

ARDEX GUIDE SPECIFICATION

ARDEX X 32™ MICROTEC® Universal Rapid Setting and Drying Thin-to-Thick Bed 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 the exterior installation of porcelain tiles with a polymer modified thin-to-thick bed mortar.
 - 1. ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound
 - 2. ARDEX X 32™ MICROTEC® Universal Rapid Setting and Drying Thin-to-Thick Bed Mortar
 - 3. ARDEX FL™ Rapid Set, Flexible, Sanded Grout
- 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-118.10 Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation
 - 2. A-118.4 Modified Dry-Set Cement Mortar
 - 3. A-118.11 EGP Latex-Portland cement mortar
 - 4. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades

5. A-108.5 Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar
6. A-118.7 High Performance Cement Grouts for Tile Installation

D. TILE COUNCIL OF AMERICA, INC. TCNA)

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, 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. Installer Qualifications:
 1. Installer is a five-star member of the National Tile Contractors Association or a Trowel of Excellence member of the Tile Contractors' Association of America.
 2. Installer's supervisor for Project holds the International Masonry Institute's Foremans Certification.
 3. Installer employs Ceramic Tile Education Foundation Certified Installers or installer recognized by the U.S. Department of Labor as Journeyman Tile Layers.
- B. 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.

1.8 WARRANTY

- A. When ARDEX X 32™ is installed with our written recommendations, and the installation is installed in conjunction with the recommended ARDEX Tile & Stone Installation Materials, the installation will provide the ARDEX SystemOne comprehensive warranty.

PART 2 - PRODUCTS

2.1 PRE-SMOOTHING MORTAR

A. Acceptable Products:

- 1. ARDEX X 32™; Manufactured by ARDEX AMERICAS, 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 20 Minutes
- 2. Pot Life: Approx. 1 hour
- 3. Use for interior or exterior
- 4. ISO 13007: EN C2 FT (T) E (E) S1
- 5. Meets or Exceeds ANSI A 118.11 & ANSI A 118.4

2.2 WATERPROOFING & CRACK ISOLATION COMPOUND

A. Acceptable Products:

- 1. ARDEX 8+9™; Manufactured by ARDEX AMERICAS, 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: Up to 45 Minutes
- 2. 100 sq. ft (2 coats) over drywall. Approx 70 sq. sf. (2 coats) over drywall.
- 3. Dry Time: 30 – 45 min. for initial coat. Approx 60 minutes for final coat.
- 4. Crack Isolation: Meets or Exceeds ANSI A 118.12 and ANSI A 118.10 Waterproofing

2.3 MORTAR

A. Acceptable Products:

1. ARDEX X 32™; Manufactured by ARDEX AMERICAS, 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 20 Minutes
 2. Pot Life: Approx. 1 hour
 3. Use for interior or exterior
 4. ISO 13007: EN C2 FT (T) E (E) S1
 5. Meets or Exceeds ANSI A 118.11 & ANSI A 118.4

2.4 CEMENTITIOUS GROUT

- A. Acceptable Products:
 1. ARDEX FL™; Manufactured by ARDEX AMERICAS, 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

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.
 3. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
 4. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.
- B. Crack and 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.
2. Saw Cuts and Dormant Control Joints – fill all dormant control joints and dormant cracks with ARDEX ARDIFIX™, as recommended by the manufacturer.

3.2 APPLICATION OF INSTALLATION MATERIALS

A. PRE-SMOOTHING WITH MORTAR

1. Pre-smooth the substrate as needed in accordance with the technical data sheet.
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.

B. Install Waterproofing and Crack Isolation Compound

1. Reference A-108.17 Installation of Crack Isolation Membrane
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.

C. 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.

D. Install Grout

1. Install grout in accordance with ANSI A 108.10.
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