# RECOMMENDED SPECIFICATION FOR ARDEX SD-P INSTANTPATCH SELF-DRYING, FAST-SETTING CONCRETE UNDERLAYMENT PATCH

#### PART I - GENERAL

#### 1.01 SUMMARY

A. This is the recommended specification for ARDEX SD-P InstantPatch, Self-Drying, Fast-Setting, Concrete Underlayment Trowelable Patch for smoothing and repairing concrete floors, ramps, stairways, as well as non-porous substrates such as terrazzo, ceramic and quarry tile prior to the installation of floor covering.

## 1.02 SECTION INCLUDES

A. ARDEX SD-P InstantPatch Self-Drying, Fast-Setting Concrete Underlayment Patch.

#### 1.03 QUALITY ASSURANCE

- A. Installer shall be factory trained and approved by the manufacturer, such as an ARDEX Choice Installer or Level Master Elite Installer.
- B. Installation of the cement-based, self-drying, fast-setting trowelable underlayment patch must be made by the applicator using mixing equipment and tools approved by the manufacturer.
- C. Provide ARDEX SD-P InstantPatch Self-Drying, Fast-Setting Concrete Underlayment Patch as manufactured by ARDEX LP, 400 Ardex Park Drive, Aliquippa, PA 15001.
- D. Underlayment shall develop a minimum compressive strength of 4200 psi after 28 days per ASTM C109/mod (air cure only).

## 1.04 SUBMITTALS

- A. Manufacturer's written letter of recommendation specific for the installation at this project site.
- B. Product Data

## 1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in their unopened packages and protect from extreme temperatures and moisture. Protect liquids from freezing.

## 1.06 SITE CONDITIONS

A. ARDEX SD-P is a cementitious material. Observe the basic rules of concrete work. Do not install below 50°F surface temperature. Install quickly if floor is warm and follow hot weather precautions available from the ARDEX Technical Service Department. Never mix with cement or additives other than ARDEX-approved products.

## **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. The Portland cement-based, self-drying, fast-setting, trowelable underlayment patch shall be ARDEX SD-P InstantPatch Self-Drying, Fast-Setting Concrete Underlayment Patch.
- B. Primer: No primer required over standard porous concrete.
- D. Water shall be clean, potable, and sufficiently cool (not warmer than 70°F).

## 2.02 MIX DESIGNS

- A. Mixing Ratios: Standard mixing ratio: Mix 1 bag of ARDEX SD-P (40 lbs.) with 4 quarts of water. Product can be missed in a clean 5-gallon pail using ARDEX T-2 Mixing Paddle and a ½" heavy-duty drill (min. 650 rpm). Mix thoroughly for approximately 2-3 minutes to obtain a lump-free mixture. Follow written instructions per ARDEX SD-P bag label.
- B. Aggregate mix: For areas to be installed over 1" thick, aggregate may be added to reduce material costs. Mix ARDEX SD-P with water first, then add from 1/3 up to 1 part by volume of aggregate (1/8" to 1/4" or larger). Do not use sand. Note: The addition of aggregate will diminish the workability. If necessary, install a finish coat to obtain a smooth surface.

#### **PART 3 - EXECUTION**

#### 3.01 PREPARATION

- A. All surfaces must be sound, solid, cleaned, and where required, properly primed.
- B. All concrete subfloors must be of adequate strength, clean, and free of oil, grease, dirt, curing compounds, and any substance, which might act as a bondbreaker. Mechanically clean using shot blasting, grinder or other. Acid etching and the use of sweeping compounds and solvents are not acceptable.
- C. All cracks in the subfloor shall be repaired to minimize telegraphing through the underlayment.
- E. Substrates shall be tested and corrected for moisture and for any other condition, which could affect the performance of the underlayment and the finish floor covering, before installing the patch. Moisture test results should be in accordance with the manufacturer's moisture requirements in accordance with ASTM F2170 or ASTM F1869.

## 3.02 PRIMER

A. Install appropriate primer in accordance with manufacturer instructions.

## 3.03 INSTALLATION

- A. Install in accordance with manufacturer's written recommendation.
- B. Underlayment shall be installed from a featheredge to 1" without the addition of aggregate and to a maximum thickness of 3" with the proper addition of aggregate (in areas up to 4 sq. ft.)

- C. Underlayment shall be installed using a wood or magnesium float. When underlayment begins to harden, finish with a steel trowel.
- D. Underlayment can receive floor covering as soon as the surface becomes sufficiently hard (about 1 hour). Parquet, athletic flooring and flooring requiring special adhesives can be installed in 16 hours.

#### 3.04 FIELD QUALITY CONTROL

A. Where specified, field sampling of the Ardex topping is to be done by taking an entire unopened bag of the product being installed to an independent testing facility to perform compressive strength testing in accordance with ASTM C 109/modified: air-cure only. There are no in situ test procedures for the evaluation of compressive strength.

## 3.05 PROTECTION

A. Prior to the installation of the finish topping, the surface of the underlayment should be protected from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

**END OF SECTION**