

ARDEX GUIDE SPECIFICATION

ARDEX X 78™ MICROTEC® Semi-Pourable Tile and Stone Mortar Installation Materials for Tile and Stone Applications

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 installation of tile on floors and horizontal surfaces with a latex modified thin-set mortar.
 - 1. ARDEX X 78™ MICROTEC® Fiber Reinforced, Semi-Pourable, Polymer Modified Thin Set Mortar
 - 2. ARDEX E 90™ Mortar Admix
 - 3. ARDEX FL™ Rapid Set, Flexible, Sanded Grout
 - 4. ARDEX WA™ High Performance 100% Solids Epoxy Grout and Adhesive
- B. Complete ARDEX product and system installation details are provided in their corresponding Technical Brochure available at 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 Fast-setting latex thin-set mortar and latex Portland cement mortar
 - 2. A-118.11 EGP latex Portland cement mortar
 - 3. A-118.3 Water Cleanable Epoxy Mortar & Grout
 - 4. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades

5. A-108.10 Installation of Grout in Tilework
6. A-108.5 Installation of ceramic tile with latex thin-set mortar
7. A-118.7 High Performance Cement Grouts for Tile Installation

D. TILE COUNCIL OF AMERICA, INC.

1. Handbook for Ceramic Tile Installation

E. INTERNATIONAL STANDARDS ORGANISATION (ISO)

1. ISO 13007 – Ceramic Tile-Grouts & Adhesives

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's product data 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, certified applicator, such as an ARDEX LevelMaster[®] Elite or Choice Contractor, using mixing equipment and tools approved by the manufacturer. Please contact ARDEX Engineered Cements (724) 203-5000 for a list of recommended installers.

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 78™; Manufactured by ARDEX Americas: 400 Ardex Park Drive, Aliquippa, PA, 15001, USA, (724) 203-5000, www.ardexamericas.com
 - a. ARDEX E 90™ Mortar Admix; Manufactured by ARDEX Americas: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, 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. Open Time: up to 60 Minutes
 - 2. Pot Life: 4 hours
 - 3. Use for interior or exterior floors and horizontal surfaces
 - 4. ISO 13007: EN C2 FT (T) E (E) S1
 - 5. Thin Set: Meets or Exceeds ANSI A 118.11 & ANSI A 118.4

2.2 CEMENTITIOUS GROUT

- A. Acceptable Products:
 - 1. ARDEX FL™ Sanded Grout; Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA, 15001, USA, (724) 203-5000, 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. Pot Life: Approx. 30 minutes
 - 2. Working Time: Approx. 30 minutes
 - 3. Open to Traffic: 90 minutes

2.3 EPOXY GROUT

- A. Acceptable Products:

1. ARDEX WA™ High Performance 100% Solids Epoxy Grout and Adhesive; Manufactured by ARDEX Americas: 400 Ardex Park Drive, Aliquippa, PA, 15001, USA, (724) 203-5000, 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. Pot Life: Approx. 40 minutes
 2. Working Time: Approx. 1 hour
 3. Open to Traffic: Light Foot Traffic - 12 hours, Full Traffic Loads - 2 days

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.

3.2 APPLICATION OF INSTALLATION MATERIALS

- A. 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. For standard applications of tiles and most natural stone over wood and concrete where improved strength, flexibility or water repellency is needed, for installations of tile over tile, or for applications of mesh-backed tile and stone, mix the ARDEX X 78 WITHARDEX E 90™ Mortar Admix according to the technical data sheet.
- B. Install Grout

1. Install grout in accordance with ANSI A108.10 or ANSI A 108.6.
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. Protect the installation from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

END OF SECTION