

SECTION 03 35 00 – CONCRETE FINISHING

PART 1 - GENERAL

1.01 SUMMARY

- A. Work Included: Provide products in accordance with the Contract Documents. The Contract Documents are as defined in the "Agreement". The "General Conditions " shall apply to all work under the Contract. The Work of this Section shall include but not be limited to the following:

1. Self-leveling latex modified lightweight concrete floor fill.
2. Floor primers and accessories.
3. Patching material.

- B. Related Sections:

1. Section 09 30 00 - Tile
2. Section 09 65 00 - Resilient Flooring

1.02 QUALITY ASSURANCE

- A. Engage an experienced firm that has recently completed Cementitious Floor Topping projects similar in cost, design, and extent to that indicated by this section and whose work has resulted in construction with a record of successful in-service performance.

1.03 SUBMITTALS

- A. Product Data: Submit data for proprietary materials and items, as requested by Resident Engineer.
- B. Samples: Submit samples of each material as requested by Resident Engineer, including names, sources, and descriptions.
- C. Laboratory Test Reports: Submit laboratory test reports.
- D. Materials Certificates: Provide materials certificates in lieu of materials laboratory test reports when permitted by Architect and signed by Manufacturer and Contractor, certifying that each material complies with, or exceeds, specified requirements.

1.04 PROJECT CONDITIONS

- A. Maintain environmental conditions and protect work before, during, and after installation to comply with manufacturer's printed recommendations.
- B. Maintain temperatures at not less than 50 deg F in areas designated to receive fill material, during and after installation, unless otherwise required by manufacturer's instructions.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, provide products as manufactured by one of the following, or approved equal:
 - 1. Ardex, Inc.
 - 2. Euclid.
 - 3. Increte Systems.
 - 4. or Approved equal.
- B. Product:
 - 1. Engineered Cement: Provide "Ardex K-15" as manufactured by Ardex, Inc., or an approved equal with a 3 day compressive strength of not less than 3000 psi, and with a 28 day compressive strength of not less than 4000 psi per ASTM C 109.
 - a. For leveling of floors.
 - 2. Finishing Underlayment: "SD-Fb Feather Finish" as manufactured by Ardex Inc., or an approved equal.

2.02 MIX DESIGN

- A. General: Mix proportions and methods shall be in strict compliance with the manufacturer's recommendations.
- B. Mix Proportions: Provide mixture proportions in strict accordance with manufacturer's printed instructions.
 - 1. Mix materials in a high-speed mixing device for not less than two minutes.
- C. Mixing devices: Provide mechanical mixer for mixing topping material with water at project site. Equip mixer with a suitable water-measuring device.
 - 1. Use only mixers which are capable of mixing cement and water into a uniform mix.

PART 3 - EXECUTION

3.01 CONDITION OF SURFACES

- A. Substrate Surfaces: Remove dirt, loose material, oil, grease, paint or other contaminants, leaving a clean structurally sound substrate surface that complies with manufacturer's requirements.
- B. Leak Prevention: Fill cracks, seams, and voids of substrate with a quick setting patching compound as recommended by fill manufacturer to prevent leakage of fill materials where leakage could occur.
- C. Primer: Apply primer, as recommended by fill manufacturer, in compliance with the manufacturer's directions. Porosity of substrate may require multiple coats of primer; comply with manufacturer's recommendations.

3.02 PLACING

- A. Apply materials to comply with the manufacturer's instructions.
- B. Application: Place lightweight concrete fill product over properly prepared substrates. Spread and screed fill material to a smooth surface. Place fill material as continuously as possible until application is complete so that no fill material slurry is placed against fill material which has obtained its initial set.
- C. Drying: General Contractor shall provide continuous ventilation and adequate heat to rapidly remove moisture from the area until the fill material product is dry. General Contractor shall provide mechanical ventilation if necessary under the above conditions.
 - 1. To test for dryness, tape a 24 inch by 24 inch section of plastic to the surface of the underlayment. After 48 to 72 hours, if no condensation occurs, the underlayment shall be considered dry. Perform dryness test 7 days after pour, and each day thereafter until dryness test proves successful.

3.03 PERFORMANCES

- A. Failure of materials to bond to substrates (as indicated by a hollow sound when tapped), or disintegration or other failure of underlayment to perform in accordance with product data, will be considered failure of materials and workmanship. Repair or replace materials in areas of such failures.

3.04 PROTECTION

- A. Protection: During construction, place temporary protections, as recommended by the manufacturer, to protect systems from construction traffic and similar loads.

END OF SECTION