

# E-CAP™

## MOISTURE BARRIER ENCAPSULATOR

- Provides a smooth surface for resilient flooring installations when a moisture barrier is required
- Eliminates bond failure, crumbling, mildew and staining
- Install floor coverings in 6 hours
- Easy to apply - seeks its own level



Engineered with  
CONTROLLED CURE  
TECHNOLOGY™

### PRODUCT DESCRIPTION

E-Cap Moisture Barrier Encapsulator is part of a slab-on-grade moisture barrier system when used in conjunction with RedGard™ Waterproofing & Anti-Fracture Membrane. It's a self-leveling, cement-based encapsulator used to provide a smooth surface for resilient or wood flooring installations when a moisture barrier is required. Formulated with Controlled Cure Technology™ E-Cap eliminates flooring installation problems of bond failure, crumbling, mildew and staining due to free-moisture found in other typical underlayments.

### AREA 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. Ensure 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 primer 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 m<sup>2</sup>) use a 1/16" x 1/16" x 1/16" (1.6 mm x 1.6 mm 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<sup>2</sup>) use a 3/16" x 5/32" (5 mm x 4 mm) V-notch trowel. While troweled membrane is still fresh, fill a 1/2" to 3/4" (13 mm - 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. A 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.



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**Encapsulation:** Mix 50 lb. (22.68 kg) bag of E-Cap Moisture Barrier Encapsulator 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 1/8" (3 mm) thick in one application.

#### **CURING**

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.

#### **CLEAN UP**

Clean tools with water before material dries. Clean all spray equipment immediately after use.

#### **COVERAGE**

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

#### **PHYSICAL PROPERTIES**

**Packaging:** 50 lb (22.68 kg) bag

**Storage:** Store in a cool dry area.

#### **ITEM CODE**

LQECAP50

#### **SAFETY**

Contains Portland cement. Wear rubber gloves and eye protection. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes. Consult physician immediately. Do not breathe dust. This product contains one or more chemicals known to the state of California to cause cancer. This product contains free silica which may cause cancer or delayed lung injury (silicosis). Wear approved respirator in dusty areas.

KEEP OUT OF REACH OF CHILDREN.

DO NOT TAKE INTERNALLY.

#### **TECHNICAL DATA**

	<b>E-CAP SELF-LEVELING ENCAPSULATION</b>
Flow Time	10 minutes
Pot Life	30 minutes
Initial Set, ASTM C191 @ 70° F (21° C)	90 minutes
Final Set, ASTM C191 @ 70° F (21° C)	3 1/2 hours
Walkable Hardness (after final set)	2 - 4 hours
Drying time before floor covering installation	4 hours
Compressive Strength, ASTM C109	
1-day	2400 psi (168.7 kg/cm <sup>2</sup> )
28-day	4400 psi (309.3 kg/cm <sup>2</sup> )
Flexural Strength, ASTM C109	
28-day	1600 psi (112.5 kg/cm <sup>2</sup> )
Bond Strength, ASTM C109	
28-day	470 psi (33 kg/cm <sup>2</sup> )



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