

Exhibit D - Stucco Standard & Detail

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Jim Hinderaker

From: Brian Rumsey <brumsey@crossarchitects.com>
Sent: Monday, July 28, 2014 12:33 PM
To: Jim Hinderaker
Cc: Byington, Spencer
Subject: RE: Stucco

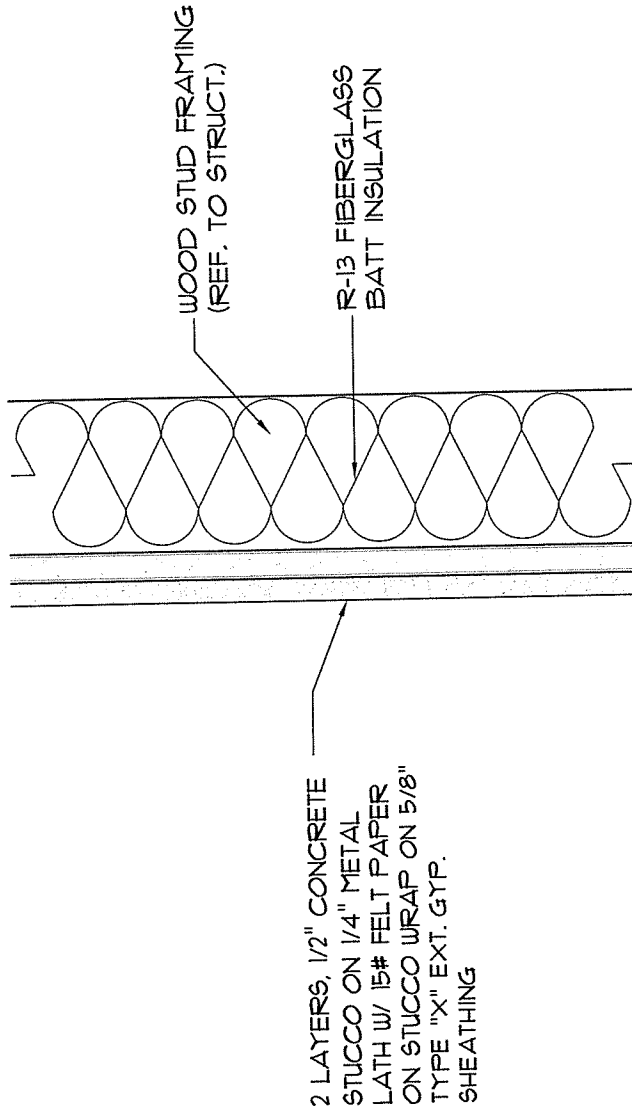
Jim,

The lakeside Lodge stucco will meet or exceed the requirements of ASTM C 926 and the city's adopted building code standard Section 2512 of the 2009 International Building Code.

Thanks!

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DETAIL @ CONCRETE STUCCO

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N.T.S.

SECTION 092410

PORTLAND CEMENT PLASTER – ONE COAT

PART 1 - GENERAL

- 1.1 SECTION INCLUDES
 - A. Fiber reinforced portland cement plaster wall cladding.
- 1.2 QUALITY ASSURANCE
 - A. Applicator: Company specializing in cement plaster work with 5 years documented experience.
 - B. Apply cement plaster in accordance with manufacturer's recommendations, approved NER report, and as noted. Plaster products to have approved NER Report.
 - C. Plastering shall be of highest quality and finish. Intersections of planes shall be sharp and accurate. Finished surfaces shall be uniform in texture and color throughout area, and free from imperfections.
- 1.3 SUBMITTALS
 - A. Submit under provisions of Section 013000.
 - B. Provide product data on both base coat and finish coat materials that give characteristics, limitations, of products, and written acknowledgment that both base and finish coat manufacturer's products are compatible with each other and be fully warranted when applied with each other.
 - C. Submit manufacturer's installation instructions for all products within the system.
- 1.4 FIELD SAMPLES
 - A. Provide sample panel under provisions of Section 01300.
 - B. Construct field sample of one wall area, not less than 10 x 10 feet in size, complete, illustrating surface finish color of finish coat.
 - C. Locate where directed.
 - D. Accepted sample may remain as part of the work.
- 1.5 ENVIRONMENTAL REQUIREMENTS
 - A. Do not apply plaster when substrate or ambient air temperature is less than 50 degrees F unless sand and mixing water are heated to 70 degrees F and temporary protection is provided to keep minimum 50 degrees F in plastered areas for 24 hours. Do not use frozen materials in mixes.
 - B. Maintain minimum ambient temperature of 50 degrees F during and after installation of plaster.
 - C. Protection
 - 1. Protect plaster from uneven and excessive evaporation during hot, dry weather.
 - 2. Protect finished surfaces installed prior to plastering by covering with suitable dropcloths.
 - 3. Screen openings with plastic film when building is subject to hot, dry winds, or temperature differentials of more than 20 degrees F are present.
- 1.6 COORDINATION
 - A. Openings and chases for heating, plumbing and electrical ducts, pipes and conduits shall be built into plaster work as required. Consult other trades in advance and make provisions for their work to avoid cutting and patching.
- 1.7 WARRANTY
 - A. Comply with provisions of Section 017800.
 - B. Warrant installed system (including sheathing substrate and sealants) for 5 years to:
 - 1. Be free from defects in material or labor, including cracks, adhesive or bonding failure, finish degradation, and color retention.
 - 2. Remain in watertight or airtight condition.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Magna Wall, Inc.
- B. Sto Powerwall.
- C. ParexStucco One Coat 202.
- D. Substitutions: Submit in accordance with Section 016000.

2.2 PLASTER MATERIALS

- A. Portland Cement: ASTM C150, Normal - Type I Portland.
- B. Lime: ANSI/ASTM C206, Type S.
- C. Aggregate: Natural sand in accordance with ANSI/ASTM C144.
- D. Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.
- E. Plaster Mix Reinforcement: Glass fibers, 1/2 inch nominal length, alkali resistant.
- F. Finish Texture: As selected by Architect.

2.3 CEMENT PLASTER BASE COAT

- A. Mix and proportion cement plaster in accordance with manufacturer's instructions.
- B. Do not retemper or use material that has partially set. Do not use frozen, caked or lumpy materials. Clean mixer or mixing boxes of set of hardened materials before materials for a new batch are loaded. Mix each batch separately. Thoroughly dry mix materials before adding water.
- C. Mix only as much plaster as can be used prior to initial set.
- D. Mix materials dry, to uniform color and consistency, before adding water.
- E. Protect mixtures from frost, contamination, and evaporation.

2.4 ACCESSORIES

- A. Polystyrene Insulation for Ornamentation:
 - 1. ASTM C578; tested in accordance with ASTM E84 with flame-spread of less than 25.
 - 2. Insulation board must be aged. If air dried, provide board aged for not less than 6 weeks in block form prior to cutting and shipping.
 - 3. Water Absorption: In accordance with ANSI/ASTM D2842, 4% by volume.
 - 4. Variations in tolerances in dimensions of insulation board shall be minimized to +/- 1/16" in all dimensions.
 - 5. Label each insulation board to provide information required by applicable codes, and to include manufacturer's quality control number.
 - 6. Density: 1.0 PCF.
 - 7. Size: As required for shapes and sizes indicated.
 - 8. Thickness: Minimum 1" with greater thickness as detailed to maintain profiles at built-up areas.
 - 9. Edges: All edges to be square, except top edges that are exposed to the weather shall slope per recommendations of finish coat manufacturer.
 - 10. Insulating Value: R = 3.7.
 - 11. Manufacturer: Approved by coating system manufacturer.
- B. Ornamentation Adhesive and Mesh Adhesive: Acrylic based, compatible with the insulation board substrate, and reinforcing fabric; free of iron containing compounds.
- C. Reinforcing Fabric: Balanced open mesh glass fiber fabric, minimum 4.5 oz/s.y., properly treated for compatibility with other materials of the system and supplied by coating system manufacturer. Provide impact resistant mesh as described in EIMA-101.86 in addition to standard fabric wherever foam ornamentation occurs within 6 feet of an adjacent grade or paving, and at parapet caps.
- D. Base Coat: Compatible with the insulation board and reinforcing fabric.
- E. Joint Sealant: Silicone sealant specified in Section 07900. Listed by the system manufacturer and approved by the sealant manufacturer for the selected system.
- F. Mechanical Fasteners for Foam Shapes: Type, quantity, and spacing as required by acrylic top coat manufacturer for size and shape or ornamentation.
- G. Joint Devices: Refer to Section 092116.

2.5 FINISH COAT

- A. Premixed Exterior Finishing Coat: 100 percent acrylic copolymers, with integral color.
- B. Color: As selected by Architect or as indicated in Contract Documents.
- C. Acceptable Products:
 - 1. TeifsFlex by Teifs Wall Systems.
 - 2. Sto Flexfinish by StoCorp.
 - 3. Parex DPR Acrylic Finish by ParexLaHabra.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work. Verify that substrate workmanship is within acceptable tolerances.
- B. Grounds and Blocking and Accessories: Verify items within walls, and other areas receiving plaster for other Sections of work have been installed.
- C. Mechanical and Electrical: Verify services within walls have been tested and approved.
- D. Verify that furring, lathing and control/expansion joints are complete and tightly secured in place.
- E. Beginning of installation means acceptance of existing conditions.

3.2 PREPARATION

- A. Protect surfaces near the work of this Section from damage or disfiguration.
- B. Clean concrete surfaces of foreign matter. Clean surfaces using acid solutions, solvents, or detergents. Wash surfaces with clean water.

3.3 APPLICATION - BASE COAT

- A. Apply plaster in accordance with manufacturer's instructions.
- B. Apply plaster by machine or hand. Interrupt plaster only at junctions of plaster planes, at openings or at control joints.
- C. Layout do permit completion of an entire surface in one application. Maintain a wet edge. Work to corners and joints, and do not allow material to set up within a distinct wall area.
- D. Interrupt plaster at control joints. Tool through to produce "V" joint at intersection of frames and other items of metal or wood which act as plaster grounds.
- E. Nominal Plaster Thickness: As required by system manufacturer.
- F. Apply base coat with sufficient material and pressure to form keys on metal lath.
- G. Water Curing of Base Coat:
 - 1. Follow procedures recommended by Portland Cement Association.
 - 2. Cure minimum of 48 hours.
 - 3. Prevent premature dry-out.
 - 4. Allow base coat to cure a minimum of 6 days before applying elastomeric finish coat.
 - 5. Upon completion, point-up plaster around trim and other locations where plaster meets dissimilar materials.
- H. Cut out and patch defective or damaged plaster.
- I. Match patching of defective or damaged plaster to existing work in form and texture.

3.4 FOAM ORNAMENTATION INSTALLATION

- A. General: Install in accordance with system manufacturer's printed instructions.
- B. Adhere foam ornamentation to vertical surfaces in locations indicated
- C. Precut board as required to fit openings, projections, etc., stagger vertical joints and corners.
- D. Adhesive:
 - 1. Apply mixed adhesive to the entire surface of the insulation board with a notched trowel in accordance with manufacturer's printed instructions.
 - 2. Apply pressure over entire surface of board to ensure uniform contact and high initial grab. Abut joints tightly. Rasp flush irregularities in insulation board exceeding 1/16 inch.
- E. Base Coat and Standard Reinforcing Fabric:
 - 1. Using stainless steel trowel, apply base coat mixture to a uniform thickness of 1/16 inch.
 - 2. Immediately place reinforcing fabric against the wet base coating, trowel from center to edges, embedding fabric into the coating.
 - 3. Use reinforcing fabric continuous at corners and lapped not less than 2-1/2 inches at fabric edges. Provide an additional layer of reinforcing fabric at exterior corners.
 - 4. Install additional reinforcing fabric at diagonally at corners of openings.
 - 5. Avoid wrinkles while embedding the reinforcing fabric.
 - 6. Back wrap insulation board at base.
 - 7. Verify base coating surface is dry and hard before proceeding to finish application.
- F. Base Coat and Reinforcing Mesh for Impact-Resistance Areas
 - 1. Using stainless steel trowel, apply impact adhesive to entire surface of board to a uniform thickness of 3/32 inch.
 - 2. Immediately embed first layer of reinforcing mesh into wet base coat using trowel. Smooth until mesh is fully embedded. Butt ends of mesh pieces tightly. Do not lap ends.
 - 3. Allow 24 hours for base coat to form a positive bond. Protect from damage and weather while curing.

4. Apply a second layer of standard reinforcing mesh and adhesive mixture over first layer of reinforcing fabric as specified above.
- 3.5 ACRYLIC FINISH COAT INSTALLATION
 - A. Using clean stainless steel trowel, apply a light coat of finish material directly to the cement plaster base coat (or to the reinforced base coating over ornamentation areas).
 - B. Apply and level during the same operation to the minimum attainable thickness consistent with uniform coverage.
 - C. Apply and texture finish continually over an entire surface.
 - D. Work to corners or joints, and do not allow the material to set up within a distinct wall area.
 - E. Furnish sufficient staging and workmen to accomplish a uniform appearance.
 - F. Achieve final texture after veneer finish has jelled so that it does not stick to the trowel.
 - G. Final Thickness: Not greater than the diameter of the largest aggregate of the finish material.
- 3.6 TOLERANCES
 - A. Maximum Variation from True Flatness: 1/8 inch in 10 feet as measured with a straight edge placed at any location on the surface.
- 3.7 PATCHING
 - A. Patch defects in workmanship and materials. Patches in finished areas shall match adjacent surfaces.
- 3.8 CLEANING
 - A. Removing plaster and protective materials from expansion beads and metal accessories. Remove plaster spatters and debris from other surfaces. Remove rubbish, debris, and scaffolds from spaces and leave broom clean.
- 3.9 FIELD QUALITY CONTROL
 - A. Manufacturer's Field Services: Notify manufacturer prior to start of work and make arrangements for manufacturer's technical representative to be present during first day's work to verify work is being conducted in accordance with their recommendations, and at minimum monthly intervals during the course of plastering work on the project. Report of site visit to be prepared on form attached, or similar form as approved by Owner.

END OF SECTION