



KEY ULTRACON TG

DESCRIPTION

KEY ULTRACON TG is a heavy duty, aliphatic urethane-modified cementitious topping applied at 1/4" to 3/8" thickness. **KEY ULTRACON TG** is formulated with a unique non-yellowing aliphatic urethane binder resin that makes it ideal for use in aesthetically sensitive areas exposed to UV spectrum light. **KEY ULTRACON TG's** high impact resistance and excellent thermal shock and chemical resistance make it ideal for heavy traffic and low maintenance areas. **KEY ULTRACON TG** is a moisture vapor tolerant system making it the ideal solution for many moisture problems. **KEY ULTRACON TG** may optionally be blended with decorative aggregates followed with grinding and polishing to create a unique finished appearance.

KEY ULTRACON TG may be used both indoors and outdoors, and in areas where freeze/thaw thermal shock is a factor. The finish sealer may include a non-skid additive for a lightly textured surface to reduce slipping under most wet conditions. Excellent for rehabbing old floors, **KEY ULTRACON TG** provides a much stronger, longer lasting surface. **KEY ULTRACON TG** is the key choice for manufacturing areas, wet process areas, parking garage valet areas, high traffic pedestrian areas, and anywhere a highly durable system is desired.

KEY ADVANTAGES

- High Impact, Thermal Shock, and Wear Resistant
- Chemical Resistant
- Non-Yellowing, Color Stability with Exposure to UV Spectrum Light
- Almost Completely Odorless, VOC Compliant in All 50 U.S. States
- Will Not Support Growth of Fungus or Bacteria
- Moisture Vapor Tolerant System

KEY CONSIDERATIONS

- Should be applied when temperature is between 50°F and 80°F
- Substrate must be free from condensation or water contamination during application and cure
- Material requires mechanical mixing
- Substrate should be clean, dry, properly prepared concrete

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion to any successful resinous flooring system application. All substrates must be properly prepared to a minimum CSP-3 surface profile as outlined in **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1**. Work must be performed by trained or experienced contractor's or maintenance personnel. The **KEY RESIN COMPANY** technical service department is available to answer any questions.

MIXING

- Mechanical mixing is required. A KOL type mixer with paddle is recommended.
- Add Part I and Part II in running mixer and blend for 20-30 seconds maximum.

- Add Part III aggregate slowly to mix and blend for 1 to 2 more minutes.

INSTALLATION

KEY ULTRACON TG is installed using a 12"x 4" steel trowel. Pour mix and spread material side to side along floor. Considerable top pressure is needed for placement. Maintain a wet edge between mixes to insure seamless installation. Push back into previous mix and pull forward to establish thickness. With a lighter pressure, trowel from side to side to close up. The last few strokes should be in one direction. Contact **KEY RESIN** for additional installation details.

PERFORMANCE PROPERTIES

Tensile Strength ASTM-C-307	750 psi
Density ASTM-C-905	125 lbs/ft ³
Thermal Shock Resistance ASTM-C-884	Passes
Adhesion to concrete ACI Committee 403	>300 psi (100% concrete failure)
Hardness ASTM-D-2240	80-85 Shore D
Abrasion Resistance ASTM-D-4060	Depends on finish and aggregate type (CS-17 wheel, 1000 cycles)
Coefficient of Friction ASTM-D-2047	0.80 average, depends on finish and aggregate type
Impact Resistance MIL-D-3134F §. 4.7.3	Withstands 16ft./lbs., no cracking, delamination or chipping, 0.003 inches indentation
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
Elevated Temperature Resistance MIL-D-3134F §4.7.5	No softening or flow
Water Absorption ASTM-D-570	0.10%
Flexural Strength ASTM-C-580	1,400 psi
Flammability ASTM D-635	Non-burning
Coefficient of Thermal Expansion ASTM-C-531	1.1 x 10 ⁻⁵ per °F
Compressive Strength ASTM-C-579	5000 psi

CURING TIME

- 10-12 hours at 75°F for light foot traffic
- 18-24 hours for light vehicle traffic, 48-72 hours for complete chemical resistance
- If sealer is used, refer to sealer product data sheet

CLEAN-UP

- Clean equipment promptly with xylene or MEK, before material fully cures

AVAILABILITY

KEY RESIN COMPANY'S products are available throughout the United States, Canada, and a number of other countries. Contact the **KEY REPRESENTATIVE** in your area for details.

COLORS

- Colors as approved (contact your Key Representative for color selections)

MAINTENANCE

After completing the application of **KEY ULTRACON TG**, 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 ULTRACON TG 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 Bulletins #3 and #3-A for additional details.

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 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.