

Passive Fire Protection Products

As a critical part of Building Regulations Part B it is a requirement for any development to incorporate Fire Protection, this also includes due consideration to pipe work systems and the potential paths they create for the movement of fire within a building.

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 Building Regulations Part B. In addition all products comply with BS 476 Part 20 and BS EN 1366-3.

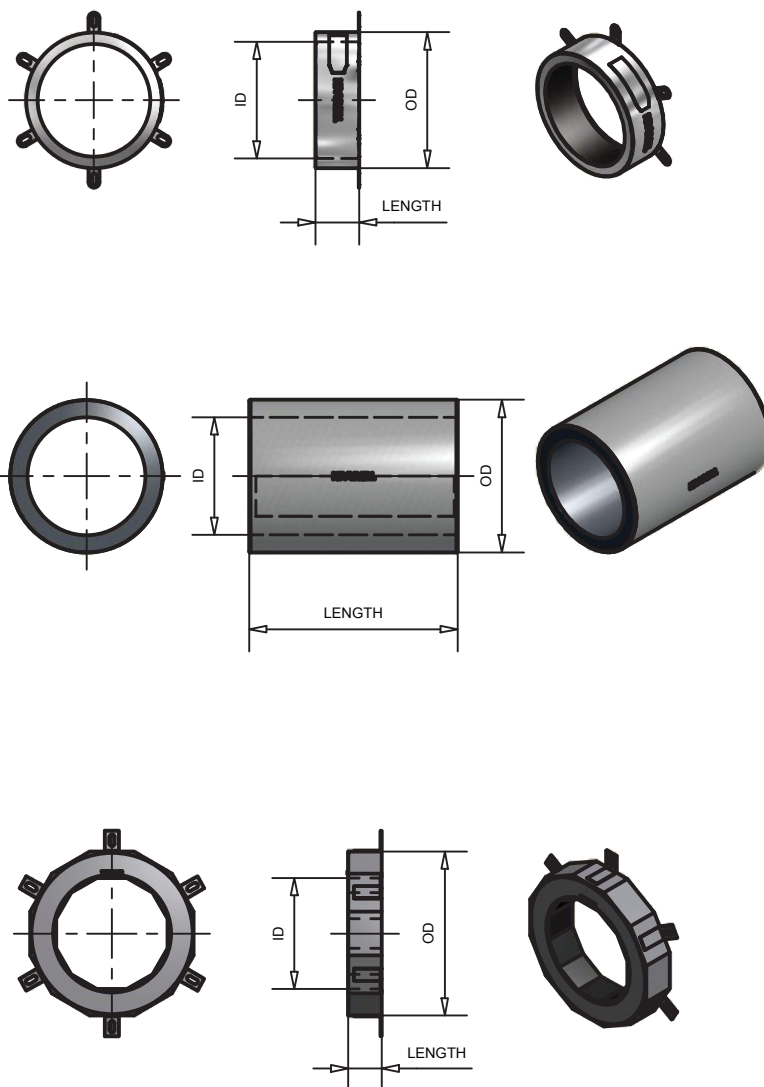
This Technical Bulletin will provide further detail on the Firetrap range and installation guidelines and schematics of the Firetrap sleeves that were tested extensively by Chiltern Fire Testing Laboratory resulting in third party certification that the sleeves will provide up to 4 hours fire protection.

PRODUCT DIMENSIONS:

Part Number	ID	OD	LENGTH
1725.2	56	73	63
1725.3	82	96	63
1725.4	110	132	63
1725.6	160	193	63

Part Number	ID	OD	LENGTH
1925.17	17	67	300
1925.21	21	71	300
1925.27	27	77	300
1925.34	34	84	300
1925.42	42	92	300
1925.48	48	98	300
1925.54	54	104	300
1925.60	60	110	300
1925.67	67	117	300
1925.76	76	126	300
1925.80	80	130	300
1925.89	89	139	300
1925.102	102	152	300
1925.108	108	158	300
1925.114	114	164	300
1925.127	127	177	300
1925.134	134	184	300
1925.140	140	190	300
1925.159	159	209	300
1925.169	169	219	300

Part Number	ID	OD	LENGTH
9725.40	40	66.7	22.4
9725.50	50	66.7	22.4
9725.56	56	81.7	32.4
9725.63	63	81.7	32.4
9725.75	75	116.7	42.4
9725.90	90	116.7	42.4
9725.110	110	145.7	47.4
9725.125	125	166.1	47.8
9725.160	160	235.5	48.2
9725.180	180	228	152.5
9725.200	200	257	177.5
9725.225	225	289	202.5
9725.250	250	319	232.5



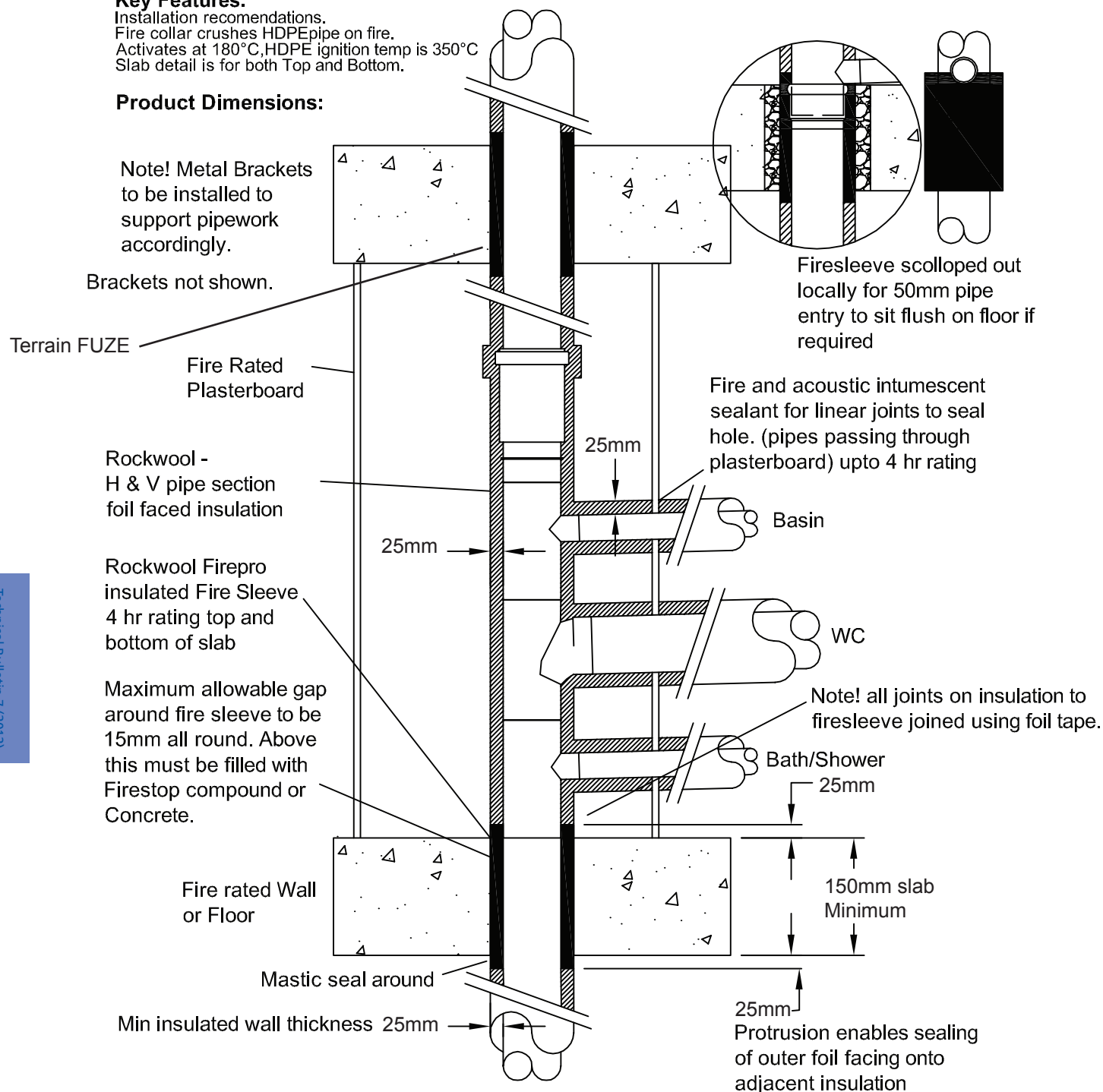
PRODUCT INFORMATION.

Fire Protection for Vertical Terrain FUZE
Pipework in a Fire rated duct.

Key Features:

Installation recommendations.
Fire collar crushes HDPE pipe on fire.
Activates at 180°C, HDPE ignition temp is 350°C
Slab detail is for both Top and Bottom.

Product Dimensions:



PRODUCT INFORMATION.

Fire Protection for Vertical Terrain HDPE
Pipework in a Fire rated duct.

Key Features:

Installation recommendations.
Activates at 180°C, HDPE
Slab detail is for both Top and Bottom.

Product Dimensions:

Note! Metal Brackets
to be installed to
support pipework
accordingly.

Brackets not shown.

Plasterboard

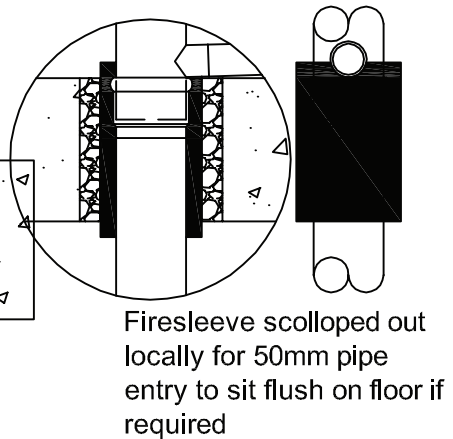
Terrain HDPE

Terrain Firetrap
insulated Fire
Sleeve 4 hr
rating top and
bottom of slab

Maximum allowable gap
around fire sleeve to be
15mm all round. Above
this must be filled with
Firestop compound or
Concrete.

Fire rated Wall
or Floor

Mastic seal around



Note! Insulation may be
required to meet standard
building requirements and
regulations.

Basin

WC

Bath/Shower

25mm

150mm slab
Minimum

25mm

INSTALLATION - FIRETRAP SLEEVES

To maintain the fire rated compartment between floor levels where Terrain drainage penetrates the slab, an insulated fire sleeve should be installed. The fire sleeve should be installed through the entire slab penetration. Where possible a maximum of 25mm of sleeve can be left protruding out of the slab both at floor level and the underside of the slab. If, due to low level connections at slab level, this method is not possible then two alternative methods can be used;

1. Maintain the 25mm protrusion but scollop out the sleeve locally to accommodate the low level connection.
2. Cut the sleeve flush with the slab/soffit level.

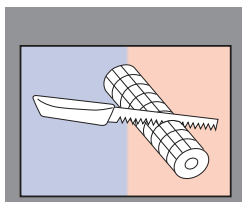
Where possible the sleeve shall be installed by sliding it over the pipe to be protected prior to installation and once the pipe is installed the sleeve shall be slid in to its finish position. Ensure that it doesn't slide out of position with either mortar or mastic.

If this is not possible then the sleeve can be slit along its length and fitted around pipes already in-situ. If this method is used then foil tape shall be used to join the two mating faces.

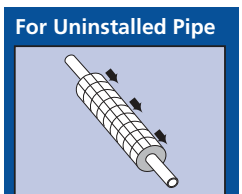
The sleeve can be fitted into pre-cast holes that are to be made good. The material used to make good can be poured into the shuttered hole and the material can be allowed to flow directly onto the sleeve outer diameter which is foil protected.

Alternatively the sleeve can be fitted into a core drilled hole provided the hole is no more than 15mm larger than the outside diameter of the sleeve. If this method is used then a fire rated mastic should be used to protect the gap between the sleeve outside diameter and the slab.

If acoustic insulation is used on the main body of the stack then this insulation can be jointed to the fire sleeve by using foil tape at the mating faces.

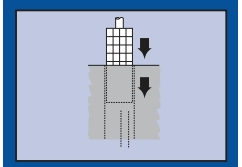


Step 1: Cut sleeve to required length i.e. penetration thickness plus 50mm to allow for 25mm to protrude either side of the penetration

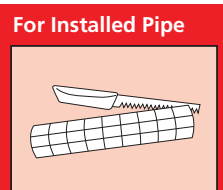


For Uninstalled Pipe

Step 2: Slide sleeve along the pipe prior to installation

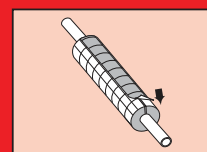


Step 3: Slide pipe and sleeve into cavity. Leave 25mm protruding out of the top and bottom of the slab

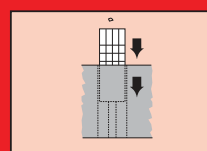


For Installed Pipe

Step 2: Make a single slit along the sleeve length to allow fitting around installed pipe



Step 3: Fit sleeve around pipe and re-seal the cut with foil sealing tape supplied



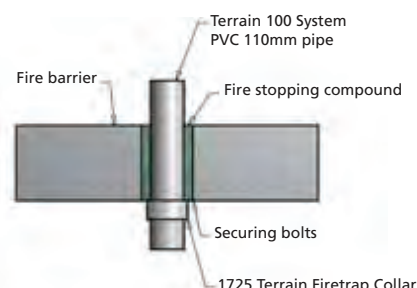
Step 4: Slide sleeve along pipe and into cavity. Leave 25mm protruding out of the top and bottom of the slab. Tape sleeve to existing insulation if required

INSTALLATION - FIRETRAP COLLARS FOR TERRAIN PVC

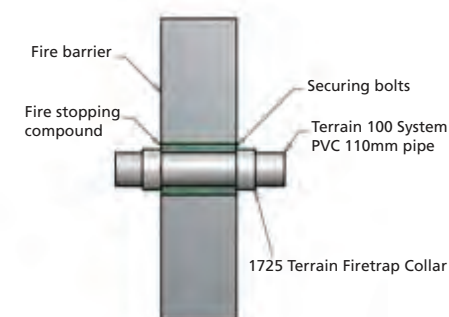
SURFACE FIXING

1. Remove plastic packaging
2. Remove tab from its location by opening collar
3. Ease the Firetrap Collar open to fit around pipe
4. Slip the Firetrap Collar up to the penetration fire rated barrier, floor or wall:
 - a) Must only be installed to soffit of slab for vertical applications
 - b) Firetrap Collars may be required on both sides of wall for horizontal applications
5. Ensure that the Firetrap Collar is closed around the pipe, with tab fitted through location and bend the locking tab back through 180°
6. Rotate the Firetrap Collar so as to locate the fixing lugs over a sound substructure and in such a position that the fixings themselves can be reached
7. Mark the positions for the fixing holes and drill them
8. Reposition the Firetrap Collar and fix in position
9. See below for correct fixing details
10. Small gaps between Firetrap Collar and substrate surface must be filled with intumescent mastic

Vertical Surface Mounted
Concrete Floor Detail



Horizontal Wall Surface
Mounted Floor Detail



Building Substrates	Fixing
Fly Ash Blocks	76mm x M6 Steel Anchor Bolts
Standard Bricks	50mm x M6 Steel Anchor Bolts
Dense (Engineering Bricks)	40mm x M6 Steel Anchor Bolts
Dense Cast Concrete	40mm x M6 Steel Anchor Bolts
Light Weight Cast Concrete	60mm x M6 Steel Anchor Bolts
Breeze Blocks	75mm x M6 Steel Anchor Bolts
3mm + Steel	M6 Steel Bolts or Drill & Self Tapping Screw

Fire Rated Plasterboard Stud Wall	M8 Spring Toggles or if a Firetrap Collar is fitted both sides then bolt straight through
Fire Rated Curtains or Mineral Wool Systems	M6 Bolts on a metal angle frame that must be secured to the solid wall, ceiling or floor. See system manufacturers recommendations

BUILT-IN APPLICATIONS

1. Remove plastic packaging
2. Remove tab from its location by opening collar
3. Ease the Firetrap Collar open to fit around pipe
4. Ensure that the Firetrap Collar is closed around the pipe, with tab fitted through location and bend the locking tab back through 180°
5. Slide the Firetrap Collar in to position within floor/wall thickness, leaving edge of Firetrap Collar exposed at surface (soffit of ceiling)
6. Fill remaining space around the Firetrap Collar with a suitable fire rated material