

Technical Data Sheet

Polyurethane Moisture Vapor Barrier and Wood Flooring Adhesive

Product Description

Fortane One™ is a revolutionary one-component urethane adhesive membrane specifically formulated to reduce the transmission of water vapor from the subfloor, act as a noise dampener, bridge cracks up to 1/8" and to provide a powerful adhesive bond.

FEATURES

- Powerful urethane bond strength
- Outstanding green strength
- Contains no water
- Zero VOC's
- Extremely easy to trowel
- Retains elasticity
- LEED® Qualified & California Proposition 65 Compliant
- Protects wood flooring against moisture vapor through the subfloor
- Bridges subfloor cracks up to 1/8"
- Provides excellent acoustical sound properties
- Safe to use on green products
- Reduces moisture transmission
- Solvent free



Typical Applications

Fortane One™ is ideal for glue-down installations on all grades of all types of engineered, solid or acrylic impregnated wood flooring and cork flooring that may require protection damage due to subfloor moisture transmissions. Fortane One™ reduces moisture to acceptable limits from a high of 12 lbs MVER or 97 %RH. Use Fortane One™ to manage moisture vapor when test results exceed 3lbs. per 1000 sq. ft. (in accordance with ASTM F-1869) / 75 %RH (in accordance with ASTM F-2170) or when concerns of future moisture are present.

Subfloor Preparation

Fortane One™ can be used over the following subfloors: concrete, Portland cement patch, terrazzo, ceramic tile, radiant heat flooring, and cement backer board.

Mechanical surface profiling is the only accepted method of subfloor preparation where warranties are issued. Acid etching is not recommended. Shotblast the floor to medium grit sandpaper texture to remove curing and surface contaminants. 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.

For application of Fortane One™ over ceramic tiles, it is necessary to grind the tile surfaces and clean thoroughly with an industrial vacuum cleaner.

Before starting the installation, carefully check that the subfloor is flat. Eliminate dips and crowns that exceed 1/8" in a 10 feet radius by patching or sanding/ grinding. Do not use product as a leveling agent. Where needed, use only Portland cement based patching and leveling compounds.

Chemical and Physical Properties

Tensile Strength	> 400 psi
Elongation	350%
Maximum Subfloor Moisture	12 lbs/ 1000 sq. ft./ 24 hours 97 %RH
Acoustical properties	IIC – 69 dB STC – 67 dB IIC (no ceiling) – 52 dB
Open Time	65°F-75°F (18°C-24°C) 60-90 min. NOTE: Open times will vary with temperature and humidity
Application Room Temperature	Between 60°F (15°C) and 90°F (35°C)
Packaging	3.5 gal pail = 47 lb (21 kg)
Flash Point	>200°F (>93.3°C)
Color	Brown
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)

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Repair all cracks in the subfloor greater than 1/8" before applying Fortane One™.

Newly poured concrete must be cured for a minimum of 42 days before application of Fortane One™.

Moisture testing must be performed in accordance to ASTM F-1869 – Calcium Chloride Test, or ASTM F-2170 – *in situ* RH Probe Test. Moisture levels must not exceed 12 lbs/1000 sq ft/ 24 hours (as per ASTM F-1869) or 97 %RH (as per ASTM F-2170).

Installation

1. Read and understand all Material Safety Data Sheets and the "Wood Flooring Adhesive Bond and Moisture Protection Warranties" prior to installation;
2. Follow all requirements provided by the wood flooring manufacturer, including those related to wood flooring acclimation, room temperature and humidity levels, environmental controls, expansion space and layout;
3. Follow the instructions for "Subfloor Preparation" above;
4. Use the recommended trowel to apply Fortane One™.
5. Apply Fortane One™ to the subfloor with recommended trowel and lay the wood floor onto the "wet" adhesive. When using Fortane One™ as a moisture barrier, 100% coverage of substrate and flooring is required. Periodically check to ensure coverage is achieved;
6. Rolling is recommended for all installations. Flooring that is not flat should be tacked, weighted, or rolled to ensure proper contact between the flooring and the subfloor.

7. Trowel tips will become worn down over time and must be changed to achieve correct coverage.
8. To maximize coverage it is recommended to trowel Fortane One perpendicular to the direction of the flooring.

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 One™ 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 One™ while it is still wet to not damage the floor.

Trowel Selection

The proper notch trowel is very important in achieving satisfactory results with Fortane One™. Use of an incorrect trowel will void all warranties.

Type of Wood Flooring	Recommended Trowel for Wood Floor	Approximate Coverage*
<ul style="list-style-type: none"> • 3/16" Fingerblock Parquet • Engineered Plank 5/8" or less • 1/2" – 5/8" Solid Wood 	3/16" x 1/4" V Notch	35 – 40 sq. ft/ U.S. gal
• 3/4" Solid Wood Plank, Shorts or Plywood	1/4" x 1/4" V Notch	30 – 35 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.

Health and Safety

Product contains isocyanates. Inhalation may be harmful. Use only in well ventilated area. Prolonged or repeated skin exposure may cause skin irritation. Do not swallow and avoid eye contact. If Fortane One™ comes in contact with skin, wash with soap and flowing water. Seek medical advice if irritation persists. If Fortane One™ comes in contact with eyes, flush with water for 15 minutes and seek medical advice. If adverse respiratory effects occur, move to a fresh air area and seek medical advice. If swallowed, do not induce vomiting and seek medical advice. For additional information, refer to Material Safety Data Sheet. **KEEP OUT OF THE REACH OF CHILDREN.**

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