



VAPORCHECK MASTIC WATERPROOFING

SPECIFICATION INFORMATION **VAPOR RETARDERS** DIVISIONS: 033000, 072600

Revised: 02-26-10

1.0 PRODUCT NAME

VAPORCHECK® MASTIC
Waterproofing Mastic

2.0 MANUFACTURER



Insulation Solutions®

Insulation Solutions Inc.
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Engineering Assistance
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3.0 PRODUCT DESCRIPTION

3.1 Basic Use:

VAPORCHECK® MASTIC is a single component, trowel grade, polymer modified, water based emulsion designed as a waterproofing and vapor barrier.

VAPORCHECK® MASTIC cures to form a tough, seamless, elastomeric membrane which exhibits excellent resistance to moisture and vapor transmissions. **VAPORCHECK® MASTIC** has been specifically formulated to act as a waterproofing and vapor barrier for use in conjunction with **VIPER®** under-slab vapor barriers.

VAPORCHECK® MASTIC is applied by trowel or putty knife to and around penetrations through **VIPER®** under-slab vapor barriers. It may also be applied to exterior vertical or horizontal surfaces of cast-in-place concrete, concrete masonry units, wood, metal, foam, OSB and ICFs. **VAPORCHECK® MASTIC** is suitable for both new and retrofit construction.

3.2 Composition & Materials:

VAPORCHECK® MASTIC is a latex modified asphalt clay emulsion with polymers and colloids to formulate a waterproof coating.

VAPORCHECK® MASTIC is 100% free of Asbestos, VOCs and HAPs.

Composition:

Asphalt	CAS 8052-42-4
Water	CAS 7732-18-5
Polymers	CAS Mixture
Clay	CAS 14808-60-7
Pigment Dispenser	CAS Mixture

3.3 Size:

VAPORCHECK® MASTIC is supplied in 5-gallon (18.9 L) pails and 28 oz. (.83 L) caulking tubes. **VAPORCHECK® MASTIC** has a shelf life of six months. The recommended storage temperature range is 70°F to 140°F (21°C and 60°C).

4.0 TECHNICAL DATA

4.1 Applicable Standards:

- American Society for Testing & Materials (ASTM)
- International Code Council (ICC)
- ASTM C 1306** Standard Test Method for Hydrostatic Pressure Resistance of a Liquid-Applied Waterproofing Membrane
- ASTM D 4541** Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
- ASTM C 836** Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course
- ASTM D 2939** Standard Test Methods for Emulsified Bitumens Used as Protective Coatings
- ASTM D 412** Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension
- ASTM E 96** Standard Test Methods for Water Vapor Transmission of Materials
- ASTM D 1970** Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
- ICC AC-29** Acceptance Criteria for Cold, Liquid Applied, Below-Grade, Exterior Dampproofing and Waterproofing materials

PROPERTIES	TEST METHOD	VAPORCHECK® MASTIC
Density		8.1 lbs/gallon (0.92 g/cm ³)
PH		> 9.5
Viscosity		1500 - 2000 cP
Hydrostatic Pressure Over Cracks	ASTM C 1306	Rapid Test: Passes @ 3.75 psi (25.8 kPa) Long Term Test: Passes @ 2.5 psi (17.24 kPa)
Dry Content	ASTM C 1250	> 64%
Low Temperature Flexibility and Crack Bridging	ASTM C 836 Sec. 6.7	No Cracking or Loss of Adhesion @ -14.8°F (-26°C)
Heat Flow Test		Liquefies @ 385°F (196°C), Softens @ 150°F (65°C)
Adhesion Strength to Poured Cement	ASTM C 836 Sec. 6.10	13.239 lbf/in. (1.49 N/m)
Adhesion Strength to Masonry	ASTM C 836 Sec. 6.10	12.092 lbf/in. (1.37 N/m)
Pull Adhesion to Poured Cement	ASTM D 4541	77.2 psi (532.3 kPa)
Pull Adhesion to Masonry	ASTM D 4541	106 psi (730.8 kPa)
Resistance to Water	ASTM D 2939 Sec. 15	No Blistering or Re-emulsification
Remain in Place During Application	ASTM C 836 Sec. 6.9	Final thickness of 0.0162 in. (0.411 mm) @ > 24 hrs.
Water Vapor Permeance	ASTM E 96	0.138 U.S. Perms (0.091 Metric Perms)
Extensibility After Heat Aging	ASTM C 836 Sec. 6.12	Pass 1/4 inch (6.35 mm) Stretch With No Cracking
Tensile Strength	ASTM D 412-98	41.3 psi (284.75 kPa)
Elongation	ASTM D 412-98	>1800%
Nail Sealability	ASTM D 1970-01	No Leaks
<p>Note: VAPORCHECK® MASTIC passes the requirements of ICC AC-29 Table 1 for the acceptance criteria of a cold, liquid-applied, below-grade, exterior dampproofing or waterproofing material.</p>		

4.2 Environmental Considerations:

VAPORCHECK® MASTIC is 100% free of VOCs, HAPs and Asbestos.

4.3 Physical Properties:

VAPORCHECK® MASTIC is a latex modified asphalt clay emulsion with polymers and colloids to formulate a waterproof coating. The gel consistency of this material allows for a heavy coating to be applied to steep or vertical surfaces with no sagging or running. **VAPORCHECK® MASTIC** forms an impervious moisture barrier that is not affected by normal alkali or acids found in soils.

5.0 INSTALLATION

5.1 Substrate Preparation:

The surface to which **VAPORCHECK® MASTIC** is applied must be structurally sound, clean, dry and free of dust, mud, loose mortar, sand, soil, frost or other loose materials. Dry or dusty surfaces should be hosed or mopped clean with water.

VAPORCHECK® MASTIC is recommended to be applied to dampened surfaces for better adhesion.

5.2 Application Temperature:

VAPORCHECK® MASTIC should NOT be applied if rain is eminent or during cold weather below 50°F (10°C).

VAPORCHECK® MASTIC cures in about 24 hours depending on the temperature and humidity.

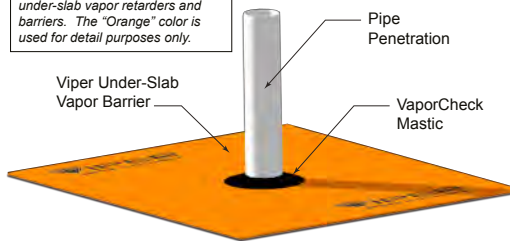
5.3 Application Procedure:

NOTE: **VAPORCHECK® MASTIC** needs to be stirred prior to use.

For pipe and rebar penetrations cut and install Viper under-slab vapor barriers tightly to penetration. Apply **VAPORCHECK® MASTIC** around penetration and over any exposed sub-surface.

For larger openings around penetrations, first install self-adhering **VIPER® VAPORPATCH**. Then seal remaining exposed areas with **VAPORCHECK® MASTIC**. Doing so provides a structurally sound, clean and dry area of adhesion to ensure a complete seal around the penetration.

Note: VaporCheck Mastic is suitable for both Viper VaporCheck and Viper VaporCheck II under-slab vapor retarders and barriers. The "Orange" color is used for detail purposes only.



VAPORCHECK® MASTIC has a thick consistency and should be applied by trowel or putty knife around all penetrations in one or two coats. It is recommended that **VAPORCHECK® MASTIC** be applied to an application thickness of 60 mils wet, which will yield 40 mils dry. These yields equate to an application rate of 25 square feet per gallon. The coating will be dry to the touch within 10 minutes, but should be allowed to cure for 4 to 24 hours after installation.

DO NOT backfill or cover for 24 hours after installation.

DO NOT allow more than 10 days to elapse before covering.

NOTE: **VAPORCHECK® MASTIC** is self priming and does not require the use of a primer. It has been tested compatible with all ABAA certified transition membranes and can be applied below and/or above these membranes.

5.4 Surface Temp. & Chemical Resistance:

VAPORCHECK® MASTIC is resistant to chemical attack and is very resistant to acids and salts. It should not be applied on surfaces that exceed 210°F.

5.5 Clean Up & Disposal:

VAPORCHECK® MASTIC can be cleaned while wet with soap and water. If the **VAPORCHECK® MASTIC** has cured; it can be removed with mineral spirits.

NOTE: DO NOT re-use container. DO NOT contaminate water, food or feed by storage or disposal. The open dumping of the container is prohibited. Consult Federal, State or Local disposal authorities for approved alternate procedures.

5.6 Storage & Limitations:

- DO NOT allow material to freeze.
- DO NOT thin the material.
- DO NOT heat material over 160°F.

6.0 AVAILABILITY & COST

VAPORCHECK® MASTIC is sold through construction supply houses across the United States and Canada.

VAPORCHECK® MASTIC current cost information can be obtained by calling our Corporate Office at 866-698-6562.

7.0 WARRANTY

INSULATION SOLUTIONS INC.® MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, NO GUARANTEE OF SATISFACTORY RESULTS FROM RELIANCE UPON CONTAINED INFORMATION OR RECOMMENDATIONS AND DISCLAIMS ALL LIABILITY FOR RESULTING LOSS OR DAMAGE.

8.0 MAINTENANCE

VAPORCHECK® MASTIC requires no maintenance once installed.

9.0 TECHNICAL SERVICES

Technical Information and detailed test results can be obtained by calling our Corporate Office at 866-698-6562.

10.0 FILING SYSTEMS

Additional Information can be obtained by calling our Corporate Office at 866-698-6562 or online at www.insulationsolutions.com.



Note: To the best of our knowledge, the specification chart on page one lists typical property values and are intended as guides only, not as specification limits. Insulation Solutions Inc.® makes no warranties as to the fitness for a specific use or merchantability of products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

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