

Drainage Solutions for Tall Buildings

Issue 1 – Fire Compartmentalisation

2016

P1

In this year's series of Technical Bulletins, we'll be focusing on our range of solutions for your tall buildings projects. In particular, we'll look at how our BES 6001 accredited products and fabricated solutions, can save build time and overall project costs.

Topics will include:

- Terrain P.A.P.A.
- Terrain FUZE
- Terrain Fabrication Service
- Pressure Systems
- BIM & Revit families
- Terrain dB12
- Permavoid

This first Technical bulletin will cover fire compartmentalisation.

Why the need for fire compartmentalisation?

As a plastic drainage system passes through any floors or ceiling it is a requirement as part of local fire regulations and Building Regulations Part B to restrict the movement of fire from one room to another.

How Terrain can help

As part of the on-going development of Terrain drainage systems, we have developed a comprehensive range of passive fire protection products for use with Terrain PVC soil and waste, Terrain FUZE and Terrain Acoustic dB12. These products will enable secure specification of Terrain drainage systems with the confidence of conforming to the requirements of Part B Building Regulations. In addition, all products have been tested to and comply with BS 476 Part 20 and BS EN 1366-3.

The Terrain Firetrap range comprises of both intumescent sleeves and collars.



Terrain Firetrap Sleeves

The Terrain Firetrap Sleeve is a cost effective product for the fire stopping of pipe penetrations whilst maintaining similar thermal and acoustic properties as standard mineral fibre insulation. Terrain Firetrap Sleeve was developed with ease of installation in mind. The sleeve can be quickly and simply fitted onto the pipe and slid into the penetration ensuring that there are no air gaps around the sleeves by filling with mortar or mastic. In a fire situation the sleeve expands to fill the available space (15mm max) between the pipe and the penetration and will crush and close off plastic drainage pipes. The sleeve forms a solid char barrier preventing the passage of fire and smoke to the adjacent compartment.

Applications

Terrain FUZE, Terrain Acoustic dB12 and Terrain PVC soil and waste above ground drainage through:

- Concrete, masonry or plasterboard partitions
- Concrete floor constructions
- Cross laminated timber (CLT) floor construction

Benefits

- Up to 4 Hour Fire Rating to BS 476 Part 20, BS EN 1366-3
- Protects pipe above and below the slab
- Cost effective
- One sleeve can replace two collars
- Easy installation
- Don't have to drill slab
- No need for mechanical fixings
- No mastic is required, providing close fit
- Easily cut to size to minimise wastage
- Simple to install without special tools or skills
- Will accept hole irregularities of up to 15mm
- Can be retro-fitted
- Offers excellent acoustic insulation
- Maintains the thermal insulation of the pipe through the slab or wall penetration
- Maintains vapour seal of existing insulation
- Allows for thermal movement of pipe

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P2

Terrain Firetrap Collars

Terrain Firetrap Collars have been specifically designed to re-instate the fire resistance of a wall or floor which has been penetrated by services such as Terrain PVC, FUZE HDPE or Terrain Acoustic dB12.

Manufactured in steel, each fire collar contains an internal lining of intumescent graphite impregnated organic polymer. Anchoring hooks are also supplied. The collars will seal pipes from 40mm to 315mm diameter and can be face fixed or set-in to a wall or ceiling structure. They are suitable for use on concrete, masonry and plasterboard partitions, have a 2 hour fire rating and feature mounting tabs for quick and easy installation.

Applications

For Terrain PVC, Fuze HDPE and Terrain Acoustic dB12 above ground drainage through:

- Concrete, masonry or plasterboard partitions
- Concrete floor construction
- Fire-proof concrete
- Brickwork floors and walls

Features

- 2 Hour fire rating
- Powder coated steel sleeve
- Can be surface mounted or built in
- Mounting tabs for quick and easy installation
- Seals against smoke, toxic gases, flames and heat
- Can be installed in a recessed area to minimize overall dimension

For further information or to download a copy of our Firetrap brochure please [click here](#)



Contact Us

to find out how we can further help with your tall building project.

Look out for our next Technical Bulletin on Terrain P.A.P.A.