

ARDEX GUIDE SPECIFICATION

ARDEX X5™ Flexible Tile and Stone Mortar and ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound and ARDEX FL™ Rapid Set, Flexible, Sanded Grout Applications to Receive the Installation of Tile and Stone

SECTION 09 30 13 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 and non-moisture-sensitive stone with a mortar.
 - 1. ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound
 - 2. ARDEX X5™ Flexible Tile and Stone Mortar
 - 3. ARDEX FL™ Rapid Set, Flexible, Sanded Grout
 - 4. ARDEX SX™ 100% Silicon Sealant for Tile and Stone Applications
- 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-118.15 Improved Modified Dry-Set Cement Mortar
 - 2. A-118.4 Modified Dry-Set Cement Mortar
 - 3. A-118.11 EGP Latex-Portland Cement Mortar
 - 4. A-118.7 High Performance Cement Grouts for Tile Installation

5. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades
6. A-108.10 Installation of Grout in Tilework
7. A-108.5 Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar
8. A-118.10 Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation
9. A-108.13 Installation of load bearing, bonded, waterproofing membrane for thin-set ceramic tile and dimensional stone

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, 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, certified applicator, such as an ARDEX LevelMaster® Elite or Choice Contractor, using mixing equipment and tools approved by the manufacturer. Please contact ARDEX AMERICAS (724) 203-5000 for a list of recommended installers.
- B. Manufacturer Experience: Provide products of this section by companies which have successfully specialized in production of this type of work for not less than 5 years. Contact Manufacturer Representative prior to installation.

1.6 WARRANTY

- A. When ARDEX X 5™ is installed with our written recommendations, the installation shall be installed in conjunction with the recommended ARDEX Tile & Stone Installation Materials, as appropriate, to provide the ARDEX SystemOne comprehensive warranty.

1.7 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.

1.8 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 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. 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

2.2 MORTAR

- A. Acceptable Products:
 - 1. ARDEX X 5™; 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 10 - 15 minutes
 2. Pot Life: Approx. 3 hours
 3. ISO 13007: C2 TE P1
 4. Thin Set: Meets or Exceeds ANSI A-118.15, ANSI A-118.11 & ANSI A-118.4

2.3 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

2.4 CAULK

A. Acceptable Products:

1. ARDEX SX; Manufactured by ARDEX Americas USA, (724)203-5000, 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.

3.2 MIXING

A. When mixing sanded materials, ARDEX recommends using the ARDEX DUSTFREE™ or a standard “gutter hook” vacuum attachment in combination with a wet/dry (Shop-Vac® style)

vacuum and HEPA dust extraction vacuum system. Additionally, each bag should be handled with care and emptied slowly to avoid creating a plume of dust. Contact the ARDEX Technical Service Department for more details on ARDEX products and air quality management.

3.3 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.

3.4 APPLICATION OF TILE

- 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.
- B. Install Grout and Caulk
 - 1. Install grout in accordance with ANSI A108.10.
 - 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.

3.4 FIELD QUALITY CONTROL

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

3.5 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