



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





3M™ Fire Barrier Moldable Putty Stix MP+

Product Data Sheet

1. Product Description

3M™ Fire Barrier Moldable Putty Stix MP+ is a one-part, ready-to-use intumescent firestop containing a synthetic elastomer. The intumescent property of this material allows 3M™ Fire Barrier Moldable Putty Stix MP+ to expand and help maintain a firestop penetration seal for up to 4 hours in the event of a fire. It is often used to fill voids in large openings and/or complex firestop systems due to its moldability, re-enterability and smoke-seal properties (provides a draft and cold smoke seal for systems with L-Ratings).

3M™ Fire Barrier Moldable Putty Stix MP+ firestops penetrations passing through fire-rated floor, floor/ceiling or wall assemblies and blank openings. In addition to excellent thermal- and fire-resistance properties, 3M™ Fire Barrier Moldable Putty Stix MP+ helps minimize sound transmission through assemblies requiring an STC rating. 3M™ Fire Barrier Moldable Putty Stix MP+ is easily moldable by hand and exhibits excellent adhesion to a full range of construction substrates and penetrants.



Moldable through penetration firestop with excellent smoke-seal capability.

Available in the following colors: ■ Dark Red

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC S115
- Provides draft and cold smoke seal (L-rating)
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*
- Will not dry out or crumble
- Excellent adhesion
- Re-enterable/repairable
- Low VOC**
- Halogen-free and solvent-free formula
- Excellent aging properties
- Red color recognized as a firestop

*Minimizes noise transfer — STC-Rating of 52 when tested in STC 53-rated wall assembly.
 **Complies with the intent of LEED® NC-EQ Credit 4.1 for Low-Emitting Materials: Adhesives and Sealants, contains <250 g/L VOC contents (less H₂O and exempt solvents per SCAQMD Rule 1168).

2. Applications

Typically used to seal gaps between cables in multiple penetrations and to firestop cable bundles, insulated pipe, electrical conduit, metal pipe and other through penetrations. Cable types covered include telephone, power/control and fiber optic inner duct. Also available in pad form as 3M™ Fire Barrier Moldable Putty Pads MPP+, which are ideal for protecting electrical box outlets. For more information visit our product catalog at www.3M.com/firestop.

3. Specifications

3M™ Fire Barrier Moldable Putty Stix MP+ 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 Stix MP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, ULC, Intertek or FM. 3M™ Fire Barrier Moldable Putty Stix MP+ 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 Stix MP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NBCC.

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

FIRE BARRIER UP TO 4 HOUR Fire Protection	SMOKE SEAL L RATED Meets Optional L Requirements
WALL OPENING UP TO 2 HOUR Fire Protection	SOUND BARRIER STC 52 In STC 53-Rated Wall Assembly

CLASSIFIED

 FILL, VOID, OR CAVITY FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS
 SEE UL FIRE RESISTANCE DIRECTORY 90G9

LISTED

 FILL, VOID OR CAVITY MATERIALS 90G9

LISTED

 FIRESTOP SYSTEMS
 SEE INTERTEK DIRECTORY

FM APPROVED

 SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APPROVAL GUIDE



4. Performance & Typical Physical Properties

Color:	Dark Red	STC:	52 when tested in STC 53 (ASTM E 90, ASTM E 413) rated wall assembly
Nominal Density:	10–12 lbs./gal. (1.2–1.45 kg/l)	VOC Less H₂O and Exempt Solvents:	< 250 g/L
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		
Large Stix Retail Stix	Appx. Dimensions: 1.5 in. dia. x 11.5 in. (38mm dia. x 292mm) 1.45 in. dia. x 6 in. (36.8mm dia. x 152.4mm)	Appx. Unit Volume: 20.3 cu. in. (331.6 cu. cm.) 9.9 cu. in. (161.9 cu. cm)	Min. Unit weight: 13.6 oz (385g) 6.4 oz (183g)

5. Packaging, Storage, Shelf Life

Packaging:	1.5 in. dia. x 11.5 in. (38mm x 292mm) stix in cardboard box, individually wrapped in liner (10 stix/case) and 1.45 in. dia. x 6 in. (36.8mm x 152.4mm) individually packed in recloseable cardboard tube (retail package, 1 stix/tube).
Storage:	3M [®] Fire Barrier Moldable Putty Stix MP+ should be stored indoors in dry conditions.
Shelf Life:	3M [®] Fire Barrier Moldable Putty Stix MP+ 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 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 Stix MP+. Ensure that the surface of the substrates are not wet and are frost free.
Installation Details:	Moldable Putty MP+ can be used as a primary firestopping sealant, or as a secondary product in conjunction with other 3M Fire Protection Products such as 3M [®] Fire Barrier Pillows, 3M [®] Fire Barrier Composite Sheet CS-195+, 3M [®] Fire Barrier Pass-Through Devices or the 3M [®] Fire Barrier Putty Sleeve Kit. An example of how the putty is to be installed when it is the sole product in a metallic pipe penetrations comes from UL System C-AJ-1027 “Moldable putty material kneaded by hand and applied to fill annular space to a minimum depth of 1 in. (25.4 mm), flush with top surface of floor. In wall assemblies, required putty thickness to be installed symmetrically on both sides of wall.” When used with 3M [®] Fire Barrier Pillows, UL systems typically require the putty to be installed “within annulus at all corners of opening and extending a minimum 1 in. (24.5mm) in both directions from each corner, flush with top surface of floor or both surfaces of wall.” Any voids between pillows should be filled with a minimum 1 in. (24.5mm) depth of putty. In the case of cable tray applications, there are additional requirements for the application of putty such as installing the putty between the bottom of the cable tray and bottom of opening. Likewise, putty (or another system-approved sealant) is required between the top of the cable tray and bottom of composite sheet or pillows. Consult each applicable UL system for specific putty installation requirements.
Limitations:	Note: 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.

7. Maintenance

No maintenance is expected to be required when installed in accordance with the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M[®] Fire Barrier Moldable Putty MP+ is no longer installed per original system parameters, remove the putty, clean the area, and install the proper thickness per system details ensuring it bonds to the substrate and adjacent putty. If mineral wool was used as backing material, replace with new mineral wool prior to installation of the putty (putty can be reused if it is free from contaminants and can be molded together at new/existing putty overlap).

8. Availability

Description	Color	Size	Unit	Billing UPC Number	Units/Case	Price Unit
Moldable firestop putty stix (large)		1.5" dia. x 11.5"	Stix	50051115-16526-4	10	EA
Moldable firestop putty stix (retail)		1.45" dia. x 6"	Stix	50051115-16561-5	12	EA

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. 3M[®] Fire Barrier Moldable Putty Stix MP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers.

9. Safe Handling Information

Consult country-of-use Material Safety Data Sheet (MSDS) prior to handling and disposal.



3M 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 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. **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.

Please Recycle. Printed in U.S.A. © 3M 2013. All rights reserved.
Reference Number 98-0213-4640-2

3M is a trademark of 3M. Used under license in Canada. LEED is a trademark of U.S. Green Building Council Non-Profit Corporation. All other trademarks are the property of their respective owners.