

**ARDEX GUIDE SPECIFICATION**  
**ARDEX X 77™ MICROTEC®, ARDEX E 90 MORTAR ADMIX**  
Applications to Receive the Installation of Tile and Stone

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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 installation of tile with a latex modified thin-set mortar.
  - 1. ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar
  - 2. ARDEX E 90™ MORTAR ADMIX Tile and Stone Mortar Enhancer
- B. Complete ARDEX product and system installation details are provided in their corresponding Technical Brochure 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-118.4 Modified Dry-Set Cement Mortar
  - 2. A-118.11 EGP Latex-Portland Cement Mortar
  - 3. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades
  - 4. A-108.5 Installation of Ceramic Tile with Latex Thin-Set Mortar
- E. TILE COUNCIL OF NORTH AMERICA, INC. (TCNA)
  - 1. EJ171 Movement Joint Guidelines for Ceramic, Glass and Stone
- F. INTERNATIONAL STANDARDS ORGANISATION (ISO)

1. ISO 13007 C2 TE P1 – Ceramic Tile-Grouts & Adhesives

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 factory-trained, using mixing equipment and tools approved by the manufacturer. Please contact ARDEX AMERICAS [www.ardexamericas.com](http://www.ardexamericas.com) (724) 203-5000 for a list of recommended installers.
- B. Product must have a hydraulic cement-based inorganic binder content to include Portland cement ASTM C150: Standard Specification for Portland Cement and other specialty hydraulic cements. Gypsum-based products are not acceptable.
- C. Manufacturer Experience: Provide products of this section by companies which have successfully specialized in production of this type for not less than 5 years. Contact Manufacturer Representative prior to installation.

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.
- 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. These temperatures must also be maintained during and for 48 hours after the installation of products included in this section. Install quickly if substrate is warm and follow warm weather instructions available from the ARDEX Technical Service Department.

## **PART 2 - PRODUCTS**

### **2.1 MORTAR**

#### **A. Acceptable Products:**

1. ARDEX X 77™; Manufactured by ARDEX AMERICAS, USA, (724) 203-5000, [www.ardexamericas.com](http://www.ardexamericas.com)
2. WATER: Water shall be clean, potable, and sufficiently cool (not warmer than 70°F).
3. Additive (as needed): ARDEX E 90™; Manufactured by ARDEX AMERICAS, USA, (724) 203-5000, [www.ardexamericas.com](http://www.ardexamericas.com)

## **PART 3 – EXECUTION**

### **3.1 PREPARATION**

#### **A. Subfloors: Prepare substrate in accordance with manufacturer’s instructions.**

1. Prior to proceeding please refer to ANSI A 108.01 “General Requirements for Subsurface” and the TCNA’s “Handbook for Ceramic Tile Installation” for detailed information. Substrate and ambient temperatures must be a minimum of 50°F (10°C).
2. All subfloors must be clean and completely free of all contaminants, including dust, oil, grease, wax, sealers, paint, varnish, etc. Prepare floor as required by mechanical means. Do not use chemicals to clean the floor.

#### **B. Joint Preparation:**

1. Moving Joints – Expansion joints must be provided over existing moving joints and cracks, and where substrate materials change composition or direction per ANSI A108 AN-3.7. A flexible sealing compound such as ARDEX ARDISEAL™ Rapid Plus may be installed.
2. Saw Cuts and Control Joints – fill all non-moving joints with ARDEX ARDIFIX™ Joint Filler, as recommended by the manufacturer.

#### **C. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.**

### **3.2 INSTALL TILE WITH MORTAR**

1. Install tiles following the general office outline procedure set forth in ANSI A108.5.

2. Comply with manufacturer's printed instructions for mixing of material, installation, and cure. For questions contact the ARDEX Technical Services Department at (724) 203-5000.

3.3 FIELD QUALITY CONTROL

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

3.4 PROTECTION

- A. Prior to the installation of the finish flooring from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

**END OF SECTION**