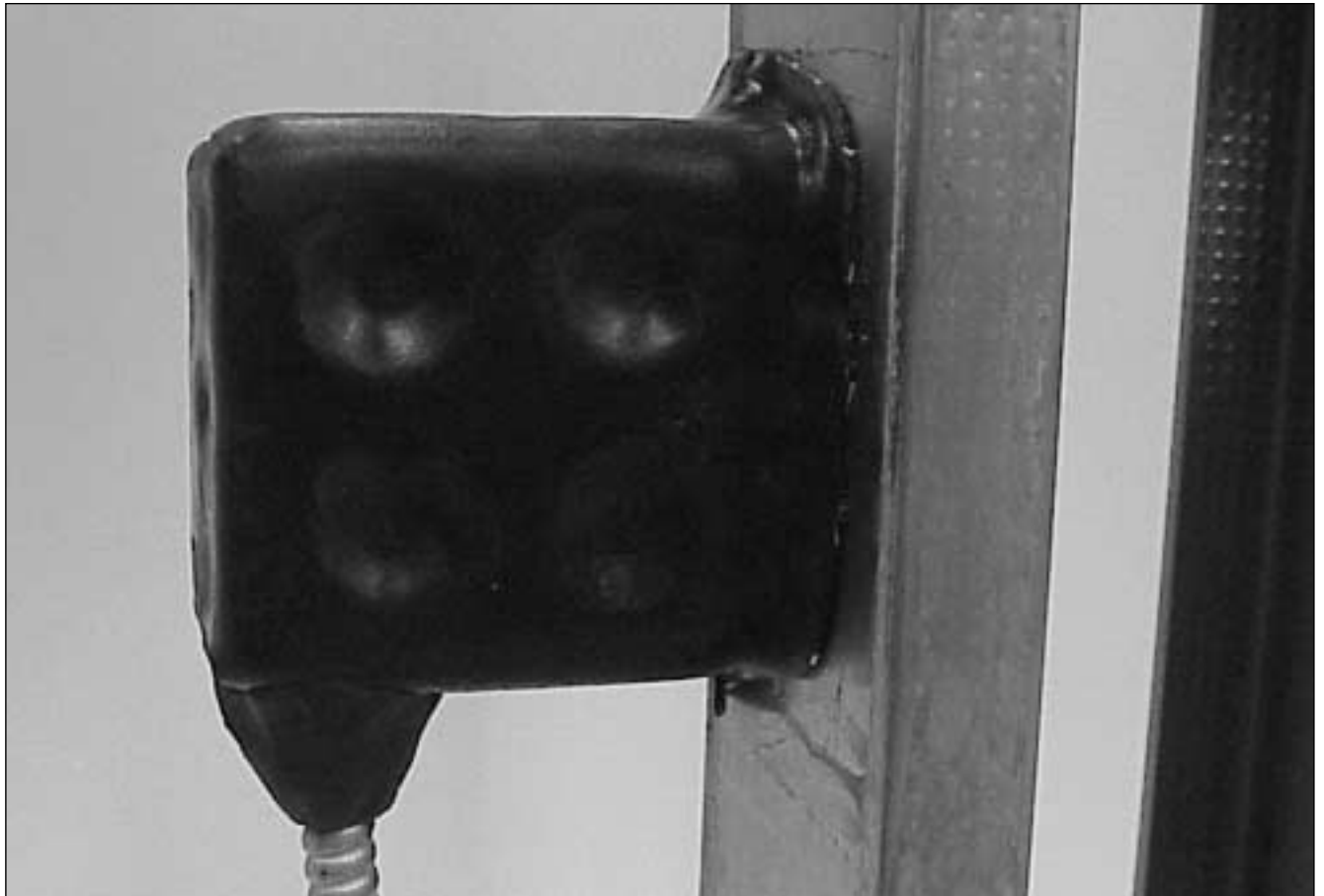




Fire Barrier Moldable Putty+

Product Data and Installation Instructions



1. Product Description

3M™ Fire Barrier Moldable Putty+ consists of a synthetic elastomer designed for use as a one part, intumescent fire resistive putty used to restore the integrity of fire rated building construction. Up to a four hour fire rating is achieved when tested in accordance with the time/temperature curves and water hose stream tests of UL 1479 and ASTM E 814. This is achieved by the unique intumescent (expanding when heated) and high strength insulating char-forming properties of this material. 3M Moldable Putty+ Stix is approximately 1.4 inches (35,6 mm) in diameter by 11 inches (279 mm) in length. Moldable Putty+ Pads are 4 x 8 x 1/8 inches (102 mm x 203 mm x 3,2 mm), 7 x 7 x 1/8 inches (178 mm x 178 mm x 3,2 mm), and 9.5 x 9.5 x 1/8 inches (241,3 mm x 241,3 mm x 3,2 mm), and Moldable Putty+ Cable Wrap is 2 x 8 x 1/8 inches (51 mm x 203 mm x 3.2 mm) approximate dimensions.

Features

- Tested to UL 910 flammability test
- Halogen-free formula: Free from corrosive gases during a fire, making it safe for building occupants and sensitive electrical equipment.
- Minimal odor.
- Long shelf-life: Stix and pad packages can be sealed for reuse. Putty will not dry out or crumble.
- Easily re-enterable.
- Provides a draft and cold smoke seal in the installed condition, even before any temperature rise occurs, resultant from a fire.
- Adheres to all common building surfaces (Cement, gypsum, wood and plastic), including metal and plastic electrical boxes.
- One part, solventless pads or stix are easily hand molded, with no damming required (this applies to non-insulated metal pipe/conduit), allowing for easy application.
- Intumescent: expands when heated, forming a hard char, preventing the transmission of hot gases and fire.
- Designed to meet the intent of NEC 300-21 (NFPA 70). ICBO, SBCCI and BOCA Building Codes.
- No special tools required.
- Contains no asbestos, non-toxic.

2. Applications

Used to seal cable (including fiber optic inner duct and cable), insulated pipe, electrical conduit, and metal pipe, penetrations against air draft, smoke, noxious gas and flame propagation.

3M Fire Barrier Product	Size	Volume
Moldable Putty+ Stix	1.4 in. x 11 in. (35,6 mm x 279 mm)	21.2 in. ³
MPP+ Pads	4 in. x 8 in. x 1/8 in. (102 mm x 203 mm x 3,2 mm)	4 in. ³
	7 in. x 7 in. x 1/8 in. (178 mm x 178 mm x 3,2 mm)	6.12 in. ³
	9.5 in. x 9.5 in. x 1/8 in. (241,3 mm x 241,3 mm x 3,2 mm)	11.3 in. ³
MP+ Cable Wrap	2 in. x 8 in. x 1/8 in. (51 mm x 203 mm x 3,2 cm)	2 in. ³

3. Typical Physical Properties

Color: Red
Density: 8-11 lbs./gal. (0,95-1,35 kg/L)
Weight:

2 in. x 8 in. Cable Wrap (51 mm x 203 mm)	1.35 oz (38 g)
4 in. x 8 in. Pad (102 mm x 203 mm)	2.7 oz (76 g)
7 in. x 7 in. Pad (178 mm x 178 mm)	4.1 oz (115 g)
9.5 in. x 9.5 in. Pad (241,3 mm x 241,3 mm)	7.6 oz (215 g)
1.4 in. x 11 in. Stix (35,6 mm x 279 mm)	20 oz (567 g)

4. Specifications

The Fire Barrier Moldable Putty+ shall be a one part, intumescent elastomer. Under normal environmental conditions, the material shall be noncorrosive to metal and compatible with synthetic cable jackets. When exposed to flame or heat it shall be capable of expanding and comply with paragraph 300-21 of N.E.C. (NFPA 70) and meet the requirements of UL 1479, ASTM E 814.

5. Performance

Properties (Typical Values)

Adhesion: Very good to most surfaces
Fire Resistance: 1-4 Hours (system dependent)
Heat Expansion:
Begins: 437°F (225°C)
Significant: 617°F (325°C)
Free Expansion: Nominal 3 times

Test Conditions

Oven: 90 days, 176°F (80°C):
2.7 Times Nominal Expansion
Humidity Chamber:
90 days, 90°F (32°C), 90% R.H.:
2.6 Times Nominal Expansion

6. Installation Techniques

The drawings on the next page show an example of one of the UL classified firestop systems using 3M Fire Barrier Moldable Putty+. Drawings for other tested firestop systems are available.

All surfaces shall be clean and free of dust, grease, oil, loose materials, rust or other substances to ensure adequate adhesion. Remove desired amount of 3M Fire Barrier Putty+ from stix or pads and install putty into the appropriate 3M firestop system. Note: Make sure the 3M Fire Barrier Putty+ is in complete contact with the inside surface of the opening and also the surface of the penetrating item.

Refer to following page for instructions on installing MPP+ Moldable Putty Pads and Moldable Putty+ Cable Wraps.

7. Maintenance

3M Fire Barrier Moldable Putty+ is stable under normal storage conditions. Normal stock and stock rotation practices are recommended. This product is not impaired by freezing; however, it should be warmed to at least 32°F (0°C) before applying.

8. Purchase Information

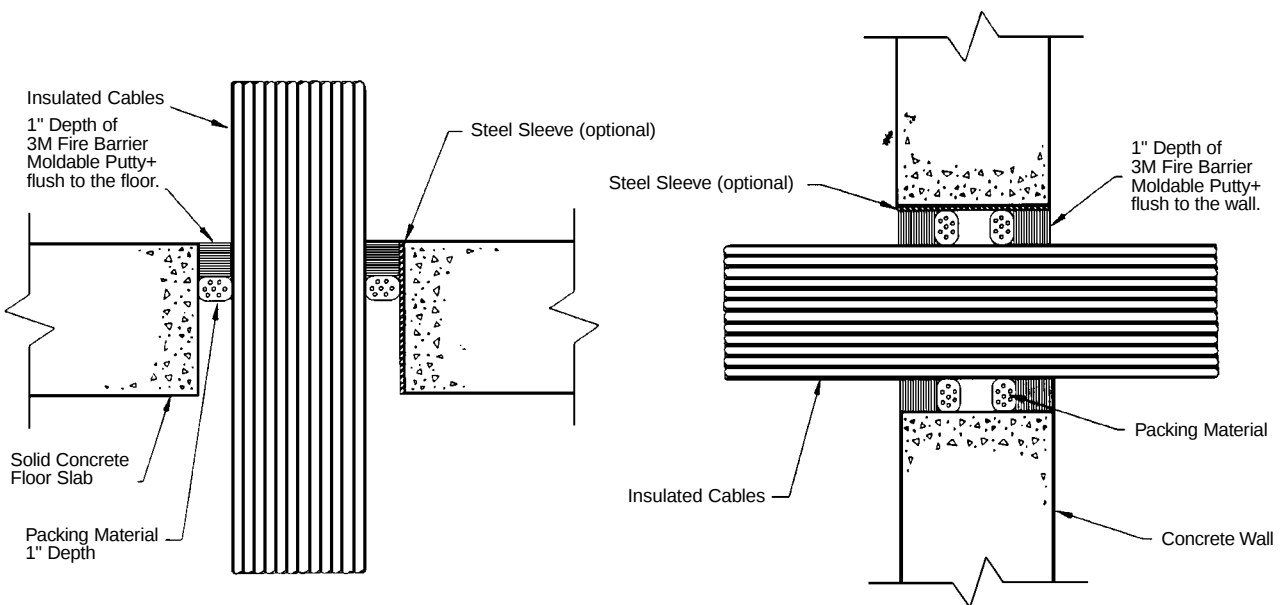
3M Fire Barrier products are available through a network of nationwide distributors. For information on where to buy, go to www.3m.com/firestop. 3M Moldable Putty+ Stix is available in 1.4 diameter by 11 inch long stix (35,6 mm x 279 mm), approximate dimensions, and are packaged 10 stixs per box.

Moldable Putty+ Pads are available 4 x 8 x 1/8 inch pads (102 mm x 203 mm x 3,2mm) and are packaged 10 pads per box, 10 boxes per carton and in 7 x 7 x 1/8 inch pads (178 mm x 178 mm x 3,2 mm), 9.5 x 9.5 x 1/8 inch pads (241,3 mm x 241,3 mm x 3,2 mm), and are packaged 20 per box and 5 boxes per carton. Moldable Putty+ Cable Wraps are available 2 in. x 8 in. x 1/8 in. (51 mm x 203 mm x 3,2 mm) and are packaged 20 strips per box and 10 boxes per carton.

9. Safe Handling Information

Consult Material Safety Data Sheet prior to handling and disposing of 3M Fire Barrier Moldable Putty+.

Insulated Cables/Moldable Putty Penetration Seal/Concrete



Notes:

1. For concrete/concrete block walls, install 3M Fire Barrier Moldable Putty+ on both sides of wall.
2. Recommendations based on product performance per ASTM E 814 (UL 1479) Fire Test and UL System CAJ 3021.
3. Cable types covered include: telephone, power/control, or fiber optic.
4. Firestop system rating up to 3 hr. F.
5. There are other UL classification listings and configurations not described in this data sheet. For specific information consult current Underwriters Laboratories, Inc. Fire Resistance Directory.

3M Fire Barrier MPP+ Moldable Putty Pads

Installation Instructions For UL Listed Metallic and Non-metallic Outlet Boxes

Refer to the Wall Opening Protective Material (CLIV) listing in either the 3M Fire Protection Products Applications and Specifiers Guide or the UL Fire Resistance Directory Volume 1 for MPP+ Moldable Putty Pad application on UL Listed metallic and nonmetallic outlet boxes. No special skills or tools are required. To ensure adequate adhesion, all surfaces shall be clean and free of dust, grease, oil, loose materials, rust or other substances.



Step 1: Remove liner from both sides of pad.



Step 2: UL Listed metallic or nonmetallic outlet boxes (refer to above listing)



Step 3: Starting at top, align to front edge of box and overlap onto the stud 1/2 inch (13 mm).



Step 4: Adhere remaining pad to box and cut to provide a snug fit around conduits or cables.



Step 5: Extra putty will pleat at corners after pad has been applied to surface of box.



Step 6: Trim excess putty from corners and apply it to conduit fittings or cables connected to the box. Ensure pad is pressed firmly to surface of top, back, bottom, and side of box.

Warranty and Limited Remedy. This product will be free from defects in material and manufacture for a period of ninety (90) days from date of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. If this 3M product is proved to be defective within the warranty period stated above, your exclusive remedy and 3M's sole obligation shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the product.

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Consumer Safety and Light Management

3M Center 223-2N-21
St. Paul, MN 55144-1000
(800) 328-1687

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