



30-90/ 91 Vapor-safe mastic

Colour

30-90 White
30-91 Grey

Application Consistency

Trowel, glove, or airless spray.

Average Weight/U.S. Gallon (ASTM D 1475)

11.5 pounds (1.42 kg/l)

Average Non-Volatile (ASTM D 1644)

59% by volume (71% by weight)

Coverage (FSTM 71)

Wet coverages shown below are for smooth non-porous surfaces. Porous or rough surfaces will require higher volume to attain required dry thickness. 4-6 gallons per 100 square feet. 6 gal: (2.4 l/m²) 4 gal: (1.6 l/m²)

Drying Time 73°F (23°C) 50% RH (ASTM 1640)

To Touch: 4 hours
Through : 24 hours

Service Temperature Limits (FSTM 70)

(Temperature at coated surface)
Minus 20°F to 180°F (-29°C to 82°C)

Water Vapor Permeance

ASTM E 96 Procedure B, 0.013 perms (0.009/metric perms) at 43 mils dry (1 ASTM F 1249, 0.08 perms at 37 mils dry (0.94 mm).
Tested at 100°F (38°C) and 90% RH.

Wet Flammability (ASTM D 3278)

Flash point: None to boiling, 212°F (100°C).

Surface Burning Characteristics (ASTM E 84)

Flame Spread : 5
Smoke Developed: 25
Tested at coverage rate of 25 sq. ft. per gal.(0.61 m²/l).
Applied to ¼ inch (6.4 mm) inorganic reinforced cement board. Spread may vary at different product thicknesses and/or when applied over other surfaces.

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FSTM: Foster Standard Test Method

Foster Vapor-Safe Mastic is a high solids water base, fire resistive, flexible vapour barrier finish for most types of thermal insulation, including polystyrene foam. It may be used over dry concrete, finishing cement, and most metals.

Vapor-Safe Mastic is non-flammable when wet and has a mild latex "paint type" odour. It is designed for heavy duty/industrial use on pipes, vessels, ducts and equipment operating below ambient temperatures. It may also be used indoors.

Vapor-Safe Mastic has the water resistance and low water vapour permeance normally found only in solvent based products. It can be used in high humidity environments, and greatly retards water vapour permeation.

Vapor-Safe Mastic is ideal for vapour sealing ASJ, FRK, and FSK jackets and board facings at joints, laps and over staple and weld pin punctures. It is an excellent duct board closure sealant. Do not exceed 1/8" (3.2 mm) wet film thickness.

Vapor-Safe Mastic conforms with current USDA requirements regarding use in meat and poultry processing areas under federal inspection. Letter of certification is available upon request.

Vapor-Safe Mastic contains no asbestos, lead, mercury, or mercury compounds.

Vapor-Safe Mastic meets NFPA 90A and 90B 25/50 requirements and the requirements of Military Specification MIL-C-19565C, Type II.

Limitations

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

To resist rain wash off, allow at least 8-12 hours drying time above 50°F (10°C), with a relative humidity of 50%. Higher humidity and/or lower temperature may retard drying.

Always select Vapor-Safe Mastic in the white colour for use over Polystyrene on outdoor installations.

Always test foil and paper facings for acceptable adhesion before using.

Outdoor horizontal surfaces must always drain completely.

A pitch of at least ¼" per foot (2 cm/m) is recommended.

After long term outdoor exposure 30-90 may weather to an off-white colour.



FOSTER VAPOR-SAFE® MASTIC 30-90 / 30-91

Material Preparation - DO NOT THIN - Apply only to clean, dry, oil free surfaces. Keep container closed when not in use. Stirring is usually not necessary.

Application

To prevent water vapour and moisture infiltration, proper and complete flashing is required. Follow flashing specifications.

Heavy Duty/Industrial Outdoor

1. Apply a tack coat of Foster Vapor-Safe Mastic (colour as selected) at 2 gallons per 100 square feet (0.8 l/m²).
2. Embed Foster MAST-A-FAB white membrane into the wet tack coat. Smooth membrane to avoid wrinkles and overlap all seams at least two inches (5 cm). Apply finish coat of Vapor-Safe Mastic, within ½ hour after the tack coat application, at 4 gallons 100 square feet (1.6 l/m²).
3. This application shall provide a minimum dry film thickness of 57 mils (1.4 mm).
Over cellular glass insulation, increase the coverage to 7 gallons per 100 square feet (2.9 l/m²).

Indoor and Light Duty Outdoor Apply as above except that the finish coat shall be 2 gallons per 100 square feet (0.8 l/m²) and the minimum dry film thickness shall be 37 mils (0.9 mm).

Moisture Barrier Sealer

1. Where required at all fittings and at specified intervals of straight-run pipe insulation, apply Foster Vapor-Safe Mastic at 1/16 inch (1.6 mm) thick to all butt joints of pipe insulation and onto the bore of the insulation for a minimum of two inches (5 cm) from the joint.
2. Position insulation, press firmly into place making certain that a complete unbroken seal is obtained.

Trowel

Use clean steel trowel. Apply each coat in full thickness before initial set. Avoid excessive troweling.

Brush or Glove

Use a good brush (suitable for water based paints), making strokes as long as possible over the surface. Apply with full brush and spread out evenly. Do not overwork.

Spray

Vapor-Safe Mastic may be airless spray applied. For spray equipment information, please consult your Spray Equipment Supplier. Average Viscosity Range: 100,000 – 120,000 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 (with ammonia added) or strong solvents such as chlorinated solvent (non-flammable) or xylol (flammable).

Data Reported From ASTM E84 Fire Test (Tunnel Test) - Coating, General Purpose H.B. Fuller Company

Surface Burning Characteristics

Surface	¼ inch (6.4 mm) Inorganic Surface Reinforced Cement Board
Flame Spread	5.3
Smoke Developed	25.1
Number of Coats	2
Rate per Coat (sq./ft. per gal.)	50

For industrial use only.

This data sheet is based on specifications, data and test results available to us at the time of publication.

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* If not applicable, within 6 months from date of supply.