1. **GENERAL**
   1. **SECTION INCLUDES:**
      1. Liquid applied, cementitious self-leveling floor underlayment.
      2. Sloped application, where indicated.
   2. **REFERENCES**
      1. ASTM C109 - Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 in or 50 mm Cube Specimens).
   3. **SUBMITTALS**
      1. Submit Product Data: Provide physical characteristics and product limitations.
      2. Submit Manufacturer’s Installation Instructions: Indicate recommended mix for intended application.
   4. **QUALIFICATIONS**
      1. Applicator: Company specializing in performing cementitious underlayment with minimum five years experience.
   5. **FIELD SAMPLES**
      1. Place a field sample panel of underlayment material.
         1. Locate where approved.
         2. Show feather edge condition.
         3. Accepted sample may remain as part of the Work.
   6. **ENVIRONMENTAL REQUIREMENTS**
      1. Do not install underlayment until floor penetrations and peripheral work is complete.
      2. Maintain minimum ambient temperatures above 50 degrees F, 24 hours before, during and 72 hours after installation of underlayment.
      3. During the curing process, ventilate spaces to remove excess moisture.
2. **PRODUCTS**
   1. **MANUFACTURERS**
      1. Products of the following manufacturers form the basis for design and quality intended:
         1. Ardex Inc., Garden Grove, CA
         2. W. R. Bonsal Company, Charlotte, NC
         3. The Burke Group, Long Beach, CA
         4. Harris Specialty Chemicals, Inc., Jacksonville, Fl
      2. Or equal, as approved in accordance with Section 01630 for substitutions.
   2. **MATERIALS**
      1. Underlayment for Level Applications: K-15.
      2. Underlayment for Sloped Applications: SD-P
      3. Utilize manufacturer’s recommended specifications, proportions, mix ratios, additives and proprietary components as required for specific applications, and as approved by Architect.
      4. No gypsum base materials permitted.
      5. Water: Potable and not detrimental to underlayment mix materials.
      6. Primer: Manufacturer’s recommended type for surface on which underlayment is applied.
      7. Joint and Crack Filler: Latex-based.
   3. **MIXING**
      1. Site mix materials in accordance with manufacturer’s instructions.
      2. Mix to achieve compressive strength of 4200 psi minimum in accordance with ASTM C-109.
      3. Mix to self-leveling consistency. Add aggregate as recommended by the manufacturer to achieve trowel consistency for sloped applications.
3. **EXECUTION**
   1. **EXAMINATION**
      1. Verify substrate conditions.
      2. Verify that substrate surfaces are clean, dry, unfrozen, do not contain petroleum by-products or other compounds detrimental to underlayment material bond to substrate.
      3. Verify quantities of materials required to complete application.
   2. **PREPARATION**
      1. Remove substrate surface irregularities. Fill voids and deck joints with filler. Finish smooth.
      2. Vacuum clean surfaces.
      3. Prime substrate in accordance with manufacturer’s instructions. Allow to dry.
   3. **INSTALLATION**
      1. Install underlayment in accordance with manufacturer’s instructions.
      2. Place to grade levels required and to conform to details on drawings.
      3. Pour, trowel or pump materials in place.
   4. **CURING**
      1. Air cure in accordance with manufacturer’s instructions.
   5. **APPLICATION TOLERANCE**
      1. Maintain top surface level to 1/16 inch in 10 ft.
   6. **FIELD QUALITY CONTROL**
      1. Placed material will be inspected under provisions of Section 01400, for conformance to specification requirements. Defective grade levels or areas where materials indicated evidence of uneven surface finish or where additional fill is required, shall be corrected at no cost to Owner.
   7. **PROTECTION OF FINISHED WORK**
      1. Do not permit traffic over unprotected floor surface.

**END OF SECTION**