QUIKRETE® Guide Specification

Heavy Duty Masonry Coating (No. 1312)
Portland Cement Based Waterproofing, Sealing and Protective Concrete and Masonry Coating

Specifiers Note: Select section based on intended use. Delete other section numbers:

Section 071116
Cementitious Damp Proofing

Section 099400
Decorative Finishing

PART 1 – GENERAL

1.10 SUMMARY

A. Provide Portland cement based coating for waterproofing, sealing and protecting existing concrete, stucco, brick or masonry walls.

B. Related Sections: Other specification sections which relate directly to the work of this section include the following:
   - Section 030100: Maintenance of Concrete
   - Section 033000: Cast-In-Place Concrete
   - Section 040100: Maintenance of Masonry
   - Section 042200: Concrete Unit Masonry
   - Section 071613: Polymer Modified Cement Water Proofing

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

1. ASTM C 109: Compressive Strength of Hydraulic Mortars
2. ASTM C 191: Setting time of Hydraulic Cement
3. ASTM C 348: Flexural Strength
4. ICC 1806.2: Damproofing Requirements for Acrylic Modified Cement Based Coatings

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 manufacturer 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. Portland cement based waterproofing, sealing and protective concrete and masonry coating.

Comply with the following:

1. Manufacturer: Heavy Duty Masonry Coating (No. 1301 - White, No. 1312 - Gray), Acrylic Fortifier (No. 8610) 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. Compliance: ICC 1806.2 (2 coats with Acrylic Fortifier)
      VOC compliant (OG/L)

   b. Compressive Strength, ASTM C 109 Modified:

      **Brushable Consistency**: 2000 psi (13.8 MPa) @ 24 hours, 5000 psi (34.5 MPa) @ 7 days and 6000 psi (41.3 MPa) @ 28 days.

      **Trowelable Consistency**: 3000 psi (19.2 MPa) @ 24 hours, 6000 psi (41.3 MPa) @ 7 days and 8000 psi (55.1 MPa) @ 28 days.

   c. Flexural Strength, ASTM C 348:

      **Brushable Consistency**: 450 psi (3.1 MPa) @ 24 hours, 550 psi (3.8 MPa) @ 7 days, 1000 psi (6.9 MPa) @ 28 days.

      **Trowelable Consistency**: 550 psi (3.8 MPa) @ 24 hours, 650 psi (4.5 MPa) @ 7 days, 1200 psi (8.3 MPa) @ 28 days.

   d. Color: White (No. 1301), Gray (No. 1312)

1. Decorative Integral Color: QUIKRETE® Stucco and Mortar Colors (No. 1319)

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. Prior to application, clean the surface of all loose material, dirt, dust grease, oil, paint or efflorescence. Smooth areas should be roughened or etched.

3.30 MIXING:

Comply with manufacturer’s printed instructions and the following:

A. Material should be mechanically mixed for a minimum of 3-5 minutes using a five gallon (19L) bucket with a ½” (12mm) drill and paddle mixer. For large grouting applications a standard mortar mixer should be used.

B. Add 1 ½ gallon (5.7L) of clean water for each 40lb (18.1 kg) bag to achieve a plastic consistency. (Trowelable: 1 gallon (3.8L). Add the powder to the water and mix until a lump free, fluid consistency is achieved. Add water sparingly to reach the desired consistency. Do not mix more material than can be placed in 15 minutes.

C. **Specifiers Note:** Fortifier required for damp proofing or for installation over low porosity concrete: ½ gallon (1.9 L) of QUIKRETE® Acrylic Fortifier can be used as a replacement for ½ gallon (1.9 L) of mixed water per bag.

D. **Specifiers Note:** If a colored decorative finish is desired: add QUIKRETE® Stucco and Mortar Color (#1319) directly to the mixing water. QUIKRETE® Stucco and Mortar Color (No.1319). Comply with manufacturer’s printed instructions.

E. Do not exceed a total volume of 7 quarts (6.6L) of water for each 40lb (18.1 kg) bag.

F. Prepare only enough mix as can be applied in one hour.

G. Do not re-temper with additional water.

3.40 APPLICATION:

Comply with manufacturer’s printed instructions and the following:

1. Dampen surface with a fine water mist before application, saturate the surface evenly.

2. Apply with a stiff masonry brush using a circular scrubbing motion to insure deep penetration of the ingredients. Can also be spray applied.

3. Lightly mist several times for 24 hours after application to eliminate rapid moisture loss.

**Specifiers Note: Two coats required for damp proofing**

4. Two coats are recommended. Apply the second coat between 12 hours and 48 hours after the first coat.

5. One 40 lb (18.1 kg) bag will cover up to 180 sq. ft. (16.7 m²) when applied at a uniform 1/32” (0.8 mm) thickness.

6. Do not use over previously painted, sealed or waxed surfaces.

7. Do not apply when temperatures are expected to be below 40°F (4°C) within 24 hours.
3.50  CURING
A. Lightly mist with water several times for 24 hours after application.
B. No special procedures are required with the addition of Acrylic Fortifier.

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