QUIKRETE[®] Guide Specification

Quikrete® One Coat Fiberglass Reinforced Stucco

(Sanded – No. 1200; Concentrated – No. 1216) Alkali Resistant, Fiberglass Reinforced, Portland Cement Based Stucco for One Coat Applications

Quikrete® Base Coat Stucco (No. 1139-80)

Portland Cement Based Stucco for Scratch and Brown Coat Cement Plaster Applications

Quikrete® Based Coat Stucco with Water-Stop (No. 1139-86)

Portland Cement Based, Water Resistant Exterior Stucco for Scratch and Brown Coat Cement Plaster Applications

Quikrete® Finish Coat Stucco (White – No. 1201; Gray – No. 1202) Portland Cement Based Color and Texture Coat Finishing Plaster

Quikrete® Liquid Stucco - Acrylic Finish Coat (No. 1321) Acrylic Based, Moisture Resistant Textured Stucco Finish Coat

Section 092400 Portland Cement Plastering (Stucco)

PART 1 – GENERAL

1.10 SUMMARY

- A. Specification provides requirements for the applications of a Stucco System, including general information, pertaining to the design, materials and application of Stucco.
- B. Related Sections: Other specification sections which relate directly to the work of this section include the following:

Section 033000 – Concrete Section 042200 – Concrete Unit Masonry Section 054100 – Structural Metal Stud Framing Section 061100 – Wood Framing Section 061600 - Sheathing Section 072400 – Exterior Insulation and Finish Systems Section 072500 – Weather barriers Section 076000 – Flashing and Sheet Metal Section 079200 – Joint Sealants Section 092900 – Gypsum Board Section 099000 – Painting and Coating Section 099400 – Decorative Finishing

1.20 SUBMITTALS

- A. Submittal requirements by the stucco contractor are to be indicated in the construction documents. The following is a list of documents that may be requested.
 - 1. Product literature.
 - 2. Samples and/or mock-ups of system.
 - 3. Certification of compliance of materials and/or product literature.
 - 4. Product literature for all additives and proprietary components.
 - 5. Finish sample for texture and color for architect/owner approval.

1.30 **REFERENCES**

- A Building Codes International, NFRA, California, Uniform
- B. American Concrete Institute
- C. Federal Specifications:

FS UU-B-790a: Building Papers FS FF-N-105B: Nails, Wire Staples for Applications of Gypsum Board FS QQ-W-461H: Wire, Steel and Carbon (round, bare & coated)

- D. Portland Cement Plaster (Stucco) Manual by PCA
- E. Stucco Resource Guide (NWCB)
- F. National Building Code Canada
- G. ASTM Standards:

ASTM A526: Steel Sheet, Hot-Dip Galvanized, Commercial Quality ASTM C91: Masonry Cement ASTM C109: Compressive Strength of Hydraulic Cement Mortars ASTM C144: Aggregate ASTM C150: Portland Cement ASTM C207: Hydrated Lime for Masonry Purposes ASTM C260: Air-Entraining Admixtures ASTM C348: Flexural Strength of Hydraulic Cement Mortar ASTM C494: Chemical Admixtures for Concrete ASTM C834: Standard Specification for Latex Sealants ASTM C841: Installation of Interior Lathing and Furring ASTM C847: Metal Lath ASTM C897: Aggregate for Job-Mixed Portland Cement Plaster ASTM C926: Application of Portland Cement-Based Plaster ASTM C932: Surface-Applied Bonding Agents for Exterior Plastering ASTM C979: Pigments for Integrally Colored Concrete ASTM C1032: Woven Wire Plaster Base ASTM C1063: Installation of Lathing and Furring for Portland Cement Plaster ASTM D1784: Rigid Poly (Vinyl Chloride) PVC Compounds

ASTM E72: Strength Tests of Panels for Building Construction ASTM E119: Methods for Fire Tests of Building Construction and Materials ASTM E514: Method for Water Penetration and Leakage Through Masonry

1.40 QUALITY ASSURANCE

- A. Pre-installation meeting.
- B. Wall assembly fire-resistance rating: _____ hour(s).

Specifier's Note:

- Construction documents shall indicate the type of fire and/or sound assembly rating required for project.
- Construction documents to indicate fire-resistance assembly test required.
- C. Applicator qualifications. The plastering company shall meet the following requirements:
 - 1. Specialize in this scope of work.
 - 2. Have qualified and properly trained people to perform work.
 - 3. Be licensed, bonded and insured.
 - 4. Be in good financial standing and capable of meeting the financial obligations associated with the stucco scope of work on the project.
 - 5. Have documented experience in quality work of comparable scope.

1.50 DELIVERY, STORAGE AND HANDLING

A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number, and shelf life.

- B. All trim accessories and lath and/or other specified products to be shipped to job site in original containers. Any damaged or bent materials shall be replaced.
- C. Handle products in accordance with manufacturer's printed recommendations.

1.60 ENVIRONMENTAL CONDITIONS

- A. Cold Weather Conditions:
 - 1. Do not apply cement plaster when ambient temperature is less than $35^{\circ}F(2^{\circ}C)$.
 - 2. Do not apply cement plaster to any frozen surfaces or surfaces containing frost. Protect plaster coats against freezing for a period of 24 hours after application.
 - 3. Do not use frozen materials.
 - 4. Tenting, heat and ventilation must be provided if cement plastering is done in a temperature below 35°F (2°C).

- B. Warm Weather Conditions:
 - 1. Protect the basecoats and finish coat of cement plaster from uneven and excessive evaporation in warm, windy weather. (Refer to section on curing in PART III)
 - 2. Moist curing of cement based plaster is required.

PART 2 – **PRODUCTS**

2.10 MOISTURE BARRIER

A. Water-resistant paper - Federal Specification UU-B-790a, grade D/30-minute or 60-minute.

2.15 WINDOW HEAD, DOOR, LOUVER AND/OR OTHER PENETRATION-PLUS WALL OPENING PAN-TYPE FLASHING – 26-GAUGE GALVANIZED SHEET METAL, OR PVC PLASTIC

2.20 RUNNER- AND CROSS-FURRING CHANNELS

Cold-rolled galvanized steel channels, 1 1/2 inch (38 mm) and 3/4 inch (19 mm), a minimum of 33,000 psi yield strength and a minimum of 0.0538-inch bare steel thickness, ASTM A526.

Specifier's Note:

• Suspended soffits/ceilings – 1 1/2-inch (38 mm) main runner, 3/4-inch (19 mm) cross furring.

2.25 FURRING "HAT" CHANNELS

Furring channel, galvanized 7/8-inch (22 mm), 20-gauge.

2.30 MECHANICAL FASTENERS

- A. Non-corroding fasteners, depending on the type framing or substrate:
 - Wood Framing minimum 11 gauge, 7/16 inch (11 mm) diameter head galvanized roofing nails with minimum 3/4 inch (19 mm) penetration into studs or minimum #8 Type S wafer head fully threaded corrosion resistant screws with minimum 3/4 inch (19 mm) penetration into studs. (Nails: FS FF-N-105; Screws: ASTM C646)
 - Steel Framing minimum #8 Type S or S-12 wafer head fully threaded corrosion resistant screws with minimum 3/8 inch (10 mm) penetration into studs. (Screws: ASTM C646)
 - Concrete or Masonry minimum #8 wafer head fully threaded corrosion resistant screws for masonry with minimum 1 inch (25 mm) penetration into substrate. (Screws: ASTM C646)

4. Wood framing with EPS board over OSB board or plywood sheathing- Wire lath shall be fastened with corrosion resistant nails or 1" wide crown staples which penetrate at least 1" into the studs.

B. Tie Wire – 18 gauge galvanized and annealed low-carbon steel in compliance with ASTM A641 with Class I coating. (FS QQ-W-461g. AS)

2.40 LATH

- A. Self-furring 1 inch (25 mm) woven wire lath minimum No. 20 gauge, galvanized. Shall comply with ASTM 1032.
- B. Self-furring diamond-mesh metal lath galvanized, 2.5 or 3.5 lb per sq. yd. Shall comply with ASTM 847.
- C. 3/8-inch (10 mm) rib lath, galvanized. ASTM 847.

2.50 TRIM ACCESSORIES

Specifier's Note:

- Trim Accessories shall be fabricated from galvanized steel, zinc (alloy), PVC or anodized aluminum.
- Depth (the grounds) of accessories depends on the required thickness of cement plaster basecoat, without the finish coat.
- Accessories of PVC plastic or zinc (alloy) are recommended if corrosion is a concern because of environmental conditions.
- A. Steel accessories per ASTM C 841
- B. PVC plastic accessories per ASTM D1784 & C1063
- C. Aluminum accessories from extruded alloy 6063 T5
- D. General types of accessories:
 - 1. Foundation weep screed: _____
 - 2. Casing bead type no. 66 (JMOLD): _____

3. Corner reinforcement (corner bead): _____

- E. Soffit vents _____
- F. Drip screeds _____
- G. Trim accessory joints (control joints), expansion joints, or revels

Specifier's Note:

• Construction documents shall reference type, style and manufacturers of accessories.

2.60 BONDING AGENTS

- A. Type II Ethylene Polyvinyl Acetate Co–Polymer Bonding Agent for Portland Cement Repair Mortars. Comply with the following:
 - 1. Manufacturer: Concrete Bonding Adhesive (No. 9902) 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°F (23°C) and 50% relative humidity.
 - a. Application: Spray, brush or roller application or applied as a blended Portland Cement/Bonding Adhesive slurry coat.
 - b. Bond Strength, ASTM C1059: > 1250 psi (8.6 MPa) @ 20 days.
 - c. Combustibility: Non-combustible, both before and after use.

2.70 BASE COAT STUCCO MATERIALS

- A. Factory proportioned, alkali resistant, fiberglass reinforced, Portland cement based stucco designed for one-coat basecoat application. Comply with the following:
 - Manufacturer: One Coat Fiberglass Reinforced Stucco Sanded (No. 1200), One Coat Fiberglass Reinforced Stucco – Concentrated (No. 1216) 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 degrees C) and 50 percent relative humidity.
 - a. One Coat Fiberglass Reinforced Stucco Sanded (No. 1200)
 - 1. Compressive strength at 28 days, ASTM C109: 2020 psi (13.9 MPa)
 - 2. Flexural strength at 28 days, ASTM C348: 570 psi (3.9 MPa)
 - 3. Tensile strength at 28 days, ASTM C109: 180 psi (1.2 MPa)
 - 4. Wind driven rain, average flow, 24 hours ASTM E514: 0.002 lb (0.9 g) per hours
 - 5. Freeze/thaw resistance, ICBO Acceptance Criteria 9/30/85 : No visible cracking, checking or delamination after 10 F/T cycles of 75° to -20°F (24° to -29°C)
 - 6. Water vapor permeability, ASTM E514: 7.2 perm (415 ng/(Pa x s x m²)) @ 14 days
 - 7. Transverse load strength, ASTM E72

Wood studs, average load to failure: 96 psf (469 kg/m²) Metal studs, average load to failure: 138 psf (674 kg/m²)

8. Fire rating: One hour fire rating applied over:

OSB Sheathing Plywood Sheathing OSB and EPS Foam Plywood and EPS Foam

- b. One Coat Fiberglass Reinforced Stucco Concentrated (No. 1216)
 - 1. Compressive strength at 28 days, ASTM C109: 2020 psi (13.9 MPa)
 - 2. Flexural strength at 28 days, ASTM C348: 570 psi (3.9 MPa)
 - 3. Tensile strength at 28 days, ASTM C109: 180 psi (1.2 MPa)
 - 4. Wind driven rain, average flow, 24 hours ASTM E514: 0.002 lb (0.9 g) per hours
 - 5. Freeze/thaw resistance, ICBO Acceptance Criteria 9/30/85 : No visible cracking, checking or delamination after 10 F/T cycles of 75° to -25°F (24° to -29°C)
 - 6. Water vapor permeability, ASTM E514: 7.2 perm (415 ng/(Pa x s x m²)) @ 14 days
 - 7. Transverse load strength, ASTM E72

Wood studs, average load to failure: 96 psf (469 kg/m²) Metal studs, average load to failure: 138 psf (674 kg/m^2)

- 8. Fire rating: One hour fire rating applied over: OSB Sheathing Plywood Sheathing OSB and EPS Foam Plywood and EPS Foam
- B. Factory proportioned, Portland cement based exterior stucco for use in scratch and brown coat stucco applications. Comply with the following:
 - Manufacturer: Base Coat Scratch and Brown Coat Stucco (No. 1139.80), Base Coat Stucco with Water-Stop (No. 1139-86) as manufactured by the QUIKRETE® Companies, One Securities Centre, 3490 Piedmont Road, NE,
 - 2. Performance and Physical Properties at 73 degrees F (23 degrees C) and 50 percent relative humidity.
 - a. Base Coat Stucco Scratch and Brown Coat (No. 1139.80)
 - 1. Compressive Strength, ASTM C109:

900 psi (6.2 MPa) @ 7 days

1200 psi (8.3 MPa) @ 28 days

- 2. Compliance, ASTM C 926
- b. Base Coat Stucco with Water-Stop (No. 1139-80)
 - 1. Compressive Strength, ASTM C109:

900 psi (6.2 MPa) @ 7 days

1,200 psi (8.3 MPa) @ 28 days

- 2. Wind Driven Rain, ASTM E514: 0.002 lb (0.9 g) per hours
- 3. Compliance, ASTM C926

2.80 FINISH COAT MATERIALS

- A. Factory proportioned stucco finish color and texture coat. Comply with the following:
 - Manufacturer: Finish Coat Stucco (White No. 1201; Gray No.1202) 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 degrees C) and 50 percent relative humidity.
 - a. Compressive Strength, ASTM C109:

900 psi (6.2 MPa) @ 7 days 1200 psi (8.3 MPa) @ 28 days

b. Compliance, ASTM C926 (Type F Plaster)

2.90 ACRYLIC FINSIH COAT MATERIALS

- A. Factory proportioned, pre-mixed 100%, acrylic, co-polymer finish color and texture coat. Comply with the following:
 - Manufacturer: Liquid Stucco Acrylic Finish Coat (Swirl No. 132000, Fine No.132200, Coarse No. 132100) 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 degrees C) and 50 percent relative humidity.
 - a. Water Vapor and Permanence, ASTM E96: 212 perm (121.688 ng/(Pa x s x m²)
 - b. Accelerated Weathering, ASTM G 26 & G 23: No blistering, cracking or shipping after 1000 hours minimum
 - c. Salt Spray Resistance, ASTM B117: No deleterious effects after 1000 hours minimum
 - d. Wind Driven Rain, Federal Specification TT-C-555B: No effect, passes test
 - e. Chemical Resistance, ASTM D1308 (Method A): No deleterious effects
 - 20% NaOH
 - CloroxTM
 - 2 Fuel Oil
 - Mineral Spirits
 - Vinegar
 - Gasoline
 - Ethyl Alcohol
 - 29% NH₄OH

PART 3 EXECUTION

3.10 **EXAMINATION**

- A. Prior to starting lathing or plastering work, carefully inspect installed work of other trades to verify that work is complete to the point where work of this section may properly commence.
- B. Notify the architect or proper authorities in writing of conditions detrimental to the proper and timely completion of the lathing and/or plastering work.
- C. Do not begin installation until all unsatisfactory conditions are resolved.
- D. A pre-construction meeting is recommended with the architect and/or owner, primary contractor and representatives responsible for the windows, framing, flashing, roofing, sealants, stucco and any other building components interfacing with the stucco.

3.20 **PERFORMANCE**

- A. The work shall be performed by a skilled and trained work crew.
- B. Install specified products and/or systems in accordance with reference standards, manufacturer's recommendations, unless indicated otherwise in project documents.
- C. Flashing shall be installed prior to start of lathing or may be required to be integrated at the time of lathing.

3.30 INSTALLATION OF STUCCO TRIM ACCESSORIES

- A. Verify that substrate and work by other trades are complete to the point at which installation of trim accessories may properly commence.
- B. Attachments shall be firm enough to hold trim accessories in place without misalignment during plastering.

Specifier's Note:

- Flanges or attachment points of trim accessories shall be secured to substrate in accordance with requirements of manufacturers of approved fasteners. Space per manufacturer's directions.
- C. Zinc alloy or PVC is recommended if trim accessories are exposed to a high-salt environment.
- D. Install individual trim-accessory sections to each other at end joints for accurate alignment.
- E. Install trim accessories in a manner that ensures a true, level and plumb stucco surface, and moisture resistant.
- F. Install the trim accessories in accordance with the required thickness of stucco basecoat and finish coat requirements.
- G. Install the longest possible lengths of trim accessories. A minimum continuous section (length) of 7 ft. (2 m) is recommended.

3.35 TRIM ACCESSORY JOINTS

A. The water-resistant barrier must continue to be unbroken behind trim accessory joints in vertical or horizontal direction.

- B. Locate trim accessory joints strategically at points where building movement is anticipated.
 - 1. Wall penetrations
 - 2. Structural plate lines
 - 3. Junctures of dissimilar substrates
 - 4. Existing construction joints in structure
 - 5. Columns
 - 6. Cantilevered areas
- C. Joints are recommended in stucco assemblies with lath reinforcement but have limited use in direct-applied stucco over concrete or concrete masonry surface.
- D. It is recommended that trim accessory joints be weather-sealed by embedment in caulking at intersections when placed end-to-end and at the terminations.
- E. It is recommended to install vertical joints continuously and abut them to horizontal joints (be sure that water-resistant barrier runs continuously behind joints).
- F. Install longest possible lengths. No termination of a section within 24 inches (600 mm) of an intersection, with the exception of pre-manufactured trim accessory joint intersections.
- G. Trim accessory joints shall be installed on framed, sheathed construction so as to create stucco panel of 150 to 180 sq. ft. (14 m² to 17 m²) in as square a configuration as possible.
- H. Trim accessory joints shall be installed with concrete or concrete masonry construction so as to create a stucco assembly (with lath reinforcement) of 200 to 250 sq. ft. (18 m² to 23 m²).
- I. Installing control joints over continuous lath is an approved method.
- J. Sheathed framed construction with vertical trim accessory joints that require the lath to be terminated (cut) and installed on top of the flanges shall be placed at framing member locations. Lath shall be attached with appropriate fasteners through the trim accessory flange, sheathing and into the framing member.

3.40 LATHING FOR SOFFITS

- A. Suspended soffits/ceilings shall be erected so that the finished basecoat cement plaster surface is true to line and level, with allowable tolerance of 1/4 inch (6 mm) in 10 ft. (3.1 m).
- B. Spacing, attachment, size and type of hangers, fasteners and inserts shall be as required in reference standards in section 1.30.

3.45. LATHING SYSTEMS FOR SUSPENDED SOFFITS

- A. Soffit framing system
 - 1. Hanger wires maximum support 16 sq. ft (1.5 m²)
 - 2. 1 1/2-inch (38-mm) main runner channels o.c. spacing 48 inches (1.2 m)
 - 3. 3/4-inch (19-mm) cross-furring channels o.c. spacing 13 to 16 inches (325 mm to 400 mm)
 - 4. 3.4-pound-per-square-yard diamond-mesh lath.
 - 5. Wire-tie lath to cross-furring channels with 18-gauge tie-wire, 6 inches (150 mm) o.c.

- B. Soffit framing system with sheathing
 - 1. Hanger wires, maximum support 16 sq. ft. (1.5 m²)
 - 2. 1 1/2-inch (38-mm) main runner channels, maximum o.c. spacing 48 inches (1.2 m)
 - 3. 20-gauge furring "hat" channels, spaced maximum 16 inches (400 mm)
 - 4. 1/2 –inch (13 mm) gypsum sheathing board
 - 5. 3.4-pound-per-square-yard self-furring diamond-mesh lath attached through gypsum sheathing board into furring channels, maximum 6 inches (150 mm) o.c. with type S screws wafer head 1 inch (25 mm) long.

3.47 SOFFIT LATHING SYSTEM TO WOOD JOIST

- A. 3/8 inch (10 mm) rib lath attached 6 inches (150 mm) o.c., with one of the following:
 - 1. Roofing nails: 11 gauge \cdot 7/16-diameter head \cdot 1-inch long
 - 2. Staples: 16 gauge \cdot 3/4-inch crown \cdot 1 1/4-inch long
 - 3. Screws: Type $W \cdot$ wafer head $\cdot 1$ -inch long

3.50 SURFACE PREPARATION

A. Surfaces must be clean dry and free of dust, dirt, oil and other foreign matter.

3.60 MIXING

Comply with manufacturer's printed instructions and the following:

- A. Base Coats
 - 1. One Coat Fiberglass Reinforced Stucco Sanded. Comply with manufacturer's printed instructions and the following:
 - a. Fiberglass Reinforced Stucco shall be mechanically mixed in a paddle-type mortar mixer for 3-5 min.
 - b. Add approximately 1.75 gallons (6.6 L) of clean mixing water into the mixing container for each 80 lb (36.3 kg) bag. Add the powder to the mixing water and mix until a firm, workable consistency is achieved. Avoid over mixing as this may affect the integrity of the AR glass fibers. If more water is needed, add small amounts at a time and continue to mix until desired consistency is achieved. Prepare only enough mix as can be applied in one hour.
 - c. Specifier's Note: To improve Fiberglass Reinforced Stucco's water resistance, impact resistance, strength and durability:
 1/2 gallon (1.9 L) of QUIKRETE® Acrylic Fortifier can be used as a replacement for 0.5 gallon (1.9 L) of mixing water per bag.
 - d. Do not exceed a total volume of 2 gallons (7.6 L) of water for each 80 lb (36.3 kg) bag.
- 2. One Coat Fiberglass Reinforced Stucco Concentrated. Comply with manufacturer's printed instructions and the following:
 - a. Fiberglass Reinforced Stucco Concentrated should be mechanically mixed in a paddle-type mortar mixer for 2-3 min.

- b. Add approximately 6 gallons (23 L) of clean mixing water into the mixer for each 90 lb (40.8 kg) bag.
- c. Add approximately 240 lb (109 kg) of clean dry plaster sand (ASTM C897). Pour the powder into the mixer and mix until a firm, workable consistency is achieved. Avoid over mixing as this may affect the integrity of the AR glass fibers. Mixing water will vary with sand loading and moisture content. If more water is needed, add small amounts at a time and continue to mix until desired consistency is achieved. Prepare only enough mix as can be applied in one hour.
- d. Specifier's Note: To improve Fiberglass Reinforced Stucco's water resistance, impact resistance, strength and durability:
 1/2 gallon (1.9 L) of QUIKRETE® Acrylic Fortifier can be used as a replacement for 1/2 gallon (1.9 L) of mixing water per bag.
- e. Do not exceed a total volume of 7 gallons (26.6 L) of water for each 90 lb (40.8 kg) bag.
- 3. Base Coat Stucco. Comply with manufacturer's printed instructions and the following:
 - a. Base Coat Stucco should be mixed mechanically in a paddle-type mortar mixer.
 - b. Add approximately 1.5 gallons (5.7 L) of clean mixing water into the mixing container for each 80 lb (36.3 kg) bag. Add the powder into the mixing water and mix until a firm, workable consistency is achieved. If more water is needed, add small amounts at a time and continue to mix until desired consistency is achieved. Prepare only enough mix as can be applied in one hour.
 - c. Specifier's Note: To improve Fiberglass Reinforced Stucco's water resistance, impact resistance, strength and durability:
 1/2 gallon (1.9 L) of QUIKRETE® Acrylic Fortifier can be used as a replacement for 1/2 gallon (1.9 L) of mixing water per bag.
 - d. Do not exceed a total volume of 14 pints (6.6 L) of water for each 80 lb (36.3 kg) bag.
- 4. Base Coat Stucco with Water-Stop. Comply with manufacturer's printed instructions and the following:
 - a. Base Coat Stucco with Water-Stop should be mechanically in a paddle-type mortar mixer.
 - b. Add approximately 1.5 gallons (5.7 L) of clean mixing water into the mixing container for each 80 lb (36.3 kg) bag. Add the powder into the mixing water and mix until a firm, workable consistency is achieved. If more water is needed, add small amounts at a time and continue to mix until desired consistency is achieved. Prepare only enough mix as can be applied in one hour.
 - c. Specifier's Note: To improve Fiberglass Reinforced Stucco's water resistance, impact resistance, strength and durability:

1/2 gallon (1.9 L) of QUIKRETE® Acrylic Fortifier can be used as a replacement for 1/2 gallon (1.9 L) of mixing water per bag.

d. Do not exceed a total volume of 14 pints (6.6 L) of water for each 80 lb (36.3 kg) bag.

B. Finish Coat

- 1. Finish Coat Stucco. Comply with manufacturer's printed instructions and the following:
 - a. Finish Coat Stucco should be mechanically mixed in a paddle type mortar mixer for 2-3 min.

- b. Add approximately 2 gallons (7.6 L) of clean mixing water into the mixing container for each 80 lb (36.3 kg) bag. Add the powder into the mixing water and mix until a firm, workable consistency is achieved. If more water is needed, add small amounts at a time and continue to mix until desired consistency is achieved. Prepare only enough mix as can be applied in one hour.
- c. Specifier's Note: To improve Finish Coat Stucco's waterproofing qualities and adhesion to previously dried base coats:

1/2 gallon (1.9 L) of QUIKRETE® Acrylic Fortifier should be used as a replacement for 1/2 gallon (1.9 L) of mixing water per bag.

- d. Specifier's Note: If a colored decorative finish is desired, QUIKRETE® Stucco and Mortar Color (#1319) can be added directly to the mixing water.
- e. Do not exceed a total volume of 2 1/4 gallons (8.6 L) of water for each 80 lb (36.3 kg) bag.
- 2. Liquid Stucco Acrylic Finish Coat. Comply with manufacturer's printed instructions and the following:
 - a. Liquid Stucco should be mechanically mixed in the bucket with a 1/2-inch (12.7-mm) drill and paddle until a firm consistency is achieved.
 - b. Up to 12 fl oz (350 ml) of liquid pigment and water may be added per 60 lb (27 kg) pail.

3.70 APPLICATIONS OF STUCCO BASECOAT FOR SOFFITS

- A. Indicate factory proportioned QUIKRETE® Base Coat Mix to be used.
- B. Apply stucco first ("scratch") coat in a nominal thickness of 3/8 inch (10 mm). First coat should completely embed the lath. First coat should be thick enough to allow for scoring of cement plaster surface. Scratch horizontal grooves 1/8 inches (3 mm) deep across the surface of the basecoat mortar.

Specifier's Note:

- QUIKRETE® One Coat Fiberglass Reinforced Stucco required only one 3/8 inch (10 mm) coat eliminating the need for a second 3/8 inch (10 mm) coat.
- C. Moist cure the first ("scratch") coat for a minimum of 48 hours before application of the second ("brown") coat.
- D. Apply stucco second ("brown") coat in a nominal thickness of 3/8 inch (10 mm) over stucco first coat. Second coat thickness to bring the combined basecoats (first and second) thickness to a nominal thickness of 3/4 inch (19 mm).
- E. Apply the second coat with sufficient material and pressure to ensure a tight uniform bond to the first coat.
- F. Screed the second coat to a true, even plane, filling surface defects with cement plaster.
- G. Trowel-float the second coat surface uniformly.

3.71 **CURING OF SOFFIT BASECOAT** – Refer to section 3.93

3.72 STUCCO FINISH COAT – Refer to section 3.94

3.73 ACRYLIC FINISH COAT – Refer to section 3.95

3.74 TWO COAT STUCCO DIRECT TO CONCRETE

- A. Apply QUIKRETE® Concrete Bonding Adhesive directly to concrete surface only in accordance with the recommendation of manufacturer of the material.
- B. Install trim accessories termination trim accessory, corner reinforcements (corner beads), trim accessory joints (control joints) and other specified accessories in accordance with sections 3.30 and 3.35.
- C. Indicate type of stucco termination trim accessory (casing bead):

Indicate name of manufacturer (optional):____

- D. Attach termination trim accessory to concrete surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 8 to 12 inches (200 to 300 mm) o.c.
- F. Attach corner reinforcement to concrete surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c. staggered.
- G. Indicate the type of trim accessory joint (control joint, expansion joint, reveal or other style):

Indicate name of manufacturer (optional):

- The use of trim accessory joints (control joints) is limited on a stucco system direct to concrete masonry, and they are not required as frequently as for framed construction.
- Control or expansion joints are recommended at locations of concrete expansion joints (construction joints).
- Control joints are recommended if the area exceeds 250 sq. ft. (23 m²). Panel should be in as square configuration as possible.
- I. Attach trim accessory joints to concrete surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c. staggered.
- J. Application of stucco basecoat.
- K. Indicate the factory proportioned QUIKRETE® BaseCoat Mix to be used:______ Refer to section 2.70
- L. Apply basecoat (brown coat) in a normal thickness of 3/8 inch (10 mm).
- M. Apply basecoat with sufficient material and pressure to ensure tight contact with concrete surface and

uniform thickness.

- N. Screed the basecoat to a true and even plane, filling basecoat surface defects with cement plaster.
- O. Trowel-float the basecoat surface uniformly.
- 3.75 **CURING OF BASECOAT** Refer to section 3.94
- 3.76 **STUCCO FINISH COAT** Refer to section 3.95
- 3.77 ACRYLIC FINISH COAT Refer to section 3.97

3.78 TWO-COAT STUCCO DIRECT TO CONCRETE MASONRY "CMU"

Specifier's Note:

- Reinforcement lath is omitted in this system. Do not tool the mortar joints of the concrete masonry assembly. It is recommended to have mortar joints struck flush with the surface.
- Coated (painted) concrete masonry surfaces require self-furring lath attached in accordance with standards or the removal of the coating.
- A. Install trim accessories termination trim accessories (casing beads), corner reinforcement (corner beads); trim accessory joints (control joints) and other specified accessories to sections 3.30 and 3.35 to concrete masonry substrate.
- B. Trim Accessory Attachment

Specifier's Note:

- For substrates of concrete masonry units, brick or tile, it is recommended that the fasteners be placed in the mortar joints. This will minimize damage to the individual units.
- C. Indicate types of termination trim accessories (casing beads):
- D. Attach termination trim accessory to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter. length of fasteners 3/4 inch (19 mm); spacing of fasteners 8 to 12 inches (200 to 300 mm) o.c.
- E. Indicate the type of corner reinforcement (corner bead):_____
- F. Attach corner reinforcement to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c. staggered.
- G. Indicate the type of trim accessory joint (control joint, expansion joint, reveal or other style):_____

Specifier's Note:

• Control joint s are recommended if the area exceeds 250 sq. ft. (23 m²). Panel should be in as square a configuration as possible.

- Control or expansion joints are recommended at locations of concrete masonry expansion joints.
- H. Attach trim accessory joint to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners12 inches (300 mm) o.c. staggered.
- J. Indicate factory proportioned QUIKRETE® BaseCoat Mix to be used for the basecoat:

Refer to section 2.70

Specifier's Note:

- Delete basecoat mixes not applicable to this project.
- K. Apply basecoat (brown coat) in a nominal thickness of 1/2 inch (13 mm).

Specifier's Note:

- Basecoat direct to concrete masonry surface 3/8 inch (10 mm) to 5/8 inch (13 mm) thick, not greater than 5/8 inch (13 mm).
- L. Apply basecoat with sufficient material and pressure to ensure tight contact with concrete masonry surface and uniform thickness.

Specifier's Note:

- Dampen the substrate by spraying with clean water prior to plastering.
- It is advisable first to apply a dash bond coat or liquid bonder to the concrete masonry surface in order to uniform the suction and help prevent the telegraphing of the mortar joints. Dash coat does not replace one of the specified number of coats.
- M. Screed the basecoat to a true, even plane, filling basecoat surface defects with cement plaster.
- N. Trowel-float the basecoat surface uniformly.
- 3.79 **CURING OF BASECOAT** Refer to section 3.94
- 3.80 **STUCCO FINISH COAT** Refer to section 3.95
- 3.81 ACRYLIC FINISH COAT Refer to section 3.97

3.82 STUCCO ASSEMBLY ATTACHED TO CONCRETE

- Concrete surface to be in good condition, no large voids, no spalling and no delamination. Concrete to be true and straight.
- Concrete to be cured a minimum of 30 days before start of any stucco work.
- A water-resistant barrier is not required for this stucco assembly. A combination self-furring lath and water-resistant barrier (paperback lath) is recommended if the project documents specify a water-resistant barrier.

- A. Install trim accessories termination trim accessories (casing beads), corner reinforcement (corner beads), trim accessory joints (control joints) and other specified accessories in accordance with sections 3.30 and 3.35.
- B. Indicate type of stucco termination trim accessory (casing bead):_____
- C. Attach termination trim accessory to concrete surface with low-velocity, power-actuated pins or drill-anddrive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19mm); spacing of fasteners 8 to 12 inches (200 to 300 mm) o.c.
- D. Indicate the type of corner reinforcement (corner bead):____
- E. Attach corner reinforcement to concrete surface with low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c. staggered, or attach to lath with 18-gauge tie wire, spaced 12 inches (300 mm) o.c. staggered.
- F. Indicate the type of trim accessory joint (control joint, expansion joint, reveal or other style):

- Control joints are recommended for areas greater than 200 sq. ft. (18 m²). Maximum recommended length of a panel is 20 ft (6 m). Panel size should not exceed a 3-to-1 ratio.
- G. Attach trim accessory joints to concrete surface with low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c.
- H. Installation of expansion joints requires lath to be cut and attached to both sides of the expansion joint flange staggered 12 inches (300 mm) o.c., attach with wire ties or appropriate fasteners into concrete surface. (Control joints installed on top of lath.)
- I. Install galvanized self-furring diamond-mesh metal lath, 2.5 or 3.4 pounds per sq. yd. (1.4 kg/m² or 1.8 kg/m²) to vertical concrete surface (walls). For horizontal concrete surfaces (ceilings), use 3.4-pound-per-square-yard (1.8 kg/m²) self-furring lath.

Specifier's Note:

- Lath shall be applied with the long dimension of sheets horizontal.
- J. Attach lath to concrete surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm).
- K. Spacing of fasteners for 2.5-pound-per-square-yard lath to walls shall be 16 inches (400 mm) o.c. horizontally and 7 inches (180 mm) o.c. vertically. Spacing of fasteners for 3.4-pound-square-inch lath to walls shall be 24 inches (600 mm) o.c. horizontally and 6 inches (180 mm) vertically. Spacing of fasteners for lath to ceilings shall be 16 inches (400 mm) and 7 inches (180 mm) o.c.

3.83 **STUCCO ASSEMBLY ATTACHED TO CONCRETE/APPLICATION OF STUCCO BASECOAT** – Refer to section 3.93

3.84 **CURING OF BASECOAT** – Refer to section 3.94

3.85 **STUCCO FINISH COAT** – Refer to section 3.95

3.86 ACRYLIC FINISH COAT – Refer to section 3.97

3.87 STUCCO ASSEMBLY ATTACHED TO CONCRETE MASONRY

Specifier's Note:

- A concrete masonry wall must have been cured in accordance with industry standards (a minimum of 30 days) before application of stucco assembly.
- Do not tool the mortar joints of the concrete masonry assembly. It is recommended to have mortar joints struck flush with the surface.
- A. Install trim accessories termination trim accessories (casing beads), corner reinforcements (corner beads); trim accessory joints (control joints) and other specified accessories in accordance with sections 3.30 and 3.35.
- B. Trim accessory and lath attachment

Specifier's Note:

- For substrates of concrete masonry units, brick or tile, it is recommended that the fasteners be placed in the mortar joints. (This will minimize damage to the individual units.)
- C. Indicate type of termination trim accessory (casing bead/foundation weep screed):
- D. Attach termination trim accessory to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins and drill-and-drive fasteners. Fastener heads minimum 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c.
- E. Indicate the type of corner reinforcement (corner bead):_____
- F. Attach corner reinforcement to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c. staggered.
- G. Indicate type of trim accessory joint (control joint, expansion joint, reveal or other style) :

- Control or expansion joints are recommended at locations of concrete masonry expansion joints (construction joints).
- Trim accessory joints (control joints) are recommended, by not as frequently as for framed construction.
- Control joints are recommended for areas greater than 200 sq. ft. Maximum recommended length of a panel is 20 ft (6 m). Panel size should not exceed a 3-to-1 ratio.

- H. Attach trim accessory joints to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm); spacing of fasteners 12 inches (300 mm) o.c. staggered,
- I. Installation of expansion joints requires lath to be cut and attached to both sides of the expansion joint 12 inches (300 mm) o.c. staggered, with appropriate fasteners, into concrete masonry joints.
- J. Installation of lath reinforcement to concrete masonry

- A water-resistant barrier is not normally required or recommended for this stucco assembly. A combination self-furring lath and water-resistant barrier (paper-backed lath) is the style of lath recommended if the project documents specify a water-resistant barrier over the concrete masonry substrate.
- K. Indicate type of self-furring lath: ______ Refer to section 2.40 for lath selection.
- L. Attach lath to concrete masonry surface with hardened concrete stub nails; low-velocity, power-actuated pins or drill-and-drive fasteners. Fastener heads minimum of 3/8-inch (10-mm) diameter, length of fasteners 3/4 inch (19 mm).
- M. Spacing of fasteners for attachment of woven wire lath, welded wire lath and 2.5-pound-per-square-yard diamond-mesh lath: 16 inches (400 mm) o.c. horizontally. For attachment of 3.4-pound-per-square-yard diamond-mesh lath: 24 inches (600 mm) o.c. horizontally. Vertical attachment of lath shall be 7 inches (180 mm).

3.88 STUCCO ASSEMBLY ATTACHED TO CONCRETE MASONRY / APPLICATIONS OF STUCCO BASECOAT – Refer to section 3.93

- 3.89 **CURING OF BASECOAT** Refer to section 3.94
- 3.90 **STUCCO FINISH COAT** Refer to section 3.95
- 3.91 **ACRYLIC FINISH COAT** Refer to section 3.97

3.92 STUCCO ASSEMBLY TO SHEATHED CONSTRUCTION

- It is recommended that the minimum size of wood framing member the stucco system is going to be over 2x4 standard or better grade.
- It is recommended that the minimum size of steel framing members be 3 1/2 inches (88 mm) and a minimum of 20-gauge (0.0329).
- Open-frame construction is an approved framing method for attachment of stucco assembly, but not recommended for best performance.
- Exterior sheathing board to have firm contact with framing members (no gaps).
- Framing assembly (substrate) to be true, straight and level. Align in accordance with its application standards.
- It is recommended that the wood framing and wood sheathing board have a moisture content of less than 19% before starting the scope of the stucco work.

- The substrate to which the stucco systems is attached must be rigid and a minimum design deflection of L/360.
- Appropriate exterior sheathing boards over which to install the stucco assembly:
 - 1. Exterior gypsum sheathing
 - 2. Glass-mat gypsum sheathing
 - 3. Cementitious backer board (may require paperback lath)
 - 4. Exterior-grade plywood
 - 5. Oriented strand board
- Exterior-grade plywood and oriented strand boards shall be installed with a minimum of 1/8 inch (3 mm) gap along all panel edges and ends.
- Exterior sheathing board, once installed, requires protection from climatic conditions, until the installation of the stucco system.
- Sections of flashing or trim accessories that butt each other (at corners or another condition) need to be lapped, caulked, or have a strip of self-adhering membrane over the joints to prevent moisture intrusion into the building structure.
- A. Install a water-resistant barrier "WRB" as part of the stucco assembly. Water-resistant barrier, per F.S. UU-B-790A grade D 60-minute; spun-bounded olefin housewrap for a stucco system, or an approved weatherresistant barrier designed for a stucco system.

- It is required to use water-resistant barriers with all wood or steel framed structures.
- Two layers of Grade D 60-minute building paper are required over the wood sheathing.
- It is recommended that two layers of water-resistant barrier be installed over all types of sheathing boards.
- All flashing and water-resistant barrier to be installed in such a manner so as to prevent moisture from entering at all edges (tops and sides).
- The water-resistant barrier is to be installed "shingle-fashion" so that natural direction of water flow would be over and onto the next sheet.
- Install long dimension horizontal to framing.
- Water-resistant barrier shall have horizontal laps of 2 inches (50 mm) minimum. Vertical laps shall be 6 inches (150 mm) minimum.
- B. Attach water-resistant barrier to sheathing with small staples so as it is taut and flat. Refer to details in the "Window Flashing Applications" section.
- C. Install stucco system trim accessories foundation weep screed, casing beads, corner reinforcements (corner beads), trim accessory joints (control joints, expansion joints, reveals) and other specified accessories in accordance with sections 3.30 and 3.35.
- D. Trim accessory and lath attachment

- Lath shall be applied with long dimension of the sheets or rolls horizontal (perpendicular) to framing members. Apply lath taut.
- Bend lath and continue around corners to next framing member and/or corner reinforcement
- Attachment of lath should be at furring points.
- Fasteners to penetrate a minimum of 3/4 inch (19 mm) into wood framing members.

- Fasteners to be centered on flange (ends) or framing member. A minimum of 3/8 inch (10 mm) from edge. Both legs of staple to penetrate framing member.
- Fasteners to penetrate a minimum of 2 full threads past the steel framing member flange.
- E. Indicate type of termination-at-foundation trim accessory (foundation weep screed, as required by Building Code): ______
- F. Fasteners for attachment of trim accessories, foundation trim and lath

- Wood-sheathed framing:
 - Roofing nails: 11-gauge · 7/16-diameter head · 1 1/2 inches long (i.e., 1/2 inch wood sheathing)
 - 2. Staples: 16-gauge · 3/4-inch crown · 1 3/8 long (i.e., 1/2 inch wood sheathing)
 - 3. Type W screws: wafer head \cdot 1 1/2 inches long (i.e., 1/2 inch wood sheathing)
- Sheathed steel framing:
 - 1. Type S screws: wafer head \cdot self-drilling \cdot 1 inch (25 mm) long (i.e., 1/2 inch sheathing)
- G. Indicate type of foundation trim accessory (foundation weep screed or casing bead):
- H. Attach foundation trim accessory to building structure, with appropriate fastener selected from list in section 3.92-G. Spacing of fasteners 12 inches (300 mm) o.c.
- I. Indicate type of termination trim accessory (casing bead): _____
- J. Attach termination trim accessory to building structure, with appropriate fastener selected from list in section 3.92-G. Spacing of fasteners 12 inches (300 mm) o.c.
- K. Indicate type of corner reinforcement (corner bead):
- L. Attach corner reinforcement to building structure, with appropriate fastener selected from list in section 3.92-G, or attach to lath with 18-gauge tie wire. Spacing of fasteners 12 inches (300 mm) o.c. staggered.
- M. Indicate the type of trim accessory joint (control joint, expansion joint, reveal or other style):
- N. Attach trim accessory joints to building structure, with appropriate fastener selected from list in the section 3.92-G. Spacing of fasteners 12 inches (300 mm) o.c. staggered.

- Joints are recommended if the area is 150 to 180 sq. ft (14 to 17 m²). Maximum recommended length of a panel is 18 ft. (6 m). Panel size should not exceed a 3-to-1 ratio.
- The application of sealants is recommended in conjunction with the installation of trim accessory joints. Refer to section 3.35 and details in the "Trim Accessory Joints" section.
- A continuous (unbroken) water-resistant barrier is required behind all trim accessory joints.

- Control joints are the type of trim accessory joints recommended for installation over continuous (unbroken) lath. Expansion joints and reveals are types of trim accessory joints which require the lath to be broken behind the joint.
- If attachment of control joints is to lath or other trim accessories, use 18-gauge wire tie 12 inches (300 mm) o.c. to each flange, staggered.
- Aluminum and/or PVC reveals require that when the lath is installed over the flange, it totally covers it. The welded wire and woven wire lath shall be installed so as the crotch of the lath is over the flange.
- O. Installation of expansion joints and reveals requires lath to be cut and attached to both sides of the joint flange.
- P. Indicate type of self-furring lath: _________(Refer to section 2.40 for lath selection)
- Q. Attach lath to building structure, with appropriate fastener selected from list in section 3.92-G.

- Install lath with long dimension of sheets/rolls horizontal, perpendicular to framing members.
- Bend lath and continue around corners to next framing member or install corner beads.
- R. For attachment of 2.5-pound-per-square-yard diamond-mesh lath, the spacing of framing "studs" shall be 16 inches (400 mm) o.c. For attachment of woven wire lath, welded wire lath and 3.4-pound-per-square-yard diamond-mesh lath, the spacing of framing "studs" shall be 24 inches (600 mm) o.c. Vertical fasteners for attachment of all lath to studs shall be 6 inches (150 mm) o.c. (fasteners to penetrate into framing supports studs).

Specifier's Note:

- Refer to section 3.36 on trim accessory and lath attachment.
- All spacing is maximum.

3.93 APPLICATION OF STUCCO BASECOAT

- B. 1. Apply One Coat Fiberglass Reinforced Stucco onto the lath working from bottom to top at a minimum thickness of 3/8 inches (10 mm). Force the fiberglass reinforced stucco through the mesh so that it fits the gap between the mesh and wall completely. Screed the stucco surface flat and float, smooth the surface once the stucco has lost its sheen.

- One Coat Fiberglass Reinforced Stucco may be spray or trowel applied.
- 2. Apply Basecoat Stucco first ("scratch") coat in a nominal thickness of 3/8 inch (10 mm). First coat to completely embed the lath. First coat to be thick enough to go beyond lath so as to allow for scoring of cement plaster surface. Scratch horizontal grooves 1/8 inch (3 mm) deep across the surface of the basecoat mortar.

- Basecoat Stucco maybe spray or trowel applied.
- Allow first coat to cure 48 hours before applying second (brown) coat.
- Dampen the surface of the first (scratch) coat with a fine spray of water.
- C. Apply stucco second ("brown") coat in a nominal thickness of 3/8 inch (10 mm) over stucco first coat. Second coat thickness to bring the combined basecoats (first and second) thickness to a nominal thickness of 3/4 inch (19 mm). Complete the entire wall section in one work session to minimize color differences.
- D. Apply the second coat with sufficient material and pressure to ensure a tight uniform bond to the first coat.
- E. The "double-back" method of applying successive coats is recommended. This procedure has little or no delay between applying the second coat over the first cot.
- F. Screed the second coat to a true, even plane, filling surface defects with cement plaster.
- G. Trowel-float the second coat surface uniformly.

Specifier's Note:

- The floating process densifies the basecoat and provides a proper surface for the finish coat application.
- Float the basecoat after it has set and when moisture is still present in it. (The float should not adhere to the surface that is to be worked).
- Floating the basecoat that is to receive an acrylic finish coat is critical because of the thickness of this finish.

3.94 CURING OF BASECOAT

A. 1. One Coat Fiberglass Reinforced Stucco must be water cured with a fine mist once it has achieved final set. Spray the wall periodically for 48 hours. During hot and dry conditions, additional precautions may be necessary, including more frequent spraying, or the erection of barriers to deflect sunlight and wind.

2. Basecoat Stucco must be water cured with a fine mist once it has achieved final set. Spray the wall periodically for 48 hours. During hot and dry conditions, additional precautions may be necessary, including more frequent spraying, or the erection of barriers to deflect sunlight and wind.

B. The stucco basecoat should be protected from freezing for a period of 24 hours after application.

Specifier's Note:

- Do not moist-cure if basecoat is subject to freezing.
- Do not use frozen materials in mix.
- Do not apply cement plaster to a surface that is frozen or contains frost.

3.95 STUCCO FINISH COAT

- A. Stucco basecoat (or concrete surface) is required to be in a proper condition before application of stucco finish coat or acrylic finish coat
- B. Dampen stucco basecoat evenly with a fine water spray. Do not soak surface.

- C. Trowel or spray apply Finish Coat Stucco at a minimum 1/8 inches (3.2 mm) thickness starting at the bottom and working to the top of the wall.
- D. Smooth Finish Coat Stucco with a darby and allow application to take an initial set prior to beginning texturing operations. Avoid overlapping previously dried areas.
- E. Apply desired surface texture with a brush or trowel. Complete texture application while the mix is till workable.
- F. Indicate the type of stucco finish coat:

Manufactured stucco finish: QUIKRETE® Finish Coat Stucco

- G. Indicate the style of stucco finish: ______ Refer to section 3.92 G-1
 - 1. Styles of stucco finish:
 - a. Sand Float Finish (fine, medium or course)
 - b. Machine Dash Finish (light/medium/heavy)
 - c. Knockdown Dash Finish
 - d. Lace Finish
 - e. Light Comb Finish
 - f. English Finish
 - g. Spanish Finish
- I. Indicate the color of stucco finish:

3.96 CURING FINISH COAT STUCCO

A. Finish Coat Stucco must be water cured with a fine mist once it has achieved final set. Care must be exercised to avoid erosion damage to the finish surface. Uneven curing may result in color variations. Spray the wall periodically for several days. During hot and dry conditions, additional precautions may be necessary, including more frequent spraying or the erection of barriers to deflect sunlight and wind.

Precautions: Temperature, wind velocity, direct sunlight or shading, as well as the dampness or dryness of the surface receiving the material, all have an effect on the finished depth of color. Do not apply when weather is forecast to be above 100 F° (4 C°) within 24 hours without adopting the required hot and cold weather precautions.

3.97 ACRYLIC FINISH COAT

Specifier's Note:

• Refer to manufacturer for different styles and color selection.

- B. Apply acrylic finish over stucco basecoat (brown coat) or concrete surface minimum of 1/16 inch (2 mm) dry thickness.
- C. Apply acrylic finish coat with sufficient material to uniformly and completely cover the basecoat.

3.98 ADDITIONAL TYPES OF FINISHES

- A. Factory-mixed 100% acrylic-based elastomeric finish
- B. High-quality exterior acrylic paint

Specifier's Note:

- Applied per manufacturer's recommendations over a stucco finish or acrylic finish.
- C. High-quality exterior elastomeric paint

Specifier's Note:

• Applied over a stucco finish coat or acrylic finish coat.

END OF SECTION