

EST. 1983

Developments in Fire Curtain Technology

Date: 27 / 11 / 19

© Coopers Fire Limited

www.coopersfire.com twitter: @coopersfire

T: +44 (0)23 9245 4405

COOPERS FIRE LTD





- Established in 1874 (originally making blinds and shutters)
- Current business established in 1983
- Global provider of passive fire protection solutions
- Full value chain manufacture, installation and service
- Recognised as market leader in fire and smoke curtains
- Approved to ISO 9001 (QMS) and ISO 14001 (Environmental)

FIRE CURTAINS AS A SOLUTION

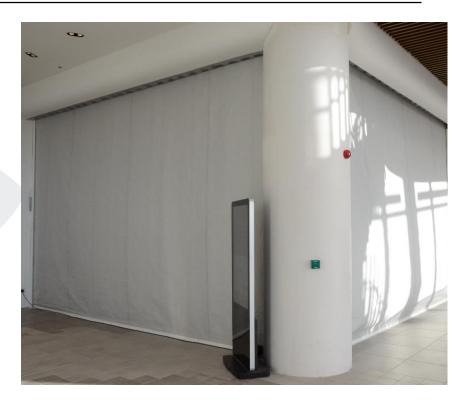


What is a Fire Curtain?

A fire curtain replaces walls and doors and allows designers to create open plan spaces in buildings.

Fire curtains:

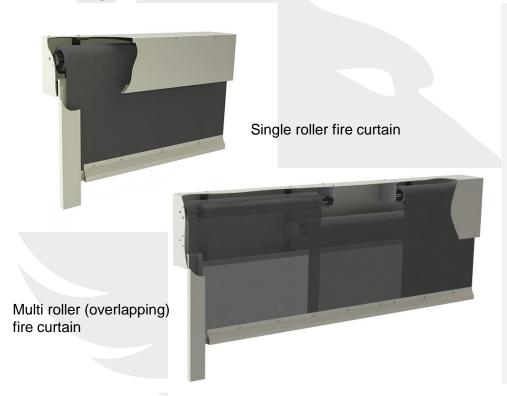
- Automatically deployed using a motor and gravity
- Integrate with fire alarm system
- Must always close entirely
- Run within side guide channels



TYPES OF FIRE CURTAINS



VERTICAL



- Like a large electrically / gravity operated roller blind
- Typically concealed above a ceiling out of view
- Retained in side retention devices (or side channels)
- Also available with smoke seals
- Fire / heat / smoke resistant fabric
- Weighted bottom bar
- Activated by an alarm signal and/or local detector

FURTHER TYPES OF FIRE CURTAIN



Fire curtains have moved on from the typical vertical roller blind type.

Now there are variants that can give fire and smoke protection but in less traditional ways allowing for more radical building design but still maintaining compliance to building code.

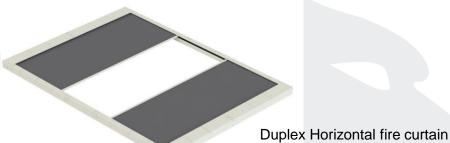


- Compartmentation.
- Protecting Escape Routes.
- Atrium & Light Wells.
- Stairwell & Access Stairs.
- Escalator Wells.
- Lift Openings & Lobbies.
- Boundary Protection.
- Cross Corridor Separation.

DESIGN ADVANCES



HORIZONTAL





- Like a large electrically operated roller awning (same method as a fire fighting lift)
- Typically concealed above a ceiling out of view
- Retained in side retention devices (or side channels)
- Fire / heat / smoke resistant fabric
- Activated by an alarm signal and/or local detector

HORIZONTAL FIRE CURTAINS







Horizontal type fire curtains give the ability to close of openings in floors, light wells and atria, without the need for multiple roller blind curtains around the openings.

LATEST DEVELOPMENTS



CONCERTINA



Closed Concertina fire curtain

Open Concertina fire curtain

- Like a large electrically / gravity operated pleated blind
- Typically concealed above a ceiling out of view
- Can change direction without the need for termination posts
- Retained in side retention devices or fully enclosed
- Fire / heat / smoke resistant fabric
- Weighted bottom tray
- Activated by an alarm signal and/or local detector

CONCERTINA FIRE CURTAINS







Fire curtains have moved on from the typical vertical roller blind type.

Now there are variants that can give fire and smoke protection but in less traditional ways allowing for more radical building design but still maintaining compliance to building code.

CONCERTINA FIRE CURTAINS





EGRESS CURTAIN





Fire curtains can now have egress doors in them to allow for easy escape without the need to raise the curtain.

VISION PANELS



As well as egress doors fire curtains also come with windows to allow for people leaving the building the ability to find safe passage, plus first responders are able to assess situations on the other side of the fire curtain when entering the building.



FIRE CURTAINS FOR CLEANROOMS





There are now fire curtains specifically for controlled or cleanroom environments.

- Compliant to Air Cleanliness
 Class 6 to ISO 14644-1, Class
 C
- Chemical resistance to ISO 4628-1

OPTIONAL EXTRAS











Remote Monitoring and Control



Emergency Retract Button

SERVICE AND MAINTENANCE





The facility to monitor and control Fire and Smoke curtains from any location in the world using a secure, internet based portal.

A proactive and innovate solution to meet the increased demand of remote monitoring and reporting of Fire and Smoke curtain systems.

Increased usage of BMS (Building Management Systems) requires monitor and control of the mechanical and electrical equipment within the building.



SERVICE AND MAINTENANCE



INSPECTION AND TESTING OF BARRIER ASSEMBLIES

Frequency	Inspection and Testing
Daily	Where no sensory equipment is installed, check for obstructions to operational areas, e.g. by alterations to cosmetic finishes, lighting, shelving, sales displays or racking or by furniture or temporary or moveable displays.
Weekly	Operate all barrier assemblies. Where a barrier assembly forms part of a smoke control system protecting a means of escape, the barrier assembly should be operated in conjunction with the smoke control system.*
Monthly	Test the release of self-closing devices and automatic release mechanisms via a test switch. Check that any sensory detection equipment is functioning correctly. Check the barrier fabric is undamaged. Check that the self-test facility is functioning correctly.
Every Three Months	Operate any barrier assembly forming part of any smoke control system, testing all zones separately.*
Every Six Months	Check that smoke seals are undamaged. Check that the barrier assembly is not structurally damaged or extensively bowed or deformed. Arrange inspection and testing of the barrier assembly by competent persons.
*A smoke control system might include fans and powered exhaust ventilators, smoke dumpers, natural exhaust ventilation, automatic smoke curtains, etc.	

*A smoke control system might include fans and powered exhaust ventilators, smoke dumpers, natural exhaust ventilation, automatic smoke curtains, etc.

Thank you for listening...



QUESTIONS?

