Technical Data Sheet

**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 metallic electrical boxes in certain configurations. 3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop 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. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

**Product Features**

- Firestop tested up to 4 hours in accordance with ASTM E814 (UL 1479) & CAN/ULC-S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides a draft and cold smoke seal
- Pliable and conformable – molds easily into required shape
- Helps reduce noise transfer – STC Rating of 62 when tested in STC 62 rated wall assembly
- Excellent adhesion
- Re-enterable/repairable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC; complies with CDPH v1.2 to meet the intent of LEED v4.1
- Will not dry out or crumble

**Applications**

4 in. x 8 in. (101.6mm x 203mm) 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. (177.8mm x 177.8mm and 241.2mm x 241.2mm) 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. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

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 NBC (Canada) Building Codes.

Performance and Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Dark Red</td>
</tr>
<tr>
<td>Nominal Density</td>
<td>10-12 lbs./gal. (1.2-1.45 kg/L)</td>
</tr>
<tr>
<td>Nominal Thickness</td>
<td>1/10 in. (2.54 mm)</td>
</tr>
<tr>
<td>Surface Burning Characteristics (ASTM E84)</td>
<td>Flame Spread 0, Smoke Development 0</td>
</tr>
<tr>
<td>Intumescent Expansion</td>
<td>Begins at 350 °F (177 °C)</td>
</tr>
<tr>
<td>STC Rating (ASTM E90 and E413)</td>
<td>62 in a 62 rated wall assembly</td>
</tr>
<tr>
<td>VOC Content (EPA Method 24)</td>
<td>28 g/L</td>
</tr>
<tr>
<td>Sizes Available (dimensions, unit volume, unit weight)</td>
<td>4 x 8 in. (101.6 x 203.2 mm), 3.2 in.³ (51.6 cm³), 2.7 oz (76 g)</td>
</tr>
<tr>
<td></td>
<td>7 x 7 in. (177.8 x 177.8 mm), 4.9 in.³ (79.0 cm³), 4.1 oz (116 g)</td>
</tr>
<tr>
<td></td>
<td>9.5 x 9.5 in. (241.3 x 241.3 mm), 9.0 in.³ (145.5 cm³), 7.6 oz (215 g)</td>
</tr>
</tbody>
</table>

Installation Techniques

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 MPP+. Ensure that the surfaces of the substrates are not wet and are frost-free.

Installation Details: Electrical boxes must be firestopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one stud cavity or if the aggregate 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 codes.
code requirements. For electrical box installations, a minimum of 1/10 in. (2.5mm) 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 at least 32°F (0°C) before applying.

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

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.

Storage and Shelf Life
3M™ Fire Barrier Moldable Putty Pads MPP+ are packaged in a corrugated cardboard box with liner between individual pads. 3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions. 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.

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. (101.6mm x 203.2mm x 2.5mm), (20 pads/case) 7 in. x 7 in. 1/10 in. (177.8mm x 177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10 in. (241.3mm x 241.3mm x 2.5mm).
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.

Safe Handling
Consult Safety Data Sheet prior to handling and disposing of 3M™ Fire Barrier Moldable Putty Pads MPP+.

Technical Information
The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but 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.
Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer’s automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M’s Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer’s use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.

NOTWITHSTANDING ANY OTHER STATEMENT TO THE CONTRARY, 3M MAKES NO REPRESENTATIONS, WARRANTIES OR CONDITIONS WHATSOEVER, EXPRESS OR IMPLIED, REGARDING THE PRODUCT IF USED IN AN AUTOMOTIVE ELECTRIC POWERTRAIN BATTERY OR HIGH VOLTAGE APPLICATION, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY ON PERFORMANCE, LONGEVITY, SUITABILITY, COMPATIBILITY, OR INTEROPERABILITY, OR ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE.

Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M’s option, replacement of the 3M product or refund of the purchase price.

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, including warranty, contract, negligence or strict liability.