# **SECTION 03540**

# RECOMMENDED SPECIFICATION FOR ARDEX SD-F FEATHER FINISH SELF-DRYING CEMENT-BASED FINISHING UNDERLAYMENT

#### PART I - GENERAL

#### 1.01 SUMMARY

A. This is the recommended specification for ARDEX SD-F Feather Finish, Self-Drying, Cement-Based Finishing Underlayment.

# 1.02 SECTION INCLUDES

A. ARDEX SD-F Feather Finish, Self-Drying, Cement-Based Finishing Underlayment.

#### 1.03 QUALITY ASSURANCE

- A. Installation of ARDEX SD-F must be by a factory-trained applicator, such as an ARDEX LevelMaster or LevelMaster Elite Installer, using mixing equipment and tools approved by the manufacturer. Please contact ARDEX at (724) 203-5000 for a complete list of Installers.
- B. Provide ARDEX SD-F Feather Finish from as manufactured by ARDEX INC., 400 Ardex Park Drive, Aliquippa, PA 15001.
- C. Underlayment shall be able to be installed from a true featheredge to ½" thick over large areas and to any thickness in well-defined areas such as filling holes or gouges and for making ramps.
- D, Underlayment shall not require that the substrate be primed.
- E. Underlayment shall be formulated with a Portland cement matrix, which develops a compressive strength of 4200 psi when tested in accordance with ASTM C109/mod. (aircure only).
- F. Underlayment shall be able to be covered by most finish flooring materials as soon as the surface hardens (usually within 1 hour). Parquet, athletic flooring and floor covering requiring specialized adhesives can be installed after 16 hours.
- G. Underlayment shall not require the addition of latex or any additive other than potable water.

# 1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in their original, unopened packages and protect from extreme temperatures and moisture.

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#### PART I - GENERAL

#### 1.05 SITE CONDITIONS

A. ARDEX SD-F 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, trowelable finishing underlayment shall be ARDEX SD-F Feather Finish.
- B. No primer required over all recommended substrates.
- C. Water shall be clean, potable, and sufficiently cool (not warmer than 70°F).

# 2.02 MIX DESIGNS

- A. Mix ARDEX SD-F powder with water to the desired trowelable consistency. The recommended mixing ratio is 2 parts powder to 1 part water by volume.
- B. Apply ARDEX SD-F to the prepared substrate using a steel trowel using sufficient pressure to achieve the desired thickness and to provide a perfect featheredge, where necessary.
- C. Install ARDEX SD-F from a true featheredge up to a maximum thickness of ½ inch or as required to fill gouges, scratches or small holes.
- D. When the underlayment can be worked on without adversely affecting the surface, proceed with the installation of floor covering. Note: The surface of the ARDEX SD-F does not have to be dry to receive ceramic tile, carpet, or vinyl floor coverings. It only needs to be hard enough to permit application of the adhesive with a notches trowel without marking the surface. Typical times range from 15 minutes to 1 hour depending upon ambient conditions.

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

# 3.01 PREPARATION

- **A.** All subfloors, regardless of material, must be solid, sound and thoroughly cleaned.
- B. All concrete subfloors must be clean, and free of all oil, grease, dirt, curing compounds, and any substance, which might act as a bondbreaker. Mechanically clean, if necessary, using shot blasting or other. Acid etching and the use of sweeping compounds or solvents are not acceptable.
- C. Wooden subfloors must be clean and free of all foreign matter. Sand to bare wood, and then vacuum to remove all dust. Re-nail any loose boards exhibiting movement.

# **PART 3 - EXECUTION**

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# 3.01 PREPARATION

- D. Non-porous subfloors, such as ceramic tile and terrazzo must be clean and free of all sealers, waxes, or other surface treatments, which may act as a bondbreaker. Professionally strip where necessary.
- E. Cutback and other non-water soluble adhesive residues must be thin and well bonded to the subfloor. Note: The use of ARDEX SD-F over adhesive residues is recommended for projects only where the adhesive residue may interfere with the performance of the new flooring. For a permanent barrier to migration of adhesive residues on commercial projects, use ARDEX K-15 + E-25 or ARDEX SD-L following the Recommended Work Practices of the Resilient Floor5 Covering Institute.
- F. Subfloors shall be tested and corrected for moisture or any other conditions which could affect the performance of the underlayment or finished floor covering.

#### 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 t 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** 

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