

ARDEX GUIDE SPECIFICATION

ARDEX 8+9 Rapid Waterproofing & Crack Isolation Compound, ARDEX X 90 OUTDOOR™ MicroteC3 Rapid-Set Flexible Tile and Stone Mortar

Subfloor Preparation Materials for Applications to Receive the Installation of Tile and Stone

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 use of a waterproofing and crack isolation membrane prior to the installation of tile with a latex modified thin-set mortar.
 - 1. ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound
 - 2. ARDEX X 90 OUTDOOR™ MicroteC3 Rapid-Set, Flexible Tile and Stone Mortar
- B. Complete ARDEX product and system installation details are provided in their corresponding Technical Data Sheet 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 Fast-setting latex thin-set mortar and latex Portland 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 latex thin-set mortar

D. TILE COUNCIL OF AMERICA, INC.

1. Handbook for Ceramic Tile Installation
2. EJ171 Movement Joint Guidelines for Ceramic, Glass and Stone

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. 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 WARRANTY

- A. ARDEX SystemOne™: When installed in accordance with the written recommendation, the use of the use of ARDEX 8+9 for crack isolation or to waterproof the substrate, following by the use of ARDEX X 90 to install tile and stone in an interior application, qualifies the project for an ARDEX 25-Year SystemOne™ Limited Warranty, provided ARDEX grouts are used.

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 40° 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 40°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

2.0 WATERPROOFING & CRACK ISOLATION COMPOUND

- A. Acceptable Products:
 - 1. ARDEX 8+9™; 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: Up to 45 Minutes
 - 2. Coats: 2
 - 3. Dry Time: 30 – 45 min. – coat 1, 1hr. coat 2
 - 4. Crack Isolation: Meets or Exceeds ANSI A 118.12 and ANSI A 118.10

2.1 MORTAR

- A. Acceptable Products:
 - 1. ARDEX X 90 OUTDOOR™; 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. Open Time: Up to 30 minutes
 - 2. Pot Life: Approx. 1 hour
 - 3. ISO 13007: C2 (T) E F S1
 - 4. Thin Set: Meets or Exceeds ANSI A 118.11, ANSI A 118.4, ANSI A 118.15
 - 5. For Interior or Exterior, horizontal or vertical applications

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.
 - 2. Surfaces that are sound, solid and uncontaminated may be bonded to without mechanical profiling. Where necessary, however substrate preparation must be by mechanical means. Do not use chemicals to prepare the substrate, including acid etching, sweeping compounds, solvents or adhesive removers.
 - 3. Thoroughly vacuum to remove all loose materials. The resulting surface must be deemed clean, sound and solid prior to proceeding with the installation.
- 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. A flexible sealing compound such as ARDEX ARDISEAL™ Rapid Plus may be installed.

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 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.

3.3 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.

3.4 FIELD QUALITY CONTROL

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

3.5 PROTECTION

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

END OF SECTION