

FIREMASTER® PLUS²

TENABLE ZONE / HEAT PROTECTION
ACTIVE FIRE CURTAIN BARRIER ASSEMBLIES

WWW.COOPERSFIRE.COM

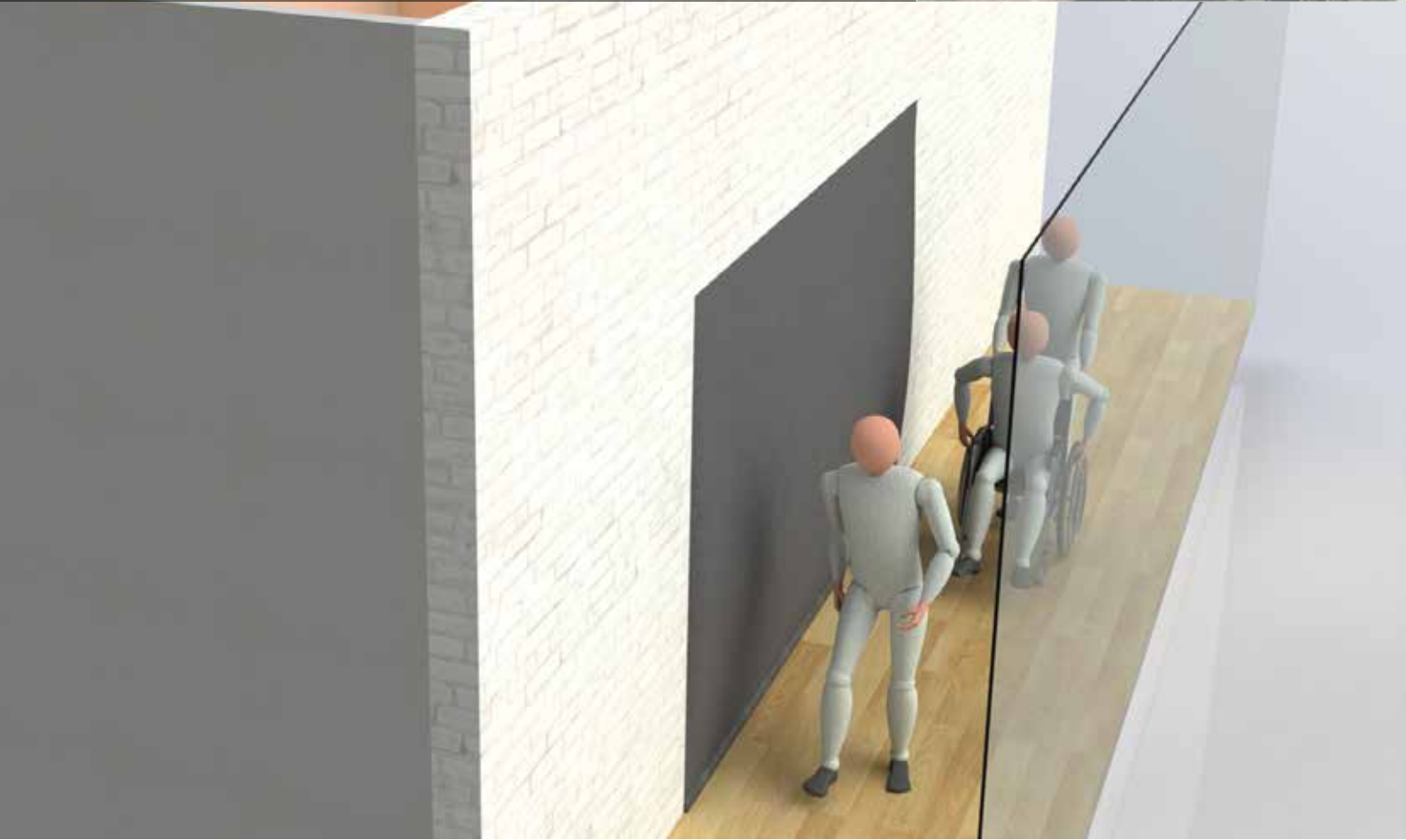


LEADING THE WAY IN FIRE PROTECTION

MEANS OF ESCAPE
PROTECTION

Active Fire Curtain Barrier Assemblies comprise technologically advanced fire-resistant fabric barriers encased in a compact steel housing. Barriers remain invisibly retracted until activated by an alarm or detector signal, at which time they descend safely to their operational position. To be compliant, Fire Barriers must be protected from a short circuit and or total power failure, this is achieved with our patented Total Gravity Fail-Safe (TGFS) system. Fire barriers will stop and control the spread of fire in a building.

The revolutionary FireMaster® Plus² Curtain Barrier uses a fabric that is an exclusive development and woven and produced by Coopers themselves. It uses a unique rapid reaction graphite flake which expands to over 20 times its original thickness on exposure to heat and fire, creating an insulating carbon barrier to heat.



PRODUCT ADVANTAGES

- Remove walls and partitions to create wide open spaces
- Remove fire doors to make free flowing corridors
- Total Gravity Fail-Safe (TGFS) operation ensures safe rates of descent even following total power loss, wiring, short circuit or system corruption
- Single roller assembly curtains for spans up to 4m as standard and Wide Single Roller assembly curtains for spans over 5m as standard

REDUCES RADIANT HEAT

- FireMaster® Plus² reduces radiant heat to under 10 kilowatts per sq mtr for 60 minutes. You can escape safely just a few inches away from a +600°C fire (over 3 times the heat of a domestic oven)

STOP FIRE SPREADING

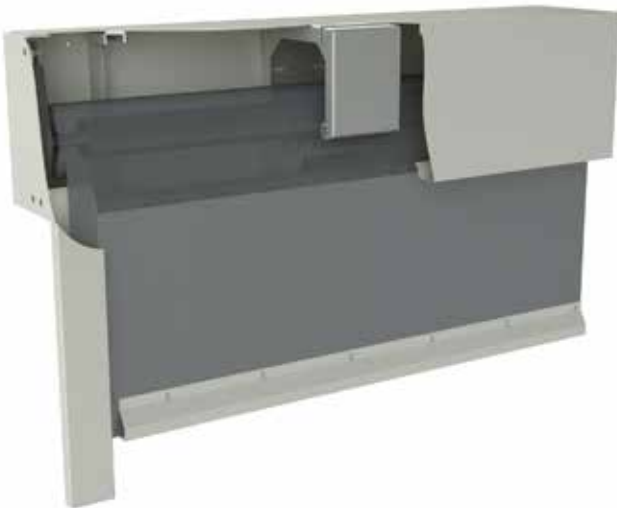
- FireMaster® Plus² stops fire for 180 minutes and offers a protected means of escape

FAST REACTION TIME

- FireMaster® Plus² expands twice as fast and double the thickness of any other product when exposed to heat and fire



Single Roller Assembly



Wide Single Roller Assembly

- Fully synchronised intelligent drive system with 'slave line' for multiple rollers
- All barriers allow egress for occupants and access for emergency services

CASE STUDY:
SSE HYDRO

GLASGOW UK

At the centre of the SSE Hydro's interior is its large, open plan atrium purposely designed to complement the venue's unique exterior looks. However, ensuring that the SSE Hydro's open plan designs meet stringent fire regulations required a modern alternative to traditional fire protection equipment.

As the leading manufacturer of fire and smoke curtains, Coopers were appointed to protect the un-insulated glazing installed above the atrium's reception area with an approved fire curtain barrier system approved to provide a 2 hour tenable zone. Coopers also developed a smoke curtain system to provide an unintrusive method capable of controlling smoke migrating from the lower floors.

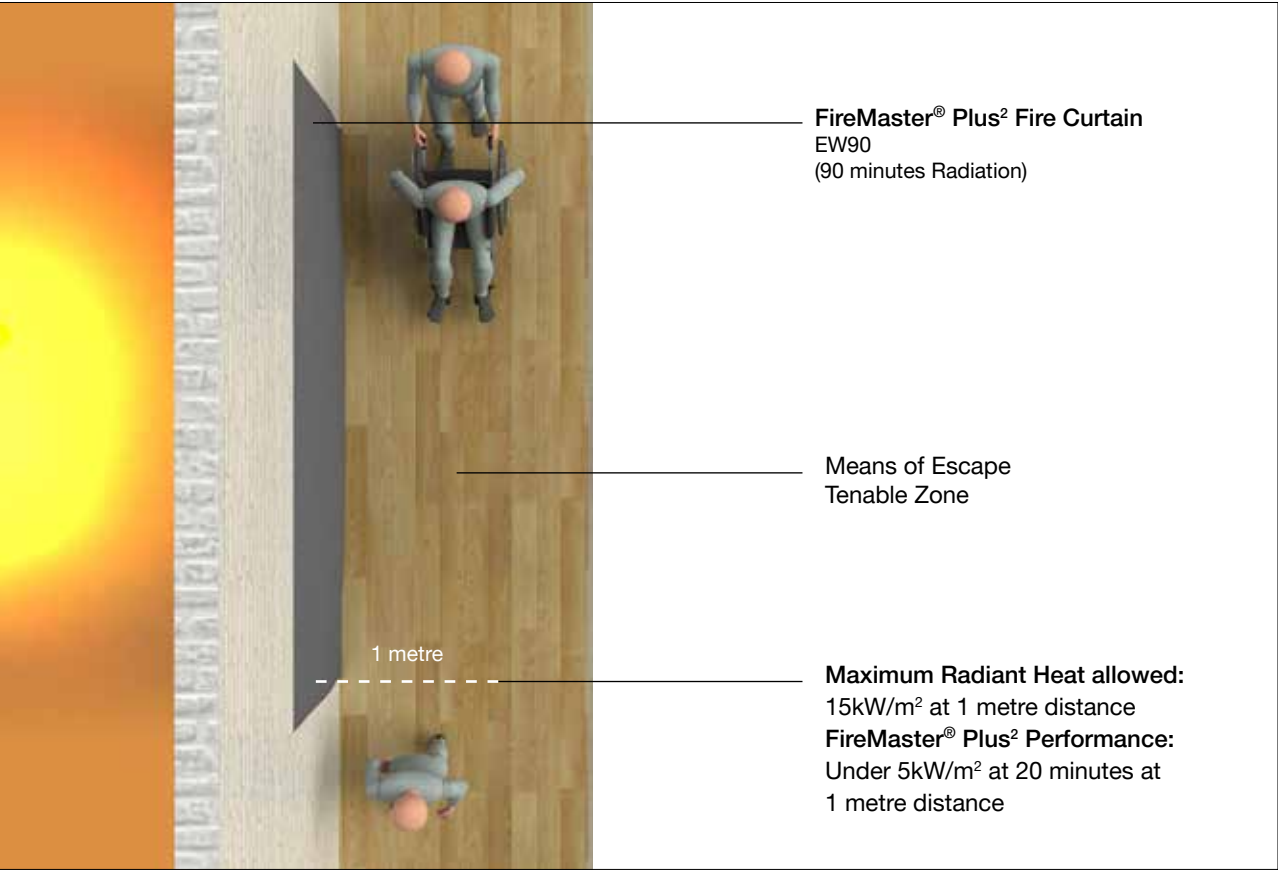
Coopers installed two FireMaster® Plus fire curtain barriers to deploy vertically to protect the atriums angled glazing situated on the first floor. Developed and installed to meet fire regulations, the FireMaster® Plus fire curtain barriers will provide the SSE Hydros' un-insulated glazing with a tenable zone approved to protect a means of escape for up to 2 hours.

BENEFITS

- Accredited by Independent Third Party Certification for both Product and Installation
- Manufactured by Coopers in the UK under BS EN ISO 9001 and 14001 systems
- Total Gravity Fail-Safe (TGFS)

TENABLE ZONE - PROTECTED MEANS OF ESCAPE

STANDARD AND SMOKE SEAL (SS) HEADBOX SIZES



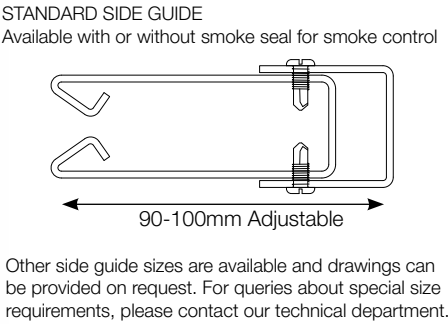
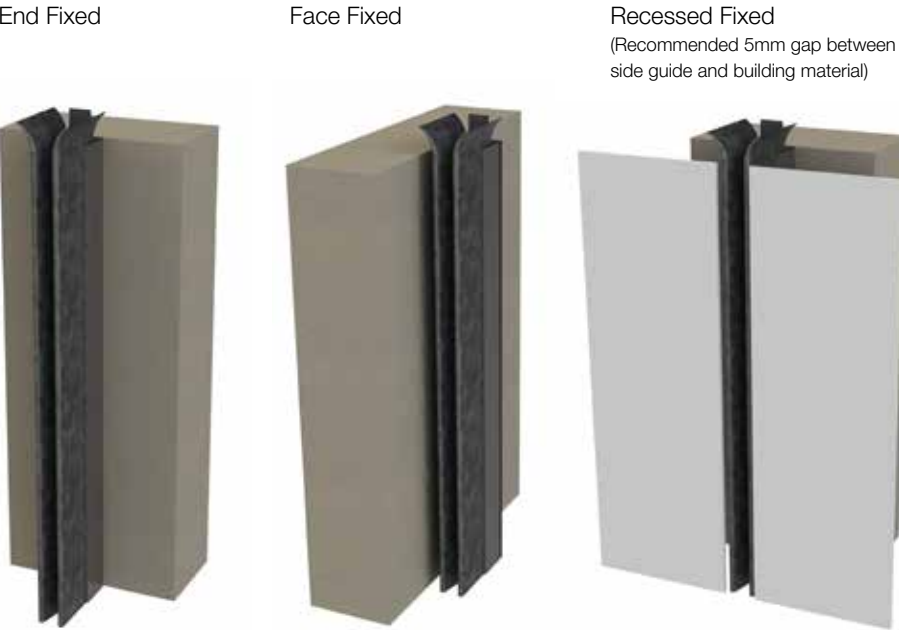
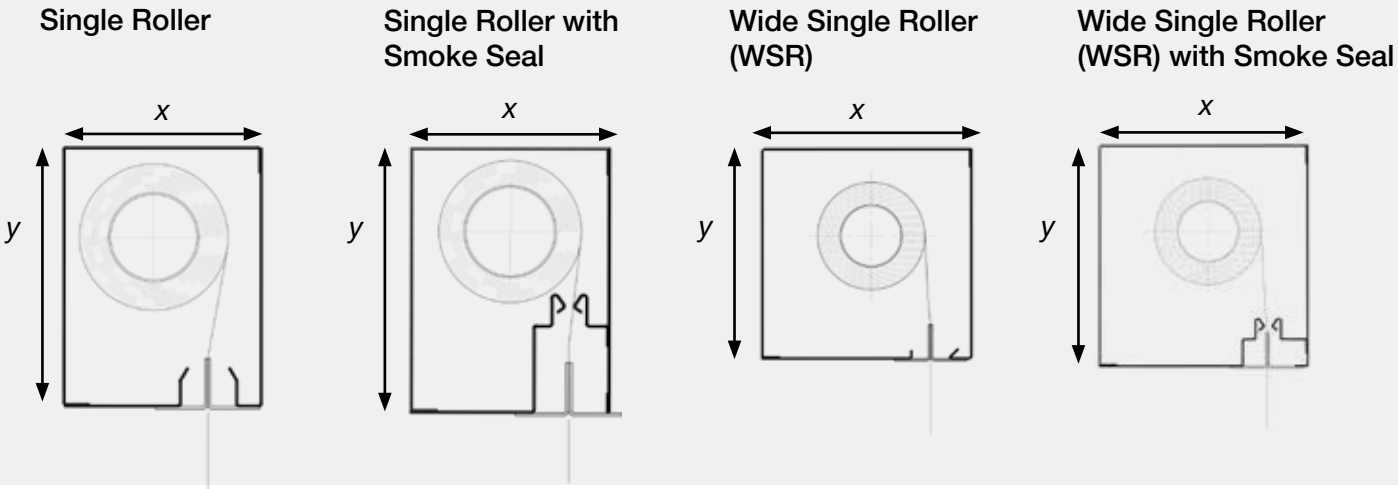
Model	Maximum Barrier Width up to	Maximum Barrier Drop up to	Dimensions	
Single Roller			X	Y
FMP 15/20	4 metres	2.5 metres (2.5m with Smoke Seals)	150mm	200mm
FMP 18/22	4 metres	4 metres (3m with Smoke Seals)	180mm	220mm
FMP 18/26	4 metres	6 metres (4m with Smoke Seals)	180mm	260mm
FMP 25/30	4 metres	6 metres (6m with Smoke Seals)	250mm	300mm
FMP 30/34	4 metres	8 metres (8m with Smoke Seals)	300mm	340mm
Wide Single Roller				
FMP 23/23 WSR	Contact Coopers Fire	4 metres (n/a with Smoke Seals)	235mm	235mm
FMP 23/25 WSR	Contact Coopers Fire	5 metres (4m with Smoke Seals)	235mm	250mm
FMP 25/30 WSR	Contact Coopers Fire	6 metres (6m with Smoke Seals)	250mm	300mm
FMP 30/34 WSR	Contact Coopers Fire	8 metres (8m with Smoke Seals)	300mm	340mm

Coopers Fire has a design solution for any size requirement.
The table above represents maximum possible working dimensions for each product model. For product certification dimensions please contact Coopers Fire.
For technical drawings please visit www.coopersfire.com
For queries about special size requirements and oversized barrels, please contact our technical department.

SIDE CHANNELS

Side channels seal the curtain fabric and the building. Fire can cause extreme positive or negative pressures. 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.

HEADBOX ILLUSTRATIONS



HOW THE HEADBOXES ARE INSTALLED



HOW ARE THE BARRIERS CONCEALED?

FireMaster® Plus² systems provide a range of ceiling interfaces and can even invisibly conceal the barriers in the ceiling whilst still allowing access for service and maintenance. All our systems remain totally concealed when non-operational.



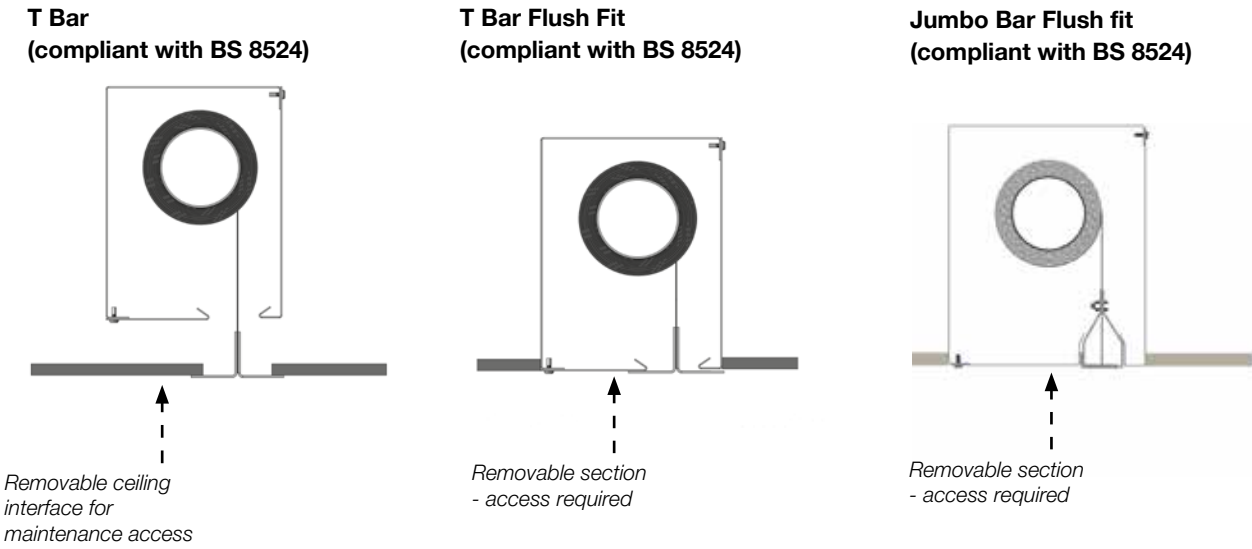
T Bar
(BS 8524 Compliant)

Jumbo Bar Flush Fit
(BS 8524 Compliant)
(limited to 3m wide x 3m drop)

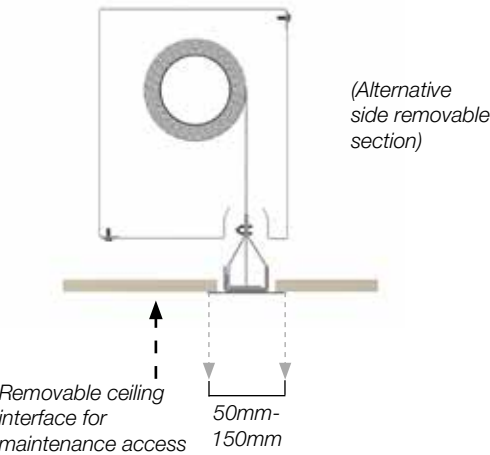
Jumbo Bar with Stall Plate
(BS EN 1634-1 Compliant
as part of an assessment)

Jumbo Bar with Ace Capping
(BS EN 1634-1 Compliant
as part of an assessment)

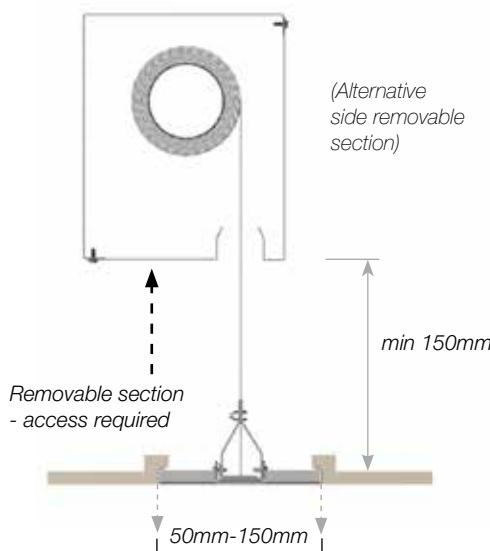
HOW IS THE BARRIER ACCESSED?



Jumbo Bar with Stall Plate
Only available under BS EN 1634-1



Jumbo Bar with Ace Capping (suspended ceiling)
for ease of maintenance through ceiling - no need for destructive access
Only available under BS EN 1634-1

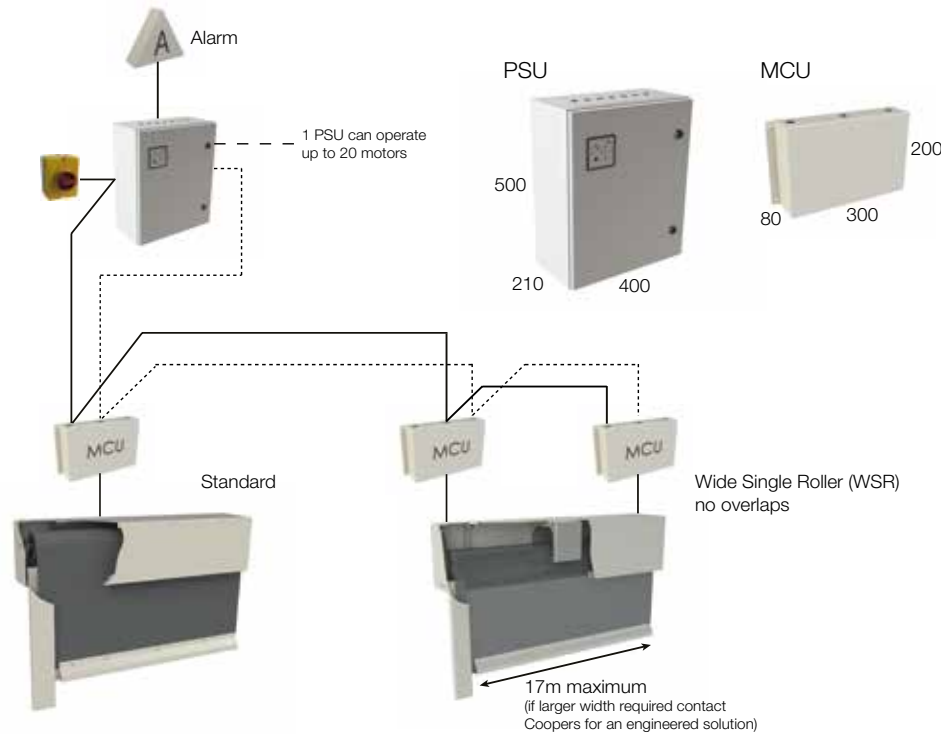


CONTROL OPTIONS

Controls are custom made to be fully compatible with both existing alarm systems and the number of barrier units installed, whether single or multiple roller assemblies.

Coopers also design and build Grouped Control Panels to accomodate customers requirements. This allows all controls to be installed within a single enclosure for easier installation, commissioning, servicing and reduction in field wiring. Please contact Coopers for more information on Grouped Controls.

When an alarm signal is detected, the control panel will automatically trigger all the Barrier systems to deploy by controlled descent using our unique Total Gravity Fail-Safe (TGFS) system.



PRODUCT SPECIFICATION

Under BS 8524-1:2013 the fire curtain achieves 180mins (3 hrs). The complete system is tested to BS EN 1634-1:2014 and is classified as E180 EW90 for a Single and Wide Single Roller panel curtain in accordance with BS EN 13501 2:2007+A1:2009. The FireMaster Plus² has a Smoke Leakage rate of less than 3m²/m/h to BS EN 1634-3:2004.

The fabric is additionally tested for 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) of Approved Document B (Volumes 1 & 2) 2006 Edition 'Fire Safety' to England & Wales Building Regulations 2000.

EFP™ 2/1000/DGI is a high performance textile composite material of woven glass fibre with an intumescent graphite silicone coating

on both sides. This forms a rapid, expanding carbonaceous char at 160°C and reduces heat radiation. This coating was developed and used first by Coopers Fire.

DON'T BE LIABLE

Fire Curtain Barriers MUST have a 'Total' Fail-Safe by Gravity* in the event of total mains, wiring, short circuit and/or system corruption.

Coopers Fire, with their unique patented Total Gravity Fail-Safe (TGFS) system, are Independantly Third Party Certified by a UKAS approved certification body to BS 8524-1:2013.

CONTROLS SPECIFICATION

POWER SUPPLY
230V AC 50Hz dedicated supply via all pole isolator

BATTERIES
2 x 12V 12A/h lead acid batteries

ALARM SIGNAL
Normally closed volt-free contacts. Open on activation

TEST FACILITY
Zone Control Panel (ZCP) located on front of Power Supply Unit (PSU)

DISPLAY
Power ON, Alarm ACTIVE and Alarm OFF status LED's on ZCP

POWER SUPPLY SIZE
400mm(w) x 500mm(h) x 210mm(d)

MOTOR CONTROL UNIT SIZE
300mm(w) x 200mm(h) x 80mm(d)

QUALITY ASSURANCE AND CERTIFICATION



certifire

MEMBERSHIP



CPD ACCREDITATIONS



For information, to get a quote
or to book a CPD workshop

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Coopers Fire Ltd has a policy of
continuous product improvement.

As such we reserve the right to
change design and specifications
without prior notice.

Please check our website for the
latest information.

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*Multiple patents granted and pending.

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