



VERSION 20.0

# VAPOR RETARDERS

DIVISION 033000, 072600

## PRODUCT NAME

VaporCheck® Mastic Waterproofing Mastic

## MANUFACTURER

#### **ISI BUILDING PRODUCTS**

401 Truck Haven Road East Peoria, IL 61611 866.698.6562 / www.isibp.com

## PRODUCT DESCRIPTION

#### **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 underslab 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.

## **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 Disperser CAS Mixture

#### SIZE

Standard Size: 5-gallon (18.9 L) pails 28 oz. (.83 L) caulking tubes

# **TECHNICAL DATA**

# APPLICABLE STANDARDS American Society for Testing & Materials (ASTM)

**ASTM C 1306** Standard Test Method for Hydrostatic Pressure Resistance of a Liquid-Applied Waterproofing Membrane Under Concrete Slabs

**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 E 96** Standard Test Methods for Water Vapor Transmission of Materials

**ASTM D 412** Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension

**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

## **ENVIRONMENTAL CONSIDERATIONS**

VaporCheck Mastic is 100% free of VOCs, HAPs and asbestos.

#### **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 unaffected by normal alkali or acids found in soils.

## INSTALLATION

#### 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.

#### **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 twenty-four hours depending on the temperature and humidity.

#### **APPLICATION PROCEDURE**

VaporCheck Mastic needs to be stirred prior to use.

For pipe and rebar penetrations, cut and install Viper Vapor Barrier tightly to penetration. Apply VaporCheck Mastic around penetration and over any exposed subsurface.

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.

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 twenty-five square feet per gallon. The coating will be dry to the touch within ten minutes, but should be allowed to cure for four to twenty-four hours after installation.

DO NOT backfill or cover twenty-four hours after installation. DO NOT allow more than ten 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.

#### SURFACE TEMPERATURE AND 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.

#### **CLEAN UP AND 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.

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.

These are general installation instructions. Instructions on architectural or structural drawings should be reviewed and followed. Detailed installation instructions can be obtained by calling the manufacturer at 866.698.6562 or visiting www.isibp.com.

# WARRANTY

Warranty information can be obtained by calling the manufacturer at 866.698.6562 or visiting www.isibp.com.

# **MAINTENANCE**

Requires no maintenance once installed.

# **TECHNICAL SERVICES**

Technical information and detailed test results can be obtained by calling the manufacturer at 866.698.6562.

# FILING SYSTEMS

Additional information can be obtained by calling the manufacturer at 866.698.6562 or visiting www.isibp.com.

PROPERTIES TEST PROCEDURE (INDEPENDENT TEST FACILITY)	TEST METHOD APPLICABLE STANDARDS	RESULTS IP UNITS
DENSITY		8.1 lbs/gallon (0.92 g/cm²)
PH		> 9.5
VISCOSITY		1500 - 2000 cP
HYDROSTATIC PRESSURE OVER CRACKS	ASTM C 1306	Rapid Test: Passes at 3.7 PSI (25.8 kPa)
DRY CONTENT	ASTM C 1250	> 64%
LOW TEMP FLEXIBILITY & CRACK BRIDGING	ASTM C 836 SEC. 6.7	No Cracking or Loss of Adhesion @ -14.8°F (-26°C)
HEAT FLOW TEST		Liquifies @ 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 STRENGTH TO POURED CEMENT	ASTM D 4541	77.2 psi (532.3 kPa)
PULL ADHESION STRENGTH 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

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