



# KEY DIAMOND CHIP FLOORING

## DESCRIPTION

**KEY DIAMOND CHIP FLOORING** is a 1/8" moisture tolerant resin floor system which incorporates **KEY EPOCOAT** technology, a unique water based epoxy allowing for installation on new concrete (5 days old) or any concrete substrate emitting excessive moisture vapor without fear of moisture related blistering or delamination. **KEY DIAMOND CHIP FLOORING** is sealed with various topcoats to meet particular performance requirements.

**KEY DIAMOND CHIP FLOORING** is ideal for any project with a requirement for USGBC LEED certification. Typical uses include corridors, lobbies, light manufacturing areas, classrooms, cafeterias, general purpose use, and numerous other areas.



## KEY ADVANTAGES

- Low VOC, water based.
- Decorative appearance.
- Barrier against radon and other gases.
- Unlimited moisture vapor tolerance.
- May be installed over 5 day old concrete.
- Sanitary, 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.
- Confirm specific topcoats with Key Resin to meet project and performance requirements.

## COLOR SELECTION

**KEY DIAMOND CHIP FLOORING** is available in standard blends, solid colors and custom colors.

## 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 blast or coarse grit grind concrete slabs to create a coarse texture surface profile minimum CSP-3.

### INSTALLATION

**KEY EPOCOAT BASECOAT** is a two-component material. Do not alter mixing ratios in any way. Part I and Part II are supplied in the correct mixing ratios. Always mix a complete unit in the proportions supplied.

Stir material for approximately 3-4 minutes to form a homogenous consistency using a slow speed drill and "Jiffy" blade. Do not entrap excessive air. Scrape all sides and bottom of container to ensure thorough mixing.

Follow all additional mixing and application instructions as outlined in **KEY DIAMOND CHIP FLOORING** Installation Instructions document.

## TECHNICAL DATA

### Performance Properties

Material: Key Epocoat Resin	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, Shore D	70-75
ASTM-D-2240	
Compressive Strength	6500 psi
ASTM-C- 579	
Flexural Strength	2100 psi
ASTM-C-580	
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 REPRESENTATIVE** in your area for details.

## MAINTENANCE

After completing the application of **KEY DIAMOND CHIP FLOORING**, the installer should provide the owner with maintenance instructions relevant to the specific topcoats used and sanitation requirements of the owner, refer to Key Resin Technical Bulletins #3 and #3-A for initial recommendations. 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 REPRESENTATIVES** and **KEY RESIN TECHNICAL SERVICES** are available to assist you, CALL (888) 943-4532 or visit [www.keyresin.com](http://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.