THOUGHTFULLY DESIGNED CONCRETE COATINGS



General Overview

TOP SHELF® EPOXY

ON-SITE APPLICATION TESTING

To ensure desired results are achieved, test the system in a small area on site before beginning any project.

SURFACE PREPARATION

Test and look for any unknown site conditions and/or defects. For testing requirements, review KRETUS® Pre- and Post-Job Checklists available at kretus.com/project-planning.

Before installing any KRETUS® product, substrate must be

- Clean: Remove any and all contaminates.
- **Profiled:** Mechanically prepare surface to CSP 3-5 (adhere to International Concrete Repair Institute's current guide for Concrete Surface Profiles). Each project may require a different CSP.
- Sound: Treat all joints (terminations and transitions) and random cracks.

NOTE: Coatings tends to pull away from free edges—termination points (anywhere concrete ends), joints, cracks, gutters, drains. Anchor joints may need to be added 6" from termination points. Joints and cracks may need to be expanded to 2x the width and 1x the depth. Edges around drains and gutters may need a deeper slope.

MIXING GUIDE

Review mix ratios and application methods on KRETUS® System Action Guideline.

Review KRETUS® Mixing Station Guide available at kretus.com/project-planning for general handling, storage, and preparation procedures. Careful measurements and thorough mixing are essential for a proper cure. Observe all mixing procedures and guidelines to assure a controlled and thorough chemical transition to a high-strength solid.

• **Mixing drill:** Use a variable-speed drill and Jiffler double-bladed mixer. When mixing terrazzo, slurry, or mortar epoxy, use high-RPM, high-torque. For all other epoxies, use a low-RPM, low-torque.

Mixing Instructions

- Mix Part A and B for 2 minutes.
- If Part A is pigmented: Mix Part A until color is uniform. Add Part B and continue to mix for 2 minutes.
- If adding fumed silica, Matting Additive, or colorant: Mix Part A and additive for 2-5 minutes. Add Part B and continue to mix for 2 minutes.
- If adding Metallic Pigment: Mix additive and Part A for 2-5 minutes. Allow color to set for 20 minutes to 24 hours before combining with Part B. Add Part B and mix for 1-2 minutes.
- If adding KRETUS® Solvent Cleaner, quartz, or Anti-Slip texture: Mix Part A and Part B for 2 minutes. Add additive and continue to mix for 1 minute.

SAFETY & CLEANUP

Review current Safety Data Sheet(s) and all relevant documentation before installing. Safety conditions and personal protective equipment must be considered before using any KRETUS® product.

For technical and safety data on TSE (Top Shelf® Epoxy), go to kretus.com/top-shelf-epoxy.

TSE General Overview, Rev. 9/27/22



TOP SHELF® EPOXY APPLICATIONS (IN ALPHABETICAL ORDER)

APPLICATION	PRODUCTS REQUIRED	MIX RATIO	METHOD/TOOLS	COVERAGE RATE*
Base or Body Coat, 1/8" self-leveler	Part A: A- or CR-Resin Part B: any hardener Part C: KRETUS® Quartz SG	A:B:C = 1 gal:1/2 gal:30 lbs	 gauge rake or 1/2" wide x 3/8" deep V-notched squeegee loop and spiked roller 	30-35 SF/KIT
Base or Body Coat, 3/16" self-leveler	Part A: A- or CR-Resin Part B: any hardener Part C: KRETUS® Quartz SG	A:B:C = 1 gal:1/2 gal:30 lbs	gauge rake and/or trowelloop and/or spiked roller	25-30 SF/KIT
Base or Body Coat, 1/4" self-leveler	Part A: A- or CR-Resin Part B: any hardener Part C: KRETUS® Quartz SG	A:B:C = 1 gal:1/2 gal:30 lbs	gauge rake and/or trowelloop and/or spiked roller	15-20 SF/KIT
Base or Body Coat, 1/4" trowel applied	Part A: A- or CR-Resin Part B: any hardener Part C: KRETUS® Quartz TG	A:B:C = 1 gal:1/2 gal:100 lbs	gauge rake and/or trowelloop and/or spiked roller	30 SF/KIT
Base or Body Coat, 1/2" trowel applied	Part A: A- or CR-Resin Part B: any hardener Part C: KRETUS® Quartz TG	A:B:C = 1 gal:1/2 gal:100 lbs	gauge rake and/or trowelloop and/or spiked roller	15 SF/KIT
Broadcast System: Base Coat Directly Under Broadcast	Part A: A- or CR-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	 Work in 200-500 SF increments: Before Q-grade broadcast, apply epoxy with 15-20 WFT-mil blade. Before all other broadcasts, apply epoxy with 8-12 WFT-mil blade. Wait 10-15 min. For quartz, broadcast to refusal. For chip, broadcast according to desired look. When coat is dry, sand any uneven surfaces. Sweep and vacuum loose media. 	Under Quartz/ Sand • XF- or F-grade: 210-300 SF/KIT • Q-grade: 120-160 SF/KIT Under Color Chip 1/8-1/4": 210-300 SF/KIT
Broadcast System: Cap Coat Directly Over Broadcast	Part A: A- or CR-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	flat rigid or flat flexible blade3/8" nap roller	Over Quartz/Sand: • XF-grade: 200-260 SF/KIT • F-grade: 170-230 SF/KIT • Q-grade: 120-170 SF/KIT Over Color Chip • 1/8": 190-230 SF/KIT • 1/4": 230-260 SF/KIT



TOP SHELF® EPOXY APPLICATIONS (CONTINUED FROM PAGE 2)

APPLICATION	PRODUCTS REQUIRED	MIX RATIO	METHOD/TOOLS	COVERAGE RATE*
Broadcast System Top Coat Directly Over Cap Coat	Part A: A- or CR-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	flat rigid or flat flexible blade3/8" nap roller	With Quartz • XF-grade: 285-315 SF/KIT or • F-grade: 285-315 SF/KIT • Q-grade: 120-170 SF/KIT With Chip • 1/8": 150-250 SF/KIT • 1/4": 200-300 SF/KIT
Countertop Body Coat, 8-12 mils	Part A: CAST-Resin Part B: AP	A:B = 1 gal:1/2 gal	8-12 WFT-mil bladenon-shed 3/8" nap roller	200-300 SF/KIT
Countertop Body Coat, 15-20 mils	Part A: CAST-Resin Part B: AP or EZ	A:B = 1 gal:1/2 gal	15-20 WFT mil bladenon-shed 3/8" nap roller	120-160 SF/KIT
Countertop Body Coat, 25-30 mils	Part A: CAST-Resin Part B: AP or EZ	A:B = 1 gal:1/2 gal	25-30 WFT mil bladenon-shed 3/8" nap roller	80-90 SF/KIT
Countertop Prime Coat, 8-12 mils (over Concrete or Wood)	Part A: CAST-Resin Part B: AP or EZ	A:B = 1 gal:1/2 gal	flat flexible/rigid bladenon-shed 3/8" nap roller	450-600 SF/KIT
Crack & Joint Repair NOTE: Prime Coat required before Crack and Joint application.	Part A: A- or COVE-Resin Part B: MVR-FC or MVR-EZ Part Q: quartz	A:B:Q = 1 gal:1/2 gal:25-35 lbs	 Install Prime Coat. While Prime Coat is still wet, trowel filler into crack/joint. Sprinkle quartz to saturation and smooth with trowel. Allow to dry. Grind smooth as needed. 	See Joint & Filler Rates at kretus.com/project-planning
Joint Reinforcement/ Flexible Membrane	Part A: A- or COVE-Resin Part B: MVR-FC or MVR-EZ fiber mesh	A:B = 1 gal:1/2 gal	 Follow Crack and Joint Repair. Apply epoxy with flat flexible blade or trowel. Lay mesh into wet material to saturate. Allow to dry. 	See Joint & Filler Rates at kretus.com/ project-planning
Metallic Prime Coat	Part A: A-Resin Part B: any hardener Part MP: Metallic Pigment	A:B:MP = 1 gal:1/2 gal:4 oz	flat flexible bladenon-shed 3/8" nap roller	300-450 SF/KIT
Metallic Body Coat, 15-20 mils	Part A: A-Resin Part B: any hardener Part MP: Metallic Pigment	A:B:MP = 1 gal:1/2 gal:8 oz	 15-20 WFT-mil blade non-shed 3/8" nap roller effects: leaf blower, back roll, or solvent spray 	120-160 SF/KIT

TSE General Overview, Rev. 9/27/22



TOP SHELF® EPOXY APPLICATIONS (CONTINUED FROM PAGE 3)

APPLICATION	PRODUCTS REQUIRED	MIX RATIO	METHOD/TOOLS	COVERAGE RATE*	
Metallic Body Coat, 25-30 mils	Part A: A- or CR-Resin Part B: any hardener Part MP: Metallic Pigment	A:B:MP = 1 gal:1/2 gal:8 oz	 25-30 WFT-mil blade non-shed 3/8" nap roller effects: leaf blower, back roll, or solvent spray 	80-100 SF/KIT	
MVR Coat, 12 mils— for low to moderate MVER, 10-15 lbs	Part A: A- or CR-Resin Part B: MVR-FC or MVR-EZ	A:B = 1 gal:1/2 gal	8-12 WFT mil blade non-shed 3/8" nap roller	210-300 SF/KIT	
MVR Coat, 16 mils — for high MVER, 15-20 lbs	Part A: A- or CR-Resin Part B: MVR-FC or MVR-EZ	A:B = 1 gal:1/2 gal	15-20 WFT mil blade3/8" nap roller	120-160 SF/KIT	
Prime Coat— for concrete in good condition	Part A: A- or CR-Resin Part B: any hardener Part SC: Solvent Cleaner	A:B:SC = 1 gal:1/2 gal:1 qt	flat flexible/rigid bladenon-shed 3/8" nap roller	450-600 SF/KIT	
Prime & Seal Coat— for weak/porous concrete	Part A: A- or CR-Resin Part B: any hardener Part SC: Solvent Cleaner	A:B:SC = 1 gal:1/2 gal:2 qt	flat flexible/rigid bladenon-shed 3/8" nap roller	600-750 SF/KIT	
Terrazzo	Part A: T-Resin Part B: any hardener desired aggregate	A:B = 5 gal:1 gal	 Apply coating with trowel. Place aggregates to create desired look. Allow to dry. Grind and/or polish smooth. 	Depends on aggregate size.	
Top Coat, 8-12 mils	Part A: A- or CR-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	8-12 WFT-mil blade non-shed 3/8" nap roller	210-300 SF/KIT	
Top Coat, 15-20 mils	Part A: A- or CR-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	15-20 WFT-mil bladenon-shed 3/8" nap roller	120-160 SF/KIT	
Top Coat, 25-30 mils	Part A: A- or CR-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	• 25-30 WFT-mil blade • non-shed 3/8" nap roller	80-100 SF/KIT	
Top Coat with Anti-Slip Texture	Part A: A- or CR-Resin Part B: any hardener Part SC: Solvent Cleaner Part T: AO 220 or AO 120 or Bead 100	A:B:SC:T = 1 gal:1/2 gal:1/2 qt:12 oz	5-7 WFT-mil blade3/8" nap roller	400-560 SF/KIT	
	Part A: A- or CR-Resin Part B: any hardener Part T: AO 80 or Glass 70	A:B:SC:T = 1 gal:1/2 gal:1/2 qt:12-14 oz	OR • dip-and-roll method with 3/8" nap roller		
	Part A: A- or CR-Resin Part B: any hardener Part T: AO 60 or Bead 50	A:B:SC:T = 1 gal:1/2 gal:1/2 qt:14-16 oz			



TOP SHELF® EPOXY APPLICATIONS (CONTINUED FROM PAGE 4)

APPLICATION	PRODUCTS REQUIRED	MIX RATIO	METHOD/TOOLS	COVERAGE RATE*
Top Coat with Anti-Slip Texture	Part A: A- or CR-Resin Part B: any hardener Part T: Tex 50	A:B:SC:T = 1 gal:1/2 gal:1/2 qt:16 oz	• 5-7 WFT-mil blade • 3/8" nap roller OR	400-560 SF/KIT
	Part A: A- or CR-Resin Part B: any hardener Part T: AO 36	A:B:SC:T = 1 gal:1/2 gal:1/2 qt:16-18 oz	dip-and-roll method with 3/8" nap roller	400-360 SF/ KIT
Top Coat with High Chemical Resistance NOTE: Contact KRETUS® before installation when temperatures are higher than 80°F.	Part A: CR-Resin Part B: MVR-FC or FAST	Use same Mix Ratio for any Top Coat application. NOTE: Do not add Solvent Cleaner—it will lower chemical resistance.	Use same Method/ Tools for any Top Coat application.	Depends on Method/Tools selected.
Wall Cove Prime & Cap Coat @ 4-6" high	Part A: COVE-Resin Part B: any hardener	A:B = 1 gal:1/2 gal	 1"-radius cove trowel brush margin or flat trowel non-shed 3/8" nap roller 	300-375 LF/KIT
Wall Cove Body Coat @ 4" high, 3/16" nominal thickness, 1" radius	Part A: COVE-Resin Part B: any hardener Part C: Quart CG	Small-batch mix recommended: A:B:C = 1 qt:1/2 qt:4-5 qts Large batch: A:B:C = 1 gal:1/2 gal:1 bag	 1"-radius cove trowel brush margin or flat trowel non-shed 3/8" nap roller 	60 LF/KIT
Wall Cove Body Coat @ 6" high, 3/16" nominal thickness, 1" radius	Part A: COVE-Resin Part B: any hardener Part C: Quart CG	Small-batch mix recommended: A:B:C = 1 qt:1/2 qt:4-5 qts Large batch: A:B:C = 1 gal:1/2 gal:1 bag	 1"-radius cove trowel brush margin or flat trowel non-shed 3/8" nap roller 	40 LF/KIT
Vertical Coat, Backroll	Part A: A- or CR-Resin Part B: AP or EZ Part FS: fumed silica	A:B:FS = 1 gal:1/2 gal:1.5-2 qt	• dip-and-roll method with 3/8" nap roller	300-340 SF/KIT
Vertical Coat, Spray	Part A: A- or CR-Resin Part B: AP or EZ Part SC: KRETUS® Solvent Cleaner	Small-batch mix recommended: A:B:SC = 1/2 gal:1 qt:1 qt Large batch: A:B:SC = 1 gal:1/2 gal:1.5-2 qt	 HVLP paint sprayer: 5-15 psi at air cap conventional paint sprayer: 45-55 psi at gun gun setup: 1.7 mm or equivalent 	500-600 SF/KIT

^{*}Coverage rates are for estimating purposes only. Factors such as waste, unusual/abnormal substrate conditions, and other unforeseen jobsite conditions may affect actual product yields and are the responsibility of the installer.



AGGREGATES & ADDITIVES

• Find Color Charts for Vinyl Color Chip, Color Quartz, and Top Shelf® Epoxy Colorant at kretus.com/color-charts.

PRODUCT	USE	COVERAGE RATE	MIX RATIO
Anti-Slip (kretus.com/anti-slip)	Increase impact and skid resistance.	Depends on application	See mix ratios for Top Coat with Anti-Slip Texture.
ESD Additive	Gives epoxy top coat ESD properties. See kretus.com/esd.	Depends on application	1 gal per 1.5-gal kit
Fumed silica	Thickens epoxy.	Depends on application	See mix ratio for Vertical Coat, Backroll.
Matting Additive	Gives epoxy a low-gloss finish.	Depends on application	4-12 lbs per 6-gal kit 1-4 lbs per 1.5-gal kit
Metallic Pigment	Gives epoxy a 3-D reflective look.	Depends on application	See mix ratios for Metallic applications.
Quartz, XF-grade, or Industrial Sand #60	Broadcast over Base Coat to improve slip resistance or provide decorative finish.	0.35-0.75 LB/SF	Do not mix if using as broadcast.
Quartz, F-grade, or Industrial Sand #30, #20	Broadcast over Base Coat to improve slip resistance or provide decorative finish.	0.25-0.50 LB/SF	Do not mix if using as broadcast.
Quartz, Q-grade, or I ndustrial Sand #20	Broadcast over Base Coat to improve slip resistance or provide decorative finish.	0.25 LB/SF	Do not mix if using as broadcast.
Solvent Cleaner	Reduces viscosity.	Depends on application	See mix ratios in Application table.
Top Shelf® Epoxy Accelerant	Speed working, recoat, and return-to-service times.	Depends on application	32 oz per 6-gal kit 8 oz per 1.5-gal kit
Top Shelf® Epoxy Colorant	Select Top Shelf® Epoxy Resins are available pre-blended in standard colors. Colorant packs can be combined with clear Top Shelf® Epoxy.	Depends on application	See kretus.com/color-charts.
Vinyl Color Chips, 1/8"	Broadcast over Base Coat to improve slip resistance or provide decorative finish.	0.15-0.25 LB/SF	Broadcast only— do not mix into coating.
Vinyl Color Chips, 1/4"	Broadcast over Base Coat to improve slip resistance or provide decorative finish.	0.10-0.15 LB/SF	Broadcast only— do not mix into coating.