

# Fire stop high strength fast curing structural compound

## FIRE STOP COMPOUND

# B270

### FOR LOAD-BEARING & NON LOAD-BEARING MULTIPLE- SERVICE PENETRATIONS

Nullifire B270 is a single part gypsum based compound providing up to 4 hours fire resistance. B270 is designed to re-instate the fire resistance of the compartment wall or floor, whilst providing an unsupported load-bearing capacity up to 2.5kN/m<sup>2</sup> (UDL), up to a 1800mm span, in accordance with BS 6399-1:1996 minimum requirements. This system also provides thermal, acoustic and air sealing performance.

#### Key features

- Up to 4 hours fire resistance
- Up to 2.5kN/m<sup>2</sup> (UDL), unsupported
- Easy, fast installation
- Load-bearing seal up to 1800mm effective span by any length
- Quick setting
- Zero shrinkage
- Easily re-penetrable
- Suitable for walls and floors
- Resistant to mould, fungus and vermin attack
- Offers effective support to dampers/ductwork



## Specification

Colour	Off white
Bag quantity	20kg dry
Density (wet cast)	1750-1900kg/m <sup>3</sup>
Load-bearing	2.5kN/m <sup>2</sup> UDL
Max. unsupported span	1800mm
Flexural strength	5.2N/mm <sup>2</sup>
Compressive strength	17N/mm <sup>2</sup>
Thermal conductivity	0.2W/mk

For seals with a span greater than 1800mm, or UDL in excess of 2.5kN/m<sup>2</sup>, please refer to our technical services department for design support.

## Material requirement

Quantity of dry compound required (per m<sup>2</sup>)

Thickness of seal	50mm	75mm	100mm
Quantity (bags)	3	5	6

Excludes area of any penetrating services

## Mixing ratios

Compound to water ratio

Pourable grade	3:1
Trowel grade	4:1

## Product overview

### Typical applications

- Health and leisure centres
- Schools, universities and other educational buildings
- Hospitals
- Industrial, power generation plants

### Permissible services

- Single and bunched cables
- Cable trays
- Cable ladders
- Trunking
- Blank openings
- Unsupported multiple ducting/damper penetrations
- Metallic pipes
- Plastic pipes\*

\*With use of B300/B150/B600

### Typical substrates

- Masonry wall/floor
- Service risers

### Testing and certification

#### Fire performance

- Tested in accordance with PrEN 1366-3 and BS 476-Pt20
- Up to 4 hours fire resistance
- ASTM with UL listing
- FM Approval

#### Acoustic performance

- Tested in accordance with BS ISO 140-3

### Technical support

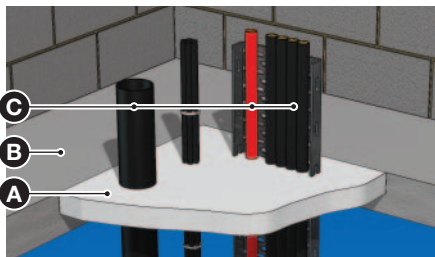
Please refer to our MSDS and technical application data sheets for further details. For guidance on applications outside this scope, contact our technical department.

## Installation guidance

Refer to B220 page 22.

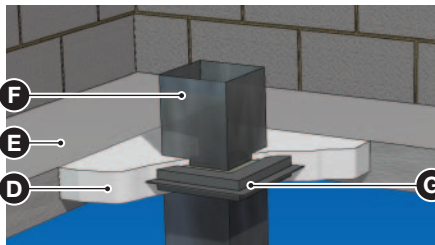
## Application types

### Horizontal – Multiple services



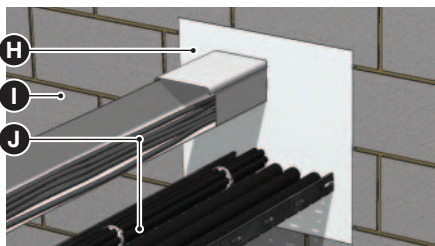
- A** B270 Compound
- B** Floor slab
- C** Multiple services

### Horizontal/vertical – HVAC duct and damper



- D** B270 Compound
- E** Floor slab
- F** Steel duct
- G** HVAC damper and expansion frame

### Vertical – Multiple services



- H** B270 Compound
- I** Masonry wall
- J** Multiple services

## Fire performance

Service type	Integrity (mins)	Insulation (mins)
<b>Masonry wall/floor</b>	<b>Maximum unsupported span 1800mm any length</b>	
Blank seal	240	240
25mm steel pipe	240	180
42mm steel pipe	240	90
60.3mm steel pipe	240	30
108mm steel pipe	240	30
Cable tray 3 x 35mm cables	240	30
Cable tray 19 x 13mm & 1 x 55mm cables	60	30
Multiple dampers 500mm x 400mm	240	240
Multiple dampers 600mm x 575mm	240	120

## Structural performance

Code of practice for dead and imposed loads in buildings provided by BS 6399-1:1996

Example of use	Uniformly distributed load (kN/m <sup>2</sup> )	Concentrated load (kN)
Work rooms (light industrial) without storage	<b>2.5</b>	<b>1.8</b>
Offices general use	2.5	2.7
Kitchens, laundries, laboratories	3	4.5
Mainframe computer rooms	3.5	4.5
Machinery halls	4	4.5
Factories, workshops (general industrial)	5	4.5

Nullifire B270 High Strength Structural Grade Compound, is capable of providing a structural seal to comply with 'Work Rooms (Light industrial traffic)' requirement, without the need for internal structural supports.

## Product range

Product	Description	Colour	Diameter (mm)	Item No.
B270	Structural Fire Stop Compound	Off white	20kg	350639

## Associated products

Product	Description	Page No.
B150	Fire Stop Pipe Collar	48
B300	Fire Stop Pipe Wrap	50
B760	Fire Stop Seal Bags	16