

# APAC™

## ENCapSeal™

## Encapsulator, Sealer and Subfloor Moisture Treatment



### DESCRIPTION

*ENCapSeal* is a high-solids, fast-drying, polymer-based compound formulated to treat moisture in concrete slabs of up to 8 lbs. per 1,000 sq. ft. per 24 hours, and up to 90% relative humidity when applied in a double-coat method. It also serves to control elevated alkalinity (pH) on concrete slabs and isolate old adhesive residues in direct glue-down floor-covering applications.

### FEATURES & BENEFITS

- Isolates old carpet and cutback adhesive residue
- Seals surfaces and reduces moisture emission levels
- Alkali-resistant; acts as a pH blocker

### USES

For use under most types of floor coverings including: carpet, carpet tile, vinyl composition tile (VCT), feltback sheet vinyl, homogeneous and heterogeneous PVC sheet, solid vinyl tile, vinyl plank, linoleum flooring, cork flooring, parquet wood flooring, and glue-down engineered wood flooring. *ENCapSeal* is compatible with all APAC water-based adhesives. Consult Technical Services for floor coverings not listed and adhesives that are not water-based.

### AREAS OF USE

- Residential (rental apartments, condominiums and homes)
- Commercial (office buildings and cafeterias)
- Heavy commercial (shopping malls, grocery stores and department stores)
- Institutional (hospitals, schools, universities, libraries and government buildings)

### RECOMMENDED SUBSTRATES

- As an encapsulator/sealer – Exterior-grade plywood, Group 1, CC type; other approved wood underlayments (per the flooring manufacturer's recommendations); concrete and properly prepared cement terrazzo; cement-based self-leveling underlayments and patching compounds; and properly prepared carpet and cutback adhesive residues
- As a moisture treatment and pH control – New and existing concrete, above and on grade

Note: Consult Technical Services for installation recommendations regarding substrates and conditions not listed.

### LIMITATIONS

Do not install over any substrates containing asbestos. For interior installations only. Product can be applied over carpet adhesive residue and asphalt cutback adhesive residue as long as adhesive ridges have been completely scraped to the subfloor with only minor stains remaining.

All adhesive residues must be hard, firm and well-bonded. Do not install when the moisture vapor emission rate (MVER) exceeds 8 lbs. per 1,000 sq. ft. per 24 hours when using the anhydrous calcium chloride test (ASTM F1869), or when the relative humidity (RH) of the concrete slab exceeds 90% (ASTM F2170). Use only when the substrate temperature is between 50°F and 90°F. Product is not recommended for use if the pH is greater than 11. Do not use over pressure-sensitive, epoxy or urethane-based adhesive residues.

*ENCapSeal* is not recommended for concrete subfloors where hydrostatic pressure is seen or expected. In areas where there has been a history of flooring failures due to sporadic elevated moisture conditions, consult with Technical Services before proceeding with the installation of *ENCapSeal*. *ENCapSeal* is not an equal replacement for a high-performance, epoxy-based moisture-reduction barrier. All concrete slabs on grade must have an effective, functioning vapor barrier.

Concrete slabs have the tendency to move (expand, contract, warp and shift) due to curing, temperature changes, seasonal changes, ground settlement, heavy loads, vibration and the earth's natural forces. APAC does not warrant against concrete slab movement or against moisture coming up through cracks and joints.

*ENCapSeal* is not recommended as a primer for any self-leveling underlayment.

In installations of resilient flooring and carpet with nonporous backings, do not use wet-lay adhesives or wet-lay installation methods. Use only tacky installation methods.

Like other moisture treatment products, *ENCapSeal* is meant to treat moisture coming from below. It is not a waterproofing membrane and is not designed to protect flooring installations from water or excess moisture coming from above (as from floods, leaks and improper cleaning/maintenance procedures).

Follow the flooring manufacturer's guidelines for climate control settings (temperature and humidity). These conditions must be maintained by the building owner in order to ensure the overall performance and long-term success of the installation.

All floor-covering products must be installed in strict accordance with the manufacturer's written installation instructions as well as corresponding industry standards.

### SURFACE PREPARATION

All substrates must be structurally sound, dry, solid and stable. Substrate should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, old adhesive residues (other than carpet and cutback adhesive residues), and any other substance or condition that may prevent or reduce adhesion. All surfaces must be level, even and relatively flat. Refer to APAC's Surface Preparation Guidelines at [www.apacadhesives.com](http://www.apacadhesives.com).

Note: If concrete contains deep voids or is highly uneven or unlevel, preliminary leveling and/or patching before the application of *ENCapSeal* may be required. Contact Technical Services for product recommendations.

### MIXING

Note: Choose all appropriate safety equipment before use. Refer to Material Safety Data Sheet (MSDS) for more information.

- Ready to use; no mixing is necessary. (Settling may occur. If needed, mix until the product is smooth and consistent.)

### BOND TEST

In the center of the installation area, sweep and clean a 24" x 24" area. Apply three 2-inch strips of masking tape to the floor, overlapping them by 1 inch. Use a roller to apply a coat of *ENCapSeal* to the floor, running this application up onto the tape and allowing the area to dry to the touch. Apply a second coat and allow the area to dry for 24 hours. After 24 hours, carefully peel tape from the floor to the point where the tape, floor and *ENCapSeal* meet. Use a scraper to test whether *ENCapSeal* can be easily removed. Further test the bond by applying a 12-inch strip of duct tape to the area, snatching the tape from the floor and seeing if the *ENCapSeal* comes up with the tape. If *ENCapSeal* cannot be scraped or peeled from the floor, there should not be bonding issues. If *ENCapSeal* can be easily removed, the concrete must be mechanically abraded (sandblasted or shotblasted) in order to eliminate the sealer, curing agent and/or other bond breakers.

### INSTALLATION

Read all installation instructions thoroughly before installation.

1. Apply with a 1/4" nap roller, rolling in the same direction with even and consistent strokes.
2. Do not pour directly onto substrate surface.
3. Allow to dry 2 to 3 hours.
4. Apply second coat, rolling perpendicular to the first direction. Film thickness should be 6 mils or more after final application dries. Do not puddle *ENCapSeal*.
5. Clean tools with water while the product is still fresh/wet; use mineral spirits once dried.
6. Allow *ENCapSeal* to dry for 24 hours before patching.
7. Protect area from traffic and other trades until the final installation of flooring.

Note: Always install *ENCapSeal*, and then apply patching compounds. Drying times will vary based on porosity and jobsite conditions. Adhesives and patching products will often require extended drying times when applied over *ENCapSeal*.

### TECHNICAL DATA

Polymer type	Styrene acrylic
Percent solids	54% to 58%
VOCs (Rule #1168 California's SCAQMD)	19 g/L
Color	Light umber
Shelf life	1 year
Flash point (Tag)	> 200°F

Note: Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

### PACKAGING

Product Code	Size
94364221	4 U.S. gals. (15,1 L)

### TYPICAL TROWELS AND APPROXIMATE COVERAGES\*

#### With a 1/4" Nap Roller

- On smooth concrete, double-coat method: 150 to 200 sq. ft. per U.S. gal.
- On rough concrete, double-coat method: 125 to 175 sq. ft. per U.S. gal.

\* Coverages shown are for estimating purposes only. Actual jobsite coverage may vary according by application method, substrate, substrate conditions and actual thickness applied.

### INDUSTRY STANDARDS AND APPROVALS

LEED Points Contribution	LEED Points
MR Credit 5, Regional Materials*	Up to 2 points
IEQ Credit 4.2, Low-Emitting Materials – Paints & Coatings	1 point

\*Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**