



KEY EPOCON SL

DESCRIPTION

KEY EPOCON SL is a moisture vapor control system utilizing **KEY EPOCOAT** technology, a unique water based epoxy which allows the contractor to install polymer resin floor systems and other moisture sensitive floor coverings on new concrete (5 days old) without fear of moisture entrapment. **KEY EPOCON SL** is applied in a two coat application. **KEY EPOCOAT** is the primer/basecoat used in **KEY EPOCON SL**.

KEY EPOCON SL reduces the passage of water vapor and moisture through slabs on, above or below grade, thus eliminating delamination and blistering of adhesives, floor coverings, resin floor systems, epoxy terrazzo and coatings.

KEY EPOCON SL controls water vapor transmission levels for the installation of most floor covering systems, including VCT, sheet vinyl, carpets, wood, laminates, polymer resin flooring and epoxy terrazzo.

KEY ADVANTAGES

- Low VOC, water based, meets LEED criteria.
- Moisture vapor and water barrier.
- Unlimited moisture vapor tolerance.
- Compatible with most flooring systems.
- Does not support mold.
- Easy to install.
- Minimal downtime.

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F.
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.
- Key Epocon SL must be installed exactly as recommended by Key Resin.

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared as outlined in **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1**. Shot blasting is the **ONLY** approved method unless otherwise approved by Key Resin. Create a coarse texture surface profile minimum CSP-3. Prepared substrate must pass water absorption test, contact Key Resin for details. Work must be performed by trained or experienced resin flooring or epoxy terrazzo contractors. Consult with **Key Resin Technical Service** regarding any questions.

INSTALLATION

Mixing: **KEY EPOCOAT** is a two-component material. Part I and Part II are supplied in the correct mixing ratios. Always mix full or half units in the proportions supplied. Add one (1) part of **EPOCOAT PART I** to four (4) parts **EPOCOAT PART II**. During mixing optionally add 5% potable water to resin used for **PRIME** coat. Do **NOT** add water to resin used for **BODYCOAT** unless approved by Key Resin Technical Service. Filler sand must also be added to **BODYCOAT**. Thoroughly mix with a low speed drill and Jiffy blade for 3-4 minutes until uniform. Do not entrap excessive air. Scrape all sides and bottom of container to ensure thorough mixing.

Primer: Prime using **EPOCOAT** *optionally* thinned 5% with potable water. Apply to the properly prepared substrate with a squeegee at coverage rate of 160 ft² per gallon and backroll with short nap roller to achieve uniform coverage. Allow to cure hard enough for light foot traffic, about 3-4 hours at 75 degrees F.

Bodycoat: Add ½ gallon of 80-100 mesh sand (Key #730 sand) to a 1.25 gallon unit **EPOCOAT** during the mixing process, blending thoroughly. Apply mixed slurry with gauge rake or notched trowel at 18 square feet per gallon of slurry to achieve nominal 90 mils. Briefly allow to self-level then promptly back roll with a looped roller. A 1.25 gallon unit mixed with sand will cover 22 ft² at 90 mils. Broadcast surface with 30-60 mesh sand to excess (30-50 lbs/100 ft²) to achieve nominal 1/8 inch. Sweep and vacuum excess or loose sand after hardening (16-24 hours, depending on temperature).

Smooth Finish Option: Sand broadcast procedure may be deleted for certain types of flooring systems if smooth finish is desired, yielding a total system thickness of 90-100 mils. Approval is required.

Top Coating, Overlays: Apply top coatings or resin floor system directly over the Key Epocon SL broadcasted or smooth surface. Prime surface with appropriate Key Resin primer as required. For vinyl flooring and other floor coverings consult with manufacturer of floor covering.

Material	2-component epoxy
Density	12.70 lbs/gallon
VOC Content, Mixed	< 1 g/L
Volume Solids	59%
Flash Point: Part A	>212°F
Part B	170 °F
Mixing Ratio	1:4 by Vol.
Pot Life, Approximate	60 minutes @ 75°F (24°C)
Open to Foot Traffic	After 16 hrs. at 73°F (23°C)
Curing Temperature	Minimum 50°F
Full Cure & Max. Resistance	7 days
Hardness, ASTM-D-2240	70-75 Shore D
Compressive Strength ASTM-C- 579	6500 psi
Flexural Strength ASTM-C-580	2100 psi
Adhesion To:	
-New concrete (5 days)	110 psi
-Moist concrete (28 days)	550 psi
-Dry concrete (28 days)	580 psi
Temperature Resistance:	
a)Continuous:	
-Dry heat	140°F (60°C)
-Humid	113°F (45°C)
b)Intermittent:	
-High pressure water	185°F (85°C)
-Dry heat	149-185°F (65-85°C)

AVAILABILITY

Key Resin Products are available throughout the United States, Canada, and a number of other countries. Contact the **Key Resin Representative** in your area for details.

COLOR SELECTION

KEY EPOCON SL is available in neutral (off-white). Consult with Key Resin Technical Service on use of recommended pigment packs.

MAINTENANCE

After completing the application of **KEY EPOCON SL** and the topcoats or floor covering system, the installer should provide the owner with maintenance instructions relevant to the specific topcoats or floor covering. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

TECHNICAL SERVICE

Key Resin Company and **KRC Associates, Inc.** provide services and consultations on material selection, specifications, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales/Technical Representatives** are available to assist you. Telephone (888)943-4532 or visit www.keyresin.com.

WARRANTY

Key Resin Company ("Key") warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed, and applied in accordance with recommendations of **Key**. If any product fails to meet this warranty, the liability of **Key** will be limited to replacement of any non-conforming material if notice of such non-conformity is given to **Key** within (1) one year of delivery of materials. **Key** may in its discretion refund the price received by **Key** in lieu of replacing the material. No customer, distributor, or representative of **Key** is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of **Key**. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. **Key** reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. **KEY'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND KEY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**