

# FIREBARRIER SILICONE

## 1. PRODUCT NAME

A/D FIREBARRIER Silicone

## 2. PRODUCT DESCRIPTION

A primerless single component silicone sealant. The sealant cures to a durable, flexible, silicone rubber when exposed to atmospheric moisture.

**Basic Use:** A/D FIREBARRIER Silicone is designed for economical use in joint and service penetration firestop configurations. It forms a durable, flexible, watertight bond with most construction materials. In most cases, no primer is required.

### Composition and Materials:

A/D FIREBARRIER Silicone is designed to tool easily. Its physical properties will remain stable over time. It may be applied over a wide temperature range, 0°F to 120°F (-18°C to 50°C), allowing the sealant to be applied in any season.

**Packaging:** A/D FIREBARRIER Silicone is available in nominal 10.3 fl. oz. (304 mL) and 28.7 fl. oz. (850 mL) cartridges, 20 fl. oz. (600 mL) foil packs and 2.64 US gallon (10L) and 4.5 US gallon (17L) bulk containers. Contents are 18.6 in<sup>3</sup>, 49 in<sup>3</sup>, 36.1 in<sup>3</sup>, 634 in<sup>3</sup> and 1050 in<sup>3</sup> respectively. Refer to the A/D FIREBARRIER estimate guide for volume and coverage information.

**Color:** Red or Grey\*

(\*Note: requires special order)

### Application Limitations:

- Do not use where abrasion or physical abuse is anticipated.
- Installation in confined or air-free spaces may inhibit cure.
- Silicones may be painted, but movement of the silicone may cause the paint film to crack and peel. We recommend the sealant be applied after painting is completed.
- Do not apply to surfaces that will be in direct contact with food.

## PHYSICAL PROPERTIES

### Properties

### Results

#### Uncured

Tool/Work Time	5 minutes
Skin Over Time @ 25°C (77°F)	Less than 60 minutes @ 50% RH
Curing Time @ 25°C (77°F)	48 hours @ 50% RH
Flow, Sag or Slump	Nil
Specific Gravity	1.13
Maximum strength	After 21 days
VOC (ASTM D 3960-92)	Less than 0.69 lb/gal US

#### Cured

Hardness (A) (ASTM D2240)	7 days @ 25°C (77°F) 50% RH. 12
Tear Strength (ASTM D624, Die B)	3.5 kN/m (20 ppi)
Elongation at Break (ASTM D412)	600%
Shrink Factor	Negligible
ASTM C 920	Type S, NS, 25, NT, G, A & M

\*Values given above are not intended to be used in specification preparation.

- Do not apply to surfaces with special protective or cosmetic coatings without prior consultation of the manufacturer and first testing adhesion.
- A/D FIREBARRIER Silicone has been tested in a wide range of firestop joint and through-penetration system geometries. For optimum economy and performance the product should be applied to a thickness equal to or slightly greater than the minimum test design thickness. Excessive depth to width ratios may cause sealant failure – **Do not apply excessive thickness.** As a guideline, A/D Fire Protection Systems recommends that the minimum test system thicknesses not be exceeded by more than 25%.

### Standards: A/D FIREBARRIER

Silicone has been tested in accordance with the following: CULC-S115, "Standard Method of Fire Tests of Firestop Systems". ASTM E814-83, "Standard Method of Fire Tests of Through-Penetration Fire Stops" ANSI/ULC 2079, "Tests for Fire

Resistance of Building Joint Systems".

## 3. TECHNICAL DATA

A/D FIREBARRIER Silicone sealant remains flexible indefinitely between temperatures of -50°F and 300°F (-45 and 149°C). It will not crack or crumble.

A/D FIREBARRIER Silicone conforms to the requirements of ASTM C 920 for Elastomeric joint sealants, Type S, Grade NS, class 25, use NT, G, A and M.

A/D FIREBARRIER Silicone is listed by ULC, ULI, ITS (Warnock Hersey) and Factory Mutual.

For details of rated firestop systems see ULC's List of Equipment and Materials, Fire-stop System and Components, ULI's Fire Resistance Directory, Volume 2, ITS' s Listings Book and Factory Mutual' s Approval Guide.

**ULC:** JF9, -14, -29, -50, -51, -93 and -94. HW-33. SP159, -160, -161, -162, -163, -219, -220, -221, -324, -325, -365, -383, -384, -385, -386, -394, -395, -421, -624, -625, -757, -760, -762, -763, -764, -768, -880, -881, -916, -926, -927, -928, -929, -930

-931, -985, -986, -987 and -988.

SPC56, -98, -99 and -100

**ULI:** CAJ-0017, -0029, -1116,

-1117, -1129, -1229, -1299, -1322, -1323, -2150, -2186, -5027, -5064, -5065, -5127, -8023, -8024, -8028 and -8080.

WJ-1064, -1085 and -2050.

WL-1050, -1066, -1151, -1198, -2155, -2156, -2157, -3042, -5031 and -8006.

FC1011, -1034, -2153, -2154, -2194, -3014, -3027, -5007 and -5024.

FF-D-1023, FW-D-1019,

HW-D-1017 and WW-D-1026

**FM:** 83, 85, 86, 87, 88, 89, 204, 206, 235 and 236.

**Intertek/Warnock Hersey:**

AD/PH 180-04 and -05.

AD/PV 60-01 and -120-01.

AD/PHV 120-01, -02, -03, 180-04 -05, -06, -07 and -08.

#### 4. INSTALLATION

Clean all openings to be firestopped by removal of foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants glazing compound, protective coatings, etc.

**Priming:** A/D FIREBARRIER Silicone generally does not require priming. In view of the unpredictability of surface characteristics, it is recommended that a test sample of sealant be

applied on the surface to test adhesion.

**Masking:** Areas adjacent to openings to be firestopped can be masked to assure a neat appearance. The masking tape should not be allowed to touch the clean surfaces to which the silicone is to adhere. Remove masking tape immediately.

A/D FIREBARRIER Mineral Wool is the required backup material in most systems. The material allows a controlled depth of sealant to be applied for maximum economy.

Install backup material as specified. Surfaces of mineral wool to receive sealant should be recessed in the opening to a depth equal to the required thickness of sealant. Apply A/D FIREBARRIER Silicone in a continuous operation to fill and seal the opening. Tool the sealant to spread it against the backup material and the opening surfaces.

Individual penetrations through drywall may not require a backing material for the silicone. Simply fill the annular space to the required depth and form a smooth bead or crown at the surfaces.

Excess sealant should be dry-wiped from glass, metal and plastic surfaces while still uncured, followed with a commercial solvent such as xylol, toluol, or methyl ethyl ketone.

CURED SEALANT IS USUALLY VERY DIFFICULT TO REMOVE WITHOUT ALTERING OR DAMAGING THE SURFACE TO WHICH THE SEALANT HAS BEEN MISAPPLIED.

**Precaution:** On direct contact, uncured sealant may irritate eyes. Flush with water and call a physician. Avoid prolonged contact with skin. **Keep out of reach of children.**

To safely use this product, read and abide by Material Safety Data Sheet (MSDS). Provide adequate ventilation.

**Shelf Life:** When stored in original and unopened container at or below 32°C (90°F), A/D FIREBARRIER Silicone has a shelf life of one year from date of manufacture.

#### 5. AVAILABILITY AND COST

**Availability:** A/D sales offices and technical representatives are located throughout North America. (See below)

#### 6. MAINTENANCE

No maintenance should be required. If silicone sealant becomes damaged, replace damaged portion. Clean surfaces in damaged areas, and repair with fresh A/D FIREBARRIER Silicone.

#### 7. TECHNICAL SERVICES

Contact nearest A/D representative.



### A/D FIRE PROTECTION SYSTEMS

Head Office: 420 Tapscott Road, Scarborough, Ontario, M1B 1Y4  
Tel: (800) 263-4087 or (416) 292-2361 Fax: (416) 298-5887

[www.adfire.com](http://www.adfire.com)

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