



TOP SHELF® EPOXY TG COMMERCIAL-RESIN | TH

Get Tough Jobs Won

KRETUS TOP SHELF® EPOXY TG COMMERCIAL-RESIN | TH is a 3-component, 100% solids trowel-applied epoxy mortar. It has high adhesion to concrete and a 24-hour return-to-service with 7 days to full cure.

ADVANTAGES

- meets USDA, FDA, EPA, and SCAQMD standards
- eligible for LEED points
- antibacterial
- high impact and traffic resistance
- low maintenance
- low odor
- waterproofing

SUGGESTED USES AND APPLICATION AREAS

- ADA-compliant ramps
- base coats
- over concrete, wood, metal, non-glazed tiles
- industrial, commercial, residential, and occupied spaces

KRETUS® SYSTEMS

- Color Chip
- Color Quartz
- Industrial Sand

For all KRETUS® systems, see kretus.com/systems.

FINISH AND COLOR

- gloss
- yellowish white

PRECAUTIONS AND LIMITATIONS

- **Application temperatures:** When temperatures increase, material cures faster. Material cures slower when temperatures decrease. If application temperatures are outside of those recommended, contact your KRETUS® Technical Representative. Apply material when temperature is decreasing—adhere to the KRETUS® Dew Point Calculation Chart available at kretus.com/project-planning.
- **Film thickness:** DO NOT apply a single coat thicker than 4 inches. DO NOT let material puddle on floor. This may cause white spots to appear when coating cures.
- **Mock-ups:** Complete samples and onsite mockups to ensure desired results are achieved.
- **Prime coat:** Top Shelf® Epoxy MVR is required. All concrete repairs must be completed before installing any system.
- **Weather conditions:** DO NOT apply under direct sunlight. DO NOT install under inclement weather conditions.

COMPONENTS

Single Kit

- Part A: Top Shelf® Epoxy Commercial-Resin, 1 gal
- Part B: Top Shelf® Epoxy TH, 1/2 gal
- Part C: TG - Trowel Grade for Epoxy, 2 bags (50 lbs each)

Larger sizes may be available through KRETUS® distributor.

SAFETY, TESTING, AND WARRANTY

- **Safety:** Personal protective equipment and safety conditions must be considered before using any product. Review all relevant and current documentation including Safety Data Sheets (kretus.com/safety-data-sheets).
- **Testing:** Before installation: Test and look for any unknown site conditions and/or defects. To ensure desired results are achieved, the system should be tested in a small area on site before full installation begins.
- **Warranty:** For warranty to be upheld, Pre- and Post-Job Checklists (kretus.com/project-planning) must be completed.

STORAGE AND APPLICATION TEMPERATURES

Ideal Storage Environment	Dry, Out of Direct Sunlight, 60-80°F
Material Temperature During Application	50-70°F and 5°F Above Dew Point
Minimum Substrate Temperature During Application	5°F Above Dew Point
Recommended Application Temperature	60-80°F, <90% RH (Relative Humidity)

Average Application Time

Ambient Temperature	60-80°F, <90% RH	50°F, 50 % RH	70°F, 50 % RH	100°F, 50 % RH
Working Time	20-25 mins	20-25 min	25 min	20 min
Recoat Window	8-24 hr	16-36 hr	8-24 hr	6-24 hr
Return to Service (Foot Traffic)	24 hr	36 hr	24 hr	24 hr
Full Cure (Vehicle Traffic)	7 days	7 days	7 days	7 days

All times recorded using 1-quart sample at ambient temperature of 70°F and 50% humidity. Top Shelf® Epoxy recorded using A-Resin in 1-quart sample.

SURFACE PREPARATION

Before installing any coating, the substrate must be sound, meaning all necessary repairs have been completed. It must be clean, dry, and free of any contaminants, moisture, materials, or particles that may hinder material's adhesion to the substrate. If applying directly over concrete, the substrate must be mechanically profiled to ICRI CSP 3. Different projects may require a different CSP. Contact your KRETUS® Technical Representative. Adhere to International Concrete Repair Institute current standards.

MIXING AND APPLICATION

Single Kit Mix Ratio	A:B:C = 1 gal:1/2 gal:100 lbs
Mixing Tool(s)	mortar mixer
General Mixing Directions	Mix Part A until uniform. Add Part B and mix for 30 seconds. Slowly add Part C and continue mixing for 2 minutes or until color and consistency are uniform.

Mixing Guidelines

Premeasure components to make sure you are using the correct mix ratio. Combine components according to mix instructions. Continue mixing until the coating's consistency is uniform. The coating must remain thoroughly mixed during the application.

Coverage Rates

Refer to the Top Shelf® Epoxy General Overview (kretus.com/product-general-overviews) and the applicable Installation Guide (kretus.com/installation-guides) for project-specific coverage rates.

Application Guidelines

- **Applying material:** Apply a prime coat of Top Shelf® Epoxy MVR at 200 square feet per gallon. Then pour mixed Top Shelf® Epoxy TG material into a screed box set to the required thickness. Move the screed box across the floor to spread the material in even rows. Follow behind with a hand trowel to smooth and compact the material. Every 500 to 1,000 square feet, finish with a stand-up power trowel to create a uniform surface.
- **Surface finishing:** Once the application is dry, and if no broadcast is used, lightly grind floors larger than 1,000 square feet or sand floors smaller than 1,000 square feet. Next, apply Top Shelf® Epoxy Grout at 200 square feet per gallon. A UV-resistant protective top coat, such as a Polyaspartic 92 or Polyurethane HP, may be applied after the grout coat.
- **Wet edge:** Keep a wet edge while applying products.
- **Spiked shoes:** Wear shoes with rounded metal spikes when walking on wet material.

PROPERTIES WHEN FULLY CURED

PROPERTIES	TEST METHOD	TYPICAL VALUES
Abrasion Resistance	ASTM D4060	40 mg loss
Abrasion Resistance with Anti-Slip	ASTM D4060	24-30 mg loss
Adhesion Strength	ASTM D4541	400 psi, concrete failure
Adhesion Strength	ASTM D4541	400 psi, vinyl failure
Adhesion Strength	ASTM D4541	500 psi, natural quartz failure
Adhesion Strength	ASTM D4541	450 psi, color quartz failure
Coefficient of Friction	ASTM D2047	Based on top coat texture (see kretus.com/anti-slip)
Compressive Strength	ASTM D695	13,700 psi
Flame Spread/ Critical Flux	ASTM E648	Class 1
Flame Spread/ Rate of Burning	ASTM D635	Self-extinguishing
Flexural Strength	ASTM D790	9,000 psi
Gloss, 60°	ASTM D523	90
Hardness, Shore D	ASTM D2240	85
Impact Resistance	ASTM D2794	120 in-lbs.
Indoor Air Quality	CA 01350	Compliant
Microbial Resistance	ASTM G21	Passes, 0 growth
Modulus of Elasticity	ASTM D790	5.0 x 10 ⁴ psi
Moisture Vapor Emission Rate	ASTM F1869	10 lbs
Moisture Vapor Permeance	ASTM E96	0.08 perms
Relative Humidity	ASTM F2170	80%
Tensile Elongation at Break	ASTM D638	5%
Tensile Strength	ASTM D638	7,800 psi
Thermal Coefficient of Linear Expansion	ASTM D696	18.0 x 10 ⁻⁶ in/in/°F
UV Resistance	ASTM D4587	Level 1

PROPERTIES	TEST METHOD	TYPICAL VALUES
Water Absorption	ASTM D570	<0.05%
Microbial Resistance	ASTM G21	Passes, 0 growth
Moisture Vapor Emission Rate	ASTM F1869	5 lbs
Moisture Vapor Permeance	ASTM E96	0.1 perms
Relative Humidity	ASTM F2170	<80%
Water Absorption	ASTM D570	<0.05%

Disclaimer: This document is intended for Kretus-trained professionals. It is not legally binding and does not remove the user's or specifier's responsibility to ensure materials are used appropriately for the project and jobsite. Always follow the most current industry standards and Kretus technical guidelines. **Note:** Subject to change without notice. For the latest version, visit kretus.com.