



# 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.









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

#### ATTENTION: CODE OFFICIALS

#### FIP 1-Step

- ✓ Is a Rated Firestop Foam
- ✓ Is UL Listed
- ✓ Meets ASTM E 814
- ✓ Meets the International Building Code for passive fire protection

 <small>FILL, VOID OR CAVITY MATERIAL FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY 50L6</small>	 <small>FILL, VOID OR CAVITY MATERIAL</small>
<small>SOUND BARRIER</small>  <small>In STC 57-rated wall assembly</small>	<small>SMOKE SEAL</small>  <small>Meets Air Leakage Requirements</small>
<small>FIRE BARRIER</small>  <small>UP TO 2 HOUR</small>	<small>TEMPERATURE</small>  <small>UP TO 1 HOUR</small>
<small>PLEASE SEE APPROPRIATE UL SYSTEM FOR ASSOCIATED RATING.</small>	

### 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 ASTM E 814/UL 1479 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 and 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 16 months in original unopened containers from date of packaging when stored above 68°F (20°C) and below 90°F (32.2°C).

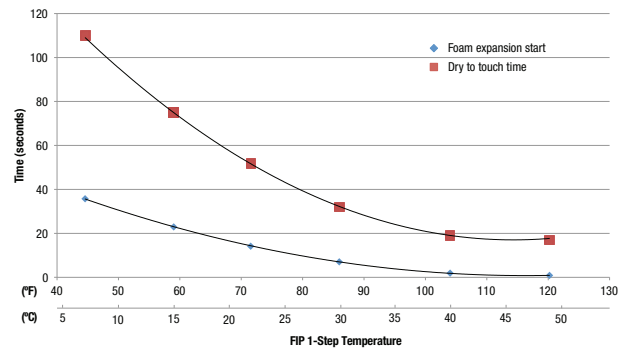
Lot numbering: First to fourth digit = Date of Production (YYMM); Fifth digit = 4 (Production Code); Sixth and Seventh digit = (Batch #); (Note: Expiration Date marked on cartridge)



## 5. Performance and Typical Physical Properties

<b>Colors Available:</b>	Maroon
<b>Application Temperature Range:</b>	50° to 120°F (10° to 49°C)
<b>Surface Burning (ASTM E 84):</b>	Flame Spread 10, Smoke Development 50
<b>STC Acoustic Barrier (ASTM E 90 and ASTM E 413):</b>	57 when tested in STC 57 rated wall assembly
<b>Unit Volume:</b>	12.85 fl. oz. Cartridge (380mL)
<b>VOC Less H<sub>2</sub>O and Exempt Solvents:</b>	<250g/L
<b>Cure:</b>	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.
<b>Air Leakage (UL 1479 Section 6):</b>	<1 CFM/Sq Ft
<b>Yield:</b>	Up to 116 cubic inches
<b>Lead:</b>	Meets the intent of LEED® VOC regulations. <250g/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 UL 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 Material Safety Data Sheet (MSDS) prior to handling and disposal.



### 3M Industrial Adhesives and Tapes Division

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