

EPOXY REPAIR



TECHNICAL DATA

CS-33

TURBOKRETE® ALL-PURPOSE EPOXY REPAIR

DESCRIPTION AND USES

TurboKrete® All-Purpose Epoxy Repair is a two component, 100% solids, high strength, high modulus, moisture insensitive, non-sag epoxy system. It is used for repairing cracks, holes, and other types of damage to concrete or as a high strength adhesive for projects that require a non-sag epoxy with a fast curing time. Cartridge packaging allows injection into cracks and holes in vertical applications.

TurboKrete All-Purpose Epoxy Repair is also suitable for use as a bonding agent for almost any material, including metal, concrete, brick, wood, stone, block, and other substrates. It can be used on wet surfaces and even in complete water immersion.

PRODUCT FEATURES AND BENEFITS

- Easily dispensable from most caulking guns
- Rapid initial 3 hour cure at room temperature
- Moisture insensitive system
- May be used on damp surfaces

PRODUCT

DESCRIPTION	SKU
Concrete Gray	257395
Component A (resin) - White	
Component B (hardener) - Dark Gray	

PACKAGING

The two components are packaged in a single 9 ounce size, dual component cartridge. The cartridges come with one static mixer nozzle. Additional static mixer nozzles can be purchased separately.

The Rust-Oleum Heavy Duty Caulk Gun has a 26:1 ratio and will dispense material between 900 and 950 lbs. of force, making it easier to apply TurboKrete All Purpose Epoxy.

COMPANION PRODUCTS

DESCRIPTION	SKU
Heavy Duty Caulk Gun (26:1 ratio)	261292
Replacement Static Mixer Nozzle (3 per pack)	257397

PRODUCT APPLICATION

SURFACE PREPARATION

New concrete must cure 28 days at 70°F (21°C) before repairs are made. Remove all dirt, grease, oil, salt or other contaminants by washing surface with Krud Kutter® Cleaner Degreaser, commercial detergent or other suitable cleaner. Rinse thoroughly with fresh, clean water. Remove all loose, unsound, or deteriorated concrete. Smooth concrete surfaces should be sanded or wire brushed to provide a surface profile. For best results, cracks should be chased by grinder using a tuck point blade.

PRODUCT APPLICATION (cont.)

MIXING

The material is properly proportioned when dispensed from the cartridge. Before attaching the static mixing nozzle to the cartridge, dispense a small amount of material into a disposable container until both materials flow evenly from the cartridge. Attach the mixing nozzle to the cartridge and dispense material until a consistent, uniform color with no streaks is obtained. The static mixing nozzle will completely and properly combine the two components and deliver fully mixed ready-to-apply material. See illustrations on page 2. Use the Rust-Oleum Heavy Duty Caulk gun or any quality caulk gun for dispensing the TurboKrete material.

For small applications, where the entire cartridge of material will not be used, a portion of material can be dispensed directly from the cartridge without the nozzle onto a flat surface and mixed together by thorough hand mixing. Do not thin with any type of solvent. Save the plastic cap and plug to reseal the unused material in the cartridge.

APPLICATION

Apply only when air and surface temperatures are between 40-90°F (4-32°C). It is strongly recommended the material temperature be at least 50°F (10°C) prior to use. Colder material will require more effort to disperse material from the cartridge. Place the mixed material directly in the area to be repaired, then work the material smooth using a hand held steel trowel. Wet the blade of the trowel with 160 Thinner to help ease the final finishing of the material. The working time is 8 minutes after the material has been dispensed.

For larger repair areas, the end of the static mixing nozzle can be cut off to increase the nozzle opening to achieve maximum flow.

When using as an adhesive for anchor bolts, fill the hole to half of the depth, then insert the anchor bolt. See page 2. When using more than one cartridge, the nozzle can be transferred from the empty cartridge to the new one in order to minimize material loss. Before transferring the nozzle, be sure to first dispense a small amount of material from the new cartridge to ensure both components have an even flow, then immediately attach the nozzle.

Do not allow material to stand in the static mixing nozzle for longer than 5-6 minutes.

NOTE: The two component configuration of the cartridge results with total plunger travel to be only ½ the length of the cartridge to fully empty.

CLEAN-UP

Use 160 Thinner or xylene



TURBOKRETE®

ALL-PURPOSE EPOXY REPAIR

MIXING - ILLUSTRATION

Unscrew plastic cap and remove plug from threaded end of cartridge. Save cap and plug to reseal if the entire cartridge is not used.

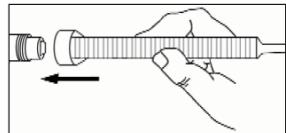
Place cartridge into a 10 oz. caulking gun. Rust-Oleum # 257396 Heavy-Duty Caulk Gun is recommended.



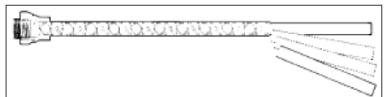
Dispense a small amount of adhesive into a disposable container until both materials are flowing evenly from the cartridge.



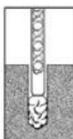
Attach mixing nozzle to the cartridge and dispense a small amount of material into the same disposable container until a consistent color, with no streaks is obtained.



Cut off the end of the nozzle for the desired flow rate.



ANCHORING INTO CONCRETE – SHORT TERM / LIGHT DUTY ANCHORING ONLY



Dispense the material from the bottom of the hole. Fill approximately $\frac{1}{2}$ " - $\frac{5}{8}$ " of the hole depth while slowly withdrawing the nozzle. Fill completely full for holes totally submerged in water.



Insert the threaded rod or rebar to the bottom of the hole while turning clockwise. The threaded rod or rebar should be free of dirt, oil, grease, or other foreign materials. Do not disturb or bolt-up until the minimum bolt-up time has passed.

PERFORMANCE CHARACTERISTICS

PROPERTY	RESULT
Tack Free Cure Time ASTM D2377	3 hours @ 75°F
Consistency ASTM C881	1/8" (3.2mm)
Gel Time ASTM C881	8 minutes
Bond Strength ASTM C882	2 days: 2,600 psi (17.9 MPa) 14 days: 3,000 psi (20.7 MPa)
Water Absorption ASTM D570	24 hours: 0.3%
Heat Deflection Temperature ASTM D648	145°F (62°C)
Linear Coefficient of Shrinkage ASTM D2566	0.001
Compressive Yield ASTM D695	1 hour: 4,600 psi (27.5 MPa) 4 hours: 6,950 psi (47.9 MPa) 8 hours: 11,400 psi (78.6 MPa) 7 days: 12,500 psi (86.2 MPa)
Compressive Modulus ASTM D695	7 days: 450,000 psi (3,103 MPa)
Tensile Strength ASTM D638	7 days: 7,250 psi (50.0 MPa)
Elongation at Break ASTM D638	1.5%
Mix Ratio	1:1
Recoat/Topcoat	Minimum of 3 hours (must sand with 150 grit before top coating to ensure proper adhesion)
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