

# **Architectural Guide Specifications**

**Raeco SLU Self-Leveling Underlayment**

(Change to meet requirements) SECTION 03550-1  
CEMENTITIOUS FLOOR UNDERLAYMENT

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

A. Work includes but not limited to the following:

1. Polymer modified cementitious self leveling underlayment.

**1.02 RELATED SECTIONS**

A. Coordinate related work specified in other areas of the Project Manual, including but not limited to the following:

Section 03300 - Cast-In-Place Concrete

Section 09650 - Resilient Tile Flooring

Section 09680 - Carpet

**1.03 REFERENCES**

A. Comply with the requirements of Section 01091 and as listed herein. See Section 01091 for listed association, council, institute, society, and the like organization for its full name and address.

ASTM C-1439                      Test Method for Compressive Strength of Hydraulic Cement Mortars. (Using 2 inch or 50 mm Cube Specimens)

ASTM C-190                      Test Method for Tensile Strength of Hydraulic Cement Mortars.

ASTM C-256                      Test Method for Flexural Strength of Hydraulic Cement Mortars.

**1.04 SYSTEM DESCRIPTION**

A. portland Cement-based, self leveling polymer modified underlayment to bring concrete slab substrates into tolerance and where unsuitable, to receive new floor finishes.

**1.05 PERFORMANCE REQUIREMENTS**

A. Resistant to indentation, tightly bonding, non-injurious adhesives and floor finishes.

**1.06 SUBMITTALS**

A. Submittals in accordance with Sections 01300 and the following:

1. Product Data: Provide completely definitive brochures including specifications, current product literature and other data to prove compliance with specified requirements.
2. Manufacturer's certification that product is cement based having a cement binder content which is a minimum of 80% of total binder as per ASTM C-114.
3. Manufacturer's certification that product specified is suitable for intended use when installed per manufacturer's literature and installation instructions.

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**1.07 QUALITY ASSURANCE**

- A. Applicator Qualifications: Applicator of concrete floor resurfacing shall be approved by manufacturer.
- B. Regulatory Requirements: See referenced Codes, Ordinances Section 01060
- C. Test Areas: At an area on-site, where approved by Engineer, provide a test installation as follows:
  - 1. Size of area shall be 4'x 4'.
  - 2. Test area shall be installed using procedures and under conditions which will reflect actual job site conditions.
  - 3. Test shall be placed and evaluated for a period of 4 days prior to approval by the Engineer.
  - 4. Approval shall deem the test area as the standard by which the remainder of the project shall be compared for the acceptance or rejection.

**1.08 DELIVERY, STORAGE AND HANDLING**

- A. In accordance with provisions of Section 01600 and the following: Materials shall be delivered in its original unopened container and protected from contamination, damage or deterioration as per manufacturer's instructions. All damaged products shall be removed from project and discarded as per local requirements.

**1.09 PROJECT SITE CONDITIONS**

- A. Environmental Conditions:
  - 1. Maintain enclosed building at minimum of 50 degrees F. before, during and after installation. Provide continuous ventilation and adequate heat to remove moisture until product has adequately cured.

**1.10 SCHEDULING / SEQUENCING**

- A. Coordinate with Engineer's approved Progress Schedule, Section 01310

**PART 2 PRODUCTS**

**2.01 MANUFACTURER**

- A. Raeco, Inc. Seattle, Washington Tel. (206) 763-1335 Fax (206) 768-0175 is specified for type, material and quantity required.

**2.02 MATERIALS**

- A. Raeco SLU, Self Leveling Underlayment in pre-blended sacks.
- B. Raeco R-2000, Bonding Agent.
- C. Clean Potable Water
- D. Appropriate Aggregate for thickness' exceeding 1/2". Refer to Product Data Sheet for type and size.

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E. Technical Data:

1. Self leveling polymer modified concrete underlayment that contains no gypsum, chlorides, ferrous metals or corrosive agents.
2. Compressive Strength, 4650 psi @ 28 days, ASTM C-1439  
Tensile Strength, 520 psi @ 28 days, ASTM C-190  
Flexural Strength, 1035 psi @ 28 days, ASTM C-256  
Shear Bond Strength, 500 psi @ 28 days  
Flammability, ASTM E84
  - a. Flame Spread 0
  - b. Fuel Contribution 0
  - c. Smoke Development 0
3. Flow Time: 20 min. @ 70° F.  
Initial Set: 45 min. @ 70° F.  
Final Set: 2-3 hrs. @ 70° F.
4. Coverage: 50 sq. ft. per sack @ 1/8"

**2.03 MIXING PROPORTIONS**

A. Mix proportions and methods shall be in accordance with product manufacturer recommendations.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify installation conditions as satisfactory to receive work of this Section. Do not install until unsatisfactory conditions are corrected. Beginning work will constitute your acceptance of conditions as satisfactory.

**3.02 PREPARATION**

A. Condition and Cleaning of Sub-floor: Sub-Floor shall be structurally sound, shot blast, and contaminant free.

B. Cracks in sub-floor shall be repaired prior to installation of the underlayment to prevent telegraphing through the underlayment.

C. Expansion Joints: Allow joints to continue through the concrete resurfacing material at same width.

**3.03 APPLICATION**

A. Primer: Prime sub-floor with specified compound. Priming instruction may vary according to type of substrate, multiple coats may be necessary.

B. Mix and apply in accordance with manufacturer's written directions.

1. Thickness: As required to meet construction conditions. Pour or pump in place to meet tolerances set forth.

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2. Drying: Provide continuous ventilation and adequate heating to removing moisture from the area until dry. Test for dryness in accordance with manufacturer's directions.

**3.04 TOLERANCES**

A. Finished surface tolerances shall be 1/8" using a 10' straight edge, measuring in any direction.

**3.05 PROTECTION**

A. Protect from heavy loads during construction, place temporary cover to area by means to protect from contamination and damage.

END OF SECTION