



SELF-LEVELING FLOOR RESURFACER & FAST-SETTING SELF-LEVELING FLOOR RESURFACER

PRODUCT NOS. 1249-50, -51

DIVISION 3

Concrete Topping
03 53 00



PRODUCT DESCRIPTION

QUIKRETE® New & Improved Fast-Setting Self-Leveling Floor Resurfacer #1249-51 & Self-Leveling Floor Resurfacer #1249-50 are self-finishing floor toppings and underlayments specially formulated to work without troweling.

PRODUCT USE

QUIKRETE® New & Improved Fast-Setting Self-Leveling Floor Resurfacer #1249-51 & Self-Leveling Floor Resurfacer #1249-50 produce a smooth surface ready for the installation of ceramic tile, resilient flooring, carpet or other finishes. QUIKRETE® Fast-Setting Self-Leveling Floor Resurfacer can also be used as a wear surface for light duty industrial floors. Following are typical substrates:

- Precast concrete plank
- New concrete floor slabs with unacceptable finishes
- Existing concrete floors with damaged finishes
- Over wood floor systems, utilizing expanded metal lath reinforcement
- Fast-Setting Self-Leveling Floor Resurfacer #1249-51 may be used for outdoor service

SIZES

- 50 lb (22.7 kg) bags

YIELD

- At a pourable consistency, a 50 lb (22.7 kg) bag will provide 0.50 cu ft (14 L) of material. At 1/4" (6.4 mm) thick, each 50 lb (22.7 kg) bag will cover approximately 25 ft² (2.3 m²) of flat surface.

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 C348 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars
- ASTM C1708 Standard Test Methods for Self-leveling Mortars Containing Hydraulic Cements

PHYSICAL/CHEMICAL PROPERTIES

Typical results obtained with QUIKRETE® Self-Leveling Floor Resurfacer, when tested in accordance with ASTM C1708, are shown in Tables 1 & 2.

Table 1 – Compressive & Flexural Strength – Typical Values

C109 Compressive	Self-Leveling	Fast-Setting
Curing time	#1249-50	#1249-51
24 hours	-	1800 psi (12.4 MPa)
7 days	1000 psi (6.9 MPa)	4000 psi (27.6 MPa)
28 days	2000 psi (13.8 MPa)	5500 psi (37.9 MPa)
C348 Flexural	Self-Leveling	Fast-Setting
Curing time	#1249-50	#1249-51
28 days	600 psi (4.1 MPa)	1200 psi (8.3 MPa)

Table 2 – ASTM C1708 Properties – Typical Values

	Self-Leveling	Fast-Setting
Flow	120-140 mm	120-140 mm
Final Set Time	> 10 hours	~ 90 Minutes
Length Change	< ±0.10%	< ±0.10%

INSTALLATION

SURFACE PREPARATION

- Large holes should be repaired. Repair holes deeper than 1 inch (25 mm). Repair 1/2" (13 mm) holes greater than 3" x 3" (76 x 76 mm). Remove all unsound concrete and prepare repair surface appropriately. Make repairs with QUIKRETE® FastSet™ Non-Shrink Grout (No. 1585-09) or FastSet™ Repair Mortar (No.1241) or other appropriate product. Allow repaired areas to cure overnight before final preparation.
- Clean the concrete slab or floor of all dirt, dust, oil, grease, paint and water soluble material.

- Seal all perimeter openings to retain leakage. These dams should be able to retain resurfacer material at a height greater than the finished floor elevation.
- A final cleaning is required prior to priming. In most cases, shotblasting is the preferred final cleaning method.
- Acid etching, solvents and sanding are not acceptable means for preparing the substrate.
- If installing over wood floors, reinforce to prevent flexing of the floor.
- Prime the clean dry floor surface with QUIKRETE® Concrete Bonding Adhesive #9902. The concrete bonding adhesive should be diluted with water, 1 part concrete bonding adhesive to 2 parts water, before application to obtain the proper penetration into the subfloor. Dense new and precast concrete requires 1 coat of diluted concrete bonding adhesive. Old, excessively porous concrete requires 2 coats

Note - Diluted concrete bonding adhesive primer should be brushed or sprayed on the subfloor in such a manner as to produce a uniform coating. No pools or puddles should be present when resurfacer is applied. Allow the primer to dry to the touch (about 1 - 2 hours depending upon conditions).

MIXING

- **WEAR IMPERVIOUS GLOVES, such as nitrile** when handling product.
- For smaller quantities, a 5 gallon (19 L) bucket with a ½" (13 mm) drill and paddle mixer may be used to mix the material.
- Mix resurfacer powder into water by mechanical means for 4 minutes at 250 to 500 RPM. Depending upon the amount to be mixed, either a semi-automated mixer or a heavy duty electric drill equipped with a suitable whisk or paddle can be used
- **DO NOT ADD WATER TO DRY POWDER.** Always add the resurfacer powder to the water to prevent clumping. The usual amount of mixing water per bag is 5 qt (4.7 L) for Self-Leveling Floor Resurfacer and 4 qt (3.8 L) for Fast-Setting Self-Leveling Floor Resurfacer. Higher water contents can cause separation, reduction of strength and shrinkage of the cured resurfacer. Mix until the material is thoroughly blended and free of lumps

APPLICATION

- Small areas may be placed by pouring from a 5 gal (19 L) bucket or suitable container. Larger areas should be resurfaced with continuous pumping equipment
- Place the resurfacer by pouring directly from the mixing container. Placing should be done as one continuous operation. No screeding or troweling is required. The mixed compound remains fluid for approximately 20 minutes
- Pour material in continuous strips about one foot (31 cm) in width across the narrow section of floor. It levels itself to a smooth surface. Pour the next strip adjacent to the edge of the previously placed material. Adjacent strips should be poured within 15 to 20 minutes to ensure a smooth and continuous surface.
- Continue the work without breaks until the area is covered. Self-Leveling Floor Resurfacer can be installed from 5/8" (15.9 mm) thick to a feather edge and Fast-Setting Self-Leveling Floor Resurfacer

from 1" (25.4 mm) thick to a feather edge, although a 1/4" (6.4 mm) minimum is required for heavy traffic areas

- For areas deeper than 1" (25.4 mm), apply Self-Leveling Floor Resurfacer in layers no greater than 1" (25.4 mm) each. Prime the floor between layers with QUIKRETE® Concrete Bonding Adhesive (No. 9902), diluted per package instructions. Alternately, Fast-Setting Self-Leveling Floor Resurfacer may be extended up to 50% with (-3/8") pea gravel in areas deeper than 1" (25.4 mm). For best results, apply a final ¼" - 1" (6-25.4 mm) layer without extension.
- Clean all mixing equipment thoroughly with water
- Fast-Setting Self Leveling Floor Resurfacer (No.1249-51) may be used for outdoor service; the standard-setting product may not. Self-Leveling Floor Resurfacer provides a smooth surface which may be too slippery when wet by rain. Many outdoor applications require the surface to slope for drainage, however Self-leveling Floor Resurfacer levels and does not provide that slope.

PRECAUTIONS

- **WEAR IMPERVIOUS GLOVES, such as nitrile** when handling product.
- Areas to receive QUIKRETE® Self-Leveling Floor Resurfacers should be protected from the sun and wind which can cause a rapid moisture loss leading to incomplete hydration and potential cracking
- Do not bridge control and expansion joints
- Product is not suitable for placement over glossy surfaces, such as tile.
- Protect the leveled floor until resurfacer has developed sufficient strength to withstand foot traffic. Self-Leveling Floor Resurfacer may be walked on within 1 - 2 days. Fast-Setting Self-Leveling Floor Resurfacer may be walked on within 6 hours, depending on conditions.
- Allow 24 - 48 hours before applying finished flooring over Fast-Setting Self-Leveling Floor Resurfacer and 1 - 2 weeks for Self-Leveling Floor Resurfacer
- Before laying floor tiles and other materials, test for excessive moisture by taping a square polyethylene sheet tightly against the surface. After several hours, examine the sheet for entrapped moisture. If condensation exists, flooring should not be applied until this test results in a dry surface. Continue monitoring moisture content. Follow the recommendations of the manufacturer of tiles and other finished flooring.

WARRANTY

The QUIKRETE® Companies, Inc. warrant this product to be of merchantable quality when used or applied in accordance with the instructions hereon. The 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) 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 in writing at One Securities Centre, 3490 Piedmont Rd., 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.