



An Introduction to Fire-stopping

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TODAYS AGENDA

1. Introduction to Fireseal
2. What is Firestopping?
3. Product Range
4. Q&A

Introduction to Fireseal

- Established in 1988
- Largest fire-stopping Company in Ireland
- 32 Employees with offices in Dublin and Cork
- Lead fire-stopping contactor on some of Ireland's landmark projects: T2 Dublin Airport, Dublin Criminal Courts, Intel, Pfizer, Whitewater Shopping Centre to name but a few...
- Specialise in upgrading existing and heritage properties to current fire regulations.
- Only Fire-stopping company in ROI to have 3rd party accreditation.

The Industry today...

- Fewer cranes in the sky = less new build
- Lots of remedial or upgrade works
- Upgrading older buildings to current regulations
- Lots of shortcuts taken in the boom and plenty more buildings out there lacking adequate fire-stopping...

Fire-stopping...

Q:What is Passive Fire Protection?

A: Passive fire protection is the primary measure integrated within the constructional fabric of a building to provide inherent fire safety and protection by responding against flame, heat and smoke to maintain the fundamental requirements of building **compartmentation**, structural stability, fire separation and safe means of escape.

Q: What is Compartmentation of a Fire?

A: The spread of Fire within a building can be restricted by sub-dividing it into compartments separated from one another by walls and /or floors of fire resisting construction.

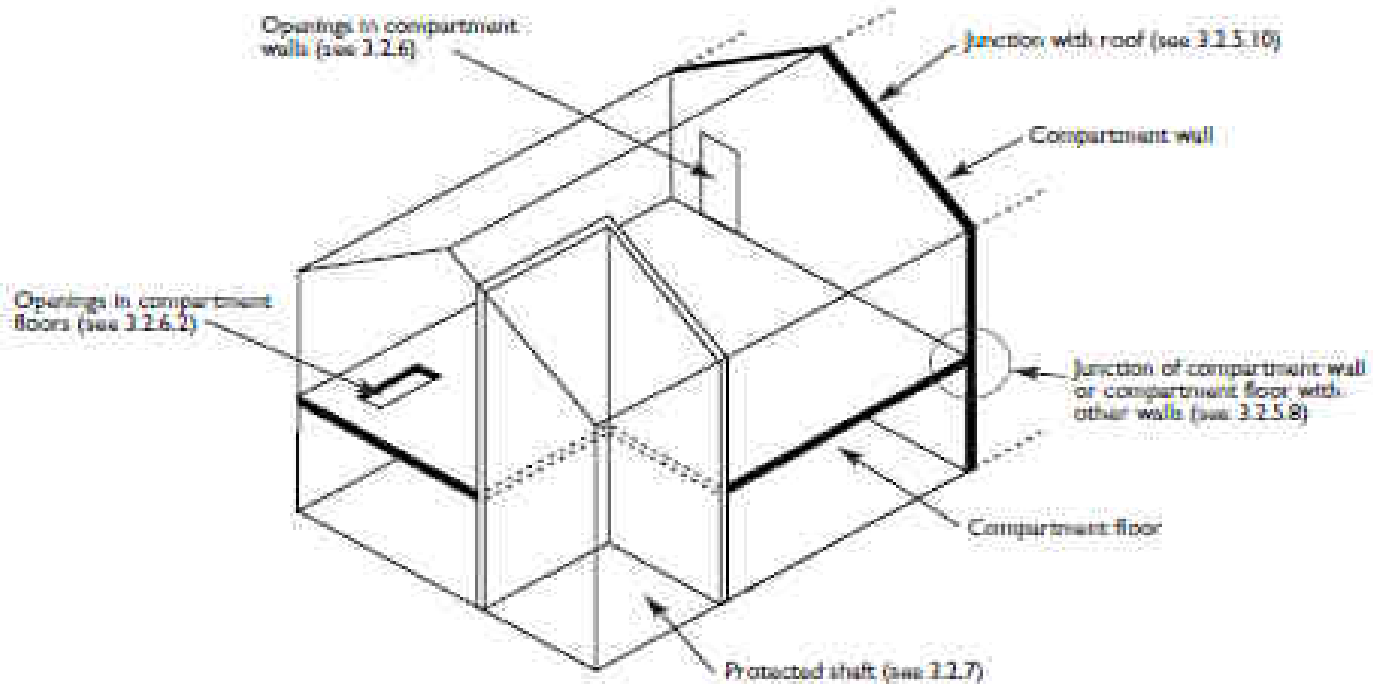


COMPARTMENTATION

Diagram 11

Compartment walls and compartment floors

Par. 3.2.4

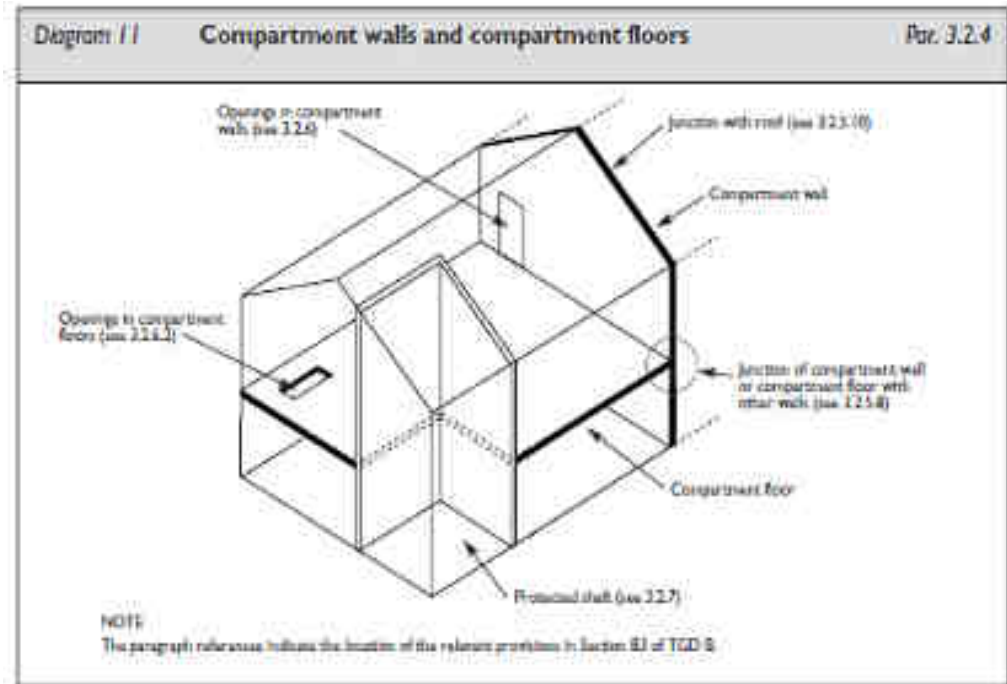


NOTE

The paragraph references indicate the location of the relevant provisions in Section B1 of TGD-B.

COMPARTMENTATION (cont...)

1. Doors
 - FD30 vs FD60 – Certification
 - Ironmongery
 - Intumescent Strips (3mm gap)
 - Architraves
2. Walls
 - Cavity Barriers
 - Oses/ Penetrations
 - Electrical
3. Floors/ ceilings
 - Oses/ Penetrations
 - Under Floor Fire Barrier – 60mins
4. Shafts/ Risers
 - Oses/ Penetrations
 - Vertical & Horizontal compartmentation
5. Roof/ Attic
 - Cavity Barriers
 - Party Walls



ANNUAL UK FIRE LOSS STATISTICS

- Direct property loss of £1,490 million
- Loss of business £35 million
- Death or injury £1,260 million
- Fire Service cost £1,700 million
- Fire prevention £2,160 million
- Administration claims £560 million

SOURCE: Home Office Statistics

Association of British Insurers (ABI)

Estimated cost of fire - £7 billion

THIRD PARTY INSTALLATION

- Staff are trained to design and install the required system
- Work is independently audited by 3rd party organisation (LPCB, FIRAS)
- Full site records required for all projects
- Labelling and recording of all penetrations
- Reduction in liability from the specifier and main contractor



INCORRECT FIRE PROTECTION

Products which have not been specifically tested for the application will not provide a compliant fire seal.

This may relate to service penetration type, orientation of opening or size of opening.



CORRECT PRODUCT, BAD INSTALLATION



TYPES OF FIRE STOP PRODUCTS

All products fall into one of three broad categories as follows:

- **Penetration Seals**
- **Linear Gap Seals**
- **Large Cavity Barriers**

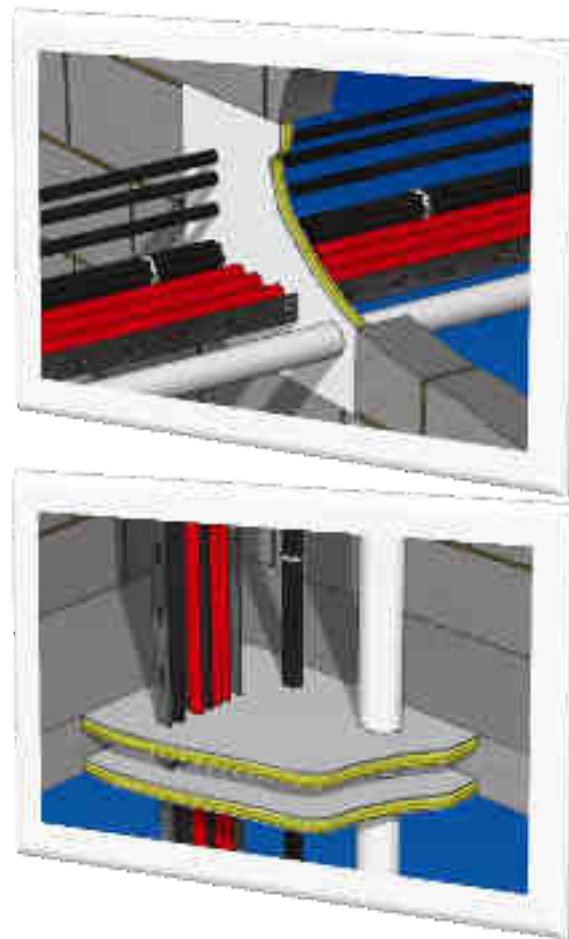
Nullifire B747 Coated Fire Batts

50 mm and 60mm @ 160 Kg/m³

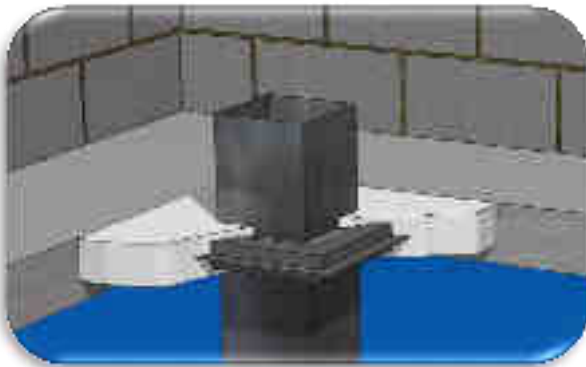
Tested to BS and EN up to 4hrs

Walls, floors, partitions, timber floors

All plastic/metal pipes, dampers, duct cables/ trays, buzz bars and blank seals



Nullifire B270 Load Bearing Compound



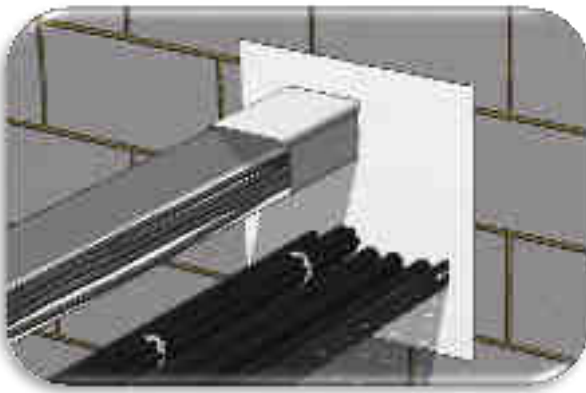
20 Kg Bags cast density **1900Kg/m³**

Tested to BS and EN up to 4 hrs

Up to **1800mm** unsupported floor span (Width).

B270 can provide un-supported load bearing seals with a point load of 2.5kn/m²

Approx 90 minutes workability



plastic/metal pipes, cables/trays, unsupported dampers, duct work, blank seals

Nullifire B150 Intumescent Pipe Collar

Pipe sizes 50mm -400mm

Tested to BS and EN up to 4hrs

Walls, floors, B747, partitions, timber floors

All plastic pipe types have been tested

Air and smoke seal available with M701



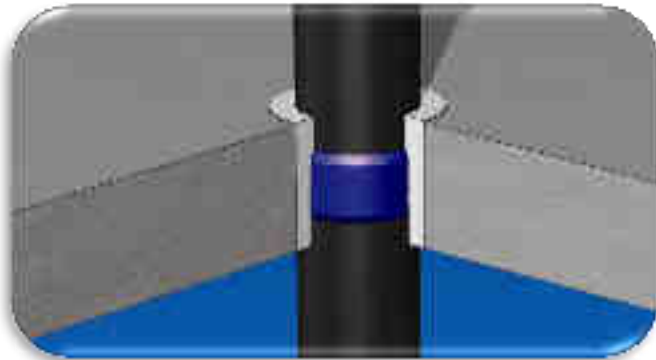
Nullifire B300 Intumescent Pipe Wrap



Pipe sizes 50mm -200mm

Tested to BS and EN up to 4hrs

Encased within walls floors & batt and to be used
within Compounds



All plastic pipe types have been tested

Easy to install.

Nullifire M701 Acrylic Sealant

Acrylic water based sealant

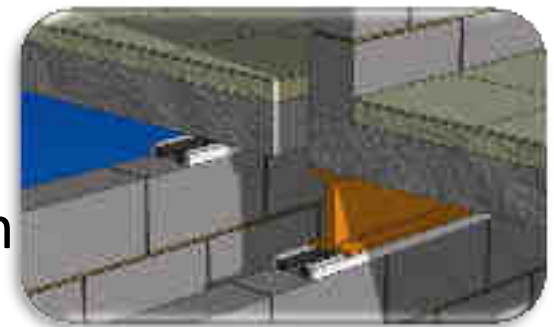
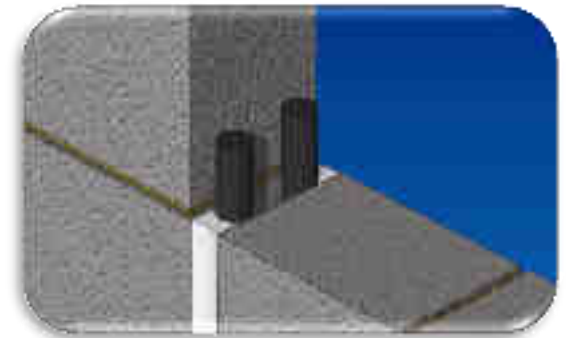
Tested to BS and EN for up to 5hrs joints
(up to 50mm).

For **internal** low movement joints.

Block work, timber, steel, around pipes
and services.

Generally 2:1 ratio.

For use with Nullifire B747 coated batt system

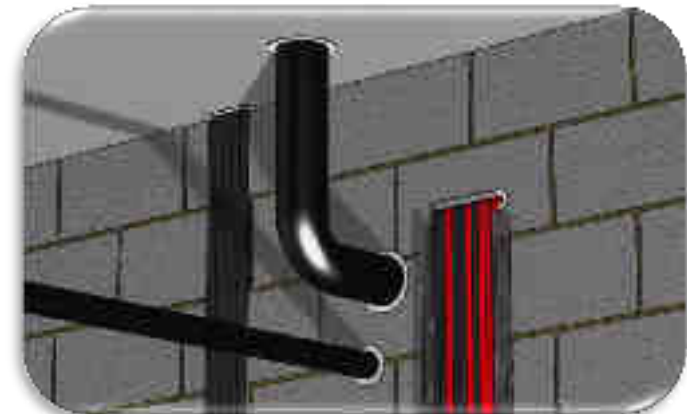
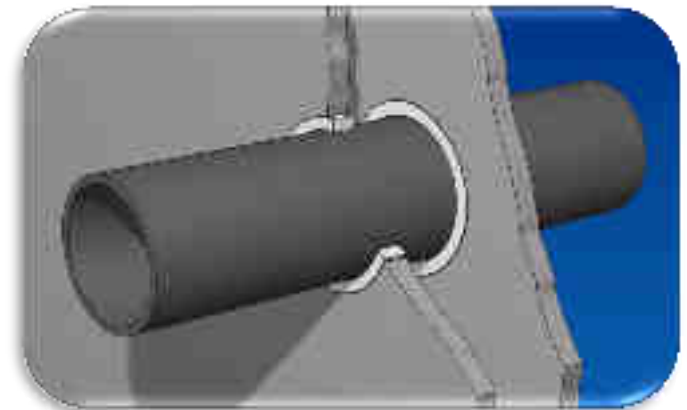


Nullifire M705 Intumescent Mastic

For use around plastic pipes up to and including 90mm. In the event of a fire The sealant will react and crush the plastic pipe reinstating the compartmentation of the structure.

One Part **Waterborne** Graphite Intumescent.

Packaging sizes currently available
310ml Cartridges (12 per box)

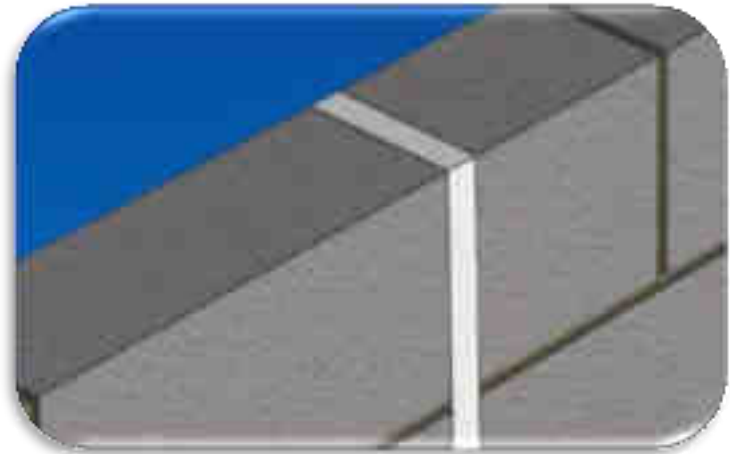


Nullifire FF177/197 Foam

For use in static, fire rated, building joints. Typically these joints are positioned where one substrate butts another.

TYPICAL SUBSTRATES

- ✓ Brick
- ✓ Stone
- ✓ Lightweight concrete
- ✓ Cement
- ✓ Plaster
- ✓ Steel
- ✓ Timber



Nullifire B810 30min Fire Curtain

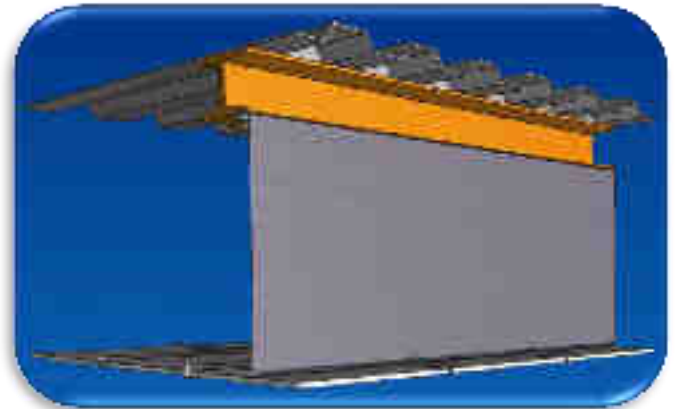
Lightweight, flexible curtain supplied in rolls 50 m x 1m

For internal fire and smoke barriers,
120 minutes integrity

Fully tested around all services

Assessed for a **3 metre** drop

Staple/Stitch and suspended ceiling fixings



Why Fire stop NEEDS to be installed correctly with tested products

3/4 of all deaths are caused by smoke inhalation.

57% of people killed in fires are not in the room of the fires origin.

47% of survivors in a fire could not see further than 3m.

Smoke travels **at 30m-120m per min** under fire conditions.

THANK YOU

