



# ADEXON<sup>®</sup>

Adexon-SC60DH & 150DA  
**Technical Information**

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22**

# Adexon-SC60DH & 150DA

**Vertical smoke curtain controls and channels smoke to 60DH and 150DA rating**

## Description

The Adexon-SC60DH is designed to control and channel smoke for 60 minutes at temperature of up to 1000°C. It achieves the smoke performance rating of 60 minutes DH.

The Adexon-SC150DA is designed to control and channel smoke for 90 minutes at temperatures of up to 600°C. It achieves the smoke performance rating of 150 minutes DA.

The system is tested and certified to EN 12101-1:2005; EN 12101-1:2005/A1:2006. Operation is via a 24V DC tubular motor/s controlled by an electronic control board. The system is available in sizes up to 8 meters high and unlimited width to suit all site requirements. It has gravity fail-safe to ensure that the system will deploy to its fire-operational position so that you have protection irrespective of whether power is maintained or not.

Our standard lead time is between 6 to 10 weeks from approval of drawings. Optional extras such as Emergency Retract Buttons and Obstruction Warning are available upon request.

## Applications

The Adexon-SC60DH & 150DA is suited to many different applications; some of the most common are:

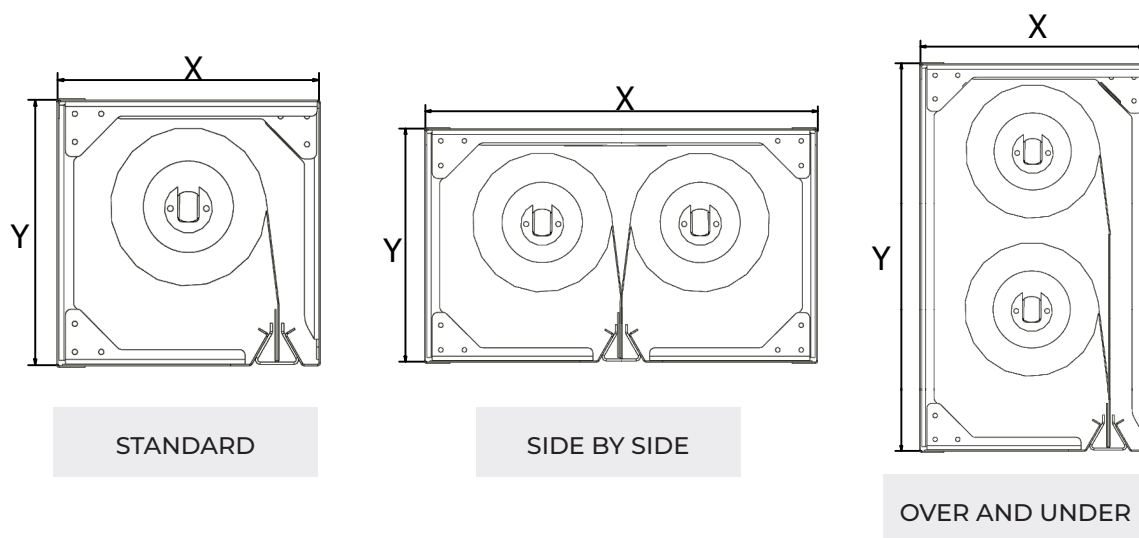
- Open spaces
- Atria
- Means of escape corridors
- Escalators and stairwells
- Lobbies and receptions
- Lifts and lift lobbies.



## Headbox sizes

Manufactured from 1.2mm thick galvanised steel, the headbox is designed to have the smallest form factor possible to fit discretely into ceilings. Headbox sizes change based on the fire curtain size requirements. Headboxes are available in all standard and non-standard PPC colours. For any any curtains that contain an EW rating or for technical drawings, please contact [admin@adexon-uk.com](mailto:admin@adexon-uk.com).

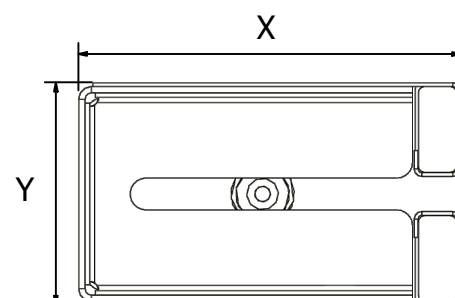
Headbox type	Fire Curtain Width	Fire Curtain Height	Headbox Dims	
			X	Y
Standard	3,500mm	8,000mm	220mm	220mm
Standard	12,000mm	6,500mm	220mm	220mm
Standard	12,000mm	8,000mm	240mm	260mm
Side by side	∞	6,000mm	250mm	170mm
Side by side	∞	10,000mm	270mm	200mm
Over and under	∞	6,000mm	170mm	280mm
Over and under	∞	10,000mm	200mm	360mm



## Side guides

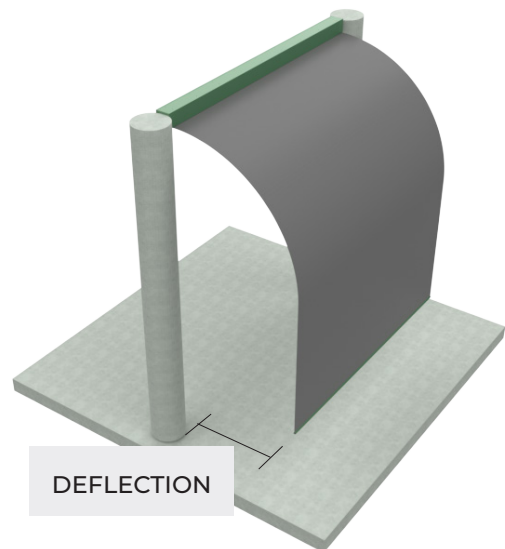
Manufactured from the same galvanised steel as the headbox, the side guides are designed to withstand the pressures caused by a fire. The side guides are available in all standard and non-standard RAL colours.

Fire Curtain Width	Fire Curtain Height	Side Guide Dims	
		X	Y
12,000mm	4,500mm	120mm	70mm
12,000mm	>4,500mm	130mm	70mm



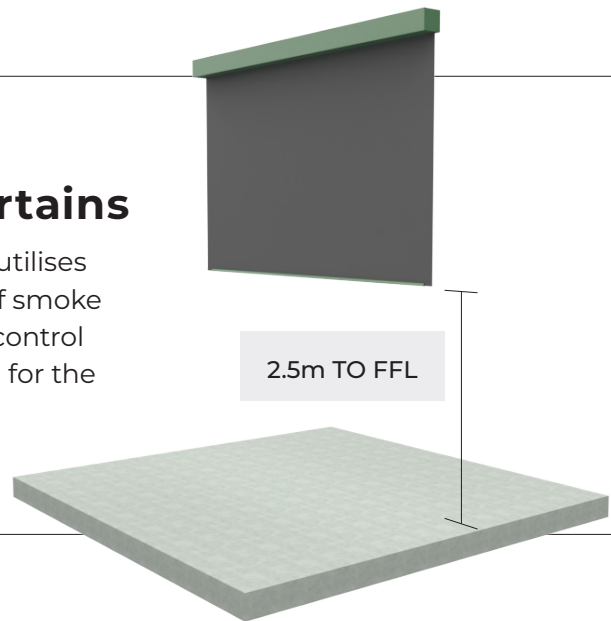
## Guide options

Smoke curtains can be installed with or without side guides, depending on the expected deflection of the fabric. Deflection is the movement of the barrier when subject to the buoyant force of hot smoke. If you have concerns over deflection, we would suggest opting for a smoke curtain with side guides to ensure the fabric is retained and the system can perform as expected.



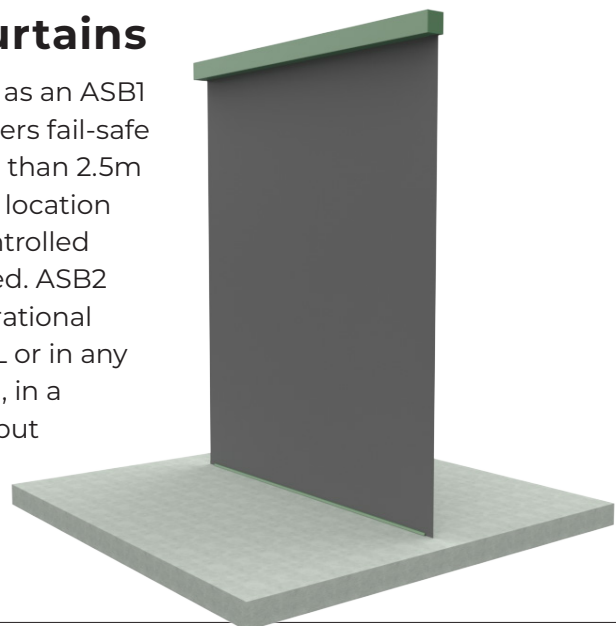
## ASB-1 & ASB-2 smoke curtains

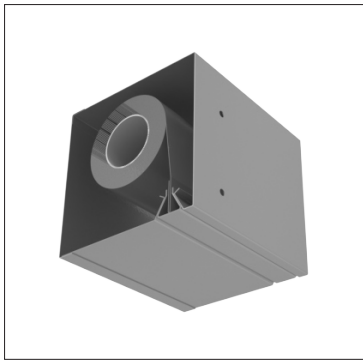
Adexon's proprietary smoke control design utilises fire-tested materials to control the spread of smoke compliant with BS EN 1634-3:2004. Smoke control can be provided up to a rating of EW90 and for the sizes shown in the table below.



## ASB-3 & ASB-4 smoke curtains

The Adexon smoke curtain can be supplied as an ASB1 or ASB2 category smoke curtain. ASB1 Barriers fail-safe in/to the fire operational position (not lower than 2.5m above the FFL (finished floor level) or in any location hazardous to occupants or objects), in a controlled manner when all power sources are removed. ASB2 Barriers which move to /stay in the fire operational position (not lower than 2.5m above the FFL or in any location hazardous to occupants or objects), in a controlled manner upon external initiation but requiring a consumable power source in order to move to or be maintained in the fire operational position.





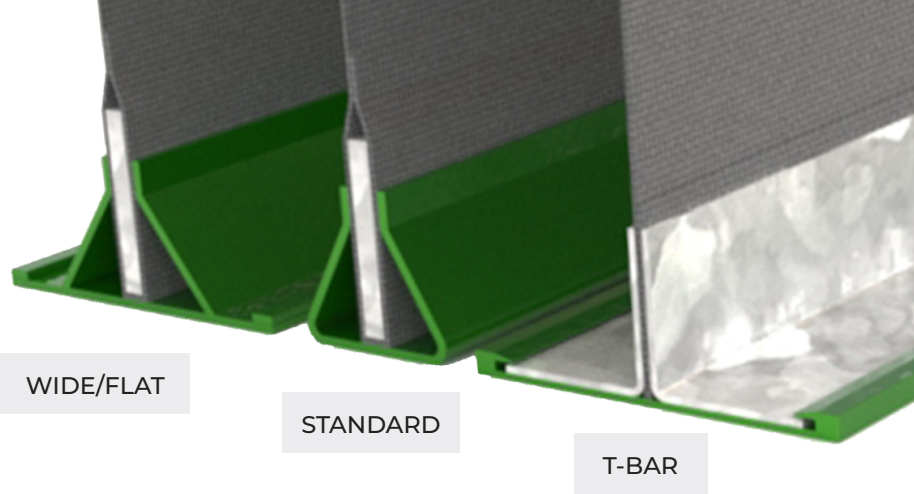
HEADBOX



UP AGAINST CEILING



WITH DROP CEILING



WIDE/FLAT

STANDARD

T-BAR

## Bottom bar types

### Standard bar

**Description** – The standard bar fits snugly inside the headbox, creating a completely flat surface, and giving a more aesthetically pleasing finish when the headbox is visible.

**Notes** – Variations of the standard bar are also available that are suitable for installations on angled surfaces like ramps.

### Wide/flat bottom bar

**Description** – The wide bottom bar is best if you wish to plasterboard under the headbox, as it will sit flush with the ceiling.

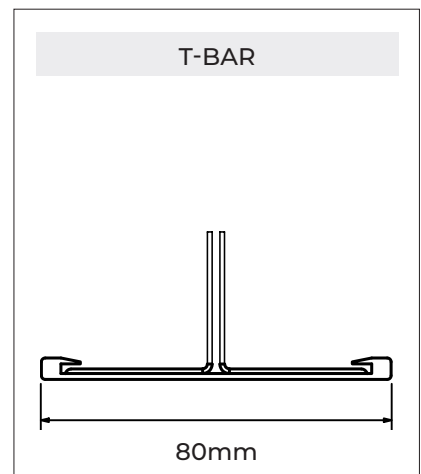
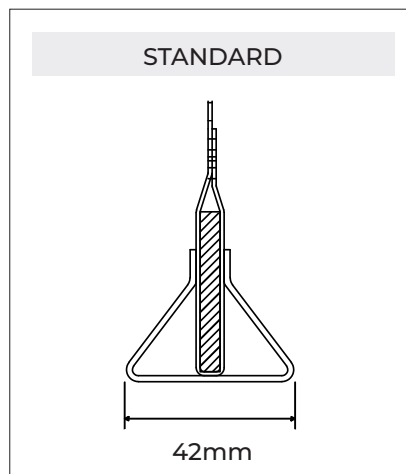
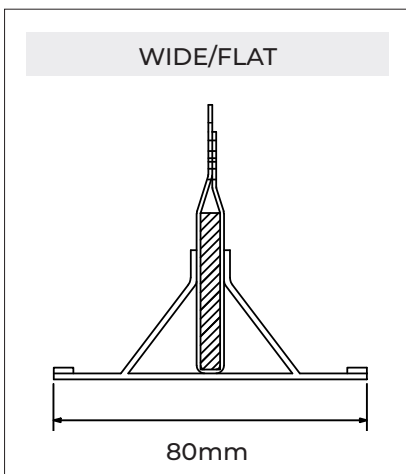
**Notes** – The plasterboard ceiling is installed after the headbox.

### T-Bar

**Description** – The T-bar is best for drop/false ceilings where the headbox is not immediately above the ceiling.

**Notes** – Additional support is required for the ceiling, where the bottom bar contacts the ceiling to withstand the force applied by the bottom bar.

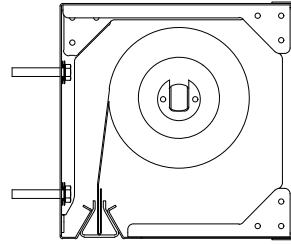
## Bottom bar sizes



# Fixing types

## Face fixed

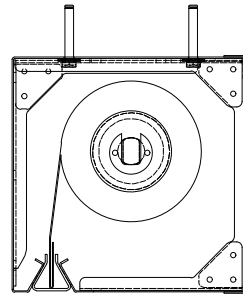
Face fixing is commonly used to install fire curtains around doorways. With this fixing method, you do not lose any of your opening.



FACE FIXED

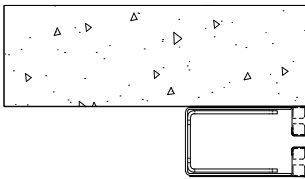
## Reveal fixed

Reveal fixing allows for a completely hidden fire curtain, commonly used in offices. With this fixing method, you will lose the width of the guides from your clear opening (max 260mm, 130mm from each side) unless concealed in the wall make-up.

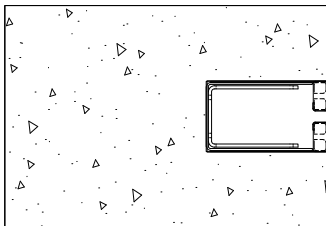


REVEAL FIXED

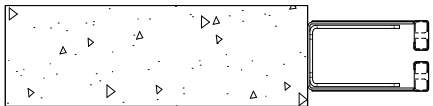
FACE FIXED



EMBEDDED



REVEAL FIXED

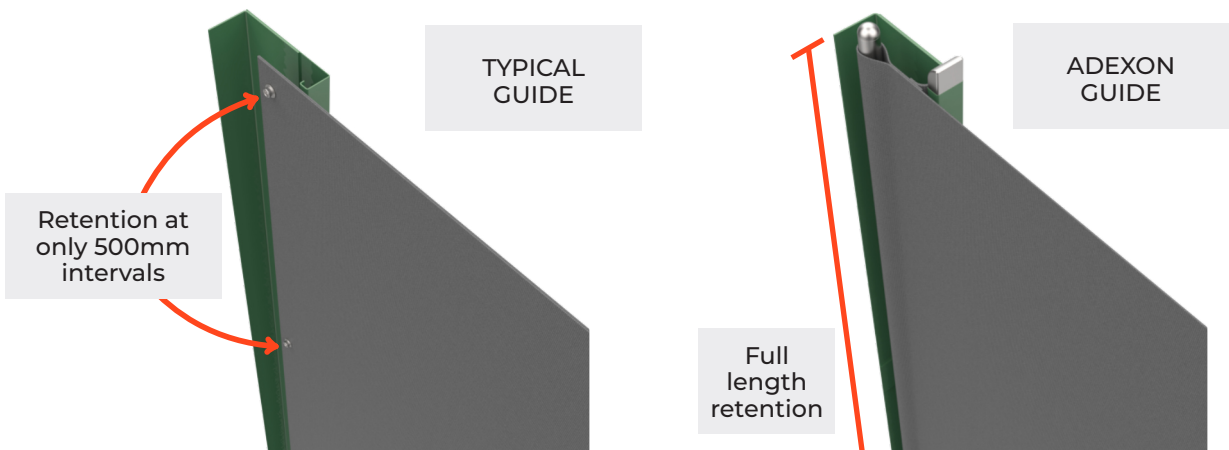


## Fabric retention

Adexon's guides have a unique fabric retention system that differs from all other UK manufacturers, utilising a full length retention design, instead of poppers/bolts retention every 500mm that is commonly used by others on the market.

This ensures the curtain will never;

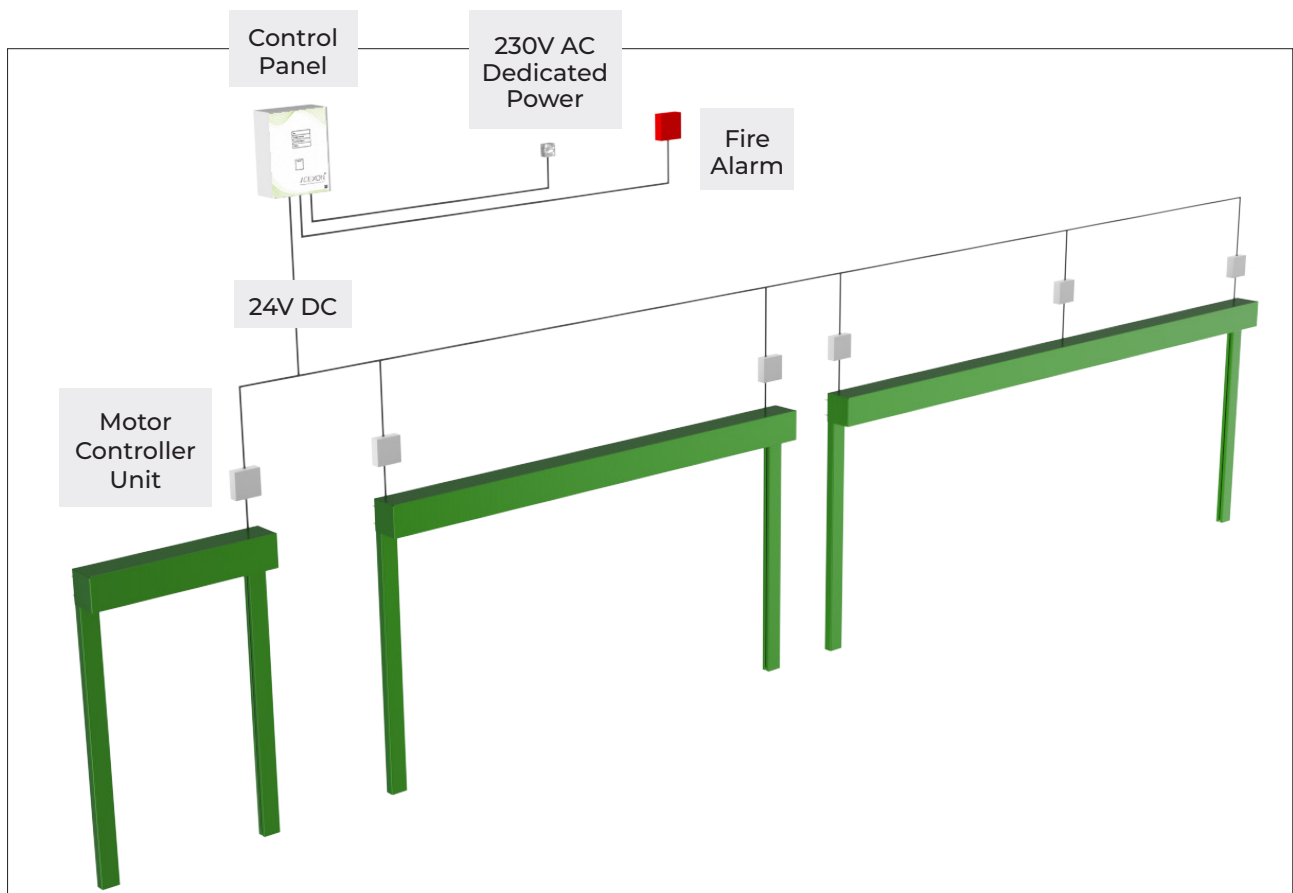
- snag and fail to descend,
- be blown out of the guides because of high pressure.



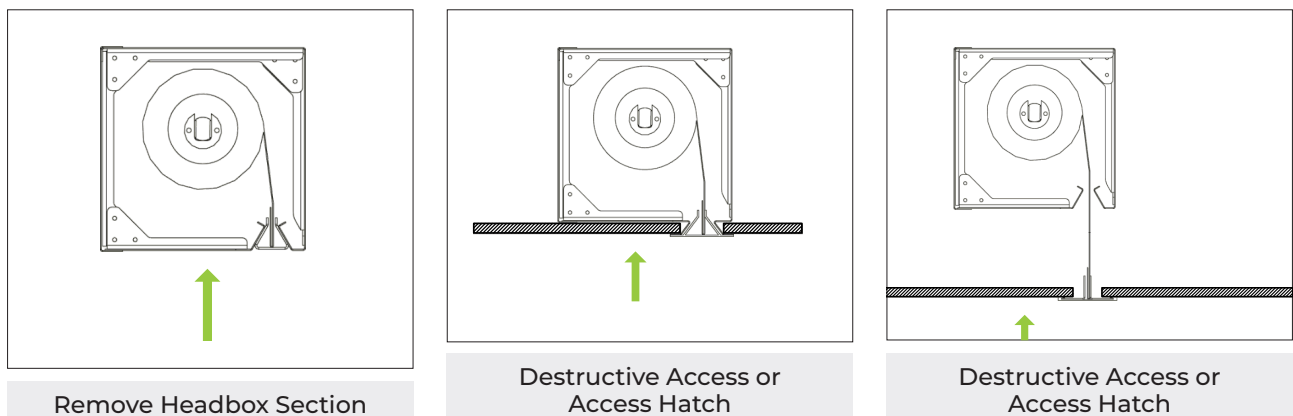
## Site wiring

The Adexon control panel and motor controllers can be used to wire multiple curtains together. Standard single curtains require 230V AC, in a 6-amp fused spur. If multiple curtains are controlled by one control panel, the power supply required varies. The curtain is activated via a normally closed volt-free signal, which can be supplied by several source types, for example, a smoke alarm, fire alarm, BMS. When the smoke or fire curtain is fully retracted, our proprietary 24V DC tubular motor holds the curtain in its fire-ready position.

The motor unit does not feature a physical brake to hold the curtain in its fire-ready position. This ensures that the curtain will always have gravity fail-safe descent in situations where power is removed e.g. wires or control panels are damaged etc. Adexon's motors and control panels include built-in technology that control the speed of descent at a rate between 0.03 - 0.3 m/s, on both power and gravity fail-safe.



## How is the headbox accessed after installation



## **Product specification**

Under EN 12101-1:2005; EN 12101-1:2005/A1:2006, our Adexon-SCDH60 & DA150 smoke curtain obtained a rating of 60 minutes rating at 1000°C (DH) and 150 minutes at 600°C (DA). Therefore the Adexon-SCDH60 & DA150 is classified as DH60 and DA150. The Adexon-SCDH60 & DA150 is cycle tested to 1000 cycles.

## **Curtain fabric**

Our fabric is manufactured from fibreglass and covered with a flame retardant polyurethane compound on both sides. This provides a high level of fire resistance and prevents the passage of smoke while also being water repellent.

## **CE marking**

Smoke curtains are required legally to be CE marked under the CPR (Construction Products Regulations). Adexon's smoke curtains are third party certified by an ENAC (ENAC is a European UKAS) approved certification body, and CE marked to EN 12101-1:2005; EN 12101-1:2005/A1:2006.

# Uniclass Specification

## Adexon-SC60DH & SC150DA Smoke Curtain

Pr\_25\_80\_79\_95 : Vertical smoke curtains (Adexon SC60DH or SC150DA)

1. Description: Automatic smoke curtains that limit and control the movement of smoke, with the classification of 60DH or 150DA.
2. Manufacturer:  
Adexon Fire & Smoke Curtains  
Prospect House  
Huyton Church Road  
Liverpool L36 5SH  
**t:** 0151 422 9111  
**e:** admin@adexon-uk.com  
**w:** www.adexon-uk.com
3. Product reference: Vertical SC60DH or SC150DA
4. Operation: Automatic, using 24V DC tubular motors, controlled by an electronic control board. Standard single curtains require dedicated 230V AC, in a 6-amp fuse spur.
5. Standards:
  - 5.1. Barrier assemblies: BS EN 12101
6. Third-party certification: Certificate of Constancy of Performance No. 0370-CPR-6415 or No. 0370-CPR-6416 (Notified Body Nr.0370)
7. Size: Curtain max. dimensions – 20m x 10m (width x height)  
  
Determine project requirements on a curtain-by-curtain basis through detailed design and scheduling. Refer to drawings for locations
8. Performance:
  - 8.1. Durability class: Pass (1000 cycles)
  - 8.2. Smoke containment: 60DH or 150DA
10. Deployment: Determine requirements on a curtain-by-curtain basis
11. Activation: As advised by the Client's Designers, may vary on a location-by-location basis
12. Finish: All headbox and rail components shall be made from galvanised steel as standard. Powder coating available (C1-5) to RAL colour to be advised by the Client's Architect.
13. Accessories: Determine requirements on a curtain-by-curtain basis

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E&OE

