



CEMENT & CONCRETE PRODUCTS™

CONCRETE RESURFACER

PRODUCT NO. 1131-40

DIVISION 3

Maintenance of Concrete
03 01 00
Concrete Restoration &
Repair 03 90 00
Concrete Resurfacers
03 92 00

PRODUCT DESCRIPTION

QUIKRETE® Concrete Resurfacer is a polymer modified Portland cement based product designed for making thin layer repairs to and for restoring the appearance of existing sound concrete surfaces.

PRODUCT USE

QUIKRETE® Concrete Resurfacer is a special blend of Portland cement, sand, polymer modifiers and other additives designed to provide a shrinkage compensated repair material. QUIKRETE® Concrete Resurfacer designed to provide a new, durable, and wear-resistant surface over worn or scaling concrete.

- Applying a single coat of QUIKRETE® Concrete Resurfacer will provide a new concrete finish to existing driveways, sidewalks or other outdoor concrete surfaces
- Utilizing an optional but recommended two-coat procedure will further improve the appearance and uniformity of new surfaces

SIZES

- 20 lb (9.1 kg) pails
- 40 lb (18.1 kg) bags and boxes

YIELD

• One 40 lb (18.1 kg) bag of Concrete Resurfacer will cover approximately 17 ft² (1.6 m²) of surface at a thickness of 1/4 in (6.4 mm) or approximately 90 ft² (8.4 m²) per bag when applied at the minimum thickness with a broom or squeegee.

COLORS

QUIKRETE® Concrete Resurfacer is cement gray in color and can be colored with QUIKRETE® Liquid Cement Color (#1317) or with other pigments approved for use in concrete and masonry products. QUIKRETE® Concrete Resurfacer has been designed to match typical concretes in color. Concrete colors vary. Compare color by mixing a small amount, placing it in an inconspicuous area, and allowing it to fully harden before proceeding with the entire project. Concrete color will also vary depending on water added and variations in the underlying concrete.

TECHNICAL DATA

APPLICABLE STANDARDS

ASTM International

- ASTM C109/C109M *Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)*
- ASTM C157 *Standard Test Method for Length Change of Hardened Hydraulic-Cement, Mortar, and Concrete*

QUIKRETE® Concrete Resurfacer (#1131-40) achieves the typical test results shown in Table 1 when tested in accordance with the appropriate ASTM standard test methods.

TABLE 1 QUIKRETE® CONCRETE RESURFACER (#1131-40) PERFORMANCE DATA ¹

Screedable consistency	Approx. 6.5 pt to 7 pt (3 L – 3.3 L)
Water needed per bag	
Flow rate (flow table, 10 drops)	105 to 115%
Compressive strength, ASTM C109 (air cured)	
1 day	1000 PSI (6.9 MPa)
7 days	3000 PSI (20.7 MPa)
28 days	4500 PSI (31.0 MPa)
Trowelable consistency	Approx. 5 pt (2.3 L)
Water needed per bag	
Flow rate (flow table, 25 drops)	105 - 115%
Compressive strength, ASTM C109 (air cured)	
1 day	1250 PSI (8.6 MPa)
7 days	3500 PSI (24.1 MPa)
28 days	5000 PSI (34.5 MPa)
Length change, ASTM C157 modified	
Stored in water	< +0.15%
Stored in air	< -0.15%
Brushable consistency	Approx. 6.5 pt to 7 pt (3 L – 3.3 L)
Water needed per bag	

¹ Standard conditions.

INSTALLATION

The specifications and information herein are provided for the cleaning, rehabilitating and resurfacing of aged, dirty and stained concrete driveways, sidewalks and floors. By following the step-by-step instructions provided, old, worn-out concrete surfaces can be transformed into attractive, new-looking durable surfaces.

Tools Needed

- 3500 PSI (24 MPa) pressure washer
- 2 to 4 ft³ (0.06 to 0.11 m³) mortar mixer with rubber scrapers in good condition (or 1/2 in electrical drill and Jiffy® mixer paddle for small jobs)
- Two 5 gal (19 L) buckets for water

- Floor broom (with long handle, sufficient to reach across the work area)
- Squeegee (with long handle)
- Round-ended trowels
- Water hose
- Tubs or buckets for carrying materials
- Duct tape
- Builder's paper for covering adjacent areas (plants, walls, concrete not to be resurfaced, etc.)

SURFACE PREPARATION

Old concrete must be rigorously cleaned to ensure proper adhesion of Concrete Resurfacer to the old surface. Follow these easy steps to prepare the surface:

Manual Cleaning of Debris from Surface

- Wash, sweep, scrape, chip or grind the surface to remove loose concrete and foreign materials such as paint, greasy residue, algae, mildew or other materials which may be stuck to the old surface

Pressure Washing

- Clean the surface using a 3500 PSI (24 MPa) pressure washer
NOTE: This step is essential in order to ensure a proper bond is achieved.
- Follow pressure washer manufacturer's instructions as to safe operation and effective use
- Hold the wand a few inches from the surface to strip away all foreign and loose materials

Penetrated oil or grease stains can be removed by acid washing, detergent washing and bleaching, following manufacturer's instructions. Acid washing can damage the existing concrete if not performed properly. Be sure to rinse thoroughly with water to remove traces of cleaning solutions. Incomplete rinsing will interfere with performance of the Concrete Resurfacer.

CONCRETE REPAIRS

Repairs to damaged concrete must be made before resurfacing can be initiated. This is to return the surface to its original condition. Repair and level to the surrounding grade all badly damaged areas using one of the concrete repair products made by the QUIKRETE® Companies such as Concrete Mix, Sand (Topping) Mix, Fast Setting Concrete, etc. Allow repair material to cure thoroughly before applying resurfacer.

Spalled and pitted surfaces may be repaired with Concrete Resurfacer mixed to a trowelable consistency.

CRACK REPAIR

- Cracks can be widened, cleaned and filled with Concrete Resurfacer mixed to a trowel-able consistency
- Existing control joints should be maintained

- Reflective cracking into the new surface cannot be completely prevented, especially if the slab does not contain adequate control joints or if slab settlement occurs
- Old expansion joints must be retained and new material installed to raise the expansion joints to the projected new height

CURB & EDGE REPAIRS

Repair the edges of broken concrete with QUIKRETE® Quick Setting Cement (#1240) mixed with QUIKRETE® Concrete Acrylic Fortifier (#8610) or QUIKRETE® FastSet™ Repair Mortar (#1241).

PREPARATION FOR SLOPE & SURFACE TYPE

No forms are needed for toppings less than 1/8in (3.2 mm).

- For thicker toppings, use form boards or other leveling/slope guides. The guides should be sturdily fixed in place, but removable after the job is finished
- Mask off surrounding areas
- Build up to the desired thickness in thin layers, each not exceeding 1/4 in (6 mm) in thickness

PLANNING THE PLACEMENT

- Section off the work into areas no larger than about 144 ft² (13.4 m²)
- Control joints and expansion joints can usually be used as natural breaking points. It is essential that control joints and expansion joints be maintained. Protect the joints to prevent spillage of the Concrete Resurfacer into these joints. Duct tape or weather-stripping is helpful for protecting joints and surrounding areas

MIXING

Mix in a 5 gal (19 L) bucket with a 1/2 in (12 mm) drill and paddle mixer. For a decorative effect, add Quikrete Liquid Cement Colors or Stucco and Mortar Color mix to the water following the instructions on the bottle. Use approximately 6 pt (2.8 L) of water per 40 lb (18.1 kg) bag. Add the powder to the water and mix for 3 minutes to a lump-free pourable consistency. Allow the mixed product to rest undisturbed for about 3 minutes, and then remix. If the remixed product is too thick, SPARINGLY add water to reach a placeable consistency. Larger quantities can be mixed using a Mortar Mixer.

Note - For a trowelable topping, reduce water content to about 5 pt (2.4 L) per 40 lb (18.1 kg) bag.

APPLICATION

Saturate the surface and remove any standing water from low places.

SQUEEGEE APPLICATION (< 1/8 in (3.2 mm))

- Pour, and then spread with a long-handled squeegee, a thin layer of mixed material onto the surface
- Finish off hard-to-reach corners and edges with a wallpaper brush. Make all brush and broom marks in the same directions
- Use the squeegee to scrub the material into the surface pores of the base concrete; then build to a nominal 1/8 in (3.2 mm) thickness

- For the recommended optional second coat, allow to remain undisturbed for 2 - 3 hours. Wait until the surface is able to withstand foot pressure; if there is an indentation when stepped on after 2 - 3 hours, then wait 1 - 2 additional hours and again check for sufficient strength. Gently saturate with a light mist of water and remove any standing water. One technique is to set the hose to a fine spray upward allowing the fine mist to fall
- The second coat must be applied within 24 hours of the first coat. Otherwise, the pressure washing technique used for preparation for the first coat must also be performed. Exercise caution to avoid washing off the first coat
- Mix the second coat to a slightly more wet consistency than the base coat (suggest an additional 1/2 - 1 pint of water per 40 lb (18.1 kg) bag). Spread the prepared second mix onto the dampened base coat
- Apply material with regular squeegee pressure to the desired thickness (1/16 in to 1/8 in (1.6 mm to 3.2 mm))
- Follow within 5 minutes with a brooming action. To give a professional appearance, be sure all the broom strokes are in the same direction. Make the brooming action a full stroke across the full distance of the current resurfacer work area without stopping

If desired, a concrete edger and groover can be used to give a finished look around the edges within 20 minutes of pouring. Keep the leading edge of the edger slightly raised

THICK APPLICATIONS (> 1/8 in (3.2 mm))

- Spray, pump or pour the prepared mix onto the old surface
- Force a thin dash coat of material into the surface using a trowel, broom or squeegee
- Build up to the desired thickness using successive 1/8 in (3.2 mm) layers. Wait until each coat has stiffened (typically 20 - 30 minutes at 70 degrees F (20 degrees C)) before applying the next coat of Concrete Resurfacer
- To achieve even, consistent patterns, apply the Concrete Resurfacer from side to side, beginning at one end of the area and working toward the other. Work from one expansion or control joint to the next, screeding to a smooth uniform thickness before stopping. Continue in this manner until the entire job has been evenly completed
- If the mix becomes too stiff to use properly, a very small amount of clean water will return it to its original consistency. Only add additional water one time Smooth with a magnesium darby or float
- Apply a final broom finish or plastic trowel finish immediately. Finishing operation must be completed within 20 minutes in hot weather, over 80 degrees F (26.6 degrees C). Finishing time will be extended in cool weather

Note - Unlike regular concrete, Concrete Resurfacer should be finished before it hardens. Edge and groove with conventional tools for a professional finished look. Grooves must be made over old grooves. Expansion joints must be maintained.

PRECAUTIONS

- This product helps to provide a consistent surface appearance. However, unlike paint or a 2 in concrete layer, variations in the underlying concrete and repairs will reflect minor shadows up through the resurfacer.
- Temperature, wind velocity, direct sunlight and shading, as well as dampness or dryness of the surface receiving the material, have an effect on the finished depth of color
- Do not apply unless temperature of dampened surface will be above 50 degrees F (10 degrees C) for 8 hours after placement and will not be below freezing for 24 hours after placement
- Concrete to be resurfaced must be kept damp. If the surface to be coated becomes dry, re-dampen before proceeding
- Low areas must be swept to remove standing water
- Old cracks can reappear due to movement in the base concrete
- Mix no more material than can be used in 20 minutes
- Apply only to bare concrete. Do not apply to painted or sealed surfaces
- Do not apply to surfaces coated with QUIKRETE® Concrete Bonding Adhesive (#9902)
- Mix only with potable water; do not use QUIKRETE® Concrete Acrylic Fortifier (#8610)
- Do not apply product over acrylic or polyurethane crack fillers, including but not limited to QUIKRETE® Concrete Crack Seal, QUIKRETE® Blacktop Crackseal, QUIKRETE® Concrete Repair or QUIKRETE® Self-Leveling Polyurethane Sealant

WORKING TIME

Concrete Resurfacer has a working time of about 20 minutes at 73 degrees F (23 degrees C). In hotter weather, the working time will be reduced. Use cold water to increase working time. Under normal conditions, no special curing is required. Wait 6 hours before allowing foot traffic on the surface. Allow 24 hours for vehicle traffic.

ADVERSE TEMPERATURE CONDITIONS

Cold weather: Do not apply unless the temperature will be above 50 degrees F (10 degrees C) for at least 8 hours. In cool weather, use warm water (approximately 120 degrees F (49 degrees C)) to speed setting time. With cool temperatures, allow longer curing time prior to use.

Hot weather: Special procedures are required when temperatures will exceed 90 degrees F (32 degrees C). When possible, work in shaded areas during cool times of the day. Use cold water to dampen the surface prior to application. Store product in a cool area prior to use. Mix with ice water to reduce product temperatures.

CURING

Moist curing should begin as soon as product is hardened enough to not be damaged by a gentle mist of water. Continue moist curing for 24 - 48 hours prior to use. Protect from rain for at least 8 hours. Do not cover unless immediate rain protection is necessary. During extreme wind and sun conditions, moist cure with a water fog spray twice daily for 24 - 48 hours after application. When covering, use sheet plastic.

Note: - Color may be affected where plastic comes into direct contact with resurfacer.

WARRANTY

NOTICE OF LIMITED WARRANTY: The QUIKRETE® Companies, Inc. warrant this product to be of merchantable quality when used or applied in accordance with the instructions hereon. This product is not warranted as suitable for any purpose or use other than the general

purpose for which it is intended. Liability under this warranty is LIMITED to the replacement of its product (as purchased) if found to be defective, or at the shipping companies' option, to refund the purchase price. In the event of a claim under this warranty, notice must be given to The QUIKRETE® Companies, Inc. in writing at: One Securities Centre, 3490 Piedmont Road, Suite 1300, Atlanta, GA 30305. **THIS WARRANTY IS ISSUED AND ACCEPTED IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND EXPRESSLY EXCLUDES LIABILITY FOR CONSEQUENTIAL DAMAGES.**