

**ARDEX GUIDE SPECIFICATION**  
**ARDEX S 1-K™ One-Component Waterproofing and Crack Isolation Membrane**

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**SECTION 09 30 00**  
**ARDEX TILE & STONE INSTALLATION MATERIALS AND SYSTEMS**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

- A. Drawings, general provisions of the Contract, and other related construction documents such as Division 01 specifications apply to this Section

1.2 SUMMARY

- A. This Section includes the application of a one-component waterproofing and crack isolation membrane for the subsequent installation of tile and stone.
  - 1. ARDEX S 1-K™ One-Component Waterproofing and Crack Isolation Membrane
- B. Complete ARDEX product and system installation details are provided in their corresponding Technical Data Sheet available at [www.ardexamericas.com](http://www.ardexamericas.com).
- C. Related Sections include the following:
  - 1. Division 09 Tile & Stone Sections

1.3 REFERENCES

- A. AMERICAN NATIONAL STANDARDS INSTITUTE (A.N.S.I.)
  - 1. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades
  - 2. A-108.13 Installation of load bearing, bonded, waterproofing membrane for thin-set ceramic and dimensional stone.
  - 3. A-118.10 American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes for Thins-Set Ceramic Tile and Dimension Stone Installation
  - 4. A-118.12 American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Stone Dimension Stone Installation
  - 5. A-108.17 Installation of crack isolation membranes for thin-set tile and dimensional stone.
- B. TILE COUNCIL OF AMERICA, INC.
  - 5. Handbook for Ceramic Tile Installation

#### 1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, a Revit file with applicable materials meeting the Revit Content Style Guide, and installation instructions for each material and product used. Include manufacturer's Safety Data Sheets.
- B. Qualification Data: For Installer

#### 1.5 QUALITY ASSURANCE

- A. Installation of the ARDEX product must be completed by a trained, applicator,

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.
- B. Store products in a dry area with temperature maintained between 50° and 85°F (10° and 29°C) and protect from direct sunlight. Store at temperatures between 40° and 90°F (5° and 32°C).
- C. Handle products in accordance with manufacturer's printed recommendations.

#### 1.7 PROJECT CONDITIONS

- A. Do not install material below 50°F (10°C) surface and air temperatures.

### **PART 2 – PRODUCTS**

#### 2.1 ONE-COMPONENT WATERPROOFING & CRACK ISOLATION COMPOUND

- A. Acceptable Products:
  - 1. ARDEX S 1-K; Manufactured by ARDEX AMERICAS USA; (724) 203-5000; [www.ardexamericas.com](http://www.ardexamericas.com)
- B. Performance and Physical Properties: Meet or exceed the following values for material cured at 70° F+/-3°F (21° C+/-3°C) and 50% +/-5% relative humidity:
  - 1. Working time: Unlimited. Seal unused portion to prevent product from drying out.

2. Coats: 2
3. Dry Time: 1 – 2 hours – coat 1, 12 – 16 hours – coat 2
4. Meets or Exceeds ANSI A 118.12 and ANSI A 118.10

## **PART 3 – EXECUTION**

### **3.1 PREPARATION**

A. Substrate : Prepare substrate in accordance with manufacturer’s instructions.

1. Prior to proceeding please refer to ANSI A 108 AN-2 “General Requirements for Subsurfaces”, the TCNA’s “Handbook for Ceramic Tile Installation” and TTMAC for detailed information on surface preparation and guidelines for substrate construction. Substrate and ambient temperatures must be a minimum of 50°F (10°C).
2. All substrates must be structurally sound, solid, dry and thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds, sealers and any contaminant that might act as a bond breaker. Plywood substrates must be APA-rated, Type 1 exterior-grade plywood. Substrate surface must be plumb and true. Floor surfaces must have minimal variation in the plane or slope, and sloped areas must have proper slope towards the drain(s). Existing tiles must be mechanically etched to produce a textured profile. ARDEX S 1-K may be installed over highly absorbent substrates, including plaster, that are properly primed. See the technical data sheet for additional information.

B. Joint Preparation:

1. Moving Joints and Moving Cracks – Expansion joints must be provided over existing moving joints and cracks, must extend through both tile and substrate and where substrate materials change composition or direction per ANSI A108 AN-3.7 and EJ171 movement guidelines for ceramic, glass, and stone.
2. Dormant Joints and Dormant Cracks – Fill dormant joints and dormant cracks

### **3.2 APPLICATION OF WATERPROOFING AND CRACK ISOLATION MEMBRANE**

- A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
- B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.
- C. Install Waterproofing and Crack Isolation Membrane
  1. Comply with manufacturer's printed instructions for mixing of material, installation, and cure.

3.3 FIELD QUALITY CONTROL

- A. Where required, contact manufacturer for field sampling methods and procedures.

3.4 PROTECTION

- A. Protect from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

**END OF SECTION**