

QUIKRETE® Guide Specification

Self-Leveling Floor Resurfacer-Fast-Setting (No. 1249-51)

Portland Cement Based, Self-Leveling, Self-Finishing Floor Topping and Underlayment

Section 03 53 00 – Concrete Topping

Section 03 54 16 – Hydraulic Cement Underlayment

PART 1 – GENERAL

1.10 SUMMARY

- A. Provide Self-Leveling Portland Cement and Underlayment for placement over existing concrete substrate.
- B. Related Sections: Other specification sections which relate directly to the work of this section include the following:

Section 030100 – Maintenance of Concrete

Section 035300 – Concrete Topping

1.20 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation for each material and product used. Include manufacturer's Material Safety Data Sheets.

1.30 REFERENCES

- A. ASTM C 109: Compressive Strength of Hydraulic Mortars.
- B. ASTM C 191: Setting Time of Hydraulic Cement.
- C. ASTM C 1059: Standard Specifications for Latex Agents for Bonding Fresh to Hardened Concrete.

1.40 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: The manufacturer shall be a company with at least fifteen years experience and regularly engaged in the manufacture and marketing of products specified herein.
- B. Installer's Qualifications: The contractor shall be qualified to perform the work specified by reason of experience.

1.50 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.
- B. Store products in a dry area. Protect from direct sunlight.
- C. Handle products in accordance with manufacturer's printed recommendations.

PART 2 – PRODUCTS

2.10 MATERIALS

- A. Self-leveling, Portland Cement Based, Self Finishing, One Component Underlayment .
Comply with the following:

1. Manufacturer: Self-Leveling Floor Resurfacer – Fast-Setting (No. 1249-51) as manufactured by the QUIKRETE® Companies, One Securities Centre, 3490 Piedmont Road, NE, Suite 1300, Atlanta, GA 30305; telephone (404) 634-9100.
2. Performance and Physical Properties at 73 degrees F and 50 percent relative humidity:
 - A. Working time, ASTM C 191: 20-40 minutes
 - B. Compressive Strength, ASTM C 109 Modified: 1800 psi (12.4 MPa) @ 24 hours, 4000 psi (27.6 MPa) @ 7 days, 5500 psi (37.9 MPa) @ 28 days
 - C. Slant Shear Bond Strength, ASTM C 1059: Exceeds 1250 psi (8.6 MPa) @ 28 days
 - D. Walk On Time: 2-4 hours maximum
 - E. Tensile Bond Strength, ASTM C 1059: 300 psi (2.1 MPa) @ 7 days, 400 psi (2.8 MPa) @ 28 days

PART 3 – EXECUTION

3.10 EXAMINATION

- A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
- B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas landscaping from contact due to mixing and handling of materials.

3.20 SURFACE PREPARATION:

Comply with manufacturer's printed instructions and the following:

- A. Clean the concrete slab or floor of all dirt, dust, oil, grease, paint and water-soluble material.
- B. Fill any deep holes or depressions to existing floor elevation with QUIKRETE® FastSet™ Non-Shrink Grout (No. 1585-09), comply with manufacturer's printed instructions. Allow filled areas to cure before pouring Floor Resurfacer.
- C. Seal all perimeter openings to prevent leakage. These dams should be able to retain resurfacer material at a height greater than the finished floor elevation.
- D. Prime the clean dry floor surface with QUIKRETE® Bonding Adhesive (No. 9902) in accordance with manufacturer's instructions. Dilute 1 part Bonding Adhesive with 2 parts clean water. Blend Bonding Adhesive completely before using.
- E. Apply with broom, roller or garden sprayer to saturate the surface.

3.30 MIXING:

Comply with manufacturer's printed instructions and the following:

- A. Material should be mechanically mixed for a minimum of 4 minutes at 250-500 RPM's using a five-gallon (19L) bucket with a ½" (12mm) drill and paddle mixer. For large grouting applications, a standard mortar mixer may be used.

- B. Add approximately 4.5 quarts (4.26L) of clean mixing water per 50 lb (22.7 kg) bag.
- C. Slowly pour the powder into the water and mix to a lump free consistency. If more water is needed, add small amounts at a time and continue to mix until the desired consistency is achieved.
- D. Use minimum amount of water necessary to achieve the desired flow characteristics. Excessive water can cause separation, reduction of strength and shrinkage of cured resurfacer.

3.40

APPLICATION:

Comply with manufacturer's printed instructions and the following:

- A. Place the resurfacer by pouring directly from the mixing container. Placing should be done as one continuous operation.
- B. Pour in continuous strips about 1 foot (0.30 m) in width across the narrow section of floor.
- C. QUIKRETE® Self-Leveling Floor Resurfacer can be installed from 1" (25 mm) thick to a feather edge in one application.
- D. Protect the leveled floor until resurfacer has developed sufficient strength. Fast-Setting Self-Leveling Floor Resurfacer may be walked on within 2 - 4 hours, depending on conditions, and finished flooring may be applied in 24 hours depending on conditions.
- E. Do not apply if temperatures are below 50°F (10°C) or are expected to go below 40° (4°C) within a 24 hour period. Use cold water in hot weather or hot water in cold weather to achieve desired grout temperature.

3.50

CURING

- A. Areas to receive Self-Leveling Floor resurfacer should be protected from the sun or wind which can cause a rapid moisture loss leading to incomplete hydration and potential cracking.

3.60

CLEANING

- A. Remove excess material before material cures. If material has cured, remove using mechanical methods that will not damage substrate.

END OF SECTION