

QUIKRETE® Guide Specification

Exterior Use Anchoring Cement (No. 1245-81)

Rapid Setting, High Strength, Shrinkage Compensated Exterior Grade Anchoring Grout

Section 036100 – Cementitious Grouting

PART 1 – GENERAL

1.10 SUMMARY

- A. Provide rapid setting, high strength, shrinkage compensated exterior grade anchoring grout.
- B. Related Sections: Other specification sections which relate directly to the work of this section include the following:

- Section 033000: Cast-In-Place Concrete
- Section 034000: Pre-Cast Concrete

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 E 488: Pull Out Strength of Anchors in Concrete and Masonry

1.40 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: The manufacturer shall be a company with at least fifteen years experience in the manufacturer and marketing of pre-packaged cementitious repair materials.
- 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. Rapid setting, high strength, shrinkage compensated exterior grade anchoring grout.

Comply with the following:

1. Manufacturer: Exterior Use Anchoring Cement (No. 1245-81), 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 (23°C) and 50 percent relative humidity:
 - a. Compliance: ASTM C 928 R-2 specifications
 - b. Setting time, ASTM C 191: 10-30 minutes
 - c. Compressive Strength, ASTM C 109: 2000 psi (13.8 MPa) @ 2 hours, 4000 psi (27.6 MPa) @ 24 hours, 6000 psi (41.4 MPa) @ 7 days and 7000 psi (48.3 MPa) @ 28 days
 - d. Pull out Strength, ASTM E 488¹: 14,000 lb – force (6395 kg force) @ 24 hours, 21,000 lbs – force (9571 kg – force) @ 28 days

¹ ASTM E 488 Assembly: 1/2" (12 mm) threaded bolt embedded 8" (208 mm) in a 2" (50 mm) hole in 4,000 psi (27.6 MPa) concrete

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:

1. Holes should be drilled at least 1" (25 mm) wider than the item to be anchored and a minimum of 2" – 4" (50-100 mm) deep.
2. Remove all loose concrete and debris from the hole.
3. Dampen the hole prior to pouring anchoring cement. Remove standing water.

3.30 MIXING:

Comply with manufacturer's printed instructions and the following:

1. Add 5 parts Anchoring Cement with 1 part clean water.
2. Pour powder into the water and mix vigorously until a flowable consistency is achieved. For vertical applications reduce the amount of water for a putty – like consistency.
3. Mix only the amount of Anchoring cement that can be used in 10 minutes.

3.40 **APPLICATION:**

Comply with manufacturer's printed instructions and the following:

1. Pour the mixed material into the hole or void to slightly above floor level.
2. Hold bolt or post in place until the material begins to stiffen.

3.50 **CURING**

A. No special procedures are required. During the first 24 hours, keep covered or damp to prevent excessive loss of water.

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