

# 3M™ Fire Barrier Rated Foam FIP 1-Step

## Product Data Sheet

### 1. Product Description

3M™ Fire Barrier Rated Foam (FIP 1-Step), is a smoke, sound, and firestopping foam for wall and floor penetrations. Premium two-part, easy-to-handle formulation. Expands up to five times during installation and bonds to most construction substrates including, but not limited to, concrete, metal, wood, plastic and cable jacketing. Dries to a flexible solid. During a fire, product maintains a tight firestop against smoke and flame.



#### ATTENTION: CODE OFFICIALS

##### FIP 1-Step

- Is a Rated Firestop Foam
- UL/ULC Listed
- Meets ASTM E 814 & CAN/ULC S115
- Meets the International Building Code for passive fire protection

- Re-enterable / repairable
- Sag-resistant formulation
- Excellent adhesion
- Paintable with primer
- Quick cure & eliminates the need for mineral wool and caulk

### 2. Applications

Typical applications include: blank openings, metal pipe, cables, cable tray, insulated pipe, combination penetrations through concrete floor/wall and gypsum wall board assemblies.

### 3. Specifications

FIP 1-Step shall be a two-component, ready-to-use, gun-grade, firestopping foam. FIP 1-Step shall be tested to the criteria of CAN/ULC S115 Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 84 / UL 723 Standard Test Method for Surface Burning Characteristics of Building Materials, ASTM E 90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements, and ASTM E 413 Classification for Rating Sound Insulation. FIP 1-Step shall meet the requirements of the IBC, IRC, IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NBCC.

#### Typically Specified Divisions

Division 7  
Section 07 84 00 - Firestopping  
Section 07 27 00 - Air Barriers

#### Related Sections

Section 07 86 00 - Smoke Seals  
Section 07 87 00 - Smoke Containment Barriers  
Section 21 00 00 - Fire Suppression  
Section 22 00 00 - Plumbing  
Section 26 00 00 - Electrical

### 4. Storage & Shelf Life

#### Storage

FIP 1-Step should be stored indoors in dry conditions between 40°F and 85°F (5°C and 30°C). Avoid freeze / thaw exposures of the FIP 1-Step while still in the packaging. If product freezes, then product must be fully thawed and brought to ideal application temperature prior to use (See Section 5).

#### Shelf Life

FIP 1-Step shelf life is 12 months in original unopened containers from date of packaging when stored above 68°F (20°C) and below 90°F (32.2°C).

Lot numbering: First to fourth digit = Date of Production (YYMM)

Fifth digit = 4 (Production Code)

Sixth and Seventh digit = (Batch #)

(\*\*\*Note: Expiration Date marked on cartridge)



FILL, VOID OR CAVITY MATERIAL  
FOR USE IN THROUGH-PENETRATION  
FIRESTOP SYSTEMS SEE UL FIRE  
RESISTANCE DIRECTORY 50L6



FILL, VOID OR CAVITY  
MATERIAL

#### SOUND BARRIER



#### SMOKE SEAL



#### FIRE BARRIER



#### TEMPERATURE



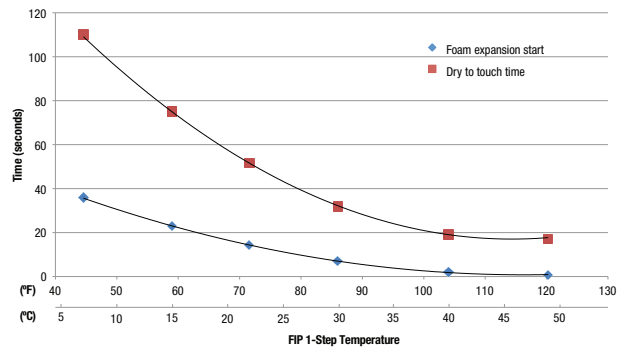
PLEASE SEE APPROPRIATE UL SYSTEM  
FOR ASSOCIATED RATING.



## 5. Performance & Typical Physical Properties

Colours Available:	Maroon
Application Temperature Range:	50° to 120°F (10° to 49°C)
Surface Burning (ASTM E 84):	Flame Spread 10 Smoke Development 50
STC Acoustic Barrier (ASTM E 90 and ASTM E 413):	57 when tested in STC 57 rated wall assembly
Unit Volume:	12.85 fl. oz. cartridge (380 mL)
VOC Less H <sub>2</sub> O and Exempt Solvents:	<250 g/L
Cure:	Foam becomes tack-free in about one minute. Full cure depends upon ambient conditions and volume of foam. Typical cure at 75°F (24°C) is approximately 2 minutes.
Air Leakage (UL 1479 Section 6):	<1 CFM/Sq Ft
Yield:	Up to 116 cubic inches
Lead:	Meets the intent of LEED VOC regulations. <250 g/L VOC contents (less H <sub>2</sub> O and exempt solvents).

Foam Expansion Start Time / Dry to Touch Time at various FIP 1-Step temperatures



\*Note: Expansion Start Time and Dry to Touch Times are NOT dependent on ambient air temperature. Expansion Start Time and Dry to Touch Times are dependent on FIP 1-Step temperature.

## 6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor or Sales Representative for applicable drawings and details.

### Preparatory Work

The surface of the opening and any penetrating items should be cleaned to allow for the proper adhesion of the 3M™ Fire Barrier Rated Foam (FIP 1-Step). Ensure that the surface of the substrates are not wet and are free from dust, debris and frost. Foam can be installed with either the manual or battery powered dispenser.

### Installation Details

Install the applicable depth of the FIP 1-Step as detailed within the applicable 3M ULC listed system. Please reference FIP 1-Step Installation Guide for further installation details. The FIP 1-Step may be trimmed after installation to be flush with the surface of the substrate. Clean all tools immediately after use with water if needed.

### Limitations

Do not apply FIP 1-Step when the cartridge temperature is less than 50°F (10°C), damage may occur to cartridge or dispensing equipment. Do not apply FIP 1-Step to building materials that bleed oil, plasticizers or solvent (e.g. impregnated wood, oil-based sealants, or green or partially-vulcanized rubber). Do not apply FIP 1-Step to wet or frost-coated surfaces or areas that are continuously damp or immersed in water. This product is not acceptable for use with chlorinated polyvinylchloride (CPVC) pipes.

## 7. Maintenance

No maintenance is expected when installed in accordance with manufacturer's installation guidelines. Once installed, if any section of the FIP 1-Step is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable FIP 1-Step UL Listed system.

## 8. Availability

FIP 1-Step is available in 12.85 fl. oz. cartridges. 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](http://www.3M.com/firestop).

## 9. Safe Handling Information

Consult product's Material Safety Data Sheet (MSDS) prior to handling and disposal.

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### Industrial Adhesives and Tapes Division

3M Canada Company  
Post Office Box 5757  
London, Ontario N6A 4T1  
Canada  
1 800-364-3577  
[www.3M.ca](http://www.3M.ca)

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