

# FASTSET™ SELF-LEVELING FLOOR RESURFACER

PRODUCT NO. 1247-58 (CAN)

**DIVISION 3**

03 53 00 Concrete Topping  
03 54 16 Hydraulic Cement Underlayment

## PRODUCT DESCRIPTION

High Performance Cement (HPC) FastSet™ Self-Leveling Floor Resurfacer (No. 1247-58) is a self-finishing interior & exterior floor topping and underlayment specially formulated to work without troweling.

## PRODUCT USE

HPC FastSet™ Self-Leveling Floor Resurfacer can be used over precast floor slabs, new concrete, floor slabs damaged by weather, poured-in-place slabs with unacceptable finishes, or existing floors, and is designed to meet exacting tolerances. This material can be used over wood floor systems, utilizing expanded metal lath reinforcement.

## SIZES

- 22.7 kg (50 lb) bags

## YIELD

At a pourable consistency, a 22.7 kg (50 lb) bag will provide approximately 12.7 L (0.45 ft<sup>3</sup>) of material.

## TECHNICAL DATA

### APPLICABLE STANDARDS

- ASTM C109 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
- ASTM C191 Standard Test Method for Time of Setting of Hydraulic Cement by Vicat Needle
- ASTM C348 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars
- ASTM C1708 Standard Test Methods for Self-leveling Mortars Containing Hydraulic Cements
- ACI 305R Guide to Hot Weather Concreting
- ACI 306R Guide to Cold Weather Concreting

## PHYSICAL/CHEMICAL PROPERTIES

Typical results obtained for High Performance Cement FastSet™ Self-Leveling Floor Resurfacer, when tested in accordance with the referenced ASTM procedures, are shown in Table 1.



## INSTALLATION

### SURFACE PREPARATION

Large holes should be repaired prior to the application of HPC FastSet™ Self-Leveling Floor Resurfacer. Repair all holes deeper than 25 mm (1 inch) and holes that are deeper than 13 mm (½ inch) with an area greater than 38.7 cm<sup>2</sup> (6 in<sup>2</sup>). Make repairs with HPC Cement FastSet™ Repair Mortar (No. 1247-23, -24), HPC FastSet™ All-Crete™ (No. 1587-27, -28), or other appropriate product. Allow repaired areas to cure overnight before final preparation. All surfaces should be clean and free of foreign substances including but not limited to the following: dirt, dust, oil, grease, and paint. The appropriate personal protective equipment should be worn during surface preparation. A final cleaning is required prior to priming. In most cases, pressure washing or shot blasting are the preferred final cleaning methods. 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. Seal all perimeter openings to retain leakage. These dams should be able to retain the resurfacer material at a height greater than the finished surface elevation. Prime the clean, dry floor surface with diluted QUIKRETE® Premium Concrete Bonding Adhesive (No. 9902). The primer should consist of 1 part QUIKRETE® Premium Concrete Bonding Adhesive (No. 9902) blended with 2 parts water to obtain the proper penetration into the subfloor. Old, excessively porous concrete requires 2 coats.

**Note** – The primer consisting of diluted QUIKRETE® Premium Concrete Bonding Adhesive (No. 9902) 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 to 2 hours depending upon conditions).

## MIXING

WEAR IMPERVIOUS GLOVES, SUCH AS NITRILE, MASK, AND EYE PROTECTION. Mix mechanically for a minimum of 4 minutes using either a mortar mixer or in a 19 L bucket using a heavy duty drill with paddle attachment capable of 650 RPM or greater. For large applications, use a self-contained mixing and pumping unit. Use approximately 4.7 L of potable water for each 22.7 kg (50 lb) bag. Add the powder slowly to the water and mix to a lump-free consistency. If more water is needed, add small amounts at a time until the desired consistency is achieved. Use the minimum amount of water necessary to achieve the desired flow characteristics. Excessive water can cause separation, reduction of strength, and shrinkage of cured resurfacer.

## APPLICATION

Small areas may be placed by pouring from a 19 L bucket or another 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 material will remain fluid for approximately 20 minutes. Pour the material in continuous strips of about 30 cm (1 foot) in width across the narrow section of the application area. The material will level 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 continuous surface. Continue to work without breaks until the entire application area is covered.

HPC FastSet™ Self-Leveling Floor Resurfacer can be installed from 38 mm (1-1/2 inch) thick to a feather edge, although a 6.3 mm (¼ inch) minimum thickness is required for heavy traffic areas. When applying over wood flooring (which requires lath), the minimum thickness is 16 mm (5/8 inch). For areas deeper than 38 mm (1-1/2 inch), apply HPC FastSet™ Self-Leveling Floor Resurfacer in layers no greater than 38 mm (1-1/2 inch) each. Prime the floor between layers with QUIKRETE® Premium Concrete Bonding Adhesive (No. 9902) diluted per package instructions. Alternatively, for areas deeper than 38 mm (1-1/2 inch), High Performance Cement FastSet™ Self-Leveling Floor Resurfacer may be extended up to 50% with high quality -13 mm (-1/2 inch) pea gravel. For best results, apply a final 6.3 mm to 38 mm (¼ inch to 1-1/2 inch) layer without extension.

**Note** – HPC FastSet™ Self-Leveling Floor Resurfacer may be used for outdoor service. HPC FastSet™ Self-Leveling Floor Resurfacer provides a smooth surface, which may be slippery when wet. Many outdoor applications require the surface to slope for drainage, however HPC FastSet™ Self-Leveling Floor Resurfacer self-levels and does not provide that slope.

## CURING

During the first 24 hours, it is best to keep the application area covered or damp to prevent excessive loss of water. Under hot, dry and windy placement conditions, all concrete tends to lose moisture unevenly and may develop plastic shrinkage cracks. The use of QUIKRETE® Acrylic Concrete Cure & Seal (No. 8730), plastic sheeting, or an application of a very fine fog spray of water avoids shrinkage cracking.

## PRECAUTIONS

- Control and expansion joints should be maintained to prevent cracking.
- Follow ACI 305R when using product in hot weather. An example of an additional step would be using cold water when mixing in extremely hot weather.
- Follow ACI 306R when using product in cold weather. Examples of additional steps would be using hot water when mixing in severely cold weather and using plastic sheeting and insulation blankets if temperatures are expected to fall below 0 °C (32 °F).
- Protect the leveled floor until HPC FastSet™ Self-Leveling Floor Resurfacer has developed sufficient strength to withstand foot traffic. High Performance Cement FastSet™ Self-Leveling Floor Resurfacer may be walked on within 6 hours, depending on conditions.
- Allow 24 hours to 48 hours before applying finished flooring over HPC FastSet™ 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. Be sure to follow the application instructions of the tile or other finished flooring manufacturer.

## SAFETY

**IMPORTANT:** Read Safety Data Sheet carefully before using.

**WEAR IMPERVIOUS GLOVES**, such as nitrile, mask, and eye protection.

**DANGER:** Causes severe skin burns and serious eye damage. Prolonged or repeated inhalation of dust may cause lung damage or cancer.

**KEEP OUT OF REACH OF CHILDREN**

## TABLE 1 TYPICAL PHYSICAL PROPERTIES

<b>Flow, ASTM C1708</b>	125 mm to 150 mm (5 in to 6 in)
<b>Compressive Strength, ASTM C109 (Modified)</b>	
Age	MPa (PSI)
24 hours	12.4 (1800)
7 days	27.5 (4000)
28 days	37.9 (5500)
<b>Setting Time, ASTM C191</b>	
Final	Approximately 90 minutes
<b>Length Change, ASTM C157</b>	
Age, Condition	
28 days, air	≥ -0.1%
28 days, water	≤ 0.1%
<b>Flexural Strength, ASTM C348</b>	
Age	MPa (PSI)
28 days	8.3 (1200)

## WARRANTY

**NOTICE:** Obtain the applicable **LIMITED WARRANTY** at [www.quikrete.com/product-warranty](http://www.quikrete.com/product-warranty) Or send a written request to Quikrete Canada Holdings, Limited, Five Concourse Parkway, Atlanta, GA 30328, USA. © Quikrete International, Inc. Manufactured by or under the authority of Quikrete Canada Holdings, Limited © 2023 Quikrete International, Inc.