

# 3M<sup>™</sup> Fire Barrier Packing Material PM4

**Product Data Sheet & Installation Guide** 

# 1. Product Description

3M Fire Barrier Packing Material PM4 is designed to be used as an alternative packing material to mineral wool, fiberglass and backer rod in through-penetration firestop systems. With excellent strength and flexibility characteristics, it is an ideal through-penetration packing material. 3M Fire Barrier Packing Material PM4 is also non-asbestos, mold resistant, less irritable\* and inorganic. This installation-friendly material is easy-to-dispense and its compact packaging is optimized for portability. The smooth-textured woven material can be torn by hand, eliminating the need for a knife.



FORMING MATERIAL
FOR USE IN THROUGH-PENETRATION
FIRESTOP SYSTEMS
SEE UL DIRECTORY OF PRODUCTS
CERTIFIED FOR CANADA AND UL FIRE
RESISTANCE DIRECTORY
9069

FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY



Over 20 feet of material packed into a lightweight, 12" (304.8mm) diameter roll.

#### **Product Features**

- Non-combustible material\*
- Convenient, hand-tear dispensing
- Less irritating to skin\*\*
- Approved for use in all UL-listed through-penetration 3M firestop systems
- · Easy to transport and carry

\*Per ASTM E 136 Standard Test Method for Behavior of Material in a Vertical Tube Furnace at 750°C.
\*\*3M° Fire Barrier Packing Material PM4 material is less irritating when compared to conventional mineral wool.

# 2. Applications

Packing material is a part of many through-penetration firestop systems and may be used around metallic, nonmetallic, insulated pipe, HVAC and power, and communication cable penetrants. In typical commercial and industrial construction, 3M° Fire Barrier Packing Material PM4 can be used in gypsum and concrete assemblies. In marine applications, 3M° Fire Barrier Packing Material PM4 is used at bulkhead locations.

### 3. Specifications

Along with the appropriate depth of caulk or sealant, the listed systems using 3M° Fire Barrier Packing Material PM4 have F Ratings of up to four hours. These systems are tested by Underwriters Laboratories, Inc. in accordance with ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems. Refer to the specific third-party firestop system for the 3M° Fire Barrier Packing Material PM4 depth and compression requirements. *Prior to installation, refer to the appropriate third party listing or approval for proper installation instructions.* 3M° Fire Barrier Packing Material PM4 has been tested in accordance with the following:

- ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
- ASTM E 136 Standard Test Method for Behavior of Material in a Vertical Tube Furnace at 750°C
- ASTM E 814 Standard Test Method for Fire Tests of Through-Penetration Fire Stops
- ASTM C 1338 Standard Test Method for Determining Fungi Resistance of Insulation Materials and Facings
- UL 1479 Fire Tests of Through-Penetration Firestops

3M Fire Barrier Packing Material complies with requirements of the following codes:

- ICC International Building Code

   ICC International Residential Code (as a stand alone fireblocking material)
- Legacy Codes:
- BOCA National Building Code
- ICBO Uniform Building Code
- SBCCI Standard Building Code

This is only a partial list of code compliance. For the latest code and approval information speak to your authorized 3M Fire Protection Products distributor or use the 3M contact information listed below.



# 4. Physical Properties

Color: Greenish Gray Surface Burning Characteristics: Flame Spread: 0

Density: Nominal 8 PCF (128 kg/m<sup>3</sup>) Smoke Development: 0

**Density:** Nominal 8 PCF (128 kg/m<sup>3</sup>)

**Dimensions:** 1/2 in. thick x 4 in. wide x 20.5 ft. length (12.7mm x 101.6mm x 6.24m)\*

\*4 in. (101.6mm) width meets or exceeds most UL-listed 3M Firestop System parameters.

# 5. Packaging, Storage and Shelf Life

**Packaging:** Individually shrink-wrapped bulk rolls, 5 rolls per case.

Storage: 3M° Fire Barrier Packing Material PM4 must be stored in a dry warehouse environment. Pallets should not be stacked.

Shelf Life: 3M" Fire Barrier Packing Material PM4 shelf life is indefinite when stored in original unopened packaging in a dry warehouse environment.

# 6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor/Dealer or Sales Representative for applicable drawings and details.

3M° Fire Barrier Packing Material PM4 should be installed in accordance with the following installation guide.

Material and Equipment: 3M° Fire Barrier Packing Material PM4, Putty Knife (if needed) and Protective Gloves.

**Preparatory Work:** The surfaces of all openings and penetrating items need to be clean, dry, frost free and free of dust.

**Installation Details:** Dispense the packing material by pulling it through the center opening of the package. Tear or cut-off the packing material

once the desired length is extracted from the packaging.

If the pipe is centered within the opening, coil the packing material around the penetrating item and then slide it down into the opening. The material should be positioned so the 4 in. (101.6mm) width is facing either the penetrating item or the sides of the opening. In openings where the penetrating item(s) are installed off-center, the packing material should be coiled around the penetrating items until the nearest edge of the opening is reached. All remaining open space should be filled with strips or coils of packing material until the entire opening is filled.

An installation method that is especially suited for large and/or rectangular openings is to install the material in a continuous accordion pattern. For a wall opening, a beginning course of material is installed along the bottom of the opening. When the material reaches the edge of the opening, fold the material back over itself and then continue on in the opposite direction. Repeat this zigzag pattern until the opening is completely filled up. When required, after the 3M<sup>-</sup> Fire Barrier Packing Material PM4 installation is complete, finish the overall firestop installation by applying the required depth of 3M<sup>-</sup> Fire

Barrier Sealant per the applicable system details.

**Limitations:** 3M° Fire Barrier Packing Material PM4 is not intended for use in perimeter joints or other construction joint applications.

**7. Maintenance** No maintenance should be required when material is installed in accordance with 3M<sup>™</sup> Fire Barrier Packing Material PM4 Installation Techniques (listed above).

**8. Availability** 3M<sup>-</sup> Fire Barrier Packing Material PM4 is available from 3M Authorized Fire Protection Products Distributors and Dealers. Product is available in bulk rolls, 1/2 in. x 4 in. x 20.5 ft. (12.7mm 101.6mm x 6.24m), 5 rolls/case (Minimum one case order; Half-pallet, one-pallet and large volume discounts available). For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

**9. Safe Handling Information** Consult Material Safety Data Sheet (MSDS) prior to handling and disposing of 3M<sup>®</sup> Fire Barrier Packing Material PM4. Consult Material Safety Data Sheet (MSDS) of any 3M<sup>®</sup> Fire Barrier Sealant used in conjunction with this product.



Building and Commercial Services Division 3M Center, Building 223-2N-21 St. Paul, MN 55144-1000 USA 1-800-328-1687 www.3M.com/firestop Important Notice to User:

Technical Information: The technical information, recommendations and other statements contained in this document are subject to change, the accuracy or completeness of such information is not guaranteed. Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Warranty and Limited Remedy: 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.