

# 3M™ Fire Block Foam FB-Foam

**Product Data Sheet** 

**1. Product Description** 3M™ Fire Block Foam FB-Foam is a ready-to-use foam fireblock designed to help prevent the spread of flames and smoke in residential Type V and commercial non-rated construction\*. This product is intended to resist the free passage of flame and the by-products of combustion within the concealed space of a floor, ceiling or wall cavity by restricting the movement of air, fire and smoke. Also acts as a draftstop to restrict air infiltration and movement. Meets current fireblocking sealant requirements of the International Building Code (IBC) and International Residential Code (IRC), and state and local codes based on the IBC and IRC. 3M™ Fire Block Foam FB-Foam is recognized as a requirement to the methods prescribed by IBC and/or IRC codes for maintaining the integrity of penetrations of fireblocking and for draftstopping.





Easy-to-install fireblock and draftstop for Type V Residential and other non-rated construction.

Product Color: Orange

#### **Product Features**

- Heat-resistant up to 240° F (115° C)
- ASTM E 84 Class 1 (modified)
- Draftstop helps reduce air infiltration
- Thermal insulator R-Value of 4 to 5 per inch typical
- Ready-to-use (no mixing required)
- Tack-free in approximately 5 minutes
- Expands to quickly and effectively seal openings
- Meets International Building Code (IBC) and International Residential Code (IRC) Fireblocking Requirements
- Sag-resistant formulation
- Excellent adhesion—bonds to concrete, brick, metals, wood, plastic and cable jacketing
- · Minimal shrinkage

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. <250 g/L VOC contents (less H<sub>2</sub>O and exempt solvents).

\*Not to be used as a firestop in commercial construction.

**2. Applications** For use in residential Type V and commercial non-rated construction in areas that require sealing to maintain the integrity of a fireblock. Use 3M<sup>™</sup> Fire Block Foam FB-Foam to seal interior construction voids around wires, pipes, cables and other penetrations in non-rated wood or steel-framed construction. May also be used around non-rated framing gaps/voids. Also acts as a draftstop to help prevent unwanted air infiltration. When properly installed, 3M<sup>™</sup> Fire Block Foam FB-Foam expands during application to more completely fill openings compared to conventional fireblock caulks. It has been tested to remain in place, which is more suitable to fireblock/draftstop penetrants than mineral wool, glass fiber and similar, non-adherent materials.

**3. Specifications** 3M<sup>™</sup> Fire Block Foam FB-Foam is a fireblocking, smoke and draft sealant that shall be a one-part, ready-to-use, expanding polyurethane foam for use in Type V Residential and other non-rated construction. The fireblock foam shall be tested to and passed the criteria of ASTM E 84 (Modified). 3M<sup>™</sup> Fire Block Foam FB-Foam shall comply with the requirements of the International Building Code (IBC), International Residential Code (IRC), International Fire Code (IFC), International Mechanical Code (IMC), International Fuel Gas Code (IFGC) and NPFA 5000.



## 4. Performance & Typical Physical Properties

Color: Orange **Core Density:**  $1.0 \text{ lbs / ft}^3 (17.6 \text{ kg/m}^3)$ 

Tack-Free Time: 5 Minutes at 72°F (22°C)

Adhesion: Very good (all construction substrates)

Fireblock<sup>1</sup> (per modified ASTM E 814): Passed Material Criteria

**Typical Yield:** 1/4" (6.35 mm) Bead = 3992 ft. (1217 m), 3/8" (9.44 mm) Bead = 1774 ft. (541 m), 1/2" (12.7 mm) Bead = 998 ft. (304 m)

VOC: 16% by weight (165 g/L)

Air Barrier (ASTM E 283)

@6.24 psf (300 Pa) <0.01 cfm/ft2 (0.05 L/s/m2) @1.57 psf (75 Pa) <0.0025 cfm/ft<sup>2</sup> (0.0125 L/s/m<sup>2</sup>)

Cure: Under typical conditions of 75°F (23°C) and 50% R.H., sealant becomes tack-free in about five minutes and dry-to-touch in 30 to 60 minutes. Full cure depends upon ambient conditions and volume of sealant. Typical cure time for 1/2 inch bead (76.2 mm) is 6 hours.

Note: Foam expands up to 200% during cure process. Expansion of foam and yields will vary depending on ambient conditions and type of application.

1 Products tested to modified ASTM E 814 are not required to pass the hose stream test, which is a critical criteria of through penetration firestop testing. To be used as a fireblock and/or draftstop in Type V and other non-rated construction only (not for use as a commercial firestop).

# 5. Packaging, Storage, Shelf Life

Volume: 12.0 fl. oz. can (330 ml). **Packaging** 

3M™ Fire Block Foam FB-Foam is stable under normal storage conditions. Store upright in dry area. Improper storage Storage

of this product may result in valve malfunction. Recommended storage temperature is 60°F to 80°F (15.5°C to 26.6°C). Do not expose to open flame or temperatures above 120°F (49°C). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Storage below 55°F (12.7°C) may affect foam quality if chemicals are not

warmed to room temperature before using. Protect containers from physical abuse.

**Shelf Life** 3M<sup>™</sup> Fire Block Foam FB-Foam shelf life is 15 months in original unopened containers from date of packaging. Normal

stock and stock rotation are recommended. See bottom of can for expiration date and lot information.

Lot numbering: 0 = Last digit of year manufactured, 183: = Julian Date (183 = July 2), AA, BB, CC, etc: = Random to

distinguish between lot numbers on a given manufacturing day

#### 6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales

Representative for applicable third-party drawings and details.

**Preparatory Work** This product is extremely flammable during dispensing. Read cautions on package carefully. Surfaces must be sound, dry and

free of mold, frost, grease, dust and other foreign materials. Protect surrounding areas not intended to be foamed. Fill voids with 3M<sup>™</sup> Fire Block Foam FB-Foam in accordance with applicable fireblock and/or draftstop code requirements. Wear protective

nitrile gloves, protective eyewear and protective clothing. Use in a well ventilated area.

Recommended application temperature range is between 65-80°F (18-27°C). Prior to application, shake can well and then screw **Directions for Use** 

nozzle adaptor onto valve stem, being careful not to activate the valve. With valve end of can down, slowly press trigger to dispense foam. Test on experimental surface. Foam expands up to 200% during cure process. Fill cavity only 1/3 full with foam to allow for expansion. For cavities greater than 3 in. (76.2 mm) diameter, it is recommended to slightly moisten (mist) the substrate prior to foam application to initiate the cure process. Overfilling cavities can result in a prolonged curing process, insufficient air or substrate moisture during cure may cause delayed expansion. Dries tack-free in approximately 5 minutes. Foam is cuttable in about 1 hour. Full cure occurs within 24 hours. Do not disturb uncured foam. Cured foam can be trimmed or sanded. Cured foam exposed to sunlight must be covered with paint or stain. Cured foam is resistant to temperatures ranging between -200°F to +240°F (-129°C to +115°C). Uncured foam or overspray can be removed using a solvent such as acetone.

Cured foam must be removed mechanically.

Limitations This product must not be used in areas that are expected to come into contact with water or exterior applications. For

interior use only. Adheres to almost all building materials with the exception of surfaces such as polyethylene, PTFE, silicone, oils and greases, mold release agents, and similar materials. NOT FOR USE AS A COMMERCIAL FIRESTOP.

7. Maintenance No maintenance is expected. Once installed, if any section of the 3M<sup>™</sup> Fire Block Foam FB-Foam is damaged, the following procedure will apply: the damaged section should be removed and reinstalled with a minimum 1/2 in. (12.7 mm) overlap onto the adjacent material.

8. Availability 3M<sup>™</sup> Fire Block Sealant FB-Foam is available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M<sup>™</sup> Fire Block Foam FB-Foam is available in 12 fl. oz. (330 ml) cans/12 can per case. 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 country-of-use Material Safety Data Sheet (MSDS) prior to handling and disposal.

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 quaranteed.

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.

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