E-CAP™ MOISTURE BARRIER SYSTEM INSTALLATION INSTRUCTIONS

E-Cap™ Moisture Barrier System was developed for slab-on-grade installations of resilient and wood flooring when a moisture barrier is required. Proper installation will reduce moisture transmission below 3 lbs. (1.36 kg). This easy to apply system consists of RedGard™ Waterproofing & Anti-Fracture Membrane used as the moisture barrier and E-Cap Moisture Barrier Encapsulator as the cement top coat. E-Cap self-levels in minutes. If a trowel applied skim coat is preferred, SpeedFinish™ Patching & Finishing Compound can be used instead of E-Cap Encapsulator. Both are formulated with Controlled Cure Technology™, that eliminates flooring installation problems of bond failure, crumbling, mildew and staining due to free-moisture found in other traditional underlayments.

AREAS OF USE

- Slab-on-grade concrete

USE UNDER THESE FLOOR COVERINGS

- Laminated flooring
- VCT
- Sheet vinyl flooring
- Carpet
- Wood, parquet

LIMITATIONS

- Do not apply to slab when slab temperature is below 55° F (13° C) minimum. Maintain the minimum slab temperature 72 hours after installation.
- Do not apply to overly dampened surfaces or surfaces subject to hydrostatic pressure.
- Do not use to fill existing expansion, control, construction, cold or saw-cut joints.
- Do not use as a wear surface.

SURFACE PREPARATION

General Site Conditions

The building should be closed up and acclimated with a minimum slab temperature of 55° F (13° C). In cases where the moisture transmission is greater than 12 lbs. (5.4 kg) based on ASTM F1869-98 Calcium Chloride testing method, contact our technical service department for information concerning these extreme conditions.

Surface Preparation

The slab must be fully cured (28 days minimum), firm, clean and free of all foreign matter that may prevent adhesion of the membrane to the surface including, curing compounds, sealers, adhesive residues, paint, oil, grease and waxes. Thorough scraping may be adequate, but it is recommended that a suitable mechanical method, such as scarifying or shot blasting be used to remove incompatible or stubborn materials. Shot blasting may also be required on highly polished surfaces. Insure that all loose debris is removed. Existing surfaces should be smooth and level and defects including cracks up to 1/2" (13 mm) repaired with SpeedFinish or other cement based patching material authorized by Custom Building Products prior to application.

MOISTURE BARRIER SYSTEM APPLICATION

Primer Coat

Dilute one (1) part RedGard Waterproofing & Anti-Fracture Membrane with (4) parts clean, cool water in a clean bucket mixed at low speed. Apply prime coat to the floor with a new, clean, stiff bristle push broom or commercial grade string mop and allow to dry. Drying time will depend on site conditions but is normally less than one hour.

Finish Coat

Apply RedGard undiluted using the appropriate size notch trowel held at a 45° angle. For a water transmission reading of up to 6 lbs./day/1000 sq. ft. (2.7 kg/day/93 m2) use a 1/16" x 1/16" x 1/16" (1.6 x 1.6 x 1.6 mm) square-notch trowel. For a reading between 6 - 12 lbs./day/1000 sq. ft. (2.7 - 5.4 kg /day/93 m^2) use a 3/16" x 5/32" (5 x 4 mm) V-notch trowel.

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While troweled membrane is still fresh, fill a 1/2" to 3/4" (13 - 19 mm) rough textured, synthetic roller with undiluted membrane, remove excess and roll out and flatten ridges. Apply a continuous, even film with overlapping strokes. Alternatively, an airless sprayer can be used to apply the finish coat. The sprayer should produce between 1900 to 2300 psi, with a flow rate of 1.0 to 1.5 gpm and have a tip orifice size of .025 to .029. Apply a continuous film with overlapping spray. Periodically check film thickness with a wet film gauge. Clean all spray equipment immediately after use. Initial membrane appearance is pink when wet and dries to a dark red color. After the undiluted coat has turned red with no blushing or light pink showing, about 1-1/2 to 2 hours, visually inspect the film for integrity and fill any voids or pinholes. If repairs are made, allow repaired areas to cure solid red before beginning encapsulation. A water transmission reading of up to 6 lbs. (2.7 kg) requires a minimum of 20 mils wet thickness. Water transmission between 6 - 12 lbs. (2.7 - 5.4 kg) requires a minimum 40 mils wet thickness. Depending on ambient conditions, membrane can take up to 12 hours to fully cure by turning solid red with no pink showing.

Encapsulation

E-Cap Moisture Barrier Encapsulator or SpeedFinish Patching & Finishing Compound can be used to encapsulate RedGard.

E-Cap Moisture Barrier Encapsulator: Mix 50 lb. (22.68 kg) bag of E-Cap with 6 - 6 1/2 quarts (5.7 - 6.1 L) of clean, cool water. Slowly add powder to water while mixing with a heavy-duty 1/2" (13 mm) electric drill and mixing paddle at 650 RPM. Thoroughly mix for 2 minutes to a lump-free consistency. Pour or pump, then spread with a long-handled gauged spreader. Will seek its own level during the first 10 minutes. Must be applied at least 1/8" (3 mm) thick in one application.
SpeedFinish Patching & Finishing Compound: Combine 10 lbs. (4.54 kg) of powder to 2-1/2 quarts (2.37 L) water. Slowly add powder to water while mixing with a low speed drill (less than 300 RPM) to a lump-free consistency. Using a smooth edged trowel apply SpeedFinish a minimum of 1/8" (3 mm).

COVERAGE

Primer Coat

Diluted RedGard Waterproofing & Anti-Fracture Membrane at 1 part membrane to 4 parts water is 400 to 500 sq. ft./ gallon (37 to 46 m^2/3.78 L). Therefore one gallon (3.78 L) of undiluted RedGard will make 5 gallons (18.9 L) of primer.

Finish Coat

Undiluted RedGard Waterproofing & Anti-Fracture Membrane:

80 sq. ft./gallon (7.43 m^2/3.78 L) or 400 sq. ft./5 gallons (37.2 m^2/19 L) at 20 mils wet film thickness when applied with a 1/16" x 1/16" x 1/16" (1.6 x 1.6 x 1.6 mm) square-notch trowel.

40 sq. ft./gallon (1.85 m2/3.78 L) or 200 sq. ft./5 gallons (37.2 m2/19 L) at 40 mils wet film thickness when applied with a 3/16" x 5/32" (5 x 4 mm) V-notch trowel.

Encapsulation

E-Cap Moisture Barrier Encapsulator:

50 sq. ft./50 lb. (4.6 m^2/22.68 kg) bag at 1/8" (3 mm) thickness.

SpeedFinish Patching & Finishing Compound:

30 sq. ft./10 lb. box (2.8 m^2/4.54 kg) at 1/8" (3 mm) thickness.

CURING

RedGard Waterproofing & Anti-Fracture Membrane

Normal drying time is between 1 1/2 - 2 hours. Depending on ambient conditions, drying time can take up to 12 hours.

E-Cap Moisture Barrier Encapsulator

Dries to a walkable hardness in 2 - 4 hours. Can install most floor coverings in 6 hours. Drying time can vary with temperature and humidity. For optimal assurance, run a calcium chloride test(s) for moisture transmission before applying vinyl or wood flooring.

SpeedFinish Patching & Finishing Compound

Allow to cure a minimum of 45 - 60 minutes prior to the installation of most floor coverings. Flooring requiring special adhesives can require up to 16 hours drying time. For optimal assurance, run a calcium chloride test(s) for moisture transmission before applying vinyl or wood flooring.

CLEAN-UP

Clean with water before material dries.

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