

CONCRETE FLOOR UNDERLAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing the following at all existing surfaces to receive new applied floor coverings, where required to level floors and as required by Section 03542 of the Structural Retrofit Package:
1. Concrete floor underlayment.
 2. Self-leveling concrete floor underlayment.

1.02 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation instructions for each product.

1.03 QUALITY ASSURANCE

- A. Manufacturer: Regularly providing underlayment materials of types specified or approved for not less than 5-years.
- B. Installer: Approved by underlayment manufacturer using approved equipment.

1.04 ENVIRONMENTAL REQUIREMENTS

- A. Maintain a temperature above 50-degrees F. until subfloor surface has stabilized.
- B. Provide continuous heat and mechanical ventilation until floor underlayment is dry.
- C. Follow manufacturer's additional requirements.

PART 2 - PRODUCTS

2.01 APPROVED MANUFACTURERS

- A. Concrete Underlayment: Ardex, Inc. "Ardex SD-P Instantpatch", Bonsal B-1 Leveler" or approved equal.
- B. Self-Leveling Concrete Underlayment: Ardex, Inc. "Ardex K-15 Self-Leveling Underlayment Concrete", Bonsal "Self-Leveling Underlayment", Dayton Superior "LeveLayer I", Gyp-Crete "Level-Right", Quickcrete "Self-Leveling Floor Resurfacer" or approved equal.

2.02 MATERIALS

- A. Primer: As recommended by underlayment manufacturer.
- B. Concrete Underlayment: Underlayment shall have a minimum compressive strength of 4,200-psi at 28-days. Underlayment shall be able to be installed from featheredge to 1-inch and up to 3-inches with aggregate. Minimum thickness shall be 1/8-inch.
- C. Self-Leveling Underlayment: Underlayment shall have a minimum compressive strength of 4,000-psi at 28-days. Self-leveling underlayment shall be able to be installed from featheredge to any thickness in one pour.
- D. Aggregate: Well-graded, washed gravel for use when underlayment is installed over 1-1/2-inch thick; size of aggregate as recommended by manufacturer.
- E. Water: Clean and potable.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Surfaces to receive underlayment shall be solid, clean and properly primed.
- B. Concrete subfloors shall be clean and free of oil, grease, dirt, curing compounds, and other items that may act as bond breakers. Mechanically clean if required using shot-blasting; acid etching is not acceptable.
- C. Where required, grind high spots in concrete subfloors as recommended by manufacturer.
- D. Wood subfloors shall be clean and free of foreign matter. Sand to bare wood and vacuum to remove dust. Re-nail loose boards.
- E. Non-porous surfaces such as tile shall be clean and free of wax and sealers.
- F. Repair cracks in the subfloor to prevent telegraphing through the underlayment.

3.02 INSTALLATION

- A. Prime subfloor in accordance with manufacturer's recommendations. Do not leave any bare spots and remove puddles and excess primer. Do not apply underlayment until primer is dry.
- B. Mixing Ratios: In accordance with manufacturer's instructions.
- C. Place underlayment using a wood or magnesium float. When underlayment begins to harden, finish with a steel trowel.
- D. Pour or pump self-leveling liquid underlayment and spread in place. Comply with manufacturer's instructions.
- E. Prohibit foot traffic until underlayment is dry.

3.03 COMPLETION

- A. When complete, underlayment shall be finished to a reasonably smooth and uniform condition, and be free from pin holes, gouges, cuts, and other damage or defects.
- B. Transition between finish surfaces of underlayment and adjacent existing flooring shall be free from offsets.

END OF SECTION