CSI - SECTION 09 25 23

POLISHED PLASTER – GRANITE WITH AQUAWAX

PART 1 GENERAL

1.1. SECTION INCLUDES

1. Interior decorative polished plaster finish system for installation over walls, columns, and ceilings.

1.2. RELATED SECTIONS

1. Section 09210 - Gypsum Plaster: Gypsum plaster work not part of this Section.
2. Section 09220 - Portland Cement Plaster: Portland cement plaster work not part of this Section.
3. Section 09260 - Gypsum Board Assemblies: Preparation of substrate.

1.3. REFERENCES

1. ASTM D 1308 - Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes; 1998.
2. ASTM D 2486 - Standard Test Method for Scrub Resistance of Wall Paints; 1996.
3. ASTM D 3363 - Standard Test Method for Film Hardness by Pencil Test; 1992a.
4. ASTM E 84 - Standard Test method for Surface Burning Characteristics of Building Materials; 1999.
5. ASTM D 3273 – Standard Test Method for Resistance to the Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
6. ASTM D 3274 – Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation.
7. ASTM D 3960 – Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.

1.4. SYSTEM PERFORMANCE REQUIREMENTS

1. Polished plaster P01, P20, P30 or P66 shall be tested by a qualified independent testing agency for the following properties according to the following test methods:

1. Pencil Hardness: Minimum of 5H+ when tested in accordance with ASTM D3363.

2. Scrub Resistance:Minimum 10,000 cycles using 10 grams of scrubbing medium and 5 grams of water applied by brush.

1. Chemical Exposure: Passes ASTM D 1308.
2. Mold Resistance – Minimum rating of 10 when tested according to ASTM D 3273 and D 3274.
3. VOC content – Top coat plaster to have 0g/lt (0lbs/gal) when tested according to ASTM D3960.

1.5. SUBMITTALS

See Section 01300 - Administrative Requirements, for submittal procedures.

1. Product Data: Provide manufacturer’s technical data on products specified, including installation instructions.
2. LEED Submittals: Provide all details pertaining to system and LEED data per Armourcoat document:  
     
   AI-40-085ST19.01.01: LEED STATEMENT - POLISHED PLASTER – LEATHERSTONE, TRAVERTINE, GRANITE WITH AQUAWAX
3. Shop Drawings: Indicate designs, colors, and locations.
4. Samples: Submit [\_\_\_\_\_] samples, 6 x 6 inches in size, illustrating finish color and texture.
5. Qualification Data: Certificate issued by distributor indicating that installer has attended training class and is authorized to install specified product.
6. Warranty: Sample copy of manufacturer's warranty stating obligations, remedies, limitations, and exclusions of warranty.

1.6. QUALITY ASSURANCE

1. Installer Qualifications: Company specializing in performing work of this Section with a minimum of one year documented experience. Include list of at least three completed projects of similar scope with project names and addresses and names and addresses of architects and owners. Installers must have attended Armourcoat training class.
2. Single Source Responsibility: Provide only proprietary, factory-formulated materials as produced by Armourcoat, Ltd. specifically for applications indicated. Substitutes within the system are not permitted.
3. Fire-Test-Response Characteristics: Provide finished system with the following surface-burning characteristics as determined per ASTM E 84 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.

1. Flame Spread: 10 or less.  
2. Smoke Contribution: 10 or less.

1.7. MOCK-UP

1. Prior to installing polished plaster, construct mock-up of finished surface, [\_\_\_\_\_\_] feet long by [\_\_\_\_\_\_] feet wide, illustrating surface [design,] finish and color.
2. Locate where [directed by Architect / indicated on drawings].
3. Mock-up [may / may not] remain as part of the Work.

1.8. DELIVERY, STORAGE AND HANDLING

1. Deliver materials to the construction site in their original packaging with manufacturer’s labels identifying manufacturer and product; color designation; lot number; and date of manufacture.
2. Inspect materials upon delivery and immediately report to Architect damaged or defective materials.
3. Store materials in a well ventilated area with minimum ambient temperature of 50º F (10º C). Prevent deterioration due to moisture, temperature changes, contamination, or other causes.

1.9. PROJECT CONDITIONS

1. Environmental Requirements: Do not apply polished plaster when substrate or ambient air temperatures is under 50º F (10º C) or over 95º F (35ºC).
2. Maintain these conditions 24 hours before, during and after installation of polished plaster.

1.10. WARRANTY

1. See Section 01780 - Closeout Submittals, for additional warranty requirements.
2. Provide manufacturer’s standard written warranty.

1. Period of Warranty: 10 years.

1.11. MANUFACTURERS

**Acceptable Manufacturers:**

1. Armourcoat Surface Finishes, 4330 Production Court, Las Vegas, Nevada 89115, USA   
Tel: 702 644 0606. Fax: 702 644 0554. E-mail: sales@usa.armourcoat.com.

2. Armourcoat Ltd.; Morewood Close, London Road, Sevenoaks Kent. TH13 2HU.   
Tel: +44 (0) 1732 460668. Fax: +44 (0) 1732 450930. E-mail: [sales@armourcoat.co.uk](mailto:sales@armourcoat.co.uk).  
Web: www.armourcoat.com.

Substitutions: Not permitted.

1.12. PRODUCTS

1. Products: Armourcoat Polished Plaster, Armourcoat Ltd.
2. Design: [Custom design as shown on architectural drawings and as approved on shop drawings]
3. Finish: [Custom finish to match Architect’s approved sample]
4. Color: [\_\_\_\_\_\_\_\_\_\_\_\_\_) / Multiple colors as indicated on Schedule at end of this Section].

1.13. MATERIALS

1. Polished Plaster System: Provide manufacturer’s complete system of proprietary materials specifically formulated for compatibility with one another including:

1. K40 Primer  
K124 Keycoat   
P01/P20/P30/P66 Polished Plaster  
Marble Chips  
Aquawax

1. Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.

PART 2 EXECUTION

2.1. EXAMINATION

1. Verify the suitability of existing conditions before starting work. Do not begin Work of this Section until unsatisfactory conditions have been corrected.
2. Acceptable Substrate Tolerances: Verify that substrates are true and level. Substrates shall be constructed to the following tolerances:

1. ± 0.05 inches in 2 feet and ± 0.15 inches in 6 feet.

2.2. PREPARATION

1. Comply with manufacturer's written instructions for substrate preparation.
2. Remove hardware, electrical switch and outlet plates, lighting fixtures and other items already in place that are not to receive plaster finish.

1. After completion of work, reinstall items using workers skilled in the trades involved.

1. Protect adjacent surfaces and items that are not to receive plaster finish, but which cannot be removed, from finish work. Use masking materials that will not damage protected items and surfaces.
2. Clean substrates of substances that could impair bond including mold, mildew, oil, grease, salts, contamination and dirt using methods recommended by manufacturer.
3. Substrate: For gypsum board substrates, apply coats of joint compound over joints and fasteners to achieve a minimum of a Level 4 finish. Use ready-mixed or job-mixed, drying-type, all-purpose or topping compound, or proprietary product specifically formulated for joint coating. Touch up and sand as needed to produce a surface free of visual defects, tool marks, or ridges, and conforming to a smooth flat surface. Apply Polished Plaster to Regular Gypsum Board that is fire resistant and complies with ASTM C 1396.
4. Prepare all materials in accordance with manufacturer’s recommendations.

2.3. INSTALLATION

1. Prime Coat: Apply K40 primer coat. Allow to dry.
2. Keycoat: Mix and apply K124 Keycoat in accordance with manufacturer’s instructions. Allow to dry.
3. Finish: Apply finish coats as recommended by manufacturer to achieve desired results. Number of coats and total dry mil thickness shall be as recommended by manufacturer for specified system. Allow to dry.
4. Wax: Apply Aquawax accordance with manufacturer’s instructions.
5. Provide finish free of unsightly variations in texture and other defects.

2.4. CLEANING AND PROTECTION

1. Remove temporary coverings used to protect adjacent surfaces and reinstall hardware, plates, lighting fixtures and other items previously removed.
2. Clean and repair adjacent surfaces and items soiled or damaged during Work of this Section.
3. Maintain and protect completed polished plaster surfaces until time of acceptance at Substantial Completion.

2.5. SCHEDULE

1. Plaster Style A:

1. Location: [\_\_\_\_\_\_/ As indicated on drawings].  
2. Design: [\_\_\_\_\_\_].  
3. Finish: [\_\_\_\_\_\_].  
4. Color: [\_\_\_\_\_\_].

1. Plaster Style B:

1. Location: [\_\_\_\_\_\_/ As indicated on drawings].  
2. Design: [\_\_\_\_\_].  
3. Finish: [\_\_\_\_\_].  
4. Color: [\_\_\_\_\_].