



SmokeStop™

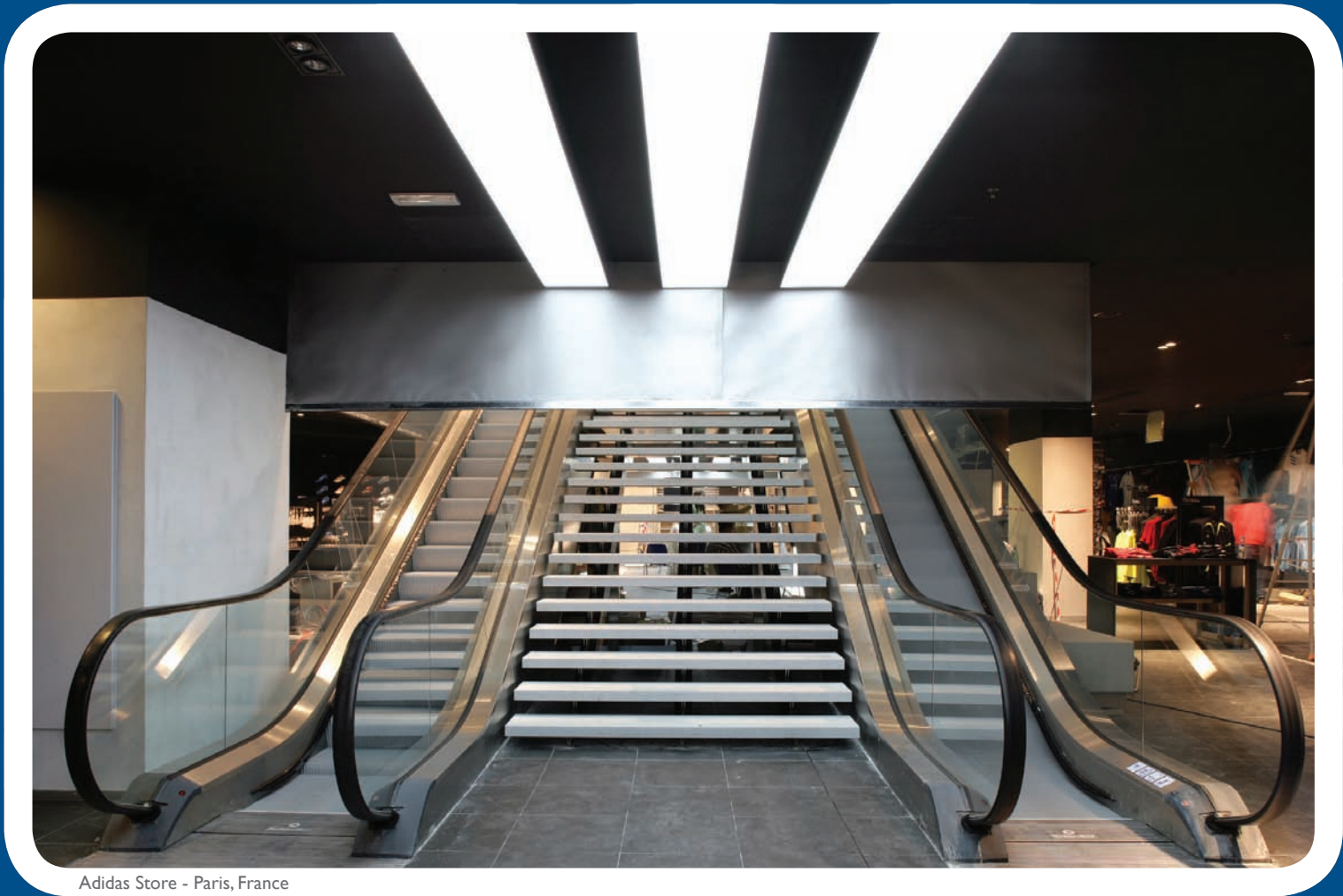
AUTOMATIC SMOKE CURTAINS



Fully retracted

Engineered, fully tested and certified for the latest fire regulations and building design technology
Fully Fit For Purpose*

SmokeStop™ is a  marked product



Adidas Store - Paris, France

Fully Deployed

* Refer to 'Don't be liable!' on the back page

DESIGN SOLUTIONS THAT WORK FOR YOU

MEANS OF ESCAPE - Curtains create protected routes

STAIRWELLS - No need for smoke-rated walls or down stands

OPEN SPACE - 'Invisible' Smoke Curtains enable maximum visibility with curtain sizes up to 200m wide and 1000m² area

ATRIA - Curtains allow multi-floor concourse openings and large atria

ESCALATORS - No need for smoke-rated walls or down stands

LIFTS - No need for lift lobby areas

BOUNDARY PROTECTION - Eliminate vertical and horizontal smoke spread to other buildings



Apple Store - Shanghai, China
Curved Edge Containment Curtains



Madrid, Spain - Curved Edge Containment Curtains



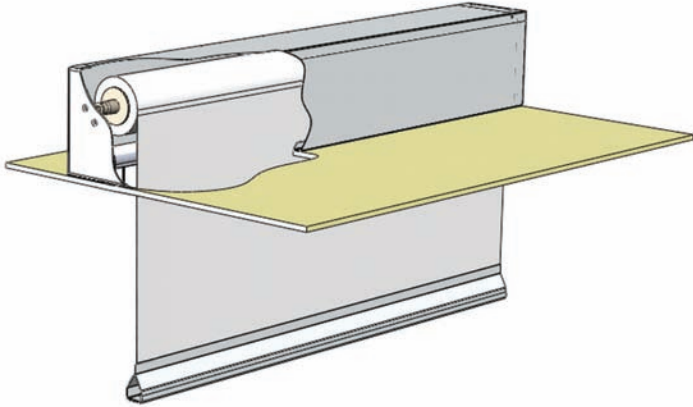
Science Park, Qatar - Carpark Lift Lobby Curtains

I WHAT ARE AUTOMATIC SMOKE CURTAINS AND HOW DO THEY WORK?

Automatic Smoke Curtains comprise technologically advanced fire-resistant fabric roller barriers encased in a compact steel housing. Curtains remain invisibly retracted until activated by an alarm or detector signal, at which time they descend safely to their operational position.

To be regulation compliant and to be fully Fit For Purpose they must be protected by total power failure & short circuit Gravity Fail-Safe. Smoke Curtains will stop and control the spread of smoke in a building and protect the means of escape. (See 'Don't be liable!' on the back page)

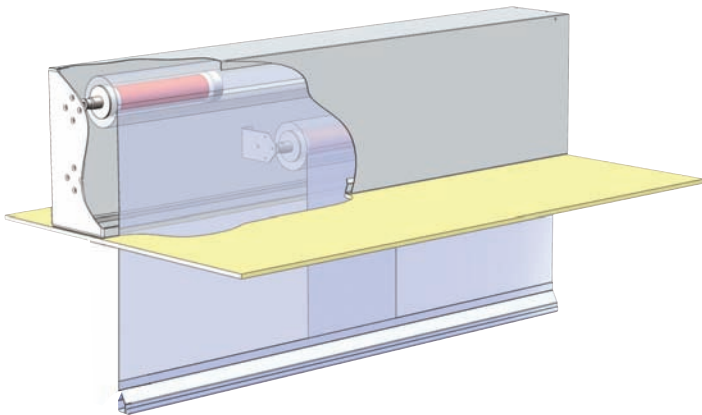
SINGLE ROLLER ASSEMBLY



Intercontinental Hotel, Hong Kong - Abutting Single Rollers with minimised edge gap

- Single roller assembly curtains for spans up to 5m as standard for CE marked products **
- All curtains allow escape for occupants and entry for emergency services
- Controlled Gravity Fail-Safe operation ensures a controlled and safe rate of descent even following total power loss or wiring / system corruption on all curtains

MULTIPLE ROLLER ASSEMBLY



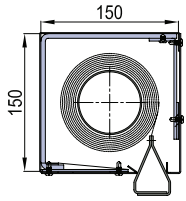
Jockey Club, Hong Kong - Edge containment curtains with channeling curtain

- Unique overlapping design with continuous, conjoined bottom bar
- Multiple roller assembly curtains for spans over 5m as standard **
- Fully synchronised intelligent drive system
- Unlimited spans of literally hundreds of linear metres and drops of 10.5m** require only lightweight housings as small as 180mm x 360mm

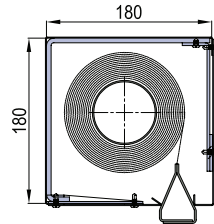
2 WHAT ARE THE STANDARD HEADBOX SIZES?

Single rollers

SS 15/15

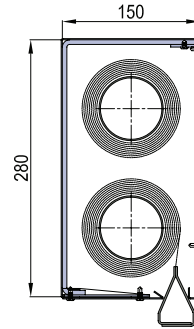


SS 18/18

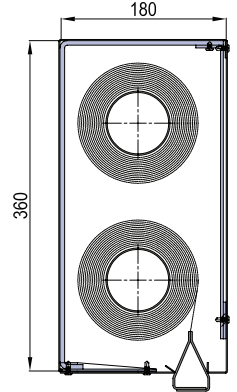


Multiple rollers

SS 15/28



SS 18/36

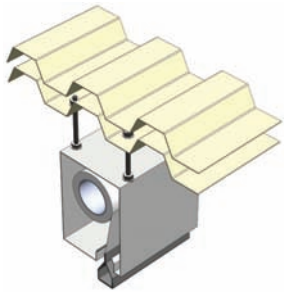


Model No.	Maximum Curtain Width **	Maximum Curtain Drop **
SS 15/15	5 metres	5 metres
SS 18/18	5 metres	10 metres
SS 15/28	200 metres	5 metres
SS 18/36	200 metres	10 metres

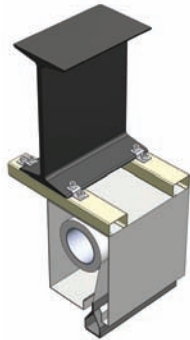
(These are just our standard sizes)

** Coopers has a design solution for any size requirement - See the chart on the left for our standard range of sizes. For queries about special size requirements, please contact our technical department.

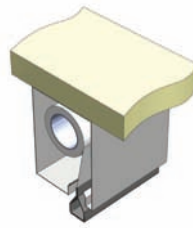
3 HOW ARE THE HEADBOXES INSTALLED?



Unistrut and drop rods



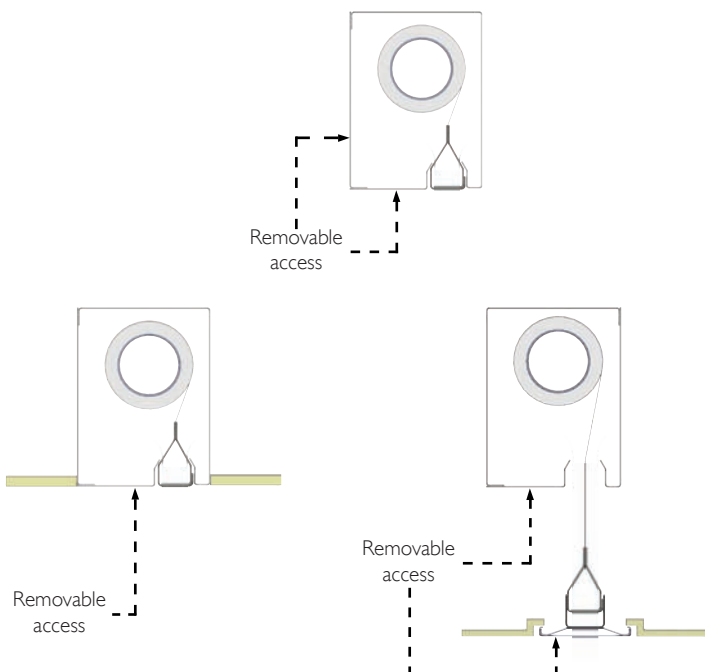
I beam



Soffit fixed

There are many fixing options to suit all types of ceiling configurations. Curtains can be integrated with both solid and suspended ceilings, enabling total project design flexibility.

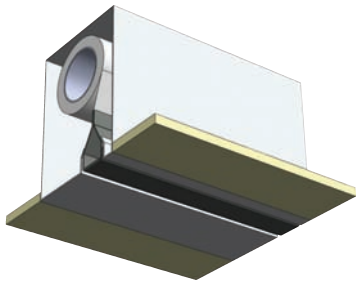
4 HOW IS THE CURTAIN ACCESSED?



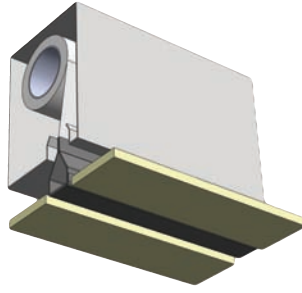
Dubai International Airport, UAE - Reservoir Smoke Curtains

(Remember, regular service and maintenance is mandatory.)

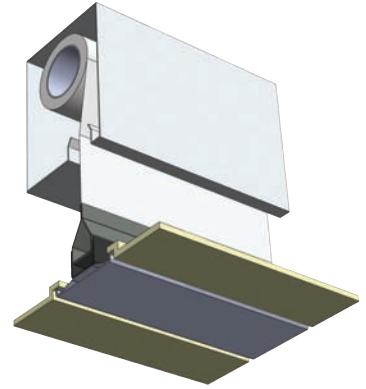
5 HOW ARE THE CURTAINS CONCEALED?



Flush fit



Suspended ceiling with recessed shadow gap



Suspended ceiling with SLAT (Self Levelling Access Trim) Patented system



Dubai International Airport, UAE - Bottom Bar Interface with shadow gap

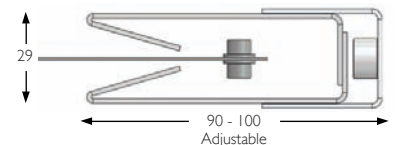
SmokeStop™ Smoke Curtain systems provide a range of ceiling interfaces and can even invisibly conceal the curtain in the ceiling whilst still allowing access for service and maintenance. All our systems remain totally concealed when non-operational.

6 DO YOU NEED SIDE CHANNELS?

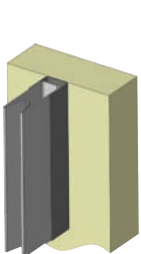
Not necessarily. Smoke Curtains are designed to be free hanging and the product standard BS EN 12101-1:2005 + A1:2006 permits and specifies what gaps are permissible between curtains and between curtains and the construction works. The SHEVS will accommodate smoke leakage where required.

Side channels can be used to seal the curtain fabric and the building to reduce smoke leakage if required due to excessive air pressure.

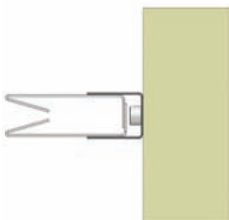
Side guide channels are made from galvanised steel (available in standard RAL colours) that can be either surface mounted or recessed into the wall structure to give a flush finish. Coopers' unique fabric locking system has been developed and proven over many years.



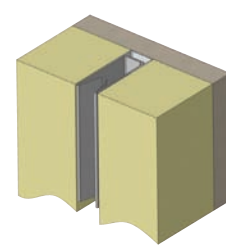
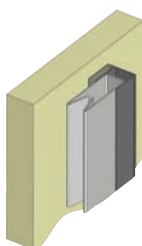
7 HOW DO SIDE CHANNELS INTERFACE WITH THE WALLS?



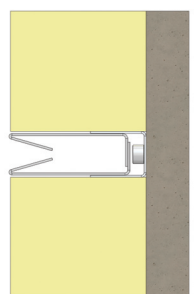
End fixed

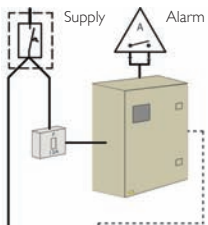


Face fixed



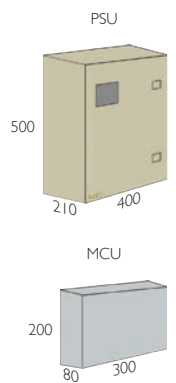
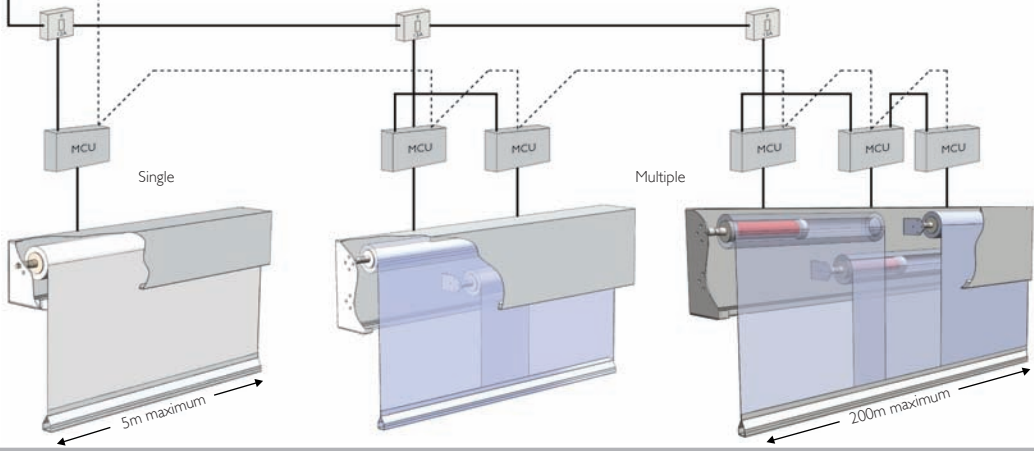
Recessed





CONTROL OPTIONS

Controls are custom made to be fully compatible with both existing alarm systems and the number of curtain units installed, whether single or multiple roller assemblies. When an alarm signal is detected, the control panel will automatically trigger all the curtain systems to deploy in a controlled descent under gravity.



CONTROLS SPECIFICATION

Power Supply: 230V AC 50Hz dedicated supply via 13Amp un-switched fuse spur
 Battery: 2 x 12V 12A/h lead acid batteries
 Alarm Signal: Normally closed, volt-free contacts. Open on activation

Test Facility: Key switch and Reset button on PSU
 Display: Power On, Alarm Active and Alarm Off
 Power Supply Size: 400mm(w) x 500mm(h) x 210mm(d)
 Motor Control Unit Size: 300m(w) x 200mm(h) x 80mm(d)

DON'T BE LIABLE!

Does your system comply with fire regulations?

- Do not jeopardise your insurance of your Professional Indemnity. Do not be fooled by systems which are not CE Marked. This is a life safety product
- Compromise on safety and you compromise on life. Demand to see a CE Marking certificate

More importantly... Is it Fit For Purpose?

- Your Smoke Curtain(s) must comply with;
- BS EN 12101-1:2005+A1:2006 to be both CE Marked and 'Fit for Purpose'. You must insist on this
- Remember Corporate & Personal Manslaughter Legislation

PRODUCT SPECIFICATION

The complete system is CE Marked in accordance with EU Construction Products Directive (89/106/EEC), as amended by the CE Marking Directive (93/68/EEC), when tested in accordance BS EN 12101-1+A1 and classified to DH60 and D₆₀₀A in accordance with BS EN 13501-4:2007+A1:2009. The complete system is also classified as DL₃₀₀, for 120 minutes in accordance with ISO 21027:2009.

The fabric is additionally tested to BS EN ISO 1716:2010, BS EN ISO 11925-2:2002 and BS EN 13823:2002; Classified as 'A2 s1 d0' to BS EN 13501-1:2007+A1:2009; Fire propagation to BS 476 6:1989+A1:2009 and surface spread of flame to BS 476-7:1997 to achieve National Class '0' in accordance with A13(b). Approved Document B 2006 Edition 'Fire Safety' to England & Wales Building Regulations 2000.

EFP2/A2 is a long established, high performance fire textile composite material of woven glass fibre with a high performance coating, containing a micronised aluminium enriched polymer, which when exposed to fire, is absorbed into the surface of the curtain to provide high temperature performance. This coating was developed and used first by Coopers Fire.

BS EN 12101-1:2005 + A1:2006 states: "Smoke barriers control the movement of fire effluent within a construction works in the event of fire. Smoke barriers, when used within a smoke and heat control system, become a critical element of that system. If smoke barriers are not in their fire operational position, the system will not perform as designed"

"However, even in the event that other elements of the SHEVS do not function, smoke barriers in the fire operational position will provide essential smoke containment and channelling"

"Smoke barriers which fail safe in/to the fire operational position (not lower than 2.5m above the finished floor level or in any location hazardous to occupants or objects), in a controlled manner when all consumable primary and auxiliary power sources are removed, in the event of wiring or system corruption, or any combination thereof"

Coopers Fire Ltd reserves the right to change product specifications that incorporate any improvements and upgrades to both electrical and mechanical components without prior notification.

Coopers Fire Ltd, Edward House, Penner Road, Havant, Hampshire PO9 1QZ UK | Registered in England Number: 2010274
 Phone: +44(0) 23 9245 4405 | Fax: +44(0) 23 9249 2732 | Email: info@coopersfire.com | Web: www.coopersfire.com

Assessed to ISO 9001:2008
 FM 22356

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 Certificate number: 538

