

1.03 REFERENCES

- A. American Society for Testing and Materials
 - A C 25 – Test Methods for Chemical Analysis of Limestone, Quicklime and Hydrated Lime.
 - B C 926 – Application of Portland Cement-Based Plaster.
 - C C 897 – Aggregate for Job-Mixed Portland Cement-Based Plaster.
 - D C150 – Portland Cement.
 - E C91 – Masonry Cement
 - F C109 – Test Method for Compressive Strength of Hydraulic Cement Mortars.
 - G C 206 –Finishing Hydrated Lime.
 - H C 1177 - Glass Mat Gypsum for Use as Sheathing
 - I C 1278 Fiber-Reinforced Gypsum Panel

- B. Portland Cement Association
 - a. PCA – Portland cement Plaster (Stucco) Manual.

1.04 DESIGN REQUIREMENTS

- A. Structural (wind and axial loads)
 - 1. Design for maximum allowable deflection, normal to the plane of the wall, of $L/360$
 - 2. Design for wind load in conformance with code requirements.

- B. Moisture Control
 - 1. Prevent the accumulation of water into or behind the stucco, either by condensation or leakage into the wall construction, in the design and detailing of the wall assembly.
 - a. Provide corrosion resistant flashing to direct water to the exterior where it is likely to penetrate components in the

wall assembly, including, above window and door heads, beneath window and door sills, at roof/wall intersections, decks, abutments of lower walls with higher walls, above projecting features, and at the base of the wall.

- b. Air Leakage Prevention—prevent excess air leakage in the design and detailing of the wall assembly. Provide continuity between air barrier components in the wall assembly.
- c. Vapor Diffusion and Condensation—perform a dew point analysis of the wall assembly to determine the potential for accumulation of moisture in the wall assembly as a result of water vapor diffusion and condensation. Adjust insulation thickness and/or other wall assembly components accordingly to minimize the risk of condensation.
- d. Waterproofing/Air Barrier over sheathing.
- e. At expansion joints, back joints with barrier membrane.

c. Grade Condition

1. Do not specify the stucco for use below grade or on surfaces subject to continuous or intermittent water immersion or hydrostatic pressure. Provide minimum 4 inch (100 mm) clearance above earth grade, minimum 2 inch (51 mm) clearance above finished grade (pavers/sidewalk). Provide increased clearance in freeze/thaw climate zones.

D. Sloped surfaces, including Foam Trim and Projecting Architectural Features attached to stucco.

1. Avoid the use of stucco on build-outs or weather exposed sloped and horizontal surfaces (refer to 2 and 3 below).
2. All projecting architectural features must have a minimum 1:2 [27°] slope along their top surface. All horizontal reveals must have a minimum 1:2 [27°] slope along their bottom surface. Increase slope for northern climates to prevent accumulation of ice/snow and water on surface. Periodic inspections and increased maintenance may be required to maintain surface integrity of finishes on weather exposed sloped surfaces. Limit projecting features to easily accessible areas and limit total area to facilitate maintenance and minimize maintenance burden.

E. Joints

1. Provide two piece expansion joints over framed structures where building movement is anticipated: at joints in the substrate or supporting construction, where the system is to be installed over dissimilar construction or substrates, at

changes in building height, at floor lines, at columns and cantilevered areas. Provide one piece expansion/control joints every 144 ft² (13 m²)*. Do not exceed length to width ratio of 2-1/2:1 in expansion joint layout and do not exceed more than 18 feet (5.5 m) in any direction without an expansion joint. Cut and wire tie lath to the expansion/control joint accessory so lath is discontinuous beneath the accessory. At expansion joints, back the joint with barrier membrane.

(The requirement for a one piece expansion/control joint every 144 ft² (13 m²) may be waived when two-piece expansion joints exist every 144 ft² (13 m²).

2. Provide one piece expansion/control joints at openings, for example, above and below doors or windows.

(This requirement may be waived when another type of expansion joint is provided in lieu of the one piece expansion/control joint, for example, back-to-back casing beads.

3. Provide minimum 3/8 inch (9 mm) wide joints where the system abuts windows, doors and other through wall penetrations.
4. Provide appropriate accessories at stucco terminations and joints.
5. Provide appropriate sealant at stucco terminations.
6. Indicate location of joints, accessories and accessory type on architectural drawings.

1.05 SUBMITTALS

- A Certification of compliance of materials with product specifications.
- B Manufacturer's written specifications, proportion mixes, and installation instructions for factory-prepared finish materials.
- C Evidence of applicator's experience including project identification with names of Owner and Architect/Engineer.
- D Samples for approval as directed by architect or owner.
- E LEED®

1.06 QUALITY ASSURANCE

- A Manufacturer requirements
 - 1. Perform work in accordance with manufacturer's instructions.
- B Contractor requirements
 - 1. Insured and engaged in application of 3-coat systems for a minimum of three (3) years.
 - 2. Knowledgeable in the proper use and handling of eco stucco™ materials.
 - 3. Employ skilled mechanics who are experienced and knowledgeable in waterproofing/air barrier, lathing and furring, stucco application, and familiar with the requirements of the specified work.
 - 4. Successful completion of minimum of three (3) projects of similar size and complexity to the specified project.
 - 5. Provide the proper equipment, manpower and supervision on the job site to install the system in compliance the project plans and specifications.

1.07 DELIVERY, STORAGE, AND HANDLING

- A Deliver manufactured materials in original packages or containers, fully identified with manufacturer's labels intact and legible.
- B Inspect materials upon delivery and immediately report to Architect any damaged or defective materials.
- C Store materials in a sheltered area with minimum ambient temperature of 45° F (7° C).

1.08 PROJECT CONDITIONS

(Weather conditions affect application, drying time and curing requirements. Hot or dry conditions limit working time and accelerate drying and may require adjustments in application, scheduling and curing to achieve desired results; cool or damp conditions extend working time and retard drying and may require added measures of protection against wind, dust, dirt, rain and freezing.)

- A Maintain ambient and surface temperatures above 40°F (4°C) during application and drying period of waterproofing/air barrier. Maintain ambient and surface temperatures above 40°F (4°C) during application and for 24 hours after set of stucco.
- B Prevent uneven or excessive evaporation of moisture from stucco during hot, dry or windy weather. For installation under any of these conditions provide special measures to properly moist cure the stucco.

- C Provide protection of surrounding areas and adjacent surfaces from application of materials.
- D Prevent excess interior humidity (for example, caused by the use of temporary interior propane heaters) during and after construction.

1.09 PROJECT COORDINATION

- A Protect sheathing from climatic conditions to prevent weather damage until the installation of the waterproofing/air barrier.
- B Provide protection of the waterproofing/air barrier installation with stucco no later than 60 days after installation.
- C Commence the stucco installation after completion of all floor, roof construction and other construction that imposes dead loads on the walls to prevent excessive deflection (and potential cracking) of the stucco.
- D Sequence interior work such as drywall installation prior to stucco installation to prevent stud distortion (and potential cracking) of the stucco.
- E Provide site grading so that the stucco terminates above earth grade minimum 4 inches (100 mm) and above finished grade (pavers/sidewalk) minimum 2 inches (51 mm). Provide increased clearance in freeze/thaw climate zones.
- F Coordinate installation of foundation waterproofing, roofing membrane, windows, doors and other wall penetrations to provide a continuous air barrier. Provide protection of rough openings before installing windows, doors, and other penetrations through the wall and provide sill flashing. Coordinate installation of waterproofing/air barrier components with window and door installation to provide weather proofing of the structure and to prevent moisture infiltration and excess air infiltration.
- G Install window and door head flashing immediately after windows and doors are installed.
- H Install diverter flashings wherever water can enter the wall assembly to direct water to the exterior.
- I Install copings and sealant immediately after installation of the stucco and when finish coatings are dry.
- J Attach penetrations through stucco to structural support and provide air tight and water tight seals at penetrations.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A Mediterranean Colors, LLC
- B Substitutions: To insure the quality of each system is maintained, no substitute should be permitted.

2.02 LATH *(supplied by others)* Select one:

- A Minimum No. 17 gauge 1.5 inch (38 mm) self-furred galvanized steel woven wire fabric in compliance with ASTM C 1032.
- B Minimum 2.5 lb./yd² (1.4 kg/m²) self-furred galvanized steel diamond mesh metal lath in compliance with ASTM C 847

(Metal lath is susceptible to corrosion in coastal environments. Provide weather protection to prevent moisture entry into wall construction.)

2.03 MECHANICAL FASTENERS *(supplied by others)*

- A Appropriate non-corroding fasteners, depending on the type of framing.
 - 1. Wood Framing--minimum 11 gauge, 7/16 inch (11 mm) diameter head galvanized roofing nails with minimum ¾ inch (19mm) penetration into studs or minimum #8 Type S wafer head fully threaded corrosion resistant screws with minimum ¾ inch (19 mm) penetration into studs.
 - 2. Steel Framing—minimum #8 Type S or S-12 wafer head fully threaded corrosion resistant screws with minimum ⅜ inch (10 mm) penetration into studs.

(Pull-out or withdrawal capacity of the selected fastener must be verified with respect to anticipated wind load, desired safety factor and building code requirements. Consult applicable code compliance report for specific assemblies and fastening schedules.)

- B Tie Wire—18 gauge galvanized and annealed low-carbon steel in compliance with ASTM A 641 with Class I coating.

2.04 ACCESSORIES *(supplied by others, select one type)*

- A Weep screed, casing bead, corner bead, corner lath, expansion and control joint accessories. All accessories shall meet the requirements of ASTM C 1063 and its referenced documents:
- B PVC plastic in compliance with ASTM D 1784, cell classification 13244C.
- C Zinc in compliance with ASTM B 69.
- D Galvanized metal in compliance with ASTM A 653 with G60 coating.

(All accessories shall have perforated or expanded flanges and shall be designed with grounds for the specified thickness of stucco.)

2.05 JOB-MIX MATERIALS

- A Water—clean and potable.
- B Clean, well graded sand free of deleterious materials in compliance with ASTM C 897 or ASTM C 144

2.06 STUCCO

- A Natural Hydraulic Lime (NHL 3.5) — Scratch and Brown Coat - job-site proportioned, lime based stucco for trowel or pump application, field mixed with graded sand (ASTM C 897 or C 144) and water.
- B [Fibers: ½ inch nominal length glass fibers meeting requirements of ASTM C1116.] [Fibers: animal hair]
- C Thickness:
 - 1. [Sheathing] [Concrete] [Masonry]
 - a. Scratch Coat: 3/8"
 - b. Brown Coat 3/8"
 - 2. [Straw-Bale]
 - a. Scratch Coat: 3/4"
 - b. Brown Coat: 1/2"

2.07 FINISH COAT *(select one)*

- A eco stucco™ TRADILIME –job-mix lime plaster – 1/8" -1/4" nominal thickness The grade of the sand contributes to final appearance. [limestone] [sandstone] [travertine]
- B eco stucco™ MURALIME – ready-mix lime paint – Applied in a two-coat brush application.
- C eco stucco™ MINERA – ready-mix lime plaster – 1/8" nominal thickness. [fossil] [marble] [sandstone]

D eco stucco TRADILIME ST – ready-mix lime plaster – 1/8” nominal thickness. [travertine] [limestone] [sandstone]

E eco stucco TRADILIME SF ready-mix lime plaster – 1/8” nominal thickness. [limestone] [sandstone] [fossil]

2.08 COLOR *(as shown on drawings)*

A Standard Color: [] as selected by architect.

B Custom Color: [] as selected by architect.

2.09 MIXING

A Natural Hydraulic Lime (NHL 3.5)

1. Scratch Coat: 1 part NHL and 2 parts of sand, proportioned by volume
2. Brown Coats: 1 part NHL and 2.5 parts of sand, proportioned by volume.

a. Small Mixers

- 1) Discharge half of the required sand.
- 2) Add all of the required lime.
- 3) Dry-Mix thoroughly (about 2 minutes until uniform color is achieved)
- 4) Add the remaining sand.
- 5) Continue dry-mixing thoroughly.
- 6) Pour water slowly and keep mixing until required workability is achieved (Approx. 10 minutes).

b. Large Mixers

- 1) Discharge equal parts of the required sand.
- 2) Add equal parts of lime.
- 3) Dry-mix thoroughly (about 2 minutes until uniform color is achieved)
- 4) Add more sand (in equal parts).

- 5) Mix well again (1-2 minutes)
- 6) Add remaining lime and remaining sand.
- 7) Continue dry-mixing thoroughly.
- 8) Pour water slowly and keep mixing until required workability is achieved (Approx. 12 minutes).

(The best results are achieved by adding water slowly. The plaster should be more like dough than slurry. The longer the final mixing time, the more workable (fatter) the plaster will be).

B TRADILIME: Job-mix lime plaster – 33 lb bag:

1. 16 Mesh Sand: Mix 1 part lime to 1 part by volume of sand and 1 part water to 5 parts by volume of lime. Let set 15 minutes and briefly remix before use.
2. 20 Mesh Sand: Mix 1 part lime to 1.5 parts by volume of sand and 1 part water to 5 parts by volume of lime. Let set 15 minutes and briefly remix before use.
3. 30 Mesh Sand: Mix 1 part lime to 2 parts by volume of sand and 1 part water to 5 parts by volume of lime. Let set 15 minutes and briefly remix before use.

C MURALIME: Ready-mix lime paint – Mix 1 part water to 2 parts by volume of lime or 4 to 5 quarts of water per 22 lb. pail. Let set for 15 minutes and remix with 4 to 8 quarts of water depending on desired effects.

D MINERA – Ready-mix lime plaster – Mix 1 part water to 5 parts by volume of lime or 5 to 6 quarts of water for 55 lb. bag. Let set for 15 minutes and remix briefly before use.

E TRADILIME [ST] [SF]: Ready-mix lime plaster – Mix 1 part water to 5 parts by volume of lime or 4 to 5 quarts of water per 44 lb. pail. Let set for 15 minutes and remix briefly before use.

Note: Dry mix for 5 minutes after all materials (including color) are in the mixer. Add the required water to achieve a uniform mix of workable consistency. Keep mix ratio consistent from batch to batch and mix each batch separately. Use only the minimum amount of water necessary for a workable mix. Retemper as needed. Use of excess water is detrimental to performance. Mix only as much material as can readily be used.

PART 3 EXECUTION

3.01 EXAMINATION

- A Inspect surfaces for:
1. Contamination—algae, chalkiness, dirt, dust, efflorescence, fungus, grease, laitance, mildew or other foreign substances.
 2. Surface absorption and chalkiness.
 3. Cracks—measure crack width and record location of cracks.
 4. Damage and deterioration.
 5. Moisture damage—record any areas of moisture damage.
- A. Inspect sheathing application for compliance with applicable requirement:
1. Exterior Gypsum Sheathing—GA-253
 2. Glass Mat Faced Gypsum Sheathing—Refer to manufacturer's instructions.
 3. Exterior Grade and Exposure 1 wood based sheathing—APA Engineered Wood Association E 30.

Note: wood-based sheathing must be gapped 1/8 inch (3mm) at edge and end joints to prevent cracking in the stucco.

- B. Report deviations from the requirements of project specifications or other conditions that might adversely affect the stucco installation to the General Contractor.

3.02 PREPARATION

- A Concrete (Cast-in-Place)
1. Provide a surface that is slightly scarified, water absorbent, straight and true to line and plane. Remove form ties and trim projecting concrete so it is even with the plane of the wall. Remove form release agents by washing with a trisodium phosphate detergent and rinsing with clean water. Establish surface profile by sandblasting, water-blasting, wire brushing, chipping or other appropriate means. Remove all dust, dirt, grease, laitance or other bond inhibiting material. Pre-moisten absorbent surfaces with water prior to placement of stucco.
- B Concrete Masonry Units
1. Remove projecting joint mortar so it is even with the plane of the wall. Remove surface contaminants such as efflorescence, existing

paint or any other bond inhibiting material by sandblasting, water-blasting, wire brushing, chipping or other adequate means. Pre-moisten the surface with water just prior to placement of stucco.

(For A and B above, where bond inhibiting material cannot be removed, where concrete or masonry surface irregularities are such that more than 1/2 inch (13 mm) of stucco must be applied, or where the surface is too dense or non-absorbent to receive the stucco, install furred or self-furred lath.

- C Gypsum Sheathing in compliance with ASTM C1396, Glass Mat Faced Gypsum Sheathing in compliance with ASTM C 1177, and Exterior or Exposure 1 wood-based sheathing (plywood and OSB [Oriented Strand Board]):

1. Verify installation of sheathing in compliance with applicable requirement.
2. Protect the substrate with a moisture barrier as required by the applicable code and install lath and accessories.

(Wood-based sheathing must be gapped 1/8 inch (3mm) at edge and end joints).

3.03 INSTALLATION

Apply the stucco in discrete panels without interruption to avoid cold joints and differences in appearance. Abut wet stucco to set stucco at natural or architectural breaks in the wall such as expansion joints, pilasters, terminations, or changes in plane. Hot or dry conditions accelerate drying and moisture loss from stucco which can affect strength and resistance to cracking. Adjustments in the application, scheduling and curing of stucco to prevent rapid loss of moisture are necessary to achieve a satisfactory stucco installation. Cold temperatures retard drying and strength gain and adjustments may have to be made in the application, scheduling and curing of stucco to prevent damage from frost and other trades. Do not install stucco during extremely hot, dry and/or windy conditions. Do not install stucco during freezing conditions or on frozen substrates. Do not install stucco onto grounds of accessories. Completely embed lath and flanges of accessories and completely cover attachments with stucco. Moist cure stucco a day prior the installation for optimum strength gain and resistance to cracking. Allow final stucco application to completely dry before applying finish. The finished installation must be true, plumb and square. Should stucco get into control or expansion joints, remove the stucco from within the joint before the stucco sets.

- A Installation over cast-in-place concrete or concrete masonry units

(Concrete and concrete masonry units require minimum 28 day cure before the installation of stucco. The requirement for an expansion joint every 144 ft² (13 m²) may be waived on solid substrates without metal lath such as cast-in-place concrete and concrete masonry units provided joints in the supporting construction exist at appropriate intervals and they are reflected in the stucco. In such cases joint spacing in the stucco shall not exceed 250 ft² (23 m²).

1. Install foundation weep screed at the base of the wall.
2. Install casing beads at stucco terminations—doors, windows and other through wall penetrations. Install two piece expansion joints (or back-to-back casing beads) at joints in the supporting construction, building expansion joints, where the stucco is to be installed over dissimilar construction or substrates, at changes in building height, at floor lines, columns, and cantilevered areas. Install one piece expansion joints at corners of windows, doors and similar through wall penetrations, and every 250 ft² (23 m²). Install corner bead at outside corners and corner lath at inside corners. Install full accessory pieces where possible and avoid small pieces. Seal adjoining pieces by embedding ends in sealant. Abut horizontal into vertical joint accessories. Attach at no more than 7 inches (178 mm) on center into concrete/masonry with appropriate fasteners.
3. Pre-moisten concrete masonry units and absorbent concrete prior to the placement of stucco (unless bonding agent has been applied to the CMU surface).
4. Scratch Coat: apply the stucco with sufficient pressure to ensure intimate contact with the substrate and complete coverage to a maximum thickness of 3/16 inch (5 mm). Score horizontally the stucco upon completion of each panel in preparation for a second coat. Let cure for 10 days.
5. Brown Coat: In hot weather conditions, moist cure the scratch coat a day prior to installation and dampen again before applying the second coat. Apply the second coat with sufficient pressure to ensure intimate contact with the scratch coat to a thickness between 3/8 to 1/2 inch (9 or 12 mm) and as needed to bring the stucco to the desired thickness. Use a rod or straight edge to bring the surface to a true, even plane. Fill depressions in plane with stucco.
6. After the stucco has lost sufficient moisture so that the surface sheen has disappeared, float the surface lightly with a darby or a wood float to compress the surface and to provide a smooth, yet open, even surface. Let cure for 10 days before applying the finish.

7. In hot weather or windy conditions, moist cure the surface for at least the first 3-4 days to prevent loss of moisture from the stucco. Avoid eroding the stucco surface with excess moisture. If relative humidity exceeds 75% the frequency of moist-curing can be diminished. Protect from frost and adverse weather conditions for a minimum of 72 hours.

B Installation over frame construction with sheathing

1. Weep Screed Installation

- a. Install foundation weep screed at the base of the wall securely to framing with the appropriate fastener. Locate foundation weep screed so that it overlaps the joint between the foundation and framing by a minimum of 1 inch (25 mm). Locate the foundation weep screed minimum 4 inches (100 mm) above earth grade, 2 inches (51 mm) above finished grade

2. Weather Protection

- a. Protect sills of rough openings with barrier membrane.
- b. Apply moisture barrier in compliance with the applicable building code. Wrap paper into rough opening and lap over barrier membrane at jambs. Lap paper over foundation weep screed attachment flange and window/door head flashings.

(Code requirements for weather protection vary. Always consult the applicable code. Typically asphalt felt in compliance with the code is attached directly to sheathing and lapped shingle style, upper courses over lower courses, by minimum 2 inches (51 mm), with vertical laps of minimum 6 inches (150 mm). Courses are staggered so that vertical joints do not align. Two layers of asphalt felt are required over wood based and gypsum based sheathing i under IBC (International Building Code) jurisdiction. If paper-backed lath is used, the water resistant backing serves as the weather protection or as one of the two layers of felt required over wood based or gypsum based sheathing. Care must be taken to prevent tears in the paper and to limit penetrations to only those required for attachment. Flashing must be in place and properly integrated with the moisture barrier at sills, above windows and doors, decks and at roof/wall intersections such that water is directed to the exterior).

3. Casing Bead and Expansion Joint Installation

- a. Install casing beads at stucco terminations—doors, windows and other through wall penetrations. Install expansion joints (or back-to-back casing beads) at building expansion joints, where the stucco is to be installed over dissimilar construction or substrates, at changes in building height, at floor lines, columns, and cantilevered areas. Install one piece expansion joints at corners of windows, doors, and similar through wall penetrations, and every 144 ft² (13 m²). Install full accessory pieces where possible and avoid small pieces. Seal adjoining pieces by embedding ends in sealant. Abut horizontal into vertical joint accessories. Attach at no more than 7 inches (178 mm) into framing with appropriate fasteners.

Note: refer to architectural drawings for joint locations and accessory type. Moisture protection must be continuous behind joints and accessories.

4. Lath Installation

- a. Diamond Mesh Metal Lath
 - i). General--install metal lath with the long dimension at right angles to structural framing. Terminate lath at expansion joints. Do not install continuously beneath joints.
 - ii). Seams/Overlaps--overlap side seams minimum 1/2 inch (13 mm) and end seams minimum 1 inch (25 mm). Stagger end seams. Overlap casing beads and expansion joints minimum 1 inch (25 mm) over narrow wing accessories, minimum 2 inches (51 mm) over expanded flange accessories. Do not install lath continuously beneath expansion joints.
 - iii). Attachment--fasten securely through sheathing into structural framing at 7 inches (178 mm) on center maximum vertically and 16 inches (406 mm) on center horizontally*. Wire tie at no more than 9 inches (225 mm) on center at: side laps, accessory overlaps, and where end laps occur between supports.
- b. Woven wire fabric lath—follow installation as for metal lath except overlap all seams by one mesh minimum.
- c. Paper-backed lath—follow installation as for metal lath. Lap lath over lath, not paper to lath overlap. For horizontal overlaps the paper backing must lap shingle style behind the lath to lath overlap.

(The type fastener selected its layout and pullout or withdrawal value from the supporting construction must be verified and approved by the project engineer/architect with respect to design wind load and local building code requirements).

5. One Piece Expansion Joint Installation

- a. Install one piece expansion joints over lath at through wall penetrations, for example, above and below doors or windows (unless another type of expansion joint is already provided at these locations or one piece expansion joints are already provided). Install one piece expansion joints over lath every 144 ft² (13 m²) (unless already provided). Wire tie one piece expansion joints to lath at no more than 7 inches (178 mm) on center. Make certain lath is discontinuous beneath joints.

6. Inside and Outside Corners

- a. Install corner lath at inside corners and corner bead at outside corners over lath. Attach through lath into framing at no more than 7 inches (178 mm) on center with appropriate fasteners.

7. Stucco Installation

- a. Scratch Coat: apply stucco with sufficient pressure to key into and embed the metal lath. Apply sufficient material, 3/8—1/2 inch (9—13mm), to cover the metal lath and to permit scoring the surface. Score horizontally the stucco upon completion of each panel in preparation for a second coat.
- b. Brown Coat: as soon as the first coat is firm enough to receive the second coat without damage, apply the second coat. Alternatively, moist cure the first coat up to 48 hours and dampen the scratched surface with water immediately before applying the second coat. Apply the second coat with sufficient pressure to ensure intimate contact with the first coat and as needed to bring the stucco to a uniform thickness that matches the grounds of the accessories. Use a rod or straight edge to bring the surface to a true, even plane. Fill depressions in plane with stucco. Final thickness of stucco shall be minimum 3/4 inch (19 mm), maximum 7/8 inch (22 mm).
- c. After the stucco has become slightly firm float the surface lightly with a darby or wood float to compress

the surface and to provide a smooth, yet open, even surface. Moist cure after the stucco has set by lightly fogging for at least 48 hours. Fog as frequently as required during the 48 hour period to prevent loss of moisture from the stucco. Avoid eroding the stucco surface with excess moisture. If relative humidity exceeds 75% the frequency of moist curing can be diminished

(The proper time to float is when the float no longer sticks to the surface of the stucco).

C Installation over straw-bale and adobe/cob construction

1. Scratch Coat: The surface should be reasonably sound. Any potential depressions or hollows should be carried out and allowed at least 7 days to cure. The scratch coat should be cast on (sprayed, harled, spatter dash, roughcast), thus improving the bond between plaster and substrate at a thickness of 1/2" in one pass to 3/4" in two passes – mixed accordingly to the method of application. Let cure for 10 days avoiding direct sunlight and drying winds.
2. Brown Coat: Moist cure the scratch coat prior to application. Apply using firm and even pressure. When using a laying on trowel application, thickness should be even throughout. Ensure not to overwork the surface. Upon completion, adequate protective and curing measures should be put in place.

D Installation of finish coat

1. Apply finish directly over the brown coat. Apply finish by troweling with a stainless steel trowel in accordance with the finish specified. Follow these general rules for application of finish:
 - a. Moist cure the brown coat before the finish installation.
 - b. Avoid application in direct sunlight.
 - c. Apply finish in a continuous application, and work a wet edge towards the unfinished wall area. Work to an architectural break in the wall before stopping to avoid cold joints.
 - d. Weather conditions affect application and drying time. Hot or dry conditions limit working time and accelerate drying. Adjustments in the scheduling of work may be required to achieve desired results; cool or damp conditions extend working time and retard drying and may require added measures of protection against

- wind, dust, dirt, rain and freezing. Adjust work schedule and provide protection.
- e. Do not install separate batches of finish side-by-side.
 - f. Do not apply finish into or over joints or accessories. Apply finish to outside face of wall only.
 - g. Do not apply finish over irregular or unprepared surfaces, or surfaces not in compliance with the requirements of the project specifications.
 - h. In hot weather conditions saturate the brown coat with water the night preceding the finish installation.

3.04 CLEANING AND PROTECTION

- A** Provide protection of installed materials from water infiltration into or behind them.
- B** Provide protection of installed stucco from dust, dirt, precipitation, and freezing.
- C** Point up around trim and other locations where plaster abuts dissimilar materials.
- D** Remove temporary coverings used to protect adjacent surfaces.
- E** Clean and repair adjacent surfaces and items soiled or damaged during work in this Section.

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