

PROPERTIES

COLOR:

White
Black

APPLICATION CONSISTENCY:

Brush, trowel, glove, or power extrusion

AVERAGE WEIGHT / U.S. GALLON (ASTM D1475):

12.0 lbs. (1.44 kg/l)

AVERAGE NON-VOLATILE (ASTM D2369):

53% by volume (67% by weight)

COVERAGE RANGE:

Brush: 45 – 55 sq. ft./gal. (1.10 – 1.35 m²/l)
0.036 – 0.029 in. (0.9 – 0.7 mm) wet film thickness

DRYING TIME 73°F (23°C) 50% RH:

Set to Touch: 1 Hour
Dry Through: 16 Hours

SERVICE TEMPERATURE LIMITS:

20°F to 200°F (-7°C to 93°C)

WET FLAMMABILITY:

No flash to boiling, 210°F (99°C)

SURFACE BURNING CHARACTERISTICS (ASTM E84):

Flame Spread: 0
Smoke Developed: 0
Tested at a coverage rate of 45 sq. ft. per gal. (1.1 m²/l) in a 3 in. (7.6 cm) strip. Applied to rigid fiberglass duct board. Type 475, covered with foil/scrim/kraft paper facing material.

LIMITATIONS:

Store and apply between 40°F (4°C) and 100°F (38°C), protect from freezing until dry.

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VAPOR-SAFE® FDS-181 DUCT SEALANT

VAPOR-SAFE® DUCT SEALANT is a fire-resistive, fibrated, water-based sealant for indoor or outdoor low, medium, and high velocity heating and air conditioning ducts. It performs as a tough and flexible adhesive and sealant, forming a durable seal against air leakage when used with reinforcing membrane. Mechanical fasteners of the type and number normally used for duct assemblies are required to provide rigidity to the duct system.

VAPOR-SAFE® DUCT SEALANT has excellent vapor retardant properties that make it the perfect choice for duct closure and butt joint sealing on both flexible and rigid faced fiberglass duct systems. It is non-flammable and has a mild odor when wet. It dries odor free.

VAPOR-SAFE® DUCT SEALANT is ideal for vapor sealing ASJ, FRK, and FSK jackets and board facings at joints, laps, and over staple and weld pin punctures.

VAPOR-SAFE® DUCT SEALANT meets the NFPA 90A and 90B 25/50 requirements.

VAPOR-SAFE® meets the requirements of:

- MAS Certified Green®
- California Dept. of Public Health Standard Method v1.2
- VOC Emissions and Content requirements to contribute to **LEED v4** EQ Credit: Low Emitting Materials – Paints and Coatings
- Collaborative for High Performance Schools EQ 7.1

VOC Content: 19 g/l, less water and exempt solvents.



UL 181A-M
UL 181B-M
6P84

APPLICATION GUIDE FOR FOSTER® VAPOR-SAFE® DUCT SEALANT 95-96

MATERIAL PREPARATION

DO NOT THIN. Apply only to clean, dry, oil-free surfaces. Keep container closed when not in use.

APPLICATION

UL 181A MASTIC CLOSURE OF UL 181 RIGID FIBERGLASS AIR DUCTS:

Apply to the surface by brush, trowel, or power extrusion. Uniformly brush out a 3" – 4" wide tack coat over the stapled and smoothed joint, at the nominal rate of 1 gal./100 sq. ft. (0.4 l/m²). Embed the reinforcing membrane into the tack coat, taking care that all of the mesh is filled. Pull the membrane taut and apply a second coat at the nominal rate of 1 gal./100 sq. ft (0.4 l/m²). Allow the completed joint to dry at least 24 hours above 70°F (21°C) before pressure testing. High humidities (over 70%) and/or cooler temperatures may retard drying. Total (mastic plus scrim plus mastic) wet film thickness to be 32 mils. Fiberglass scrim to be 5 mils thick, 20x10 plain weave weighing 1.75 oz/yd² (59 g/m²).

UL 181B MASTIC CLOSURE OF UL 181 FLEXIBLE AIR DUCTS:

Apply to clean, dry, oil-free surfaces by brush, trowel, or power extrusion. Uniformly brush out a 2" wide coat over the joint, at the nominal rate of 2 gal./100 sq. ft. (0.8 l/m²). Total coverage rate to be 45 – 55 sq. ft./gal. (1.10 – 1.35 m²/l). Allow the completed joint to dry at least 24 hours above 70°F (21°C) before pressure testing. High humidities (over 70%) and/or cooler temperatures may retard drying. Total wet film thickness to be 29 – 35 mils (0.7 – 0.9 mm).

OTHER DUCT CLOSURE AND SEALING APPLICATIONS – NOT UL 181 LISTED:

For other applications or on different types of low velocity metal duct construction, the use of a reinforcing membrane is optional. (Reinforcing membrane is suggested in medium and high pressure applications.) Apply at a rate of 45 – 55 sq. ft./gal. (1.10 – 1.35 m²/l). Allow the completed joint to dry at least 24 hours above 70°F (21°C) before pressure testing. High humidities (over 70%) and/or cooler temperatures may retard drying. For best results, do not exceed 1/4" (6.4 mm) wet film thickness. VAPOR-SAFE® DUCT SEALANT has excellent weather, water, and U.V. resistance, along with low water vapor permeance allowing it to be used outdoors and in high humidity environments. LIMITATIONS: Always test foil or paper facings for acceptable adhesion before using. Outdoor horizontal surfaces must always drain completely. A pitch of at least 1/4" per foot (2 cm/m) is required. To resist rain washoff, allow at least 12 – 15 hours drying time above 40°F (4°C), with a relative humidity of 50%. Higher humidity or lower temperatures may retard drying.

POWER EXTRUSION:

VAPOR-SAFE® DUCT SEALANT may be applied using a wide variety of power (pressure) extrusion equipment suitable for use with water-based sealants. It is a soft, buttery gel with a typical viscosity range of 80,000 – 100,000 cps. Corrosion resistant pumps and fittings are suggested.

CLEAN UP

Use fresh water to clean brushes and equipment before product dries. Dry product may be removed with hot soapy water or strong solvents such as chlorinated solvent (non-flammable) or mineral spirits (flammable).

CUSTOMER SERVICE: (800) 832-9002

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ADEQUATE TESTS: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. The warranted shelf life of our products is twelve months from date of shipment to the original purchaser or as otherwise provided on the certificate of analysis.

**For professional use only. Keep out of reach of children.
Consult Safety Data Sheet and container label for further information.**