

SECTION 035416

CEMENTITIOUS UNDERLAYMENT

PART 1 GENERAL

1.1 DESCRIPTION

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SECTION INCLUDES

- A. The Work of this Section includes all labor, materials, equipment, and services necessary to complete the cementitious underlayment as shown on the drawings and/or specified herein, including, but not necessarily limited to, the following:

- 1. Self-leveling cementitious compound applied over existing concrete substrates.

1.3 RELATED SECTIONS

- A. Cast-in-Place Concrete - Section 033000.

1.4 QUALITY ASSURANCE

- A. Applicator: Company specializing in performing the work of this Section with a minimum of 3 years' experience and approved by the manufacturer of the product used.

1.5 SUBMITTALS

- A. Submit catalog information and product data for material to be used.
- B. Submit approval letter as required by Article 3.1, para. B. herein.

1.6 PRODUCT HANDLING

- A. Protection: Use all means necessary to protect the materials of this Section before, during, and after installation, and to protect the installed work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary.

1.7 MOCK-UP

- A. Construct a mock-up of underlayment material, 8 feet long by 8 feet wide.
- B. Locate where directed by the Architect.
- C. Approved mock-up may remain as part of the Work.

1.8 JOB REQUIREMENTS

- A. Do not install underlayment until floor penetrations and peripheral work are complete.
- B. Maintain minimum ambient temperatures of 50 degrees F. 24 hours before, during, and 72 hours after installation of underlayment.
- C. During the curing process, ventilate spaces to remove excess moisture and until underlayment is dry, allow a minimum of seven (7) days.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Basis of Design: Subject to the requirements specified herein, provide "~~K-15V 1200~~" made by Ardex, or equivalent of ~~Cusotm Building Products, H. B. Fuller, Euelid Chemical Co.,~~ **Drytek 7200 by Laticrete, Skimflow ES by Dependable Floor Products** or approved equal.

2.2 MATERIALS

- A. Underlayment: One of the above listed products.
- B. Water: Potable and not detrimental to underlayment mix materials.
- C. Primer: Manufacturer's recommended type.
- D. Joint and Crack Filler: Latex based.

2.3 MIXING

- A. Site mix materials in accordance with manufacturer's instructions.
- B. Mix to achieve following characteristics:
 - 1. Density: 115 lb./cu. ft. minimum dry density.
 - 2. Compressive Strength: 4,000 psi minimum in accordance with ASTM C 109.
 - 3. Fire Hazard Classification: Flame/Smoke rating of 0/0 in accordance with ASTM E 286.
- C. Mix to self-leveling consistency.

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine the areas and conditions where cementitious underlayment is to be installed and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

- B. Manufacturer's representative must inspect surfaces to receive cementitious underlayment and approve those surfaces in writing to the Architect prior to start of application.

3.2 PREPARATION

- A. Vacuum clean surfaces; remove any material (curing compounds, film, dirt) that would be detrimental to bond of cement leveling compound.
- B. Prime substrate in accordance with manufacturer's instructions. Allow to dry.
- C. Close floor openings.

3.3 APPLICATION

- A. Install underlayment in accordance with manufacturer's instructions.
- B. Place in thicknesses range from featheredge to 1-1/4" to achieve levelness within required application tolerance. ~~Installs up to 5" with the addition of proper aggregate~~**Install in greater thicknesses with the addition of proper aggregate per manufacturers recommendations.**
- C. Transition to existing floor; use stiff mix to slope to align with existing adjacent floor.

3.4 CURING

- A. Air cure in accordance with manufacturer's instructions.

3.5 APPLICATION TOLERANCE

- A. Top Surface: Level to 1/8 inch in 10 ft.

3.6 PROTECTION OF FINISHED WORK

- A. Do not permit traffic over unprotected floor underlayment surfaces and until underlayment is completely dry.

END OF SECTION