

1 GrayStone, Inc.
2 Stucco Systems

3
4 **Portland Cement Plaster (Fiber Reinforced)**

5
6 **Section 09220**

7
8 Section 1 – General

9
10 1.1 RELATED ITEMS

11 A. Provisions within the General and Supplementary Conditions of the Contract and drawings.

12
13 1.2 QUALITY

14 A. Applicator: Minimum 5 years documented experience in cement plasterwork, or GrayStone,
15 Inc. approved.

16 B. Stucco application in accordance with manufacturer's recommendations and/or as specified
17 on plans.

18 C. Finished Stucco shall be of good quality and finish. Edges of planes shall be sharp and
19 accurate. Finished surfaces shall be uniform in texture and free from objectionable
20 imperfections.

21
22 1.3 SUBMITTALS – FRS/SBCCI 9915B

23 A. Provide product data on plaster materials, characteristics and limitations of product as
24 specified. (Reference attached SBCCI 9915B report)

25 B. Submit manufacturer's installation instructions.

26
27 1.4 SAMPLES

28 A. Provide sample panel at jobsite.

29 B. Construct sample as directed by Job authority.

30 C. Accepted sample shall remain as part of the job.

31 D. Sample texture(s) on sample panel should be used to judge entire installation for
32 consistency.

33
34 1.5 JOB SITE CONDITIONS

35 A. Do not apply stucco when air temperature in less than 35 degrees Fahrenheit.

36 B. Work should be stopped a minimum of six hours before freezing conditions.

37 C. Protect stucco from uneven and excessive evaporation during hot, dry weather by moist
38 curing.

39
40 1.6 COORDINATION

41 A. All items penetrating through substrates must be caulked or taped before lath is installed.

42 B. Openings and chases for heating, plumbing and electrical, ducts, pipes and conduits shall be
43 built into the stucco work.

44 C. Verify other trades have completed their exterior work to avoid cutting and patching.

45 D. Finished surfaces abutting stucco should be installed.

46 E. Windows and doors should be installed, flashed and taped as necessary.

- 47 F. Roof should be complete.
- 48 G. Drywall hanging complete on all levels of building.
- 49 H. Plywood and OSB substrates should be inspected for proper spacing between butt joints to
- 50 allow for expansion from moisture. Minimum 1/8 inch.

51
52 Section 2 – Product

53
54 2.1 MANUFACTURE OF PLASTER MATERIALS

- 55 A. GrayStone, Inc., 215 Pineda Street, Unit 153, Longwood, Florida 32750, Phone (407) 767-
- 56 5455.
- 57 B. Exclusive Distributor – Circle Supply of Atlanta, 4212 NE Expressway, Atlanta, Georgia
- 58 30340, Phone (800) 226-0691, Contact – Kiernan Dowell.
- 59 C. Mix only as much plaster as can be used prior to initial set.
- 60 D. 200-240 pounds or a maximum of 2 ½ cubic feet of ASTM C-144 plaster sand.
- 61 E. Use potable water (4-7 gallons) for a spray able or trowel able working mix.
- 62 F. Do not use material that has partially set.
- 63 G. Do not use frozen, caked, or lumpy materials.
- 64 H. Mixer and mud boxes shall be cleaned of set or hardened materials before newly mixed
- 65 stucco is loaded.
- 66 I. Protect stucco mix from contamination.
- 67 J. Cure stucco by fogging to reduce excess evaporation.

68
69 2.2 SUBSTRATES

- 70 A. Acceptable substrates for the GrayStone Fiber Reinforced Stucco Systems include but are
- 71 not limited to:
 - 72 1. Exterior grade gypsum sheathing (ASTM C-79-95)
 - 73 2. Oriented Strand Board (US DOC PS 2-95)
 - 74 3. Plywood (US DOC PS 1-95)
 - 75 4. Fiberboard (ANSI/AHA A 194-85)
 - 76 5. Dens-Glass Gold sheathing
 - 77 6. Expanded Polystyrene (ASTM C-578) with nominal density 1.5 PCF
 - 78 7. Extruded Polystyrene
 - 79 8. Foam Plastics
 - 80 9. Other Substrates to be approved by GrayStone prior to installation
 - 81 10. Concrete Masonry Units, free of bond breaker and wetted before Stucco is applied

82
83 2.3.1 WEATHER RESISTIVE MEMBRANE

- 84 A. Grade D building paper complying with Federal specification UUB 790a or asphalt
- 85 saturated rag felt complying UL standard No. 55-A.
- 86 B. One or two layers as required by appropriate building code. SBCCI requires one.
- 87 C. Maybe an integral part of the lath or stucco wrap.
- 88 D. Lath may be installed directly over stucco wrap.

89
90 2.4 LATH

- 91 A. Metal lath – Supplied by Dale/Incor or equal.
- 92 B. Metal lath shall comply with ASTM C 847-93; furring and self-furring requirements shall
- 93 be as set forth for wire-fabric lath. Minimum weight is 1.75 pound per square yard.
- 94 (Maximum coating thickness is ½”)

- 95 C. 20 gauge 1" galvanized steel woven wire fabric. (Maximum coating thickness is 1/2")
96 D. Other laths – welded comply with ASTM C933-80 or woven ASTM C 1032-86. (Maximum
97 coating thickness is 1/2")
98
- 99 2.5 TRIM
100 A. Trim – Supplied by Dale/Incor or equal.
101 B. All casing beads, corners, and control joints shall be installed in accordance with drawings
102 and detail items. All trim to be approved/specified by architect or owner.
103 C. General rule is panel size not to exceed 144 square feet.
104 D. All window and door corners should be reinforced.
105
- 106 2.6 CONTROL JOINTS
107 A. Control Joints – Supplied by Dale/Incor or equal.
108 B. Control joints installed as per plans or as specified by building authority.
109 C. Control joints are applied over continuous metal lath with no break in lath.
110 D. Control joints are generally used in conjunction with other trim to define panel size.
111
- 112 2.7 EXPANSION JOINTS
113 A. Expansion Joints – Supplied by Dale/Incor or equal.
114 B. Expansion joints installed as per plans or as specified by building authority.
115 C. Expansion joints are installed over break in building substrate.
116 D. Metal lath or stucco netting will terminate at Expansion joint edges.
117 E. Expansion joints are spanned by expansion trim attached over metal lath.
118
- 119 Section 3 – Installation
120
- 121 3.1 BEFORE STARTING WORK
122 A. Verify that surfaces and site conditions are ready for work.
123 B. Check furring, lath, and control/expansion joints are completed and secured properly.
124 C. Masonry: Joints are cut flush and surface is clean. No foreign material or contaminants are
125 present on masonry surface where stucco is to be applied.
126 D. Check that penetrations through lath or masonry wall are caulked or otherwise sealed
127 before stucco.
128
- 129 3.2 APPLICATION – GENERAL
130 A. Apply plaster in concordance with manufacturer's instructions. Hand trowel or pumped.
131 (Paragraph 2.1)
132 B. Stop plaster only at corner bead corners or control/expansion joints.
133 C. Layout to permit completion of an entire surface in one application.
134 D. Maintain a wet edge. Work from corner to corner or edge to edge to prevent cold joints.
135 E. Basecoat
136 1. Thickness of base coat: Minimum 3/8" to 1/2" maximum in one coat application.
137 2. Moist cure by fogging two (2) times daily for two (2) days to insure total cement
138 hydration. (Mandatory for maximum strength and minimum cracking)
139 3. Allow to cure four to six days before applying coating or consult manufacturer of
140 coating for recommendations. PH should be tested.

- 141 F. Coatings – shall be supplied by Dryvit Systems, Inc. or ArcusStone Products, Inc. Shall be
142 the type, color, and texture as selected by the architect/owner and shall be one or more of
143 the following:
- 144 1. Standard DPR (Dirt Pickup Resistance): Water-based, acrylic coatings with integral
145 color and texture, and formulated with DPR chemistry:
 - 146 a. Quarzputz®: Coarse texture.
 - 147 b. Sandblast®: Medium texture.
 - 148 c. Freestyle®: Fine texture.
 - 149 d. Sandpebble®: Pebble stucco texture.
 - 150 e. Sandpebble Fine™: Fine pebble texture.
 - 151 2. Elastomeric DPR (Dirt Pickup Resistance): Water-based elastomeric acrylic coating
152 with integral color and texture, and formulated with DPR chemistry:
 - 153 a. Weatherlastic™ Quarzputz: Coarse texture.
 - 154 b. Weatherlastic Sandpebble: Pebble stucco texture
 - 155 c. Weatherlastic Sandpebble Fine: Fine pebble texture.
 - 156 d. Weatherlastic Adobe™: Fine texture
 - 157 3. Medallion Series PMR™ (Proven Mildew Resistance): Water-based acrylic coating
158 with integral color and texture and formulated with PMR chemistry:
 - 159 a. Quarzputz PMR: Coarse texture.
 - 160 b. Sandblast PMR: Medium texture.
 - 161 c. Freestyle PMR: Fine texture.
 - 162 d. Sandpebble PMR: Pebble stucco texture.
 - 163 e. Sandpebble Fine PMR: Fine pebble texture.
 - 164 4. Specialty Finishes: Factory mixed, water based acrylic:
 - 165 a. Ameristone™: Multi-colored quartz aggregate with a flamed granite
166 appearance.
 - 167 b. Stone Mist®: Ceramically colored Quartz aggregate.
 - 168 c. Custom Brick Polymer Finish: Acrylic polymer-based finishes used in
169 conjunction with a proprietary template system to create the look of stone,
170 brick, slate or tile.
 - 171 d. E Finishes: High performance Elastomeric finish available in Sandpebble
172 E produces a rough, pebbly texture, or Sandpebble Fine E Sand texture.
 - 173 e. ArcusStone Products, Inc. Finishes: Available in Stone or Plaster
174 Limestone finishes in various textures.
 - 175 5. Coatings: Shall be water based, acrylic coating with integral color and/or texture
176 and be one of the following:
 - 177 a. Demandit PMR: Non-textured with PMR (Proven Mildew Resistance)
178 chemistry.
 - 179 b. Revyvit: Fine sandy texture.
 - 180 c. Weatherlastic Smooth™: Non-textured elastomeric coating with DPR
181 (Dirt Pickup Resistance) chemistry.
 - 182 d. Color Prime – W: A water-based, acrylic primer with integral color.

184 3.3 PATCHING

- 185 A. Patching defects in workmanship and materials. Patches in finished areas shall match
186 adjacent surfaces. All areas to be worked must be clean and free of contaminates.

- 187 1) Repair/patch cured un-coated stucco

- 188 Mix stucco as per instructions on bag, add bonding agent to the mix (1 cup of
189 bonding agent to a 5 gallon pail of stucco). An alternative is to apply bonding agent
190 directly to the stucco surface by brush, roller, or spray.
- 191 2) Repair/patch cured coated stucco
192 Mix stucco as per instructions on bag, add bonding agent to the mix (1 cup of
193 bonding agent to a 5 gallon pail of stucco). An alternative is to apply bonding agent
194 directly to the stucco surface. The coated surface should be scored with a wire
195 brush or rubbing stone. Cement stucco will not adhere to elastomerics.
- 196 3) Retexture coated or un-coated stucco
197 Mix stucco for texturing as per instructions on bag, add bonding agent to the mix (1
198 cup of bonding agent to a 5 gallon pail of stucco). An alternative is to apply
199 bonding agent directly to the stucco surface.
- 200 3.4 CLEANING
201 A. Removing plaster and protective materials from control beads and metal accessories.
202 Remove plaster splatters and debris from other surfaces. Remove rubbish, debris and scaffolds
203 from completed area.
204