

Technical Data & Certifications

ARDEX TLT™ Building Panels for Shower Systems

Offer builders and tile contractors a strong, lightweight, waterproof, and vapor-resistant tile base for wet areas. They are XPS foam panels manufactured with a proprietary blend of synthetic polymer mortar and an alkali-resistant fiber mesh. This gives the ARDEX TLT Building Panels a highly rigid structure and exceptional bonding strength.

*Sizes vary - contact your local tile sales representative or visit www.ardexamericas.com.

Properties	Standards	Values
Compressive Strength - perpendicular to surface	ASTM D1621	50.50 psi
Compressive Strength - perpendicular to cross section	ASTM D1621	386.0 psi
Tensile Strength	ASTM D1623	75.30 psi
Shear Strength	ASTM 273	53.30 psi
Flexural Strength	ASTM C203	788 psi
Nail Pull Resistance	ASTM C473-10	Wet 313,8 PSI/Dry 668 psi
Robinson Floor Test	ASTM C627	Extra heavy duty & high impact use
System Crack Resistance	ANSI A 118.12, S 5.4	No Cracks
Water Penetration	ASTM E331-09	passed
Capillarity		0
Flange-Fixture Seal		passed
Water Vapor Transmission - perm rating	ASTM E 96-05	0.494, 0.354
Freeze & Thawing Resistance	ASTM C666 - 03 (Modified), 25	No Visual Defects
Thermal Resistance R-Value (1/2")	ASTM C518	1.8 hr. ft. 2F/Btu
Surface Burning Characteristics	ASTM E 84, 12	Flame speed 0 Smoke developed 70
Flammability	NFPA 286	passed
Temperature Limits		- 50 / + 75
Linear Coefficient of Thermal Expansion	ASTM D696	0.000029 (29 x10 ⁻⁶) CTE /
Accelerated Aging	AC 71-S.3.5.3, 25 cycles	No Blistering or Delamination

Compliance with the following standards:

ICC-ES-PMG (PMG-1553).

ICC-ES-PMG (PMG-1115).

ANSI A118.12-2014 (R19), Specification for Robinson Floor Test and Crack Isolation Membranes for Thinset Ceramic Tile and Dimension Stone Installation

ASTM C666-2015, Test Method for Resistance of Concrete to Rapid Freezing and Thawing

ASTM C666-2015, Test Method for Surface Characteristics of Building Materials

ASTM E331-2000(R16), Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference

IAPMO PS 106-2015e1, Tileable Shower Receptors and Shower Kits

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ARDEX TLT™ 2” Building Panels

TEST PROCEDURE: IAPMO PS 46-2010, Field-Fabricated Tiling Kits Section 4.1 Material Property per ASTM D1621 Compressive Strength

Specimen	Initial Thickness (in)	Width (in)	Length (in)	Load	Compressive Strength	Modulus of Elasticity (psi)	Deformation (in)
1	1.925	3.973	4.043	764	47.57	99.90	1.71
2	1.946	4.060	3.970	776	48.10	98.24	1.74
3	1.941	4.029	3.980	878	54.78	112.31	1.73
4	1.950	4.007	3.978	821	51.63	105.07	1.74
Average	1.925	3.973	3.993	810	50.52	103.88	
Std Dev.					2.91	5.48	
Requirement: Minimum					36 psi		

ARDEX TLT™ Waterproofing Accessories

The ARDEX TLT™ Waterproofing Membrane is a lightweight, polyethylene membrane for use under tile and stone surfaces in showers and wet area applications. It is also suitable for chemical-resistant flooring.

The ARDEX TLT™ Seam Tape is made from the same lightweight, waterproof material as the waterproofing membrane and is for use over horizontal and vertical seams.

The ARDEX TLT™ Mixing/Pipe Valve Seals are designed to seal pipe protrusions and are for use around supply lines to shower heads, hand held wands, jets, and spray and steam heads. They act as an anti-fracture membrane between substrates and hard surface coverings.

The ARDEX TLT™ Inside/Outside Corners are constructed as a single piece from a seamless material that eliminates the potential of weak points in time-consuming jobsite-cutting techniques. They offer convenience and provide peace of mind knowing every corner is safe from water infiltration.

Compliance with the following standards:

ICC-ES-PMG (PMG-1115).

ANSI A118.10-2014 (R19), American National Standard Specification for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation

ASTM E96-2021, Standard Test Methods for Water Vapor Transmission of Materials

ICC-ES AC115 (R2013), Acceptance Criteria for Waterproof Membranes for Flooring and Shower Lining

ARDEX TLT™ Drain Kits

Are made from SAE 304 stainless steel, one of the most common and widely used stainless steel types because of the ease in which it is formed into various shapes. These drain kits are electroplated, a method used to give each drain the desired color and finish. Drain Kits include 4” square and linear in various sizes and finishes for multiple applications.

Compliance with the following standards:

ASME 112.18.2 for drain components.

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ARDEX TLT™ Shower Base: Foam Features

Is an all-in-one solution that sets new standards. It can be installed easily, quickly and securely. The technology is highly efficient and all system components are perfectly adapted to each other.

Features	Acceptance Limits
Density	2.85 pcf minimum
Flexural	60 psi minimum
Thermal 75° F	4.2 minimum for 1" ASTM C 518
Thermal 40° F	4.6 minimum for 1" ASTM C 518
Dimensional	Length +/- 1/32" per ft.
	Width +/- 1/16" per ft.
	Thickness +/- 1/16" per in.
	Square within 1/16"/ft. of width and length
Compressive	50 psi min. @ 10% def.
Oxygen Index	24.0% minimum
Flame Spread and Smoke Dev. (max.)	20 FS SD 150-300

Compliance with the following standards:

ICC-ES-PMG (PMG-1553).

ICC-ES-PMG (PMG-1115).

ANSI A118.12-2014 (R19), Specification for Robinson Floor Test and Crack Isolation Membranes for Thinset Ceramic Tile and Dimension Stone Installation

ASTM C666-2015, Test Method for Resistance of Concrete to Rapid Freezing and Thawing

ASTM C666-2015, Test Method for Surface Characteristics of Building Materials

ASTM E331-2000(R16), Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference

IAPMO PS 106-2015e1, Tileable Shower Receptors and Shower Kits

ARDEX TLT™ Shower System

Provides a simple, all-in-one solution that sets new standards. They can be installed easily, quickly, and securely. Thanks to sophisticated technology and high-quality materials, consumers will be able to enjoy a shower system which provides both high durability and excellent sealing properties.

Property	Test Method	Requirement as per PS 106 Table 2	Average of specimen tested	Pass/Fail
Chemical Resistance	ASTM D4551 Section 11.4	Comply with the chemical resistance requirements specified in Table 1 of ASTM D4551	Complies	Pass
Flexural Strength	CSA B45.5	Sec. 5.8.2.2.2	Pass	Pass
Impact Resistance	ASTM D1037 Section 21	No damage with a 12 in drop	No Damage	Pass
Indentation Resistance	ASTM D 4551 Annex A3	3 of 3 pass	3 of 3 pass	Pass
Linear Expansion	ASTM D1037 Section 24	≤ 0.07%	0.02%	Pass
Pinholes	ASTM D4551 Section 11.3	None	None	Pass
Puncture Resistance	ASTM D1037 Annex A2	6 of 6 pass	6 of 6 Pass	Pass
Tensile Strength	ASTM D1037	> 33 psi	118.8 psi	Pass

Compliance with the following standards:

IAPMO PS 106-15e1. Tileable Shower Receptors and Shower Kits.