

# **Polyurethane Moisture Barrier Adhesive**

Technical Data Sheet

### **Product Description**

Fortane MBA™ is a revolutionary one-component urethane adhesive membrane specifically formulated to be used as an adhesive moisture vapor retarder to reduce the transmission of water vapor from the subfloor for the applications where moisture could impact the performance of engineered wood flooring. Fortane MBA™ requires no pre-installation moisture testing and provides excellent tensile strength.

#### **FEATURES:**

- NO PRE-INSTALLATON MOISTURE TESTING REQUIRED.
- · California Proposition 65 Compliant
- · Extremely easy to trowel
- · Outstanding green strength
- · Contains no water

### **Typical Applications**

Fortane MBA™ is ideal for glue-down installations on all grades, types and sizes of engineered wood flooring that are designed to be installed using the glue down installation method that may require protection from damage due to subfloor moisture transmissions. When used as an Adhesive & Moisture Barrier, Fortane MBA™ reduces moisture to acceptable limits.

### **Subfloor Preparation**

Fortane MBA<sup>™</sup> can be used over the following subfloors: concrete, Portland cement patch, terrazzo, ceramic tile, APA approved wood panels, radiant heat flooring, and cement backer board.

Ensure that the subfloor is structurally sound, smooth, dry, properly cured, clean and free from dust, dirt, grease, oil, plaster, paint, old adhesive, wax, curing agents, sealers, cutback or other asphaltic-based residue and any other contaminants that could interfere with a good adhesive bond.

Concrete Subfloors: Must be cured a minimum of 28 days and pH must be between 7-10. If not, take corrective measures before proceeding. Pre-install moisture testing is not required when using the moisture control installation method. While moisture testing is not required when using Fortane MBA<sup>TM</sup> it is strongly suggested as an indicator of possible substrate problems. We refer you to the NWFA Installation Guidelines Chapter 3 moisture testing of substrates. We recommend the ASTM F-2170 relative humidity test and/or ASTM F-1869 calcium chloride test. Subfloor must have no pre-existing moisture conditions or failures from conditions of high alkali or hydrostatic pressure. The subfloor must be dry to the touch with no standing water or visible dampness, and must be prepared to receive flooring in compliance with ASTM F-710 which references readings over 3lbs or 75% on the calcium chloride test or the relative humidity test respectively require a proper moisture barrier. Concrete subfloors over a year old with high moisture readings are indicative of a chronic underlying moisture source problem resulting from hydrostatic pressure or other moisture related exclusions such as broken pipes, leaky plumbing, sink overflow, flooding, weather conditions or improper maintenance. Problems caused by these moisture related exclusions will not be covered by the limited warranty.

**Terrazzo:** All polishes and glaze compounds must be completely stripped and surface must be abraded by sanding. After sanding thoroughly vacuum (NO sweeping), to remove all loose dust particles. After vacuuming clean the entire substrate with mineral spirits and allow drying before installing the wood flooring.

Plywood and OSB Type Subfloors: All panels must be APA approved and securely fastened. Eliminate all squeaks and movement with SCREWS (not nails). Sand all high joints. Fill and patch low areas. Refer to wood flooring manufacturer for guidelines of moisture content difference between properly acclimated wood flooring and subflooring materials. (Typically should not exceed 4%)

Radiant Heated Subfloors: Fortane MBA<sup>TM</sup> is approved for use on hydronic system radiant heated subfloors, provided the wood flooring is approved over radiant heated subfloors. The system must be fully embedded in concrete. Lightweight or gypsum based topping must be primed for glue down installation. Turn off the heat 48 hours prior to the installation and leave the heat off until 48 hours after the installation is completed.









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### INSTALLING WOOD FLOORING FOR MOISTURE CONTROL APPLICATION:

- 1. Subfloor must be in compliance with "Subfloor Preparation" above before starting the installation.
- 2. Follow manufacturer's instructions for acclimation, floor layout and expansion space requirements. It is imperative the subfloor be flat, without dips, birdbaths or sudden rises (3/16" in 10' radius or 1/8" in 6' radius).
- 3. Use the trowel chart below to determine which trowel to use. The use of any other applicator or trowel will void all warranties and yield unsatisfactory results.
- 4. TROWEL THE ADHESIVE PARALLEL TO THE WOOD FLOORING IN 2-3 foot SECTIONS THEN IMMEDIATELY LAY WOOD INTO WET ADHESIVE BEFORE MOVING TO NEXT SECTION. ALWAYS SPREAD ADHESIVE BEYOND WHERE THE LAST ROW OF FLOORING STOPS TO ENSURE THERE ARE NO VOIDS BETWEEN STOPPING AND STARTING POINTS WHEN SPREADING THE ADHESIVE. 100% ADHESIVE TRANSFER IS REQUIRED FOR MOISTURE PROTECTION.
- 5. Repeat steps 3 4 until the job is complete.
- 6. It is the sole responsibility of the installer to determine the suitability and compatibility of the adhesive for the user's intended use.

### INSTALLING WOOD FLOORING FOR GLUE DOWN ONLY APPLICATION:

Concrete Subfloors must be cured a minimum of 28 days with a pH between 7-10. If not, take corrective measures before proceeding. Subfloor must be properly prepared to receive flooring in compliance with ASTM F710. Subfloor moisture levels must not exceed wood flooring manufacturer's guidelines. When subfloor moisture levels exceed wood manufacturer's limit, use the moisture control installation method.

- 1. Select the correct trowel for the wood you are installing from the trowel chart. Using the incorrect trowel will void this adhesive warranty.
- 2. This is a wet-lay adhesive. Do not spread more adhesive than can be covered within 30 45 minutes.
- Good transfer of the adhesive to the wood is critical. Periodically, pull back a board that has just been installed and make sure there is 90% adhesive transfer to the board.
- 4. Trowel tips will become worn down over time and must be changed to achieve correct coverage.
- 5. It is the sole responsibility of the installer to determine the suitability and compatibility of the adhesive for the user's intended use

NOTE: Do not set flooring into adhesive that has a dry skin. The "open time" of the adhesive will vary according to the temperature and humidity level-the higher the temperature and humidity level, the shorter the open time. CLEAN UP: Using Fortane CL™ adhesive remover, remove any Fortane MBA™ smudges from the wood floor surface as well as tools and equipment as soon as possible before the adhesive dries. Carefully use a soft cloth and Fortane CL™ to remove Fortane MBA™ while it is still wet to not damage the floor.

#### **Customer Service**

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#### Warranty

Royal Adhesives and Sealants offers a limited warranty for this product when used in accordance with printed specifications. A copy of the limited warranty can be obtained by calling technical service at 800 268-6111 or visiting www.fortane.com.

#### **Trowel Selection**

The proper notch trowel is very important in achieving satisfactory results with Fortane MBA $^{\intercal M}$ . Use of an incorrect trowel will void all warranties.









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Wood Floor	All Engineered Flooring	Engineered Plank/ Bamboo ½" or less and less than 7" wide	Engineered Plank/ Bamboo thicker than ½" or 7" or wider
Application	Adhesive and Moisture	Adhesive for subfloors with < 3	
	Barrier	lbs/1000 ft <sup>2</sup> / 24 hours or 75 %RH	
Required Trowel	V-Notch	V-Notch	Square Notch
	1/4"	1/4" \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3/16"
Coverage	30-35 sq.ft./U.S. gal	60-70 sq.ft./U.S. gal	35-45 sq.ft./U.S. gal

\*NOTE: Quantities shown above are approximate only. Actual coverage may vary according to substrate conditions and types of trowel used.

Technical Data			
Tensile Strength	> 300 psi		
Maximum Subfloor Moisture	NO MAXIMUM SUBFLOOR MVER CRITERIA		
Open time	65°F-75°F (18°C-24°C) 60-90 minutes Note: Open times will vary with temperature and humidity.		
Application Room Temperature	Between 65°F (18°C) and 90°F (35°C)		
Packaging	4 gal pail = 42 lb		
Flash Point	>152°F (>67°C)		
Color	Light green		
Cure Time	Light foot traffic after 8-10 hours Heavy foot traffic after 24 hours		
Shelf Life	One year from date of manufacture; stored at 50-80°F (10-26°C)		
VOC	<100 g/mL		
Acoustical Data	6" slab without drop ceiling: 50 dB IIC ASTM E 492-09 6" slab with a drop ceiling 66 dB STC ASTM E 90-09 69 dB IIC ASTM E 492-09		



