## SECTION 09 30 00 ARDEX TLT SHOWER 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 premium and high-performance shower bases, drain kits, building panels, and waterproofing accessories:
  - 1. ARDEX TLT Shower System including:
    - a. ARDEX TLT Building Panels
    - b. ARDEX TLT Curbs
    - c. ARDEX TLT Niches
    - d. ARDEX TLT Shower Bases
    - e. ARDEX TLT Drain Kits
    - f. ARDEX TLT 700 Multi-Purpose Construction Adhesive and Sealant
    - g. ARDEX TLT Waterproofing Accessories
    - h. ARDEX Substrate Preparation products including ARDEX AM 100, ARDEX Liquid Backer Board and ARDEX A38 Mix.
- B. Complete ARDEX product and system installation details are provided in their corresponding Technical Data Sheet available at <u>www.ardexamericas.com</u>.
- C. Related Sections include the following:
  - 1. Division 09 Tile & Stone Sections

#### 1.3 REFERENCES

SECTION 09 30 00 - 1 ARDEX TLT SHOWER SYSTEMS

#### A. AMERICAN NATIONAL STANDARDS INSTITUTE (A.N.S.I.)

- 1. A-118.4 Modified Dry-Set Cement Mortar, & A118.11 EGP Latex Portland Cement Mortar
- 2. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades
- 3. A-108.5 Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex Portland Cement Mortar
- 4. A 118.12-2014 (R19) Specification for Robinson Floor Test and Crack Isolation Membranes for Thin Set Ceramic Tile and Dimension Stone Installation
- 5. A118.10-2014 (R19) American National Standard Specification for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation

#### B. ASTM INTERNATIONAL (ASTM)

- 1. ASTM C 578: Standard specification for rigid, cellular polystyrene
- 2. ASTM C 627: Standard test method for evaluating Ceramic Floor Tile Installation Systems using the Robinson-Type Floor Tester
- 3. ASTM E 96: Standard test methods for Water Vapor Transmission Materials
- 4. ASTM E84-16: Standard Test Method for Surface Burning Characteristics for Building Materials
- 5. ASTM C666-2015 Test Method for Resistance of Concrete to Rapid Freezing & Thawing
- 6. ASTM E84-2021a Test Method for Surface Characteristics of Building Materials
- 7. ASTM E331-200(R16) Test Method for Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference
- C. ASME
  - 1. ASME A 112.6 3-206: Floor and Trench Drains
  - 2. ASME A 112.18 2: General Purpose Drains
- D. ICC-PMG
  - 1. ICC-ES EG 159: Evaluation guideline for composite backer board (approved December 2004)
  - 2. ICC-ES AC 71: Acceptance criteria for foam plastic sheathing panels used as water resistive barriers (approved February 2003, revised November 2018)
  - 3. ICC-ES AC115 (R2013) Acceptance criteria for Waterproof Membranes for Flooring and Shower Lining

#### E. IAPMO

- 1. IAPMO PS 46-2012: Field-fabricated tiling kits
- 2. IAPMO PS 106-2015e1: Tileable shower receptors and shower kits

#### F. NFPA

- 1. NFPA 286 Flammability
- G. TILE COUNCIL OF AMERICA, INC.
  - 1. Handbook for Ceramic Tile Installation
- H. INTERNATIONAL STANDARDS ORGANISATION (ISO)
  - 1. ISO 13007 C2 T- 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. 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.
- B. Installer: Must have experience in the installation of shower systems and training by manufacturer in the installation of the ARDEX TLT Shower System.
- C. Pre-Installation Conference: Conduct conference at project site with all parties present to discuss installation requirements and special considerations.
- 1.6 WARRANTY: ARDEX TLT 10-Year Single Product Warranty applies. See <u>www.ardexamericas.com</u> for additional information. With the use of additional ARDEX products, a SystemOne Warranty can be provided. Contact the local ARDEX sales professional for SystemOne Warranty information.

## 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. Maintain temperature, humidity and ventilation conditions per manufacturer's written recommendations. Do not proceed with installation if conditions do not comply with manufacturer's written recommendations.

#### PART 2 – PRODUCTS

#### 2.0 ARDEX TLT SHOWER SYSTEMS

- A. ARDEX TLT BUILDING PANELS; Manufactured by ARDEX AMERICAS: USA, (724) 203-5000, <u>www.ardexamericas.com</u>
  - 1. XPS Foam Panels with proprietary blend of synthetic polymer mortar and an alkaliresistent fiber mesh
- B. ARDEX TLT CURBS; Manufactured by ARDEX AMERICAS USA; (724) 203-5000, www.ardexamericas.com
  - 1. Ready to install, pre-waterproofed
  - 2. Lightweight XPS Foam Panels with proprietary blend of synthetic polymer mortar and an alkali-resistent fiber mesh
  - 3. Load-bearing and heavy-duty; can be tiled upon to create a completely waterproof design
  - 4. Easy to cut to required size
- C. ARDEX TLT NICHES; Manufactured by ARDEX AMERICAS USA; (724) 203-5000, www.ardexamericas.com
  - 1. Thin, ultra-lightweight, waterproof, vapor-resistant
  - 2. Lightweight XPS Foam Panels with proprietary blend of synthetic polymer mortar and an alkali-resistent fiber mesh
  - 3. Multiple sizes available; shelf easily moves up and down for custom usage
  - 4. 3 sizes available
- D. ARDEX TLT SHOWER BASES; Manufactured by ARDEX AMERICAS USA, (724)203-5000, www.ardexamericas.com
  - 1. Pre-sloped, waterproofed shower base
  - 2. Tile compliance DIN EN 14411, natural stone and small mosaic tiles

- 3. Center or Off-Center bases in multiple sizes
- Complies with International Plumbing Code (IPC), International Residential Code (IRC), Uniform Plumbing Code (UPC), and Uniform Illustrated Plumbing Code - India<sup>™</sup> (UIPC-I)
- E. ARDEX TLT DRAIN KITS and LINEAR DRAIN KITS; Manufactured by ARDEX AMERICAS USA, (724)203-5000, <u>www.ardexamericas.com</u>
  - 1. Constructed of SAE 304 Stainless Steel
  - 2. Electroplated in a variety of colors
- F. ARDEX TLT 700 Multi-Purpose Construction Adhesive and Sealant; Manufactured by ARDEX AMERICAS USA, (724)203-5000, <u>www.ardexamericas.com</u>
- G. ARDEX TLT WATERPROOFING ACCESSORIES; Manufactured by ARDEX AMERICAS USA, (724)203-5000, <u>www.ardexamericas.com</u>
  - 1. ARDEX TLT WATERPROOFING MEMBRANE; lightweight polyethelyne for use under tile and stone surfaces and chemical resistant flooring
  - 2. ARDEX TLT SEAM TAPE for horizontal and vertical seams
  - 3. ARDEX TLT CORNERS seamless inside and outside corners
  - 4. ARDEX TLT MIXING/PIPE VALVE SEALS designed to seal pipe protusions
    - a. Waterproofing membrane and systems complies with International Residential Code (IRC), International Plumbing Code (IPC) and Uniform Plumbing Code (UPC).
    - b. For steam showers designed for continuous use, the Waterproofing Sheet Membrane has been verified to have a water vapor permeance rating of 0.5 perms or less when tested per ASTM E96.
- H. ARDEX SUBSTRATE PREPARATION PRODUCTS; Manufactured by ARDEX AMERICAS USA, (724)203-5000, <u>www.ardexamericas.com</u>
  - 1. Products as required to prepare the substrate for installation of the TLT Shower System, including underlayment, patch and crack correction. Contact ARDEX AMERICAS Technical Department for recommendations on products to be used for the conditions present (724)203-5000.

## PART 3 – EXECUTION

#### 3.1 PREPARATION

A. Substrate: 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).
- 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.
- B. Crack and Joint Preparation:
  - 1. Per ANSI A 108 AN-3.7, expansion joints must be provided over existing moving joints and moving cracks and where substrate material change composition or direction.

## 3.2 INSTALLATION OF TLT SHOWER SYSTEM

- A. Install TLT Shower System comply with the below instructions, manufacturers printed instructions and application indicated on Drawings. Contact manufacturer or manufacturer's representative for site-specific recommendations if needed.
  - 1. Begin with a dry and structurally sound subfloor. The subfloor MUST be level so that the ARDEX TLT Shower Base will drain correctly.
  - 2. Pre-fit the ARDEX TLT Shower Base and cut to fit the shower area, if needed.
  - 3. Mix an ARDEX mortar suitable for the subfloor as per manufacturer specification and apply to floor and backside of ARDEX TLT Shower Base. Set the shower base into place.
  - 4. Three ways to install your drain assembly: Clamp Ring, Connectite® DWV Fitting, or Rubber Gasket.
  - 5. Apply pressure / extra weight on shower base to ensure the base slop stays at a minimum of 2%.
  - 6. Protect the shower base by using a double layer of cardboard and proceed with installation of ARDEX TLT Building Panels and TLT Waterproofing Accessories per the manufacturers' installation guidelines.

#### 3.3 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.

#### 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 using plywood, Masonite or other suitable protection course.

# **END OF SECTION**