3M™ Fire Barrier Moldable Putty Pads MPP+
Product Data Sheet

1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV), the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back electrical boxes.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration fire-stop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54 mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

Color: ■ Dark Red

4 in. x 8 in. (101.6 mm x 203.3 mm), 7 in. x 7 in. (177.8 mm x 177.8 mm) and 9.5 in. x 9.5 in. (241.2 mm x 241.3 mm) pad sizes available.

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides draft and cold smoke seal
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*

- Excellent adhesion
- Re-enterable/repairable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC
- Will not dry out or crumble
- Red color widely recognized as a fire protective product

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants.
*Minimizes noise transfer—STC-Rating of 52 when tested in STC 53-rated wall assembly.

2. Applications

4 in. x 8 in. (101.6 mm x 203 mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective to meet building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8 mm x 177.8 mm and 241.2 mm x 241.2 mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in. x 4.5 in. by 2-1/2 in. (355.6 mm x 114.3 mm x 63.5 mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications

3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Typically Specified MasterFormat (2004)
Section 07 84 00 – Firestopping
Related Sections
Section 07 84 16 – Annular Space Protection
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 27 00 – Thermal and Moisture Protection Firestopping
Section 21 00 00 – Fire Suppression
Section 26 00 00 – Electrical

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4. Performance & Typical Physical Properties

Color:	Dark Red
Nominal Density:	10-12 lbs./gal. (1.2-1.45 kg/l)
Nominal Thickness:	1/10 in. (2.54 mm)

Surface Burning (ASTM E 84)**:** Flame Spread 0, Smoke Development 0

Heat Expansion: Begins @ 350°F (177°C), Significant @ 400°F (204°C)
Free Expansion is Nominal 3 times

STC (ASTM E 90, ASTM E 413)**:** 52 when tested on back-to-back
Tested in STC 53 rated wall assembly electrical boxes

VOC Less H$_2$O and Exempt Solvents: <250 g/L

Dimensions:	4 in. x 8 in. x 1/10 in. (101.6 mm x 203.2 mm x 2.5 mm)	7 in. x 7 in. 1/10 in. (177.8 mm x 177.8 mm 2.5 mm)	9.5 in. x 9.5 in. 1/10 in. (241.3 mm x 241.3 mm 2.5 mm)
Unit Volume:	2.52 in.^{3} (41.4 cm^3)	4.63 in.^{3} (76.0 cm^3)	6.1 in.^{3} (139.8 cm^3)
Unit weight:	2.7 oz (76 g)	4.1 oz (76 g)	7.6 oz (215 g)

5. Packaging, Storage, Shelf Life

Packaging	Corrugated cardboard box with liner between individual pads.
Storage	3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.
Shelf Life	3M™ Fire Barrier Moldable Putty Pads MPP+ shelf life is indefinite in original unopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

6. Installation Techniques *Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details.*

Preparatory Work	The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not wet and are frost-free.
Installation Details	Electrical boxes must be firestopped under the following conditions: boxes larger that 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6 mm), when multiple boxes are located in one stud cavity or if the aggregate are of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm. per 9.29 sq. m) - refer to listed system details and applicable local building code requirements. For electrical box installations, a minimum of 1/10 in. (2.5 mm) thick putty application is required, 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s). Note: Partial pads can be pieced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam.
Limitations	Over application (i.e. using excessive amount of material) of product to vertical surfaces may cause sagging, follow system details. Product is not impaired by freezing but should be warmed to 32°F (0°C) before applying.

7. Maintenance No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Moldable Putty Pad MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty, ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at new/existing putty overlap.

8. Availability 3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack, 10 packs /case) 4 in. x 8 in. x 1/10 in. (101.6 mm x 203.2 mm x 2.5 mm), (20 pads/case) 7 in. x 7 in. 1/8 in. (177.8 mm x 177.8 mm x 2.5 mm), (20 pads/case) 9.5 in. x 9.5 in. 1/8 in. (241.3 mm x 241.3 mm x 2.5 mm); red-colored firestop material. 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 product's Material Safety Data Sheet (MSDS) from country of use prior to handling and disposal.*