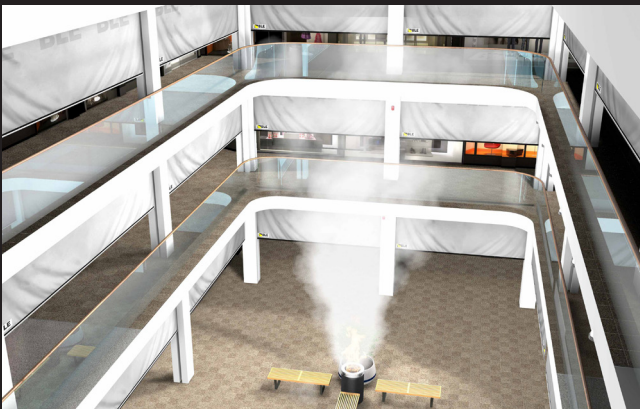




# THE LEADING EDGE IN



- > Automatic Smoke Curtains
- > Automatic Fire Curtains
- > Static Smoke Curtains
- > Accordion & Horizontal Curtains
- > Service & Maintenance

SMOKE & FIRE

# Welcome to BLE

## Why Choose BLE?



At BLE we are continually striving to improve the safety of your world. In the event of a fire, our gravity fail-safe curtains automatically deploy to contain smoke & fire. This slows down how quickly it can spread across a building, crucially allowing more time for safe emergency evacuation.

As a market leading global supplier, our products protect millions of people every day. Our curtains are rigorously tested and manufactured to the highest technical and quality standards, including BS, EN and UL.

## Smoke & Fire Curtains

Simple, efficient and cost effective smoke and fire curtains from BLE are invaluable for protecting the occupants within large open buildings from the threat of fire, smoke and hot gasses.

Active smoke barriers provide an unobtrusive and aesthetically neutral solution to compartmentation issues throughout the most complex of buildings. Using the latest CAD and manufacturing technology, we are able to create bespoke smoke barriers for the most complex smoke control system, regardless of what type of building it is protecting or where it is in the world.

Active fire barriers are similarly discreet in design and are suitable for use in a range of fire scenarios. Control systems require minimal maintenance and are designed to be robust and simple, whilst also providing advanced features such as emergency retract, obstruction sensors and audio / visual warnings.

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# Applications

## Protected Means Of Escape



BLE fire curtains can provide a protected means of escape that when not in use allows designers the freedom to achieve modern open plan spaces.

## Elevator Doors



While most elevator doors provide a fire integrity rating they do not prevent smoke leakage. BLE offer a UL approved smoke containment curtain that can be discreetly installed around the elevator door, making the curtain invisible when retracted.

## Elevator Lobbies



It may be required to create a protected lobby in front of a bank of elevator doors. Where this would previously have required the construction of a physical smoke and fire rated partition, a three sided lobby can now be produced using curtains.

## Escalators & Stairs



Smoke curtains can be used around the lower level to create a deep reservoir to prevent smoke moving to upper levels. Fire curtains can be used to seal off the stairwell completely if required. Intelligent control systems linked to the escalator operation can be provided to ensure effective means of escape are maintained.

## Fire Door Replacement



A BLE fire curtain can be specified as an alternative, offering the same levels of integrity. The curtain can be recessed within the ceiling and walls, or face fixed depending on customer requirements. It will then remain there hidden, but always ready to deploy in the event of a fire.

## Fire Compartmentation



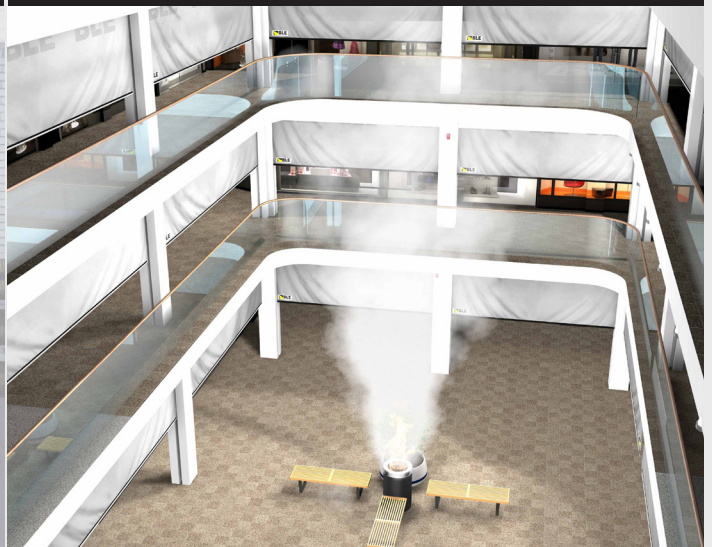
Curtains installed to form a compartment must be able to provide a physical barrier to the fire and prevent heat flux transfer of levels sufficient to ignite materials either side of the compartment.

## Smoke Compartmentation



Often in conjunction with an integrated ventilation system, smoke compartments are formed to prevent smoke spreading throughout a building. They must be impermeable to smoke leakage, within set criteria, but also offer a level of resistance to heat.

## Smoke Channelling



Smoke channels should be designed with due consideration given to the potentially large extraction units. BLE smoke curtains can be easily combined with ventilation systems to provide an integrated solution.

# Fire Curtains

## FC1 / FC60



### Key Info

Cost effective & reliable the FC1 is the ideal solution for smaller projects.

### Material

Glass cloth with a micronized aluminium polymer coating on each side of the fabric.

### Fire Integrity

Rated at 1000°C for up-to 60 minutes Integrity and 60 minutes Radiation to BS EN 1634-1.

## FC2 / FC240



### Key Info

The highest performing fire curtain in the BLE product range.

### Material

Stainless steel, wire reinforced, woven glass fibre fabric coated on each side with silver polyurethane.

### Fire Integrity

Rated at 1000°C for up to 240 minutes Integrity & 60 minutes radiation to BS EN 1634-1 & BS476 Part 22.

## FC4



### Key Info

A fire curtain that can also provide radiant heat protection

### Material

Built up of two layers of wire reinforced glass fabric with aluminium foil laminated to the outer sides. The fabric is silver & reflective in colour.

### Fire Integrity

Rated upto 1000°C for 120 minutes with enhanced resistance to the irradiance of heat.

## British & European Standards

Model	Max Width (M)	Max Drop (M)	Fire Resistance (mins)		Test Standard	Certificate / Reports
			Integrity (E)	Irradiance (W)		
FC1	3.0	3.0	60	-	BSEN 1634	Certifire CF5432
	2.8	2.5	60	30		
	1.4	2.5	60	60		
FC2	7.0	8.0	60	30	BSEN 1634	Certifire CF5433
	7.0	7.0	120	30		
	7.0	6.0	180	30		
	7.0	5.0	240	30		
	2.4	2.7	240	60		
	Unlimited	6.0	240	-		
FC4	2.6	2.7	120	120	BSEN 1634	WF341904 WF342381
	7.0	4.0	60	60		WF349970

## UL Standards

Model	Max Width (M)	Max Drop (M)	Classification	Test Standard	Certificate / Reports
FC60	45.0	12.0	60 mins fire rating	UL 10D UL1784	20151020-R26410 20120808-R26410
FC240	45.0	12.0	120 mins fire rating in gypsum 180 mins fire rating in masonry	UL 10D UL1784	20151020-R26410 20120808-R26410

# Smoke Curtains

## SC1 / SD60



### Key Info

Specified by Building Owners, Architects and Engineers in buildings across the world, our SC1 active smoke curtains protect some of the world's most high-profile buildings.

### Material

Glass cloth with a micronized aluminium polymer coating on each side of the fabric.

### Fire Integrity

Rated at 600°C for 120 minutes to BSEN12101-1

## British & European Standards

Model	Max Width (M)	Max Drop (M)	Classification	Test Standard	Certificate / Reports
SC1	Unlimited	10.0	D120 / DH60	BSEN 12101	Certifire CF5030 EC CoC 1121-CPR-FA001

## UL Standards

Model	Max Width (M)	Max Drop (M)	Classification	Test Standard	Certificate / Reports
SD60	45.0	12.0	60 mins fire rating	UL 10D UL1784	20151020-R26410 20120808-R26410 ICC-ESR-3322
SD240	45.0	12.0	120 mins fire rating in gypsum 180 mins fire rating in masonry	UL 10D UL1784	20151020-R26410 20120808-R26410



## SC2 Fixed



### Key Info

The SC2 fixed smoke curtain can be manufactured to suit any shape or size and is used extensively in aircraft hangars and warehouses where the barrier is able to stay permanently in position.

### Material

Glass cloth with a micronized aluminium polymer coating on each side of the fabric.

### Fire Integrity

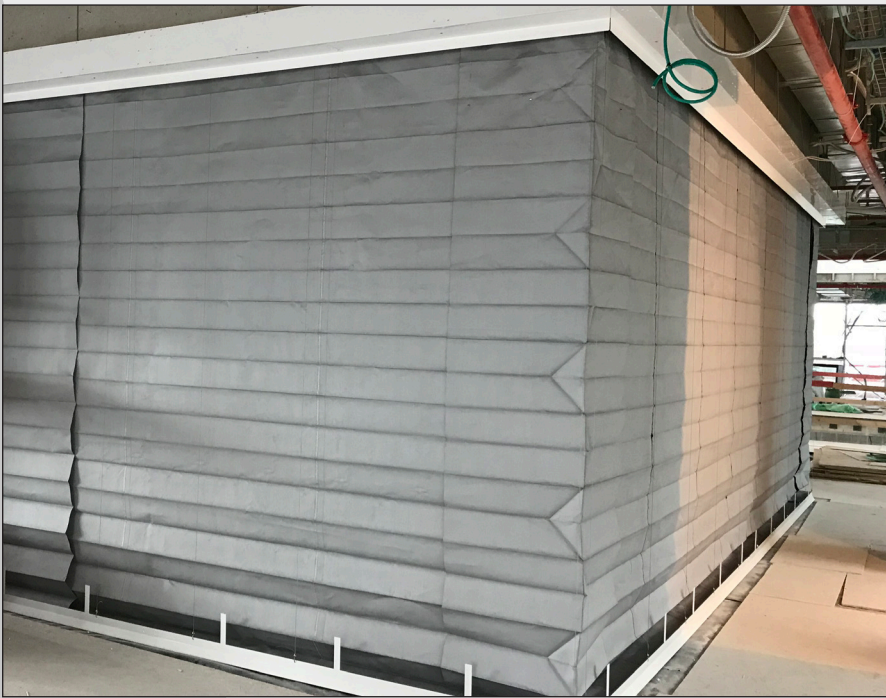
Rated at 600°C for 120 minutes to BSEN12101-1

## British & European Standards

Model	Max Width (M)	Max Drop (M)	Classification	Test Standard	Certificate / Reports
SC2	Unlimited	10.0	D120	BSEN 12101	Certifire CF5030 EC CoC 1121-CPR-FA001

# Accordion & Horizontal

## Accordion AC1



### Key Info

Developed for applications where there are no structural columns or posts to fit side guides at corners. An ideal solution for buildings with large open spaces.

### Material

Stainless steel, wire reinforced, woven glass fibre fabric coated on each side with silver polyurethane.

### Fire Integrity

Upto 180 minutes integrity to the UL10D Standard

## Accordion (UL Standards)

Model	Max Width (M)	Max Drop (M)	Classification	Test Standard	Certificate / Reports
Accordion AC1 (SD240A)	45.0	5.0	120 mins fire rating in gypsum 180 mins fire rating in masonry	UL 10D	20120808-R26410

## Horizontal HC1



### Key Info

For use in multi-story buildings to prevent fire & smoke progressing through stairwells and atrium voids to upper floors.

### Material

Stainless steel, wire reinforced, woven glass fibre fabric coated on each side with silver polyurethane.

### Fire Integrity

Rated at 1000°C for a period of up to 180 minutes integrity to BS EN 1634-1.

## Horizontal (British & European Standards)

Model	Max Width (M)	Max Drop (M)	Fire Resistance (mins)		Test Standard	Certificate / Reports
			Integrity (E)	Irradiance (W)		
Horizontal HC1	6.0	6.0	180	-	BSEN 1634	WF333819 WF333952 WF337802

# Service & Maintenance



## Why Do I Need to Service?

Smoke and fire curtains are **life safety systems**. Designed to prevent the spread of smoke and fire through a building, they help protect human life in the event of an emergency. In accordance with the Regulatory Reform (Fire Safety) Order 2015 (Section 17, Part I) it is a legal requirement that **ALL** life safety systems are regularly serviced and maintained.

## How Often Do I Need to Service?

The frequency of service and maintenance required is determined by various factors, including the use and occupancy of the building.

BLE offer a number of comprehensive service packages to maintain installed smoke and fire curtains including emergency call outs for malfunctioned barriers, whatever the cause.

## How Can BLE Help?

BLE can provide servicing for all existing types of BLE smoke & fire curtains - whether we installed them or if they were installed by a BLE distributor.

Unfortunately we are not able to offer service packages for non BLE systems. However we are able to quote for a BLE replacement curtain, which would then be eligible for one of our service packages.

## BLE Service Packages

We offer a variety of service options to suit your needs, including 1, 2 & 3 year packages. Each package allows for 1 annual visit.

For more information about Service & Maintenance, or to discuss your requirements call **0114 251 4703** or email **[enquiries@blecurtains.com](mailto:enquiries@blecurtains.com)**

# Case Studies

At BLE, not only do we provide smoke & fire containment solutions across the UK, but also across Europe, the Middle East, Far East, Asia, India and the USA. The following case studies highlight just a few of the high profile projects we have worked on in recent years - visit the BLE website for more.

## Warwick Hotel, Doha

Blending classic and contemporary styling the Warwick Hotel provides a new standard of luxury amid Doha's busy city centre. The hotel offers elegant suites, refined dining options and rejuvenating spa facilities, as well as a breathtaking rooftop swimming pool.

Working in partnership with Energy International, BLE were delighted to supply the hotel with a number of fire curtains - primarily for the generator and transformer rooms. In the event of a fire, the curtains will automatically descend to contain smoke & fire for a set period of time, allowing for safe evacuation.

Speaking of the project, Energy International's Ziad Khaled has said "Working with BLE is always such a pleasure. They listened to our requirements and delivered a cost effective solution on time".



## US Embassy, London

Located in Nine Elms, South West London, the new US Embassy is quickly becoming one of the most talked about developments in recent memory. Developed specifically to provide a much higher level of security than ever before, including bollards, ditches and a reflective pool that doubles as a moat. Working with main contractor Sir Robert McAlpine, BLE were tasked to supply and install a number of FC1 Fire Curtains for the elevators on each floor of the Embassy. The project presented several new challenges for BLE's team of installation experts, from the high levels of security onsite, to having to work around the building's unique architectural design.



## Beekman Hotel, New York

An iconic part of the New York skyline since 1761, the Beekman Hotel combines traditional architecture with luxury accommodation. Working with US Smoke & Fire, BLE were asked to supply a number of SD60 Smoke Curtains (UL Specification) for use in the hotel. Speaking of the project, US Smoke & Fire's CEO Steven Sadeghian PhD "This was a challenging project for all involved but BLE were able to manufacture ultra compact housings with varying headbox sizes on single runs to not obstruct historic metal medallions that could not be touched on each floor, whilst also maintaining a full fabric seal throughout the length of the corridor."



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## **BLE SMOKE & FIRE CURTAINS**

IS RECOGNISED AS THE LEADING EXPERT IN THE DESIGN, MANUFACTURE, COMMISSIONING, INSTALLATION AND MAINTENANCE OF FIRE DETECTION AND PROTECTION SYSTEMS.

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