FIREMASTER® PLUS²

TENABLE ZONE / HEAT PROTECTION
ACTIVE FIRE CURTAIN BARRIER ASSEMBLIES

WWW.COOPERSFIRE.COM

## coopers

EST. 1983

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® Plus^2 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.
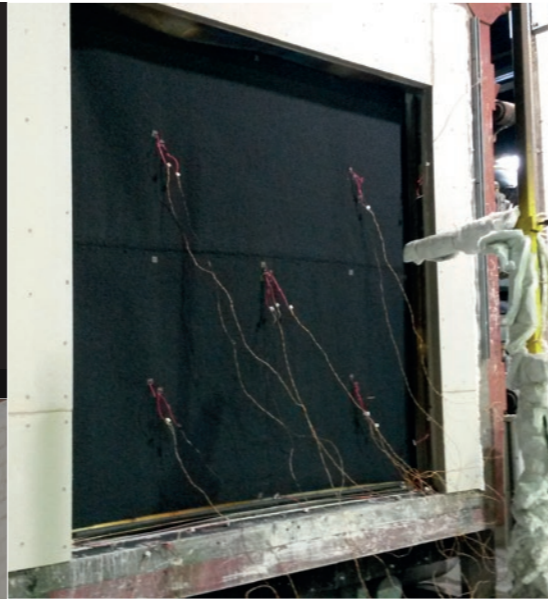
REDUCES RADIANT HEAT

- FireMaster® Plus^2 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® Plus^2 stops fire for 180 minutes and offers a protected means of escape

FAST REACTION TIME

- FireMaster® Plus^2 expands twice as fast and double the thickness of any other product when exposed to heat and fire
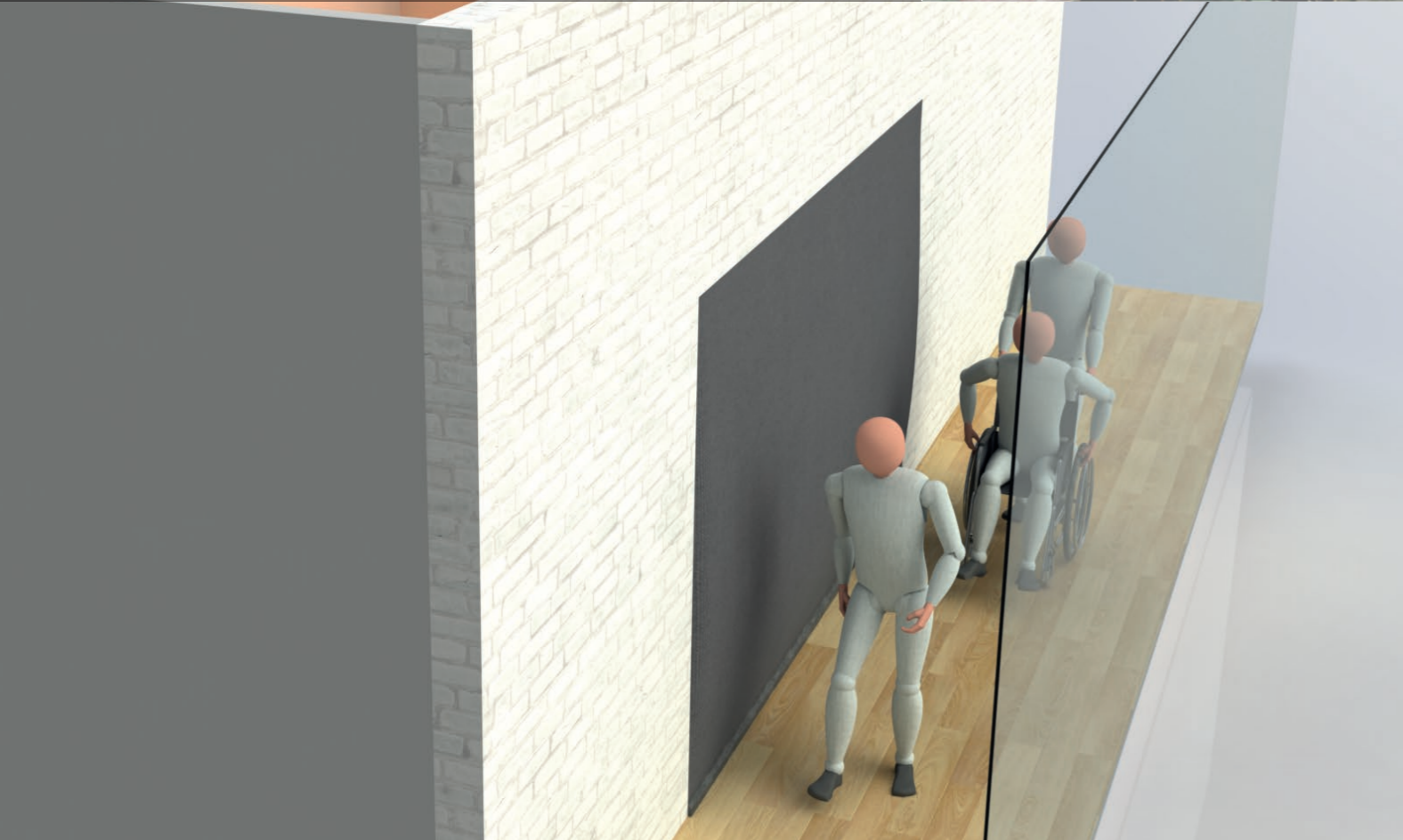
Single Roller Assembly

Wide Single Roller Assembly

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

INSULATING ZONE - PROTECTED MEANS OF ESCAPE

FireMaster® Plus² Fire Curtain
EW90
(90 minutes Radiation)

Means of Escape
Tenable Zone

1 metre

Maximum Radiant Heat allowed:
15kW/m² at 1 metre distance
FireMaster® Plus² Performance:
Under 5kW/m² at 20 minutes at
1 metre distance
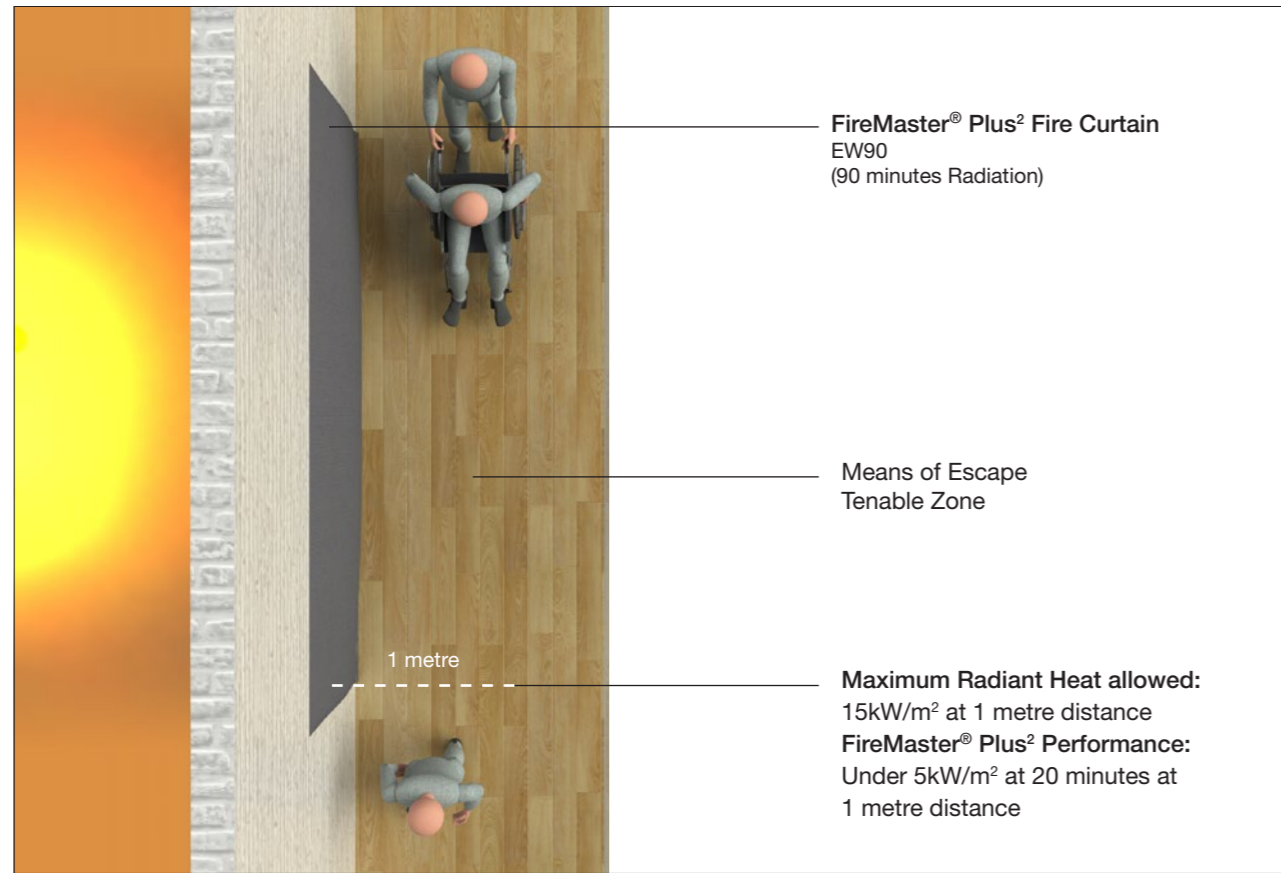
SIDE CHANNELS

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.
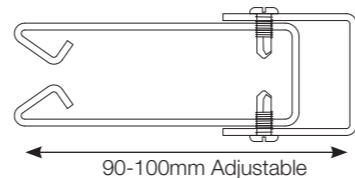
End Fixed

Face Fixed

Recessed Fixed
(Recommended 5mm gap between side guide and building material)
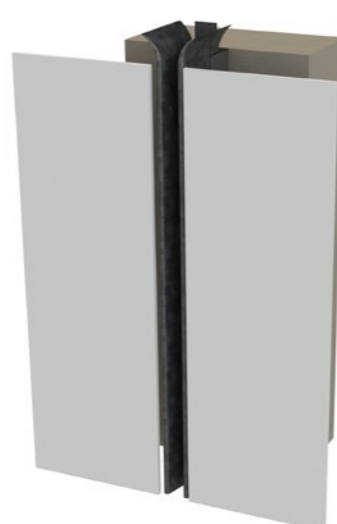
STANDARD SIDE GUIDE
Available with or without smoke seal for smoke control

90-100mm Adjustable

Other side guide sizes are available and drawings can be provided on request. For queries about special size requirements, please contact our technical department.

STANDARD AND SMOKE SEAL (SS) HEADBOX SIZES

| Model No.	Maximum Barrier Width up to	Maximum Barrier Drop up to	Dimensions	
Single Roller			X	Y
FMP 15/20	4 metres	2.5 metres (2m 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	10 metres	4 metres (n/a with Smoke Seals)	235mm	235mm
FMP 23/25 WSR	10 metres	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 shows our standard range of sizes. For technical drawings please visit www.coopersfire.com
For queries about special size requirements and oversized barrels, please contact our technical department.
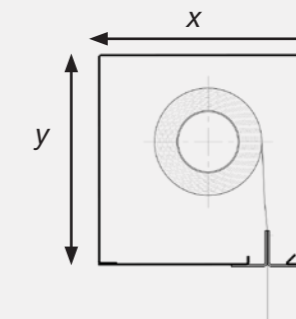
HEADBOX ILLUSTRATIONS

Single Roller
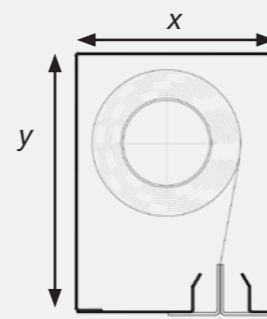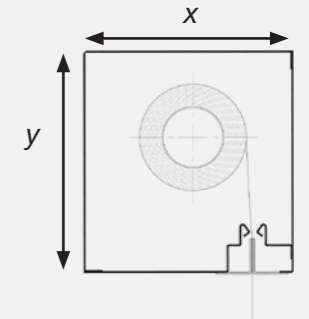
Single Roller with Smoke Seal
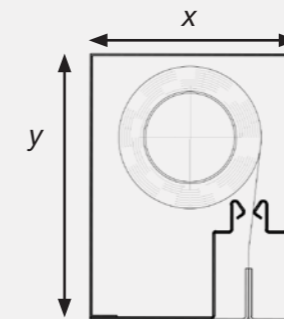
Wide Single Roller (WSR)

Wide Single Roller (WSR) with Smoke Seal

HOW THE HEADBOXES ARE INSTALLED

Unistrut and Drop Rods

I Beam

Face Fixed

Soffit Fixed

There are many fixing options to suit all types of ceiling configurations. Barriers can be integrated with both solid and suspended ceilings, enabling total project design flexibility.

HOW ARE THE BARRIERS CONCEALED?

FireMaster® Plus[2] 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.

For illustrative purposes only

Flush Fit

Suspended ceiling with SLAT™ (Self Levelling Access Trim) the unique patented Coopers' system

**Reinforced Suspended ceiling** with recessed shadow gap

HOW IS THE BARRIER ACCESSED?

(Remember, regular service and maintenance is a legal mandatory requirement)

Flush Fit

Suspended ceiling with SLAT™ (Self Levelling Access Trim) the unique patented Coopers' system

Reinforced Suspended ceiling with recessed shadow gap

Removable access

Removable access
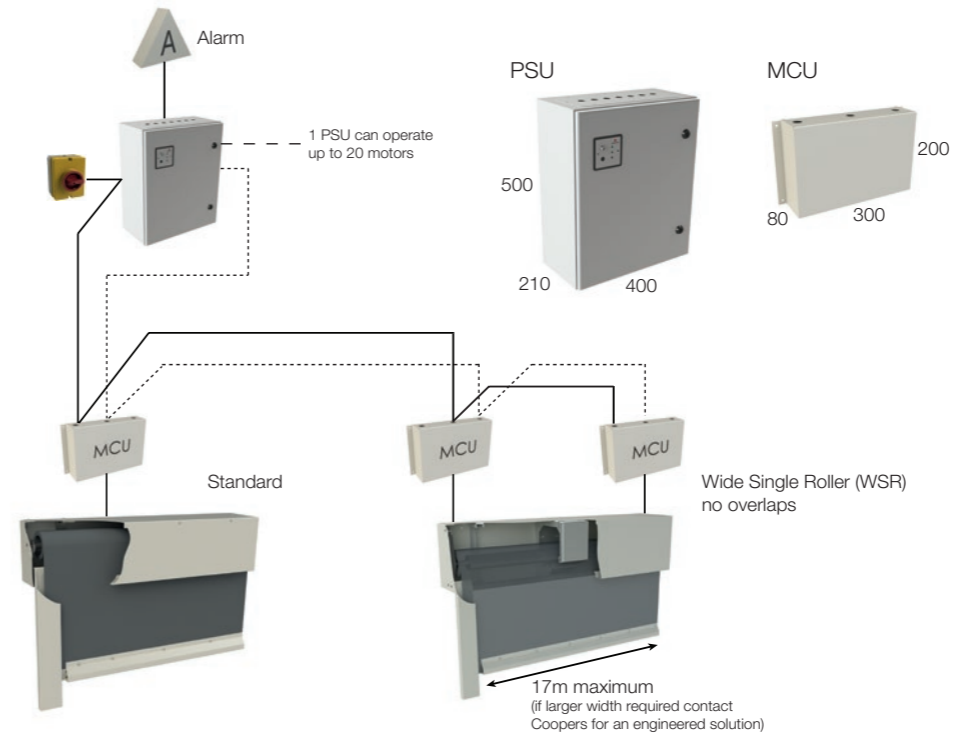
min 300mm

Removable access
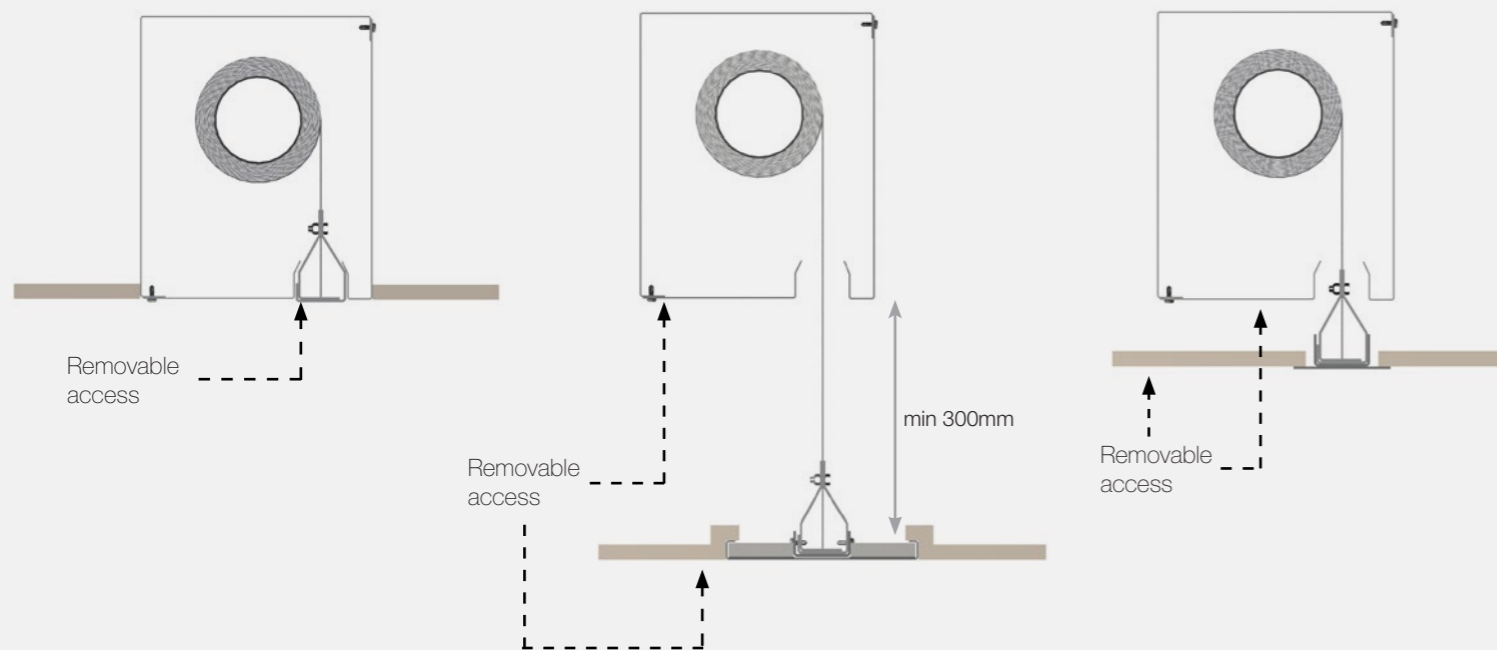
CONTROL OPTIONS

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.

A Alarm

1 PSU can operate up to 20 motors

PSU

MCU

500

210 400

200

80 300

MCU

Standard

MCU MCU

Wide Single Roller (WSR) no overlaps

17m maximum (if larger width required contact Coopers for an engineered solution)

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 Plus[2] 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.

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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EST. 1983

LEADING THE WAY IN FIRE PROTECTION