

ARDEX GUIDE SPECIFICATION

ARDEX Setting Materials, ARDEX 8+9™ Waterproofing and Crack Isolation Membrane & Grout Substrate Preparation and Installation Materials for Applications to Receive Tile and Stone Finishes

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 materials for the preparation of substrates to include the application of a waterproofing and crack isolation membrane and materials for the installation of tile and stone finishes to include setting materials and grouts.
- 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-118.3 Chemical Resistant, Water Cleanable Tile Setting & Grouting Epoxy
 - 2. A-118.4 Fast-setting latex thin-set mortar and latex Portland cement mortar
 - 3. A-118.7 High Performance Cement Grouts for Tile Installation
 - 4. A-118.10 Thin, Load Bearing Waterproofing Membrane
 - 5. A-118.11 EGP latex Portland cement mortar.
 - 6. A-118.12 Crack Isolation Membrane
 - 7. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades
 - 8. A-108.10 Installation of Grout in Tilework
 - 9. A-108.5 Installation of Ceramic Tile with Latex Thin-Set Mortar
 - 10. A-108.17 Installation of Crack Isolation Membrane
- 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 Material Safety Data Sheets.
- B. Qualification Data: For Installer

1.5 QUALITY ASSURANCE

- A. Installation of the ARDEX product must be completed by a qualified 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 maintain temperature in tile areas at not less than 50°F (10°C) or more than 85°F (29°C) during installation and for at least 7 days after completion, unless otherwise indicated in the product instructions and/or in ANSI A108 installation standards.

PART 2 - PRODUCTS

2.1 SETTING MORTAR

- A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com :
 1. ARDEX X 77™ MICROTEC® Fiber Reinforced Thin Set Mortar
 2. ARDEX X 78™ MICROTEC® Fiber Reinforced Semi-Pourable Thin Set Mortar
 3. ARDEX X 32™ MICROTEC® Exterior Self-Drying Thin-to-Thick Bed Mortar
 4. ARDEX X 3™ Thin Set Mortar

5. ARDEX X 4™ Thin Set Mortar
6. ARDEX X 5™ Thin Set Mortar
7. ARDEX S 14™ Rapid Setting Thin Set Mortar
8. ARDEX S 16™ Fast Setting Thin Set Mortar for Marble Tile
9. ARDEX FB 9 L Pourable ShearFlex® Thin Set Mortar
10. ARDEX D 14™ Type 1 Premixed Tile Adhesive (Mastic)
11. ARDEX S 48™ Universal Interior Tile Adhesive

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. Meets or Exceeds ANSI A 118.11 & ANSI A 118.4

2.2 DITRA BONDING ADHESIVE

A. ARDEX AF 207™ Pre-Mixed, Rapid Set Schluter® DITRA Bonding Adhesive

2.3 WATERPROOFING/CRACK ISOLATION MEMBRANE

A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com:

1. ARDEX 8+9™

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. Meets or Exceeds ANSI A 118.10 & ANSI A 118.12
2. Pot Life: 45 Minutes
3. Coats: 2
4. Dry Time: 1 hr. – coat 1, 2-hr coat 2
4. Accepts Tile: Within 90 minutes
5. VOC Content: 0 g/L (calculated)
6. Flood Test: Begin 4 hours after second coat has been applied

2.4 COMMERCIAL GRADE CEMENTITIOUS GROUT

A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com:

1. ARDEX FL™ Sanded Grout, color as selected by Architect
2. ARDEX FG-C™ MICROTEC® Unsanded Grout, color as selected by Architect

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. Meets or Exceeds ANSI A-118.7

2.5 EPOXY ADHESIVE & GROUT

- A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com:
 - 1. ARDEX WA™ Epoxy Adhesive & Grout, color as selected by Architect
- 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. Meets or Exceeds ANSI A-118.3

2.6 UNDERLAYMENT & PATCH

- A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com:
 - 1. ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar
 - 2. ARDEX EB 2™ Fast Setting Screed Cement
 - 3. ARDEX TL Patch® Tile Leveler, Underlayment Patch and Skimcoat
 - 4. ARDEX TL 1000™ Tile Leveler, Self-Leveling Underlayment
 - 5. ARDEX TL 700™ Tile Leveler, Self-Leveling Flooring Underlayment
 - 6. ARDEX Liquid BackerBoard® Self-Leveling Underlayment for Interior Wood and Concrete Subfloors
 - 7. ARDEX TL Wood™ Self-Leveling Underlayment for Wood and Distressed Gypsum Subfloors

2.7 ACCESSORIES

- A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com:
 - 1. ARDEX SX Caulk™
 - 2. ARDEX MC™ Moisture Control Systems (RAPID, PLUS, ULTRA)

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. Install cementitious patch and underlayment as required and in accordance with manufacturer's recommendations.

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.

3.2 APPLICATION OF WATERPROOFING AND CRACK ISOLATION COMPOUND

- 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-108.13 Installation of Waterproofing Membranes and 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.
- D. Install Tile with Thin-Set 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