



# Fire Barrier Moldable Putty+

## Product Data



### 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 MPS-2 are approximately 1.6 inches (40,6 mm) in diameter by 11 inches (279 mm) in length. Moldable Putty+ Pads MPP-1+ are 4 x 8 x 3/32 inches (102 mm x 203 mm x 2,4 mm) and MPP-4S+ are 7 x 7 x 3/32 inches (178 mm x 178mm x 2,4 mm), MPP-5S+ are 9.5 x 9.5 x 3/32 inches (241,3 mm x 241,3 mm x 2,4 mm) approximate dimensions.

#### Features:

- 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, IBC and BOCA Building Codes.
- No special tools required.
- Contains no asbestos, non-toxic.

### 2. Applications:

Used to seal construction gaps, 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. Maximum metal pipe size is 10 inches in diameter according to UL system 202.

### 3. Physical Properties:

Property	Value
Color	Red-Brown
Density	10-12 lbs/gal (1,20-1,45 kg/l)
Weight	
4 in. x 8 in. Pad (102 mm x 203 mm)	1.97 oz (56 gm)
7 in. x 7 in. Pad (178 mm x 178 mm)	3.63 oz.(103 gm)
9.5 in. x 9.5 in. Pad (241, 3 mm x 241, 3 mm)	6.70 oz (190 gm)
1.6 in. x 11 in. Stix (40,6 mm dia. X 279 mm)	17.30 oz(491 gm)

### 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)

	Units	Value
Adhesion	All substrates	Good
Fire Resistance	Hours	1-4 (system dependent)

#### Heat Expansion:

Begins	350°F (177°C)
Significant	400°F (204°C)
Free Expansion	Nominal 3 times

Test Condition	Temperature	Humidity	Time	Nominal Expansion
Oven	176°F (80°C)	----	90 days	2.7 Times
Humidity Chamber	90°F (32°C)	90 Percent	90 days	2.6 Times

## Physical Properties:

### A. Product

### Dimensions

### Volume

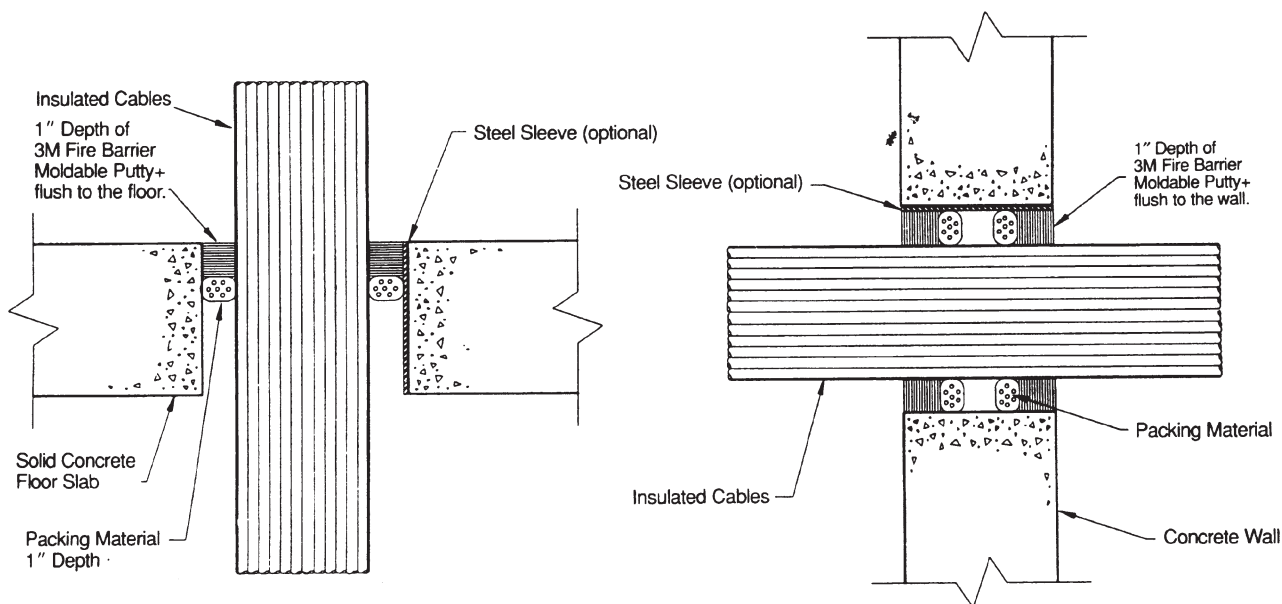
MP+ Stix	1.6 in. dia X 11 in. (40,6 mm dia. X 279 mm)	22.03 cu. in. (361,2 cu. cm.)
MP+ Pads	3/32 in. x 4 in. x 8 in. (2,4 mm x 102 mm x 203 mm) 3/32 in. x 7 in. x 7 in. (2,4 mm x 178 mm x 178 mm) 3/32 in. x 9.5 in. x 9.5 in. (2,4 mm x 241, 3 mm x 241,3 mm)	2.52 cu. in. (41,4 cu. cm.) 4.63 cu. in. (76,0 cu. cm.) 8.52 cu. in. (139,75 cu. cm.)

## 6. Installation Techniques:

Shown below is an example of one of the UL classified firestop systems using 3M Fire Barrier Moldable Putty+.

Drawings for other tested firestop systems are available.

### 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*.

## 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. Availability:

3M Moldable Putty+ Stix are available in 1.6 diameter by 11 inch long stix (40,6 mm x 279 mm), approximate dimensions, and are packaged 10 stix per box. Moldable Putty+ Pads are available 4 x 8 x 3/32 inch pads (102 mm x 203 mm x 2,4 mm) and are packaged 10 pads per box, 10 boxes per carton and in 7 x 7 x 3/32 inch pads (178 mm x 178 mm x 2,4 mm), 9.5 x 9.5 x 3/32 inch pads (241,3 mm x 241,3 mm x 2,4 mm), and are packaged 20 per box and 5 boxes per carton.

**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 OF 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 3M product.

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