

Fire Barrier Silicone Sealant 2000+

*Acoustic, Waterproof, 4hrs fire rated silicone for external and high-performance applications
AS1530.4, ASTM & UL approved*



Technical Data Sheet

a **3M** product

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KEY BENEFITS

- Tested up to 4 hours fire rating to AS1530.4, ASTM E 814 and UL 1479
- Fire resistance tested for construction joint systems
- Ideal for electrical, mechanical, plumbing and acoustic applications
- Excellent adhesion and Re-enterable/repairable
- Excellent acoustic properties (STC 56)
- Excellent flexibility
- See MORE benefits below

INTRODUCTION



3M™ Fire Barrier Silicone Sealant 2000+ is a ready-to-use, gun-grade, one-component silicone elastomer that cures upon exposure to atmospheric humidity to form a flexible firestop seal. 3M™ Fire Barrier Silicone Sealant 2000+ 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+ firestops dynamic construction joints, blank openings and penetrations passing through fire-rated floor, floor/ceiling or wall assemblies 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.

FEATURES & BENEFITS

- ✓ Firestop tested up to 4 hours
- ✓ Fire Resistance tested for construction joint systems
- ✓ Excellent flexibility
- ✓ Compression/extension capability of $\pm 13\%$
- ✓ Applied with conventional caulking equipment — excellent caulk rate
- ✓ Excellent weatherability upon cure
- ✓ Excellent adhesion
- ✓ Re-enterable/repairable
- ✓ Meets the intent of LEED VOC environmental quality requirements – 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

APPLICATION

3M™ Fire Barrier Silicone Sealant 2000+ is a flexible firestop ideal for sealing dynamic joints in fire-rated construction. In addition, 3M™ Fire Barrier Silicone Sealant 2000+ 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, conduit, power and communication cable and telephone or electrical wiring. 3M™ Fire Barrier Silicone Sealant 2000+ is also used to firestop blank openings and static construction joints.

SPECIFICATIONS

3M™ Fire Barrier Silicone Sealant 2000+ is a one-component, ready-to-use, gun-grade silicone elastomer.

3M™ Fire Barrier Sealant 2000+ is tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 1966 (UL 2079) Standard Test Method for Fire Resistive Joint Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Sealant 2000+ shall meet the requirements of the IBC, IRC, IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70) and NFPA 101.

Fire Barrier Silicone Sealant 2000+ is tested and approved to the following international standards:

- AS1530.4 - ASTM E 1966
- ASTM E 814 - UL 2079
- UL 1479 - ULC S115

Typically Specified Divisions

Division 7

Section 07 84 00 – Firestopping

Related Sections

Section 07 84 16 — Annular Space Protection

Section 07 84 43 — Fire-Resistant 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 07 27 00 — Thermal and Moisture Protection
Firestopping

Section 21 00 00 — Air Barriers

Section 22 00 00 — Plumbing

Section 26 00 00 — Electrical

PERFORMANCE & PHYSICAL PROPERTIES

Colours	Light Grey
Application Range	-29°C to 50°C
Service Range	-40°C to 150°C
Acoustic Rating	56dB reduction
Surface Burning (ASTM E 84)	Flame Spread 0, Smoke Development 0
Extension/compression capability	+/- 13%
Hardness (ASTM D 2240 Shore A)	40
Tensile Strength	350 psi (0.59 MPa)
VOC Less H ₂ O and Exempt Solvents	<32 g/L
Elongation at Break (ASTM D 412)	500%
Volume	300ml cartridge or 17lt pail
Cure	Under typical cure rate conditions of 23°C and 50% R.H., sealant becomes tack-free in about 90 minutes. Full cure depends upon ambient conditions and volume of sealant. Typical cure rate is approximately 3.18mm per day.

PACKAGING, STORAGE, SHELF LIFE

Packaging	Product packaged in cartridge or pail is enclosed in HDPE plastic containers
Storage	3M Fire Barrier Silicone Sealant 2000+ should be stored indoors in dry conditions between 4°C and 32°C



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+. 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 Australian Standard 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+ 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+ under the following conditions: when surrounding temperature is greater than 50°C, when surfaces are wet 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 (Note: once applied, sealant may be exposed to intermittent water — exhibits excellent weatherability when fully cured).

Do not apply 3M™ Fire Barrier Silicone Sealant 2000+ 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.

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+ is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable listed system, with a minimum 12.7mm overlap onto the adjacent material.

HEALTH AND SAFETY

To learn more about the safe handling of Fire Barrier Silicone Sealant 2000+, see the Material Safety Data Sheet available at www.bossfire.com.au.

LIMITATION

BOSS Fire & Safety Pty Ltd has provided the above technical information in good faith and to the best of its knowledge. This information was deemed to be correct at the time of publication. Should any data come to BOSS Fire & Safety's attention relating to the fire resistance or performance of the product described, BOSS Fire & Safety reserve the right to amend this report.

BOSS Fire & Safety strive to constantly improve and develop products so this information may change without notice.

FURTHER TECHNICAL INFORMATION

For additional technical information on the performance of 3M™ Fire Barrier Silicone Sealant 2000+ or other BOSS products please contact our Technical Services team on:

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