Glass fabric with coating and stainless-steel inlay

Materials class: **A2-s1, d0**

Manufactured in accordance with ISO 9001:2008

The installation **angles** and the **clamping profiles** are predrilled to accept rivets. The connecting pieces have a continuous predrilled hole pattern, enabling fast and easy assembly of the curtain fabric.

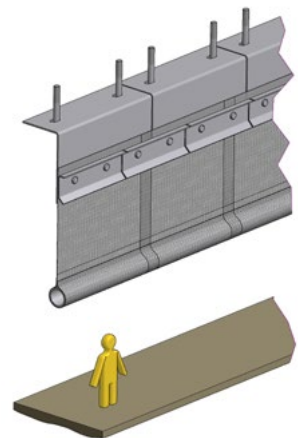
The **bottom bar** has a loop to accommodate the weight.

Fixing brackets, clamping profiles and bottom bars are all in galvanized steel.

The Draft Curtain system can be used to close off a scheme of movable smoke curtains position below it, by clamping directly onto the housing of the movable smoke curtain.

The curtain system is fixed to the building with approved fasteners at intervals of a maximum of 5 feet.

The curtain overlaps can be attached to one another using a spray adhesive approved by MPA Stuttgart, which seals the flaps tightly to enhance the appearance of the surface of the curtain.



Product Summary

Product Name	Housing type	Curtain Type	Fail Safe	Max width	Max drop	Fire Rating	Certification
Smoke Protective Curtain SD	Single unit	Automatic	yes	13' - 1½"	13' - 1½"	1 - 3 hours	UL 10D, UL 1784
Fire Protective Curtain FA	Single unit	Automatic	yes	14' - 9 1/8"	11' - 5 3/4"	1 - 3 hours	UL 10D
	Multi unit			59' - 0 5/8"	18' - 0 ½"		
Deployable Smoke Curtain SM5	Single unit	Automatic	yes	16'- 4 7/8"	9' - 0 1/4"	1 - 2 hours	EN 12101-1
Fixed Draft Curtain SM - ST	n/a	Fixed	n/a	∞	3'	1 - 2 hours	EN 12101-1
Elevator Fire Curtain SD	Single unit	Elevator curtain	yes	13' - 1½"	13' - 1½"	1 - 3 hours	UL 10D, UL 1784
Elevator Smoke Curtain GX	Single unit	Elevator curtain	yes	10'	10'	n/a	UL 1784