

SECTION 09216 – SPRAY-STONE® VENEER PLASTER

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes:

1. SPRAY-STONE veneer plaster [**over monolithic concrete**] [**over masonry surfaces**] [**over gypsum plaster**] [**over gypsum board**] [**over plaster board**] [**over adobe, cob or straw bale**] [**over foam building form blocks**] for interior application.

B. Related Sections:

1. Section 101 “Cast-In-Place Concrete”.
2. Section 202 “Concrete Masonry Units”.
3. Section 303 “Gypsum Plaster”.
4. Section 404 “Gypsum Board Assemblies”; for trim accessories.
5. Section 505 “Paints and Coatings”; for primers and sealers not specified in this section.
6. [Section “ “.]

1.2 SUBMITTALS

A. Product Data: Submit manufacturer’s literature for each product specified.

B. Selection Samples:

1. Provide samples of manufacturer’s standard colors for color selection.
2. Provide samples of standard textured finishes.

C. Verification Samples: Submit sample for each color and textured finish specified in minimum 12-inch by 12-inch sample and on substrate indicated. Apply SPRAY-STONE veneer plaster over primed substrate sample. Prepare sample to show substrate, primer, and veneer plaster [**and sealer**] in the layered application process. [**Submit full size sample for masonry substrates.**][**Apply Spray-Stone Sealer to ½ of each sample.**] In addition to verification of aesthetic qualities, the sample should also be used to demonstrate compatibility and application process.

D. LEED™ Submittals:

1. Credit EQ 4.1 Low Emitting Materials: Manufacturers' product data for sealers, including printed statement of VOC content .

2. Credit EQ 4.2 Low Emitting Materials: Manufacturers' product data for Spray-Stone veneer plaster and primer including printed statement of VOC content .

1.3 QUALITY ASSURANCE

- A. Finish Mockups: Apply mockups [**of at least 100 sq. ft. in surface area**] [**as shown on Drawings**] to demonstrate aesthetic effects and set qualities standards for materials and execution.
 1. Apply mockups at location [**indicated on Drawings**] [**as directed by Architect**].
 2. Apply mockups for the following applications:
 - a. Walls and Partitions: [**SPRAY-STONE**]; [**Smooth**] [**Textured**] [**Smooth and textured**] finishes.
 - b. Ceilings: [**SPRAY-STONE**]; [**Smooth**] [**Textured**] [**Smooth and textured**] finishes.
 3. Simulate finished lighting conditions for review of mockups.
 4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- B. For Exterior: Fade Resistance Color Pigments, ASTM D4303-03

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store materials in location not subject to direct moisture.
- B. Waste Management and Disposal: Surplus Spray-Stone veneer plaster and clean Spray-Stone veneer plaster may be used as touch-up materials and extra material for Owner. Clearly mark container as “waste recycled – clay veneer plaster”. Wet Spray-Stone veneer plaster should be dried thoroughly on plastic sheet.

1.5 PROJECT CONDITIONS

- A. Room Temperature:
 1. Primer [**and Sealer**] Application: Maintain room temperatures as required for primer [**and sealer**] in accordance with primer [**and sealer**] manufacturer’s instructions.
 2. **SPRAY-STONE** Veneer Plaster Application: Maintain temperatures at not less than 45 degrees Fahrenheit or greater than 90 degrees Fahrenheit for at least 3 days before application of clay veneer plaster, continuously during application, and for 3 days after, or until plaster has dried.
- B. Ventilation: Avoid conditions that result in **SPRAY-STONE** veneer plaster drying out too quickly.
 1. Distribute heat evenly; prevent concentrated or uneven heat on plaster.

2. Maintain relative humidity levels for prevailing ambient temperature that produces normal drying conditions.
3. Ventilate building spaces in a manner that prevents drafts of air from contacting surfaces during plaster application and until plaster is dry.

1.6 EXTRA MATERIALS

- A. Provide Owner with **[insert project requirement here]** percent of SPRAY-STONE veneer plaster applied in each color and texture specified.

PART 2 - PRODUCTS

2.1 SPRAY-STONE VENEER PLASTER

- A. SPRAY-STONE Veneer Plaster: Proprietary wet mix blend of slaked lime, dolomitic aggregates, an acrylic binder, thickening agents and pigments.
 1. Manufacturer: E3 Coatings, Inc 813 Harbor Blvd. # 163 West Sacramento, CA 95691 (916) 669-8498
 2. Product:
 - a. SPRAY-STONE
 - b. SPRAY-STONE SEALER
 3. Color[s]:
 4. Finishes:
 - a. **[Spray applied back troweled smooth.]**
 - b. **[Spray applied back troweled smooth lightly sanded.]**
 - c. **[Spray scattered in small dimples.]**
 - d. **[Spray scattered in small dimples lightly sanded.]**
 - e. **[Spray applied Graco RTX 1500 fine finish tip system smooth.]**
 - f. **[Skip troweled by hand.]**
 - g. **[Brushed on with paint brush]**
 - h. **[Rolled on with paint roller]**
 - i. **[Match architect's sample.]**
 5. Properties:
 - a. Fire-resistant: Non-combustible.
 - b. Non-toxic.
 - c. Fade resistant.

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- d. Mold resistant.
 - e. Dust resistant.
 - f. Non-dusting.
 - g. Breathable.
 - h. Paintable and stainable.
- 6. Aggregate: Calcium carbonate, Calcium Magnesium Carbonate
 - 7. Binder: Aged slaked lime (calcium magnesium hydroxide), acrylic emulsion
 - 8. Color Pigment: Universal Colorants, Natural oxides and Mineral pigments.
- B. Mix: Pigments or Colorants with large rectangular drywall mud blade mixer on high power drill motor or shake in paint shaker.
- C. **Application total thickness:**
- 1. **SPRAY-STONE**
 - a. [1 coat: 1/16 inch or less.]
 - b. [2 coats: 1/16 inch or less.]
 - c. [3 coats: 1/16 inch or less.]

2.2 PRIMER

- A. General:
- 1. VOC content must meet or exceed the VOC and chemical component limits of Green Seal requirements.
 - 2. Primer must be compatible with SPRAY-STONE veneer plaster and substrate.
- B. [Manufacturer Recommended Primer: ZINSER 1-2-3]**

2.3 SEALER

- A. General:
- 1. VOC content must meet or exceed the VOC and chemical component limits of Green Seal requirements.
 - 2. Sealer must be compatible with SPRAY-STONE veneer plaster.

2.4 JOINT REINFORCING MATERIALS

- A. Joint Tape and Embedding Material: Minimum double coated standard joint compound and firetape.

- B. Trim Accessories: As specified in Section 09260 "Gypsum Board Assemblies."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Confirm that substrate is ready to accept primer and SPRAY-STONE veneer plaster finish. Surfaces should be dry. Corners should have Slight Radius. Correct substrate conditions prior to clay veneer plaster application process.

3.2 PREPARATION

- A. Clean surfaces to remove dirt, grease, oil, and other foreign matter and deposits that could impair bond with plaster.
- B. **[Monolithic Concrete Substrates:**
 - 1. **Concrete must be fully cured and dry prior to application of primer and clay veneer plaster. If necessary, conduct moisture test to verify that the substrate is ready to receive plaster application.**
 - 2. **Brown coat entire surface with a fibered cement stucco.**
 - 3. **Lightly dampen with water prior to application of SPRAY-STONE veneer plaster.]**
- C. **[Masonry, Concrete Masonry Units, Cement Stucco or Lime Plaster Substrates:**
 - 1. **Surfaces must be fully cured.**
 - 2. **Large mortar joints: Daub even with brick or block surface or brown coat entire surface with a fibered cement stucco.**
 - 3. **Lightly dampen with water prior to application of SPRAY-STONE veneer plaster. If water misted on the substrate surface beads and does not soak in, the surface must be primed prior to clay veneer plaster application.]**
- D. **[Gypsum Plasters: Level III drywall and prime prior to application of SPRAY-STONE veneer plaster.]**
- E. **[Painted Walls & Ceilings: Prime prior to application of SPRAY-STONE veneer plaster.]**
- F. **[Gypsum Board: Level III drywall and prime prior to application of SPRAY-STONE veneer plaster. To prevent delamination of paper backings, follow recommendations of board manufacturer.]**
- G. **[Adobe, Cob Or Straw Bale Preparation: Prepare surface with a medium filler aggregate plaster made from lime . Allow base plaster to completely cure apply SPRAY-STONE veneer plaster with Graco RTX 1500 fine finish tip system.]**
- H. **[Foam Building Form Block Preparation: Apply a breathable base plaster scratch and brown coat prior to application of SPRAY-STONE veneer plaster.]**

3.3 TRIM ACCESSORY AND JOINT REINFORCEMENT INSTALLATION

- A. Trim Accessories: Prime with sanded primer.
- B. Joint Reinforcement:
 - 1. Tape and bed: Level 2, Gypsum Association GA-214.
 - 2. Corner Bead: Prime with sanded primer.
 - 3. Joints must be completely dry prior to primer application.

3.4 PRIMER APPLICATION

- A. Apply primer and allow application to dry prior to SPRAY-STONE plaster veneer application.

3.5 SPRAY-STONE VENEER PLASTER APPLICATION

A. MIXING

- 1. Use high torque ½” drill motor with large rectangular box type drywall mud mixer and mix for 5 minutes at high speed.
- 2. If thickening occurs: Add water to bring mixture to a sprayable consistency.
- 3. Mixture consistency should resemble a muffin batter, pour able yet not too thin as to run once on a wall.

B. GENERAL APPLICATION

- 1. For base coat use standard air compressor and hand held texture hopper, or self contained texture machine such as Graco TexSpray RTX 1500 at high pressure 30psi-70psi. Graco TseSpray RTX 1500 has an upgrade “fine finish tip system” that can be used to speed up application of base coat on large jobs.
- 2. Using 12” standard or stainless steel texture flat blade, back trowel plaster toward wall in a thin coat. The trowel may be laid near flat edge for easiest smoothing. A variety of plastering trowels may also be used. Pull trowel across wall in long smooth strokes.
- 3. Trowel marks and lines may be smoothed for up to 20 minutes with a trowel cleaned occasionally with a damp clean rag.
- 4. Second coat can be applied once plaster has turned lighter color. Second coat should be scattered at lower pressure 20psi-40psi in fat blobs close (6” to 18”) to the wall. You can use a side to side motion or figure eight patterns. For techniques where 90%-95% coverage is required on the second coat, test coverage by back trowelling in an inconspicuous area to determine if enough material is being scattered on the wall.
- 5. Second coat can be smoothed with a trowel cleaned occasionally with a damp clean rag and a very steep flat edge. Allow the plaster to set up for 10-20 minutes before you start

the final smoothing process. Work slowly with steady medium pressure to compact and smooth plaster without tearing the plaster from the wall.

3.6 SANDING AND SEALING

A. SPRAY-STONE Veneer Plaster finishing:

1. **SPRAY-STONE may be smoothed to final finish during final step of application.**
2. **Some finishes may prefer a very quick machine or hand sanding using 80 grit or 100 grit sand paper. Be sure not to over sand and expose the first coat layer. Sanding should be done moving quickly side to side.**
3. **SPRAY STONE SEALER can be applied using an airless sprayer at low pressure, or by brushing with a large stain type brush. Always start from the floor first as drips on unsealed plaster may leave streak marks. Do walls first before ceilings for the same reason.**
4. **SPRAY-STONE SEALER may be lightly pigmented before sealing. The sealer should be wiped in a circular pattern swirling as you move along the wall to create a modeled effect.**

B. Sealer: Apply 2 coats at sealer where **[kitchen] [bathroom] [shower] [damp] areas [indicated on Drawings]**.

3.7 CLEANING

- A. Unsealed SPRAY-STONE Veneer Plaster: Clean with barely damp sponge and water. Do not use cleansers.
- B. Sealed SPRAY-STONE Veneer Plaster: Clean with mild dish soap, damp sponge and water. Mild cleansers may be used, but sealer may need to be re-applied if sealer is damaged or removed.

3.8 PROTECTION

- A. Protect wall **[and ceiling]** finish from construction damage. Repair damage, remove protection, and clean prior to Substantial Completion.

3.9 REPAIR AND MAINTENANCE

- A. Touch-Up:

1. **SPRAY-STONE Veneer Plaster:** Use touch plaster to putty in gouges or cracks. Lightly sand using 100 grit sand paper and seal using **SPRAY-STONE SEALER IN** small swirls on a damp rag.

B. Maintenance:

1. Sealer may be applied every few years by cleaning with mild soap and reapplying sealer. Lightly wipe with a clean damp sponge or cloth to remove surface stains and marks. Do not use harsh cleaners or abrasive cloths.