



ADEXON®

Fire & Smoke Curtains

Adexon Concertina 120E

**Product Brochure &
Technical Information**

**20
24**



Product key

- 1 – Housing:** Headbox housing
- 2 – Bottom bar:** Weighted bottom bar
- 3 – Metal straps:** For the elevation and descent of the fabric
- 4 – Roller:** Fabric roller for winding
- 5 – Headbox supports:** Supports for forming the box and holding the roller (depending on model)
- 6 – Curtain fabric:** The fire/smoke-rated fabric

Adexon CFC120E

Concertina fire curtain third-party certified to 120 minutes integrity rating

Description

The Adexon CFC120E is our fire curtain that offers 120-minute fire integrity (E) that is designed to fit in irregular shapes and spaces where control of the spread of fire is necessary. As a result of not requiring side guides (unless 'open' configuration), this concertina curtain is able to adapt to open spaces, not available to vertical fire curtains. Smoke sealing is not available for fire integrity rated concertina curtains.

Tested according to BS EN 16034:2014 in conjunction with BS EN 1634-1. Operation is via 24V DC tubular motors controlled by an electronic control board. 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 8 to 11 weeks from approval of drawings. Optional extras such as Emergency Retract Buttons (ERB) and Obstruction Warning are available upon request.

Applications

- Atria, staircases, escalators
- Encapsulating free-standing kitchens or technology hubs
- Covering compartment walls
- Wrapping around decked or bar areas
- Protecting Lobby and Reception Areas

Certification and ratings

Certification

BS EN 16034:2014

Fire Safety Certification, Fire Performance, No. APF-1973

Closing cycles: C1 | Tested according to BS EN 16034:2014

Ratings:

120E

Integrity, E, rating: 120 minutes

Radiation, W, rating: N/A

Insulation, I, rating: N/A

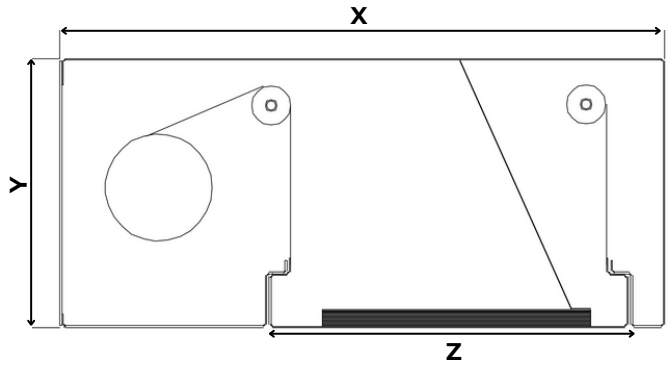
Smoke Performance: N/A

Maximum sizes

Manufactured to dimensions that suit almost all site requirements.

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 technical drawings, please contact admin@adexon-uk.com.

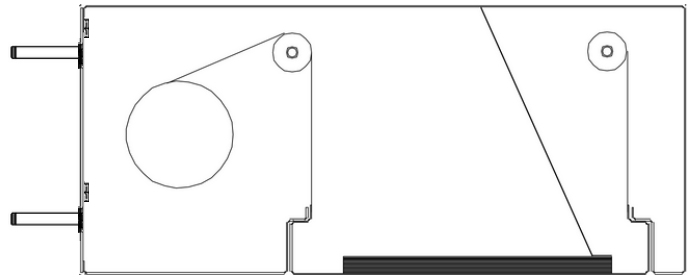


Performance Rating	Headbox Dimensions		
	X	Y	Z
120E	450	200	245

Fixing types

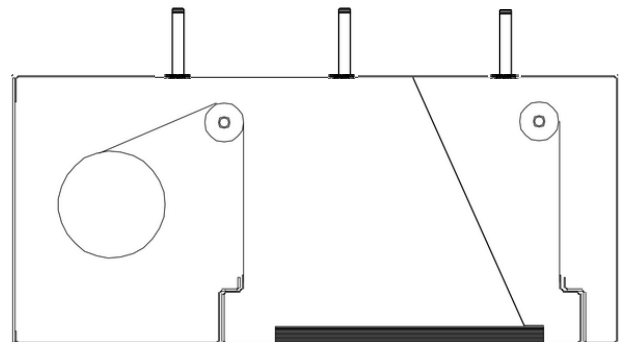
Face fixed

The concertina fire curtain with face fixing is mounted directly onto walls or ceilings, offering a versatile and accessible solution for various environments. This installation method is perfect for both new builds and retrofit projects, combining reliable fire containment with easy maintenance.

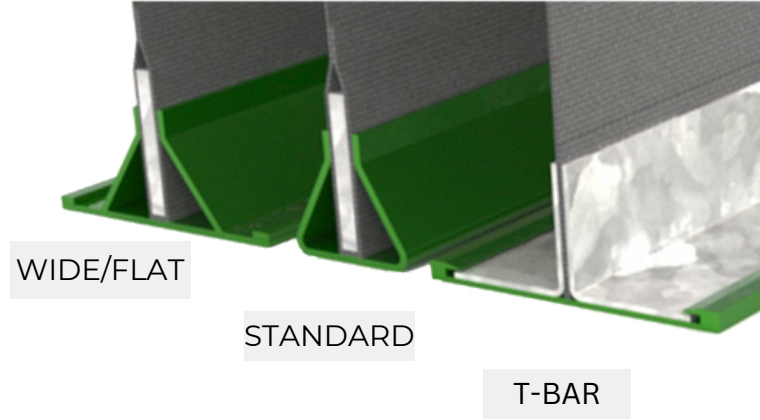


Reveal fixed

Our concertina fire curtain with reveal fixing is designed for a sleek, integrated look, fitting neatly within wall or window reveals. This method provides a clean finish while ensuring effective fire protection, making it ideal for applications where a minimalist appearance is preferred without compromising on safety.



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.

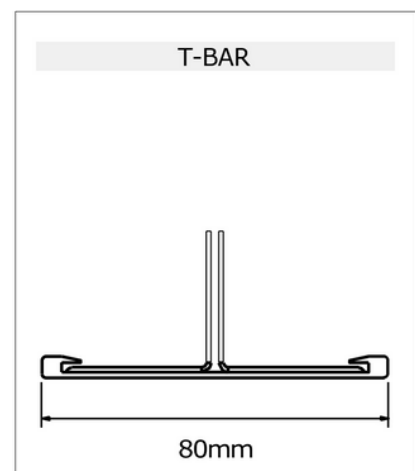
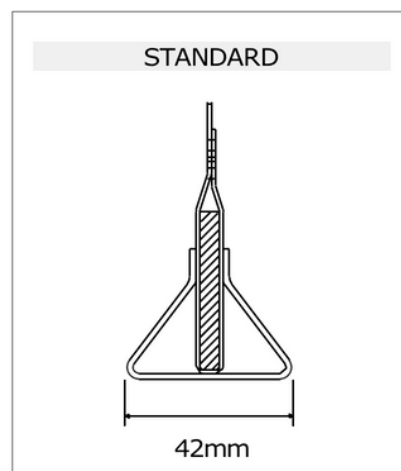
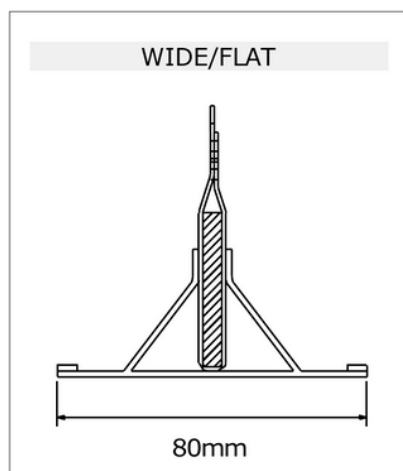
Notes - The plasterboard ceiling is installed after the headbox.

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

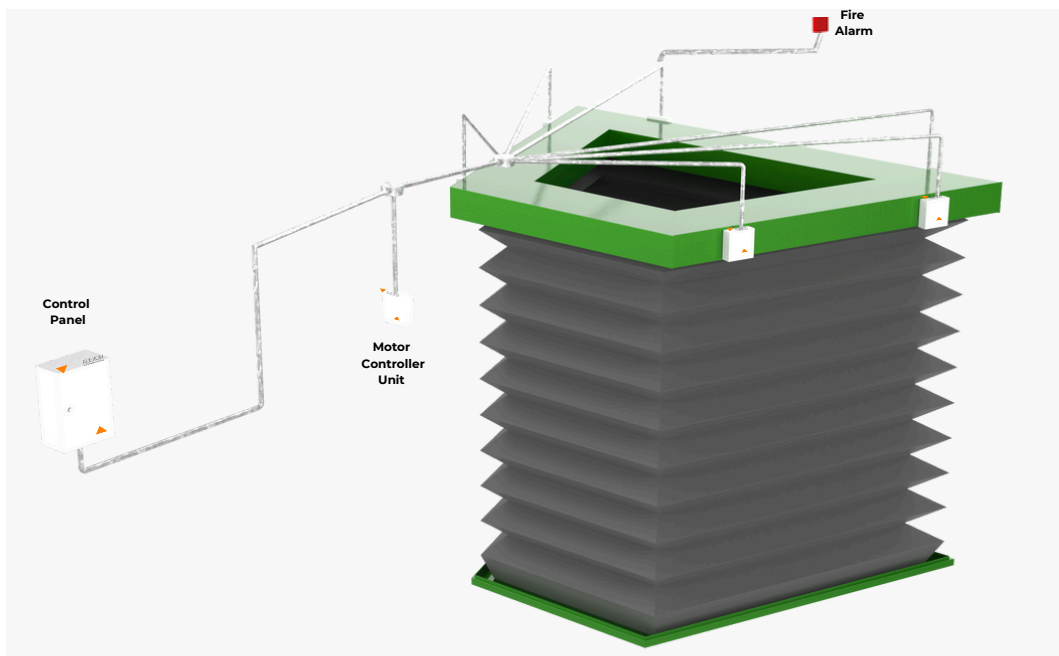


Site wiring

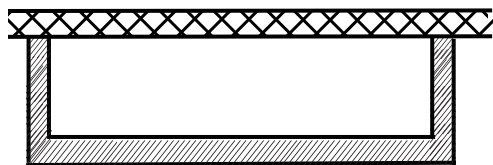
The Adexon control panel and motor controllers can be used to wire multiple curtains together. Standard single curtains require a 230V AC, 6-amp fused spur. If multiple curtains are controlled by one control panel, the power supply required varies. The curtain is activated via a normally closed volt-free 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.

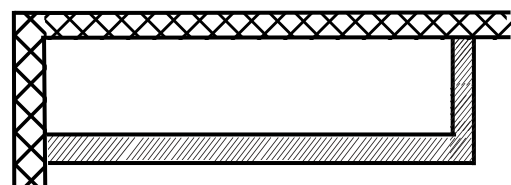
Adexon's motors and control panels include built-in technology that control the speed of descent at a rate between 0.03 - 0.3 m/s, on both power and gravity fail-safe.



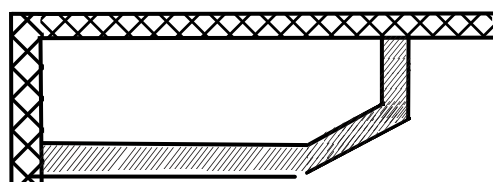
Configurations



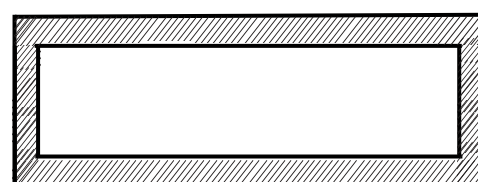
U-Shaped



L-Shaped



L-Shaped



Fully Enclosed

Product Specification

Under BS EN 16034:2014, our AdexonCFC120E fire curtain obtained a fire rating of up to 120 minutes (2 hours) when tested to BS EN 1634-1:2014. Therefore the Adexon-CFC120E product is classified as 120 E in accordance with the classifications of BS EN 13501 2:2007+A1:2009. The system cannot have smoke protection

Tenable area

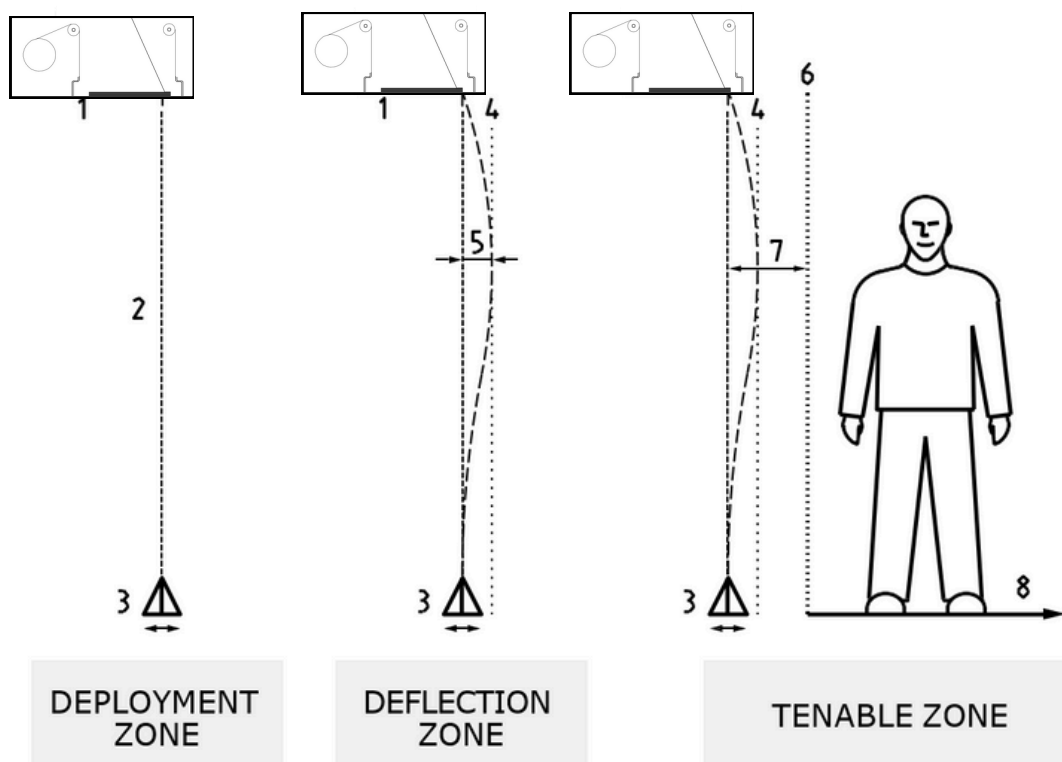
Protected escape routes must be of a minimum width to allow for safe emergency egress of the building occupants and must include space for the deployment zone, deflection zone and tenable zone. The size of your tenable area (deflection zone and tenable zone) will dictate the specification of the fire curtain that you must install to ensure sufficient protection.

Cycle test

The AdexonCFC120E is cycle tested to class 1 (between 500 and 10,000 cycles) in accordance with BS EN 16034:2014.

Curtain fabric

Our fabric is fire-resistant Tectex 450-PU/2 (0,37 mm thick and 450 gr/m²). Woven fiberglass strands with reinforcing stainless steel wires, covered in flame-retardant polyurethane. This provides a high level of fire and thermal resistance tested to above 1000°C and the pressure and temperature associated with a fire.



Uniclass specification

AdexonFC120E Vertical Fire Curtain (Integrity)

Pr_25_80_79_14 Concertina fire curtains (Adexon Concertina CFC120E)

1. Description: The concertina fire curtain provides the possibility to completely encapsulate an area or feature and keep it entirely separate from the main space, without the need for any unsightly columns or supports. There are no guides or vertical poles that need to remain in place while the curtain is open.

2. Manufacturer:

Adexon Fire & Smoke

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: AdexonCFC120E Concertina Fire Curtain (Integrity)

4. Operation: Automatic, using 24V DC tubular motors in conjunction with motor controllers controlled by an electronic control board.

5. Standards:

- 5.1. Barrier assemblies: CE Marked to BS EN 16034
- 5.2. Test standards: BS EN 1634-1

6. Third-party certification: Applus+ Certificate APF-1973

7. Size: Curtain max. dimensions - Measurements to fit almost all sizes, contact one of the Adexon team for project-specific information.

8. Performance:

- 8.1. Durability class: C1
- 8.2. Smoke containment: NA
- 8.3. Fire resistance: E 120

9. Deployment: Determine requirements on a curtain-by-curtain basis.

10. Activation: As advised by the client's designers, may vary on a location-by-location basis.

11. 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.

12. Accessories: Determine requirements on a curtain-by-curtain basis.

ADEXON[®]

Fire & Smoke Curtains

Prospect House,
Huyton Church Road
L36 5SH, Liverpool

0151 422 9111 | admin@adexon-uk.com | adexon-uk.com
E&OE

