1. Product Description

3M™ Fire Barrier Silicone Sealant 2000 NS is a ready-to-use, gun-grade, one-component non-slump silicone elastomer that cures upon exposure to atmospheric humidity to form a flexible firestop seal that also resists water leakage and acts as a barrier to airborne sound transmission. 3M™ Fire Barrier Silicone Sealant 2000 NS helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly.

3M™ Fire Barrier Silicone Sealant 2000 NS firestops penetrations passing through fire-rated floor, floor/ceiling or wall assemblies, as well as dynamic construction joints, blank openings and other fire-rated interior building construction. The sealant remains elastomeric, bonds to most common construction materials and exhibits excellent weatherability during construction. No mixing is required.

Product Features

- Firestop tested up to 3 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC S115
- Fire Resistance tested for construction joint systems in accordance with ASTM E 1966 (UL 2079)
- Class 25 sealant, per ASTM C 920
- Movement capability of ±31%
- Applied with conventional caulking equipment—excellent caulk rate
- Excellent weatherability once cured
- Excellent adhesion
- Re-enterable/repairable
- Sag-resistant allows for application on vertical surfaces
- Non-sag formulation is ideal for vertical dynamic joints and through penetrations
- Product Color: Light Gray

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.

Minimizes noise transfer—STC-Rating of 56 when tested in STC 56-rated wall assembly.

2. Applications

3M™ Fire Barrier Silicone Sealant 2000 NS is an extremely flexible firestop that accommodates normal building movement. Sag-resistant formulation makes this firestop ideal for dynamic joints such as top-of-wall/head-of-wall joints in fire-rated construction. In addition, 3M™ Fire Barrier Silicone Sealant 2000 NS is used in mechanical, electrical and plumbing applications to firestop openings and penetrations through fire-rated floor or wall assemblies. Typical penetrants include: metallic pipe, non-metallic pipe (FGG/BM system CPVC compatible), conduit, power and communication cable and telephone or electrical wiring. 3M™ Fire Barrier Silicone Sealant 2000 NS is also used to firestop blank openings and static construction joints.

3. Specifications


Typically Specified MasterFormat (2004)
Section 07 84 00 – Firestopping
Related Sections
Section 07 27 00 – Fire Barriers
Section 07 84 16 – Annular Space Protection
Section 07 84 43 – Fire-Resistive Joint Sealants
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 92 13 – Elastomeric Joint Sealants
Section 07 92 19 – Acoustical Joint Sealants
Section 21 00 00 – Fire Suppression
Section 22 00 00 – Plumbing
Section 23 00 00 – Heating, Ventilating, and Air Conditioning (HVAC)
Section 26 00 00 – Electrical

For technical support relating to 3M Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M Fire Protection Products, visit: www.3m.com/firestop
4. Performance & Typical Physical Properties

**Color:** Light Gray

**Application Temperature Range:** -20°F to 122°F (-29°C to 50°C) (ASTM C 1299)

**Service Temperature Range:** -40°F to 302°F (-40°C to 150°C)

**STC (ASTM E 90 and ASTM E 413):** 56 when tested in STC 56 rated wall assembly

**Surface Burning (ASTM E 84):** Flame Spread 0, Smoke Development 0

Volume: 10.3 fl. oz tube (304.8 cc, 18.6 in³), 4.5 gal. pail (17034.4 cc, 1039.5 in³)

**Compression/Extension Capability:** ±31%

**Hardness (ASTM D 2240 Shore A):** 15

**Tensile Strength:** 100 psi (0.69 MPa)

**VOC Less H₂O and Exempt Solvents:** <250 g/L

**Ultimate Elongation:** 1600%

Cure: Under typical cure rate conditions of 75°F (23°C) and 50% R.H., sealant becomes tack-free in about 60 minutes. Full cure depends upon ambient conditions and volume of sealant. Typical cure rate is approximately 1/8 inch (3 mm) per day.

5. Packaging, Storage, Shelf Life

**Packaging**

Product packaged in cartridge or pail is enclosed in HDPE plastic containers.

**Storage**

3M™ Fire Barrier Silicone Sealant 2000 NS should be stored indoors in dry conditions between 40°F and 90°F (4°C and 32°C). Avoid repeated freeze / thaw exposures of the 3M™ Fire Barrier Silicone Sealant 2000 NS prior to application.

**Shelf Life**

Shelf life of 12 months from date of packaging when stored below 90°F (32°C) in original, unopened containers.

6. Installation Techniques

**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 Silicone Sealant 2000 NS. Do not use alcohol to clean surfaces (recommended cleaning solvents are mineral spirits, xylene, toluene or methyl ethyl ketone (MEK)). Ensure that the surface of the substrates are not wet and are frost free. Sealant can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel.

**Installation Details**

Install the applicable depth of backing material, if required, as detailed within the applicable UL, Intertek or other third-party listed system. Cut the end of the tube spout to achieve the desired bead width when applying. Install the applicable depth of 3M™ Fire Barrier Silicone Sealant 2000 NS into the opening flush with the surface of the substrate, or as detailed within the applicable listed system, at the depth for the assembly and rating that is required. Tool within 5 minutes. Clean all tools immediately after use with mineral spirits, xylene, toluene or methyl ethyl ketone (MEK).

**Limitations**

Do not apply 3M™ Fire Barrier Silicone Sealant 2000 NS under the following conditions: when surrounding temperature is greater than 122°F (50°C), when surfaces are wet (note: once applied, sealant may be exposed to intermittent water – exhibits excellent weatherability when fully cured) or frost-coated, in unvented spaces where sealant is not exposed to atmospheric moisture, in areas where abrasion or physical abuse of the sealant are likely and/or where painting of sealant is required. Do not apply 3M™ Fire Barrier Silicone Sealant 2000 NS to polycarbonates or to building materials that bleed oil, plasticizers or solvent (e.g. impregnated wood, oil-based sealants, or green or partially vulcanized rubber). Note: in confined cure conditions there may be discoloration of brass, copper or other sensitive metals.

7. Maintenance

No maintenance is expected when installed in accordance with the applicable third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Silicone Sealant 2000 NS is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable listed system, with a minimum 1/2 in. (12.7 mm) overlap onto the adjacent material.

8. Availability

3M™ Fire Barrier Silicone Sealant 2000 NS is available from 3M Authorized Fire Protection Products Distributors and Dealers in the following sizes: 10.3 fl. oz. cartridges (12/case) and 4.5 gallon pails (1/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 product's Material Safety Data Sheet (MSDS) prior to handling and disposal.