

ARDEX GUIDE SPECIFICATION

ARDEX DS70™ Acoustic Mat and ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound

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

SECTION 09 30 00

ARDEX TILE AND 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. Subfloor Preparation Materials for Sound Deadening Applications to Receive the Installation of Tile and Stone
 - 1. ARDEX DS70™ Acoustic Mat
 - 2. ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound
- 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. Divison 09 Tile and Stone Sections

1.3 REFERENCES

- A. American National Standards Institute
 - 1. ASTM C627 – Standard test method for evaluating ceramic floor tile installation systems using the Robinson-Type floor tester.
 - 2. ASTM E2179 - Standard test method for laboratory measurement of the effectiveness of floor coverings in reducing impact sound transmission through concrete floors.
 - 3. ASTM E492 - Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine

4. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
5. A-118.10 Load bearing, bonded waterproofing membranes for tile and stone.
6. A-118.12 Crack Isolation Membrane
7. A-118.4 Latex-Modified Cement Mortar

B. THE TILE COUNCIL OF NORTH AMERICA, INC.

1. Handbook for Ceramic Tile Installation

C. INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

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 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.
- 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 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.
- B. Protect from direct sunlight. Acclimate the installation area, setting material, sound deadening mat and finish flooring in an enclosed building at a minimum of 65°F (18° C) for at least 48 hours before, during and after the installation of products included in this section.
- 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 ACOUSTIC MAT

- A. A high-performance, flat, resilient, sound-control underlayment made from a formulation of high quality, post-consumer-recycled, wear- and water-resistant rubber granules.
 - 1. Acceptable Products:
 - a. ARDEX DS 70™; Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, Pa 15001 USA, 724-203-5000, www.ardexamericas.com
 - 2. Performance and Physical Properties: Meet or exceed the following values for material cured at 73° F (23° C) and 50 percent relative humidity.
 - 3. Refer to ARDEX DS 70™ technical data sheet for sound rating based on application.

2.2 WATERPROOFING & CRACK ISOLATION MEMBRANE

- 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: 45 Minutes
 - 2. Coats: 2
 - 3. Dry Time: 30 – 45 minutes – coat 1, 1hr. - coat 2; Flood testing – 4 hours after the second coat has been applied
 - 4. Crack Isolation: Meets or Exceeds ANSI A 118.12

2.3 SETTING MATERIAL, GENERAL

- A. Acceptable Products:
 - 1. A Portland Cement Mortar Installation Material: Must Comply with ANSI A118.4
- 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: 3 hours
2. Working Time: 15-20 minutes
3. Open Time: Up to 10-15 minutes
4. Time to grout: 24 Hours

2.4 GROUT, GENERAL

A. Acceptable Products:

1. Portland Cement, polymer-modified sanded Grout: Must Comply with ANSI A118.6

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: 2 hours
2. Working Time: 2 hours
3. Open to traffic: 16-24 hours

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 AN-2 "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).
1. 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. Crack and Joint Preparation:

1. Moving Joints and Moving Cracks – All expansion joints, isolation joints and construction joints, as well as all moving cracks, must be honored up through the sound deadening mat and finish flooring. 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, Control Joints and Dormant Cracks – fill all dormant joints and dormant cracks with ARDEX ARDIFIX™ Joint Filler, as recommended by the manufacturer.

3.2 APPLICATION OF 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 Membrane
 - 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.
- D. Install Acoustic Mat
 - 1. Reference ASTM C627, E2179, E492, & E90.
 - 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.
- E. 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.
- F. Install Grout
 - 1. Install grout in accordance with ANSI A108.10.
 - 2. Comply with manufacturer's printed instructions for mixing of material, installation, and cure.

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