



KEY COMMERCIAL “GREEN”

DESCRIPTION

KEY COMMERCIAL “GREEN” is a 3/16”-1/4” decorative resin flooring system consisting of 100% solids, zero VOC epoxy resin containing rapidly renewable soy content, trowelled base consisting of up to 30% recycled content, and colored quartz aggregate broadcast finish. The quartz topping is finished with clear catalyst-cured coats of resin available in a satin or gloss finish. The installed system can be textured or smooth as desired. Easy maintenance minimizes bacterial growth. The decorative quartz aggregates are available in a series of pre-blended patterns or solid colors.

Crack-free installations of **KEY COMMERCIAL “GREEN”** can be achieved when installed in conjunction with a **Key #580 Waterproofing and Crack Isolation Membrane**. An integral cove base can be installed in areas requiring seamless wall to floor coatings. For chemical resistant applications, specify **KEY COMMERCIAL-HP “GREEN”**.

KEY ADVANTAGES

- Decorative Appearance
- High Wear, Impact and Abrasion Resistance
- Low Maintenance
- Contributes Towards LEED Credits, Environmentally Friendly
- Zero VOC Resin Contains Rapidly Renewable Soy Content
- Contains up to 30% Recycled Content
- Chemical Resistant Finishes are Available

KEY CONSIDERATIONS

- On or below grade installation must have an efficient vapor barrier under the slab.
- Special treatments are necessary where hydrostatic pressure or moisture vapor transmission may be present.
- Substrate temperature must be a minimum of 55°F (Low temperature cure system available on request).
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.

TYPICAL USES

KEY COMMERCIAL “GREEN” is ideal for any project with a requirement for USGBC LEED certification. Typical uses include commercial kitchens, rest rooms, shower rooms, cafeterias, food and beverage processing areas, pharmaceutical manufacturing, laboratories, medical facility operating rooms, and numerous other areas.



TECHNICAL DATA SYSTEM PERFORMANCE PROPERTIES

Flammability	ASTM D-635	Self Extinguishing
Adhesive Strength	MIL-D-26413	420 psi
Fungus & Bacteria Growth	MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests.
Hardness	ASTM D-2240	80-84 Shore D
Bond Strength to Concrete	ACI COMM #403, Bulletin 59-43	300 psi minimum* (100% concrete failure) *Varies by concrete tensile strength
Resistance to Elevated Temperature	MIL-D-3134F §4.7.4	No slip or flow at required temperature of 158°F
Coefficient of Friction	ASTM D-2047	0.80 average (varies by sealer type)
Water Absorption	ASTM D-570	Nil
Thermal Shock Resistance	ASTM C-884	Passes
Abrasion Resistance	ASTM D-4060	32 mg average (varies by sealer type)
Impact Resistance	MIL-D-3134F 4.7.3	Withstands 16 ft/lbs. without cracking, delamination, or chipping
Compression Strength	ASTM C-579, 7 days	14,000 psi
Tensile Strength	ASTM C-307	2,400 psi
Flexural Strength	ASTM C-580	4,200 psi
Thermal Coefficient of Expansion	ASTM C-531	22x10 ⁻⁶

Neat Resin Performance Properties

Compressive Strength	ASTM D-695	13,000 psi
Ultimate Tensile Strength	ASTM D-638	4,200 psi
Tensile Elongation	ASTM D-638	6-8%
Flexural Strength	ASTM D-790	7,800 psi
Flexural Modulus	ASTM D-790	2.5x10 ⁵
Hardness	ASTM D-2240	65-85 Shore D

COMPOSITION

100% solids clear epoxy resin binder containing rapidly renewable soy content, silica fillers, recycled glass and decorative colored quartz aggregate. Epoxy, urethane or polyaspartic finish coats provide specific performance characteristics.

COLOR & AVAILABILITY

KEY COMMERCIAL "GREEN" is available in a variety of standard blends of colored quartz. Colors will not fade or wear thin.

Key Flooring Systems are available throughout the United States, Canada, and a number of other countries. Contact the **KEY REPRESENTATIVE** in your area for details.

APPLICATION

Concrete surfaces must be in sound condition and properly prepared prior to any **KEY RESIN COMPANY** flooring system installation. Refer to **Key Resin Company Technical Bulletin #1** for specific preparation guidelines and recommended moisture testing.

Installation of **KEY COMMERCIAL "GREEN"** involves several steps including priming, applying a troweled base coat, broadcasting colored quartz aggregate, grouting, and sealing. For specific installation guidelines consult **Key Resin Company's Installation Instruction Manual**.

MAINTENANCE

After completing the application of **KEY COMMERCIAL "GREEN"**, the installer should provide the owner with maintenance instructions. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

KEY COMMERCIAL "GREEN" is easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional. Long periods of heavy traffic may cause wear patterns necessitating a maintenance application of a finish coat. Refer to Key Resin Technical Bulletin #3 and #3-A for additional recommendations.

TECHNICAL SERVICE

KEY RESIN COMPANY and KRC ASSOCIATES, INC. provide services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **KEY RESIN REPRESENTATIVES** are available to assist you. **CALL (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.**