

# FIREMASTER® NVS™ HORIZONTAL

ACTIVE FIRE CURTAIN BARRIER ASSEMBLIES  
NVS™ (NO VISIBLE SUPPORTS)

[WWW.COOPERSFIRE.COM](http://WWW.COOPERSFIRE.COM)



LEADING THE WAY IN FIRE PROTECTION

DESIGN SOLUTIONS  
THAT WORK FOR YOU

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 close safely to their fire operational position. Fire barriers will stop and control the spread of fire in a building.

To be compliant, Fire Barriers must have a dual power supply fitted as standard. To protect from a short circuit and / or total power failure, use our patented Total Gravity Fail-Safe (TGFS) system.

The rollers are mounted and are driven by tubular motors. The rollers are enclosed in a steel housing and the leading edge of the curtain fabric has a supporting bar spanning between the side channels that retain the barrier.



MINI SIMPLEX™ (SINGLE BARRIER ASSEMBLY)



Suitable for smaller, narrower openings in domestic dwellings and for skylights etc.

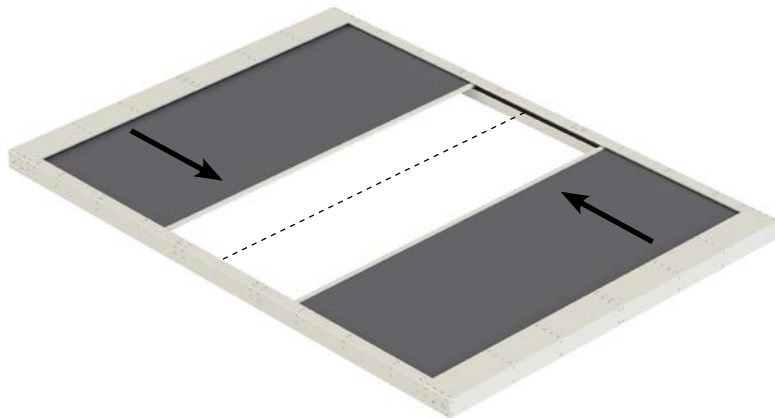


SIMPLEX™ (SINGLE BARRIER ASSEMBLY)



Suitable for smaller openings and skylights etc.

DUPLEX™ (DOUBLE CURTAIN ASSEMBLY)



Suitable for large openings including expansive atria. Complete closure in half the time

**MEANS OF ESCAPE**

- Barriers near protected routes use FireMaster® Plus

**STAIRWELLS**

- No need for fire rated walls

**ESCALATORS**

- No need for fire rated walls

**ATRIA**

- Barriers allow multi-floor concourse openings and large atria

**LIGHT WELLS**

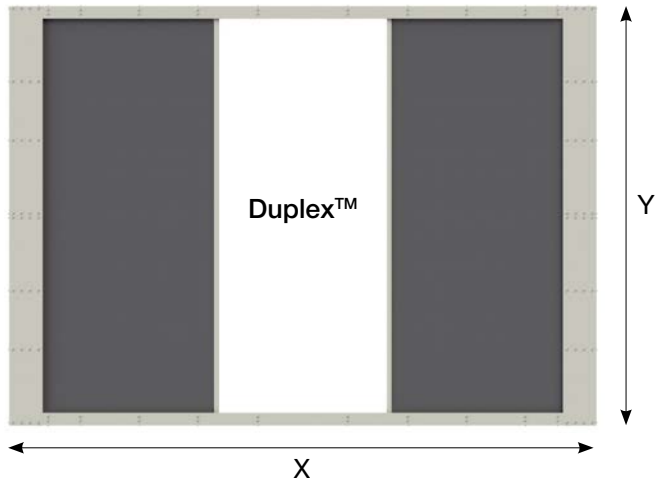
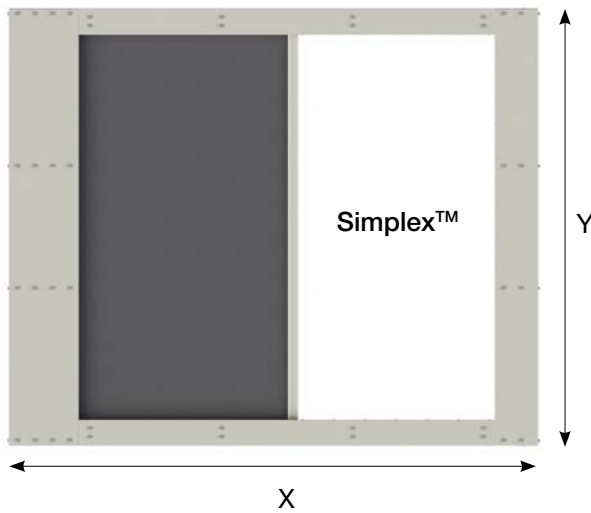
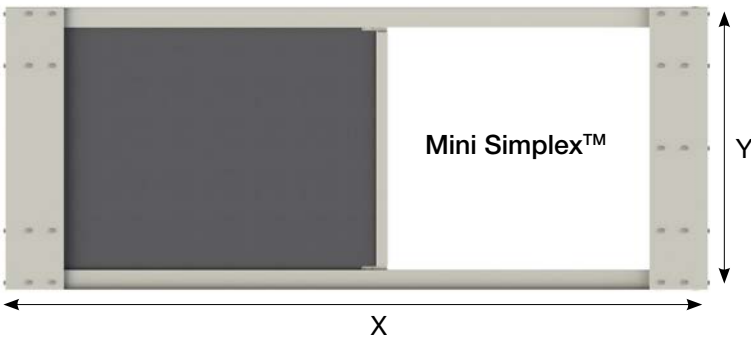
- Provides protection to non-rated glazing



STANDARD SIZES

Model		Minimum Size	Maximum Size
MINI SIMPLEX	X value	1 metre	7 metres
	Y value	1 metre	2.5 metres
SIMPLEX	X value	1 metre	7 metres
	Y value	1 metre	5 metres
DUPLEX	X value	7 metres	14 metres
	Y value	1 metre	5 metres

The sizes above apply to the standard FireMaster® NVS™ Horizontal range. Larger sizes can be manufactured on request. For the FireMaster Plus NVS Horizontal range, the maximum length (X value) differs. For further information, please contact our technical department.



CASE STUDY:  
4 NATIONAL CIRCUIT,  
ACT

CANBERRA, AUSTRALIA

The aesthetic design of each building includes a void similar to an atrium which interconnects 6 levels. This allows for introducing more natural light in to the building and increasing the opportunity for people to interact and share ideas.

As there are 6 levels interconnected through the void, the large floor area and volume created this means that the building is required to meet the atrium provisions in the Australian Part G of the BCA. This is a very costly and restrictive in design.

By incorporating Coopers FireMaster® NVS™ horizontal fire curtain barriers on levels 2 & 4 the voids can be closed in fire mode.

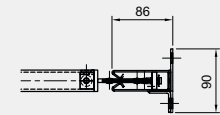
Two 9 meter wide by 17 meter draw NVS™ models were installed in the West building. These are the largest horizontal fire curtains installed in the world with No Visible Supports.

BENEFITS

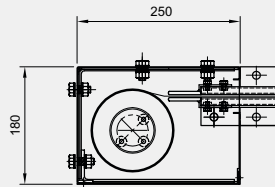
- NVS™ - No Visible Supports within the atrium void
- Cost saving on atrium construction requirements
- Cheaper solution than vertical fire curtains on multiple floors
- Reduced maintenance costs with less curtains and no supports in the void
- Light weight construction does not require structural steel to support it
- Larger sizes can be manufactured on request subject to certification

STANDARD HEADBOX AND SIDE GUIDE SIZES

Mini Simplex™

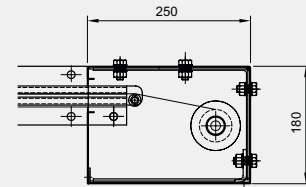


Side Profile Detail



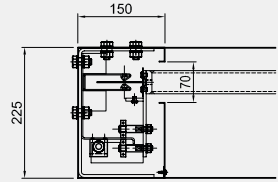
Fabric End Detail

Guides to be clad to same fire rating as curtain after installation.

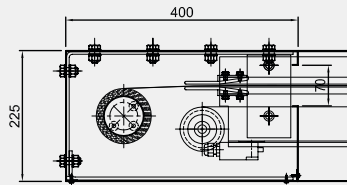


Pulley End Detail

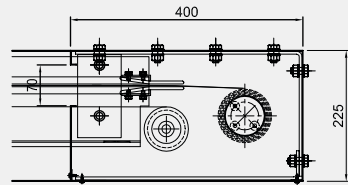
Duplex™



Side Profile Detail

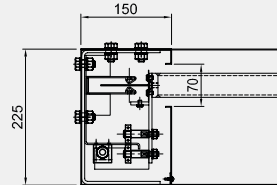


Fabric & Pulley Detail

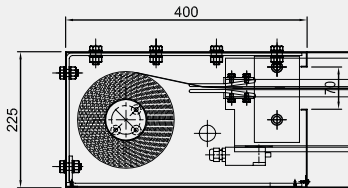


Fabric & Pulley Detail

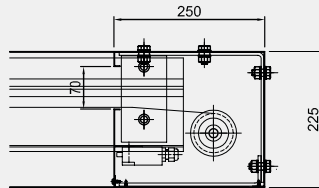
Simplex™



Side Profile Detail



Fabric End Detail



Pulley End Detail

Please note that all technical drawings are available to download as PDF and DWG (CAD files) on our website.

Visit [www.coopersfire.com/downloads](http://www.coopersfire.com/downloads)

HOW THE HEADBOXES CAN BE FIXED

Mini Simplex™  
Headbox Face Fixed



Simplex™ and Duplex™  
Headbox Face Fixed



Simplex™ and Duplex™  
Headbox Top Fixed



HOW THE SIDE GUIDES CAN BE FIXED

Mini Simplex™  
Side Guide Face Fixed



Simplex™ and Duplex™  
Side Guide Face Fixed



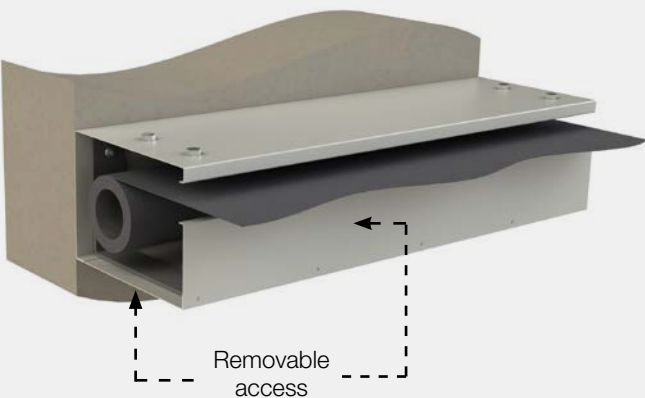
Simplex™ and Duplex™  
Side Guide Reveal Fixed



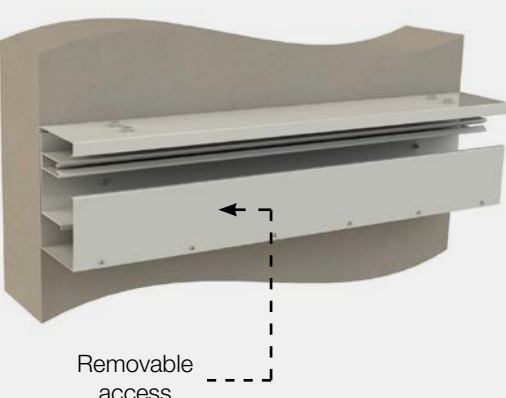
HOW IS THE BARRIER ACCESSED?

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

Headbox



Side Guide



CONTROL OPTIONS

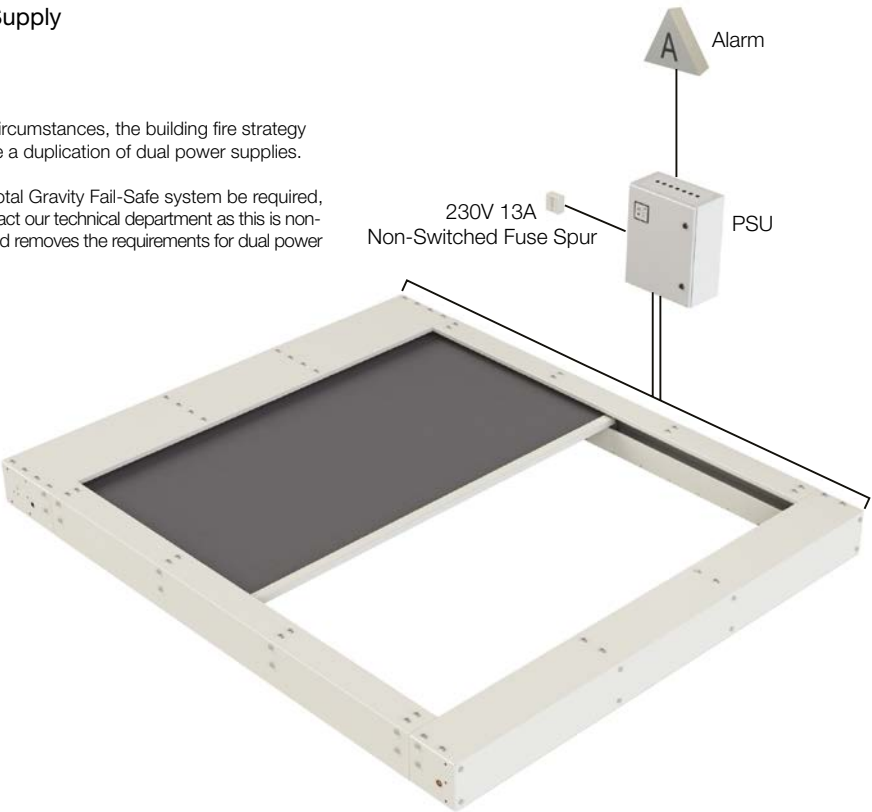
Controls are custom made to be fully compatible with both existing alarm systems and the number of curtain units installed, whether Simplex™ or Duplex™ assemblies.

When an alarm signal is detected, the control panel will automatically trigger all the curtain systems to deploy.

Power Supply

In certain circumstances, the building fire strategy may dictate a duplication of dual power supplies.

Should a Total Gravity Fail-Safe system be required, please contact our technical department as this is non-standard and removes the requirements for dual power supplies.



PRODUCT SPECIFICATION

FireMaster® NVS™ Simplex™ is tested for 120 minutes (2hrs) in accordance with BS EN 1634-1:2008 and is classified as E120 EW30 in accordance BS EN 13501 2:2007+A1:2009. It also meets the requirement of BSI PAS 121:2007 (where applicable).

EFP™ 4/1000 is a long established, high performance fire textile composite material of woven glass fibre with a high performance coating, containing a micronised aluminium enriched polymer, which when exposed to fire, is absorbed into the surface of the curtain to provide high temperature performance. This coating was developed and used first by Coopers Fire.

FireMaster® Plus NVS™ Simplex™ is tested for 120 minutes (2hrs) in accordance with BS EN 1634-1:2008 and is classified as E120 EW60 in accordance BS EN 13501 2:2007+A1:2009. It also meets the requirement of BSI PAS 121:2007 (where applicable).

EFP™ 2/1000/BI is a high performance fire textile composite material of woven glass fibre with an intumescent graphite silicon coating on both sides.

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.

DON'T BE LIABLE

Fire Barriers must have a dual power supply fitted as standard. To protect from a short circuit and / or total power failure, use our patented Total Gravity Fail-Safe (TGFS) system (fitted on request).

Coopers Fire are the only supplier with Independent Third Party Certification by a UKAS approved certification body to BSI PAS 121:2007 and now meets essential requirements of BS 8524-1:2013.

CONTROLS SPECIFICATION

POWER SUPPLY  
230V AC 50Hz dedicated supply via 13Amp un-switched fused spur

DRIVE SYSTEM:  
Coopers 24V dc motors

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  
Simplex and Mini Simplex  
400mm(w) x 500mm(h) x 210mm(d)  
Duplex  
600mm(w) x 600mm(h) x 210mm(d)



FM 22356 LQR 4007272



CPD ACCREDITATIONS



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

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continuous product improvement.

As such we reserve the right to  
change design and specifications  
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Multiple patents granted and pending.



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