

Application Data Sheet

3M™ Interam™ Ultra GS

Product Description

3M™ Interam™ Ultra GS is a graphite based, largely inorganic, flexible, fire resistive, intumescent mat. It is available in convenient rolls for quick and easy installation. Ultra GS is designed to firestop plastic pipe penetrations in fire-rated walls and floors and floor-ceiling assemblies. The unique, intumescent property (expands when heated) of this material means that as penetrating items such as plastic pipe are consumed by fire, Ultra GS expands to maintain a tight seal, preventing the spread of fire, deadly smoke, and other by-products of combustion. Ultra GS has UL listings for plastic pipe applications. See the current UL Fire Resistance Directory. Fire tested in accordance with Australian standards in walls, for PVC Conduits up to an outside diameter of 26.8 mm, as outlined below.

Product Features

- Intumescent: Expands up to 25 x when heated to seal around items consumed by fire.
- Thermal insulator: Intumescent char provides thermal insulation to deter heat transfer of a fire.
- Smoke seal: Retards spread of toxic by-products of combustion when used in conjunction with 3M™ Fire Barrier Moldable Putty Stix MP+.
- Excellent flexibility: Conformable, cost effective installation.
- Tested to AS1530.4 (2014) down to a wall thickness of 75mm.
- Versatile: Easily cut and shaped with common tools.
- No hazardous materials, very long shelf life.



Physical Properties

Colour	Grey/ Black
Roll Size	3mm x 50.8mm x 12.1m
Expansion Begins	210°C
Free Expansion	25x, 5 minutes at 350°C

Shelf Life

24 months in original unopened containers from date of packaging when stored at 20°C.

Performance Specifications for Installers:

FRL for Nominal 20 mm NBN conduit (OD 26.8mm, wall thickness 1.9 mm), with & without optic fibre cables.

Building Element	FRL
Wall: Plasterboard Dry Wall	-/120/120
Wall: Solid masonry, hollow masonry or concrete construction. Minimum 75mm thickness	-/120/120

In order to achieve the above FRLs you must ensure that the product is installed as per the Installation Techniques and the building element you are installing into has an FRL performance equal to or better than that of the 3M™ Ultra GS system. The Installation Techniques can be found on the final pages of this document.

What does FRL mean?

FRL stands for 'Fire Resistance Level'. For example, an FRL of '-/180/120' indicates:

Structural Adequacy: The first dash '-' indicates that penetration firestopping system is non load bearing.

Integrity: The middle number '120' indicates for how many minutes the fire barrier system can resist the passage of flames and hot gasses.

Insulation: The last number '120' indicates how many minutes it takes the unexposed face to heat up by more than 180°C.

Installation Techniques: Walls

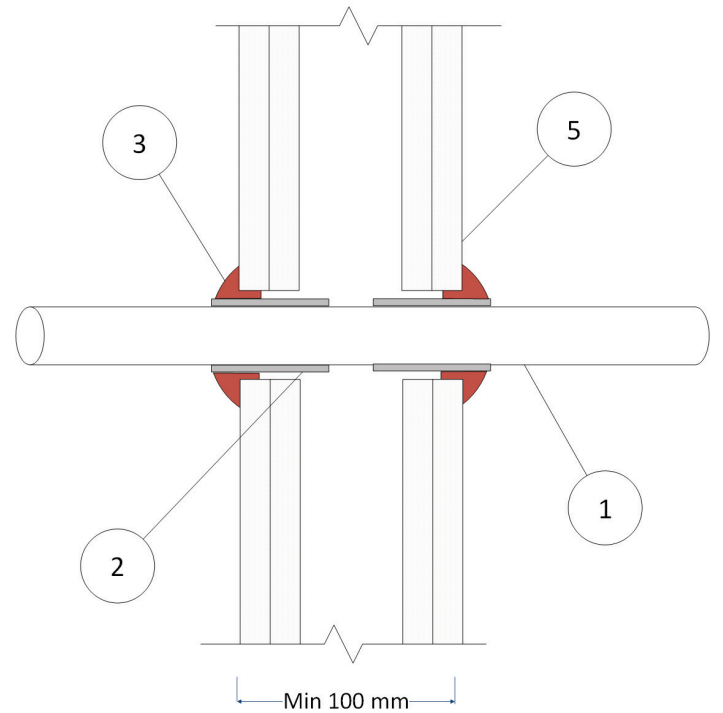
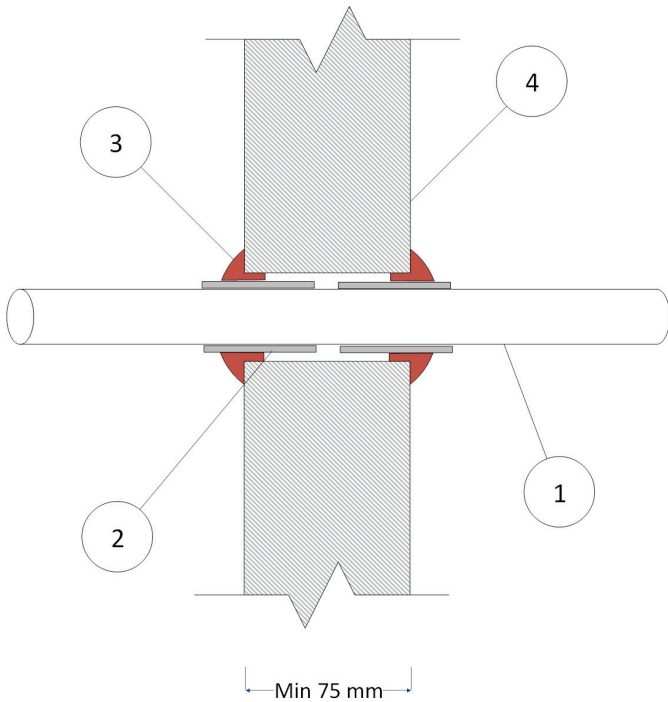
PVC Conduit – OD 26.8 mm

- Core holes such that an annular gap of 4-8 mm is available. For example, for an OD 26.8 mm Ø PVC conduit, hole 35 – 43 mm should be cored.
- Install the PVC conduit concentrically into the holes.
- Wrap the conduit with a single layer of 3M™ Ultra GS and secure with 3M™ 425 foil tape (50 mm width)
- Slide the wrap into the annular gap such that a minimum of 26 mm is within the wall.
- Install the wrap on both sides of the wall.
- Apply 3M™ Mouldable Putty + around the pipe external to the wall to give a 15 × 15 mm fillet of sealant.

Note – Conduits should be adequately supported on both sides of the wall.

75mm Solid wall systems

100mm Plasterboard wall systems



Item Number	Description
1	Nominal 20 mm NBN conduit (OD 26.8mm, wall thickness 1.9 mm) – with or without optic fibre cables
2	3M™ Ultra GS , secured with 3M™ 425 Foil tape, inserted a minimum of 26mm into the wall
3	15 × 15 mm 3M™ Mouldable Putty+ Fillet
4	Minimum 75mm Aerated concrete, Hebel®, Blockwork or Masonry
5	Minimum 100mm thick plasterboard wall (2 × 13 mm layers each side)

Tested to AS 1530.4 See Regulatory Information Report (RIR) #FCO-3220

To view all current local reports and Design Specification Sheets

Australia: www.3M.com.au/fireprotection | New Zealand: www.3M.co.nz/fireprotection



3M Australia Pty Ltd
Industrial Adhesives & Tapes Division
 Bldg A, 1 Rivett Road,
 North Ryde, NSW 2113

Phone 136 136 (Option 2)
 Email 3mindustrialau@mmm.com
 Web www.3m.com.au

3M New Zealand Ltd
Industrial Adhesives and Tapes Division
 94 Apollo Drive, Rosedale
 Auckland 0632

Phone 0800 474 787
 Email 3mnz@mmm.com
 Web www.3m.co.nz

User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. Limitation of Liability. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. 3M and Interam are a trademark of 3M Company.