

# **ARDEX 8+9**<sup>™</sup> Rapid Waterproofing and Crack

# Isolation Compound

Rapid setting - tile in as little as 90 minutes Flood test in 4 hours Crack isolation up to 1/8" (3 mm) Excellent coverage - up to 300 sq. ft. for commercial unit and up to 100 sq. ft. for convenient kit Available in Grav or White Ideal for applications in commercial and residential bathrooms, showers and kitchens prior to the installation of tile and stone For use in swimming pools\* Use for interior or exterior floors and walls<sup>+</sup> Easy to apply with a roller or paint brush A solvent-free blend of Portland cement and other hydraulic cements for the ultimate bond with ARDEX tile and stone mortars Helps to prevent efflorescence from the substrate Can be used in place of a shower pan liner Use for shower pan in conjunction with ARDEX A 38 MIX<sup>™</sup> / ARDEX A 38<sup>™</sup> for fast-track applications Zero water penetration via wind-driven rain Protects installation, including wire lathe, metal fasteners and wooden substrates Breathable makeup allows for more vapor pressure compensation; less risk of condensation within the building envelope









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# **ARDEX 8+9**<sup>™</sup> Rapid Waterproofing and Crack Isolation Compound

# **Description and Usage**

ARDEX 8+9<sup>™</sup> Rapid Waterproofing and Crack Isolation Compound is a best-in-class, two-component, solvent-free, cement-based membrane. Comprised of an acrylic-based liquid compound and a Portland and other hydraulic cement-based powder, ARDEX 8+9 can be applied easily with a paint roller or a brush to produce a highly flexible, waterproof coating. This coating protects from topside water infiltration and provides an excellent bonding layer for ARDEX tile and stone mortars. When properly installed, ARDEX 8+9 reduces the risk of efflorescence and is IAPMO certified for use as a shower pan.

ARDEX 8+9 can be used for topside waterproofing of all common building substrates including showers, balconies and other wet areas. On interior applications, ARDEX 8+9 can be used over concrete and masonry finishes, existing tile, drywall, cementitious backer boards and plywood on all interior floors or walls prior to the installation of tile and stone. +Contact the ARDEX Technical Service Department for guidance on exterior applications. ARDEX 8+9 also is ideal for crack isolation up to 1/8" (3 mm) when used with ARDEX SK MESH<sup>™</sup> Reinforcement Fabric for Waterproofing and Crack Isolation; 1/16" (1.5 mm) when used alone.

# **Substrate Preparation**

All substrates must be structurally sound, solid, dry, thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds<sup>\*\*</sup>, sealers and any contaminant that might act as a bond breaker. Plywood substrates must be APA-rated, Type 1 exterior-grade plywood. Refer to ANSI A108 AN-2 "General Requirements for Subsurfaces," the Tile Council of North America's "Handbook for Ceramic Tile Installation" and TTMAC for detailed information on surface preparation and guidelines for substrate construction. The plane of wall surfaces must be plumb and true. Floor surfaces must have minimal variation in the plane or slope, and sloped areas must have proper slope towards the drain(s).Should interior pre-leveling or substrate repair be required, use:

Product	Interior	Exterior	Vertical	Horizontal
ARDEX AM 100 <sup>™</sup> Rapid Set Pre-Tile Smoothing and Ramping Mortar (only on cementitious substrates)	x	x	x	x
ARDEX A 38 <sup>™</sup> Rapid Set Screed	x	x		x
ARDEX A 38 MIX <sup>™</sup> Rapid Set, Premixed Screed	x	x		x
ARDEX Liquid BackerBoard® Self- Leveling Underlayment (for wood and concrete subfloors)	x			x
ARDEX TL 1000 <sup>™</sup> Tile Leveler, Self-Leveling Underlayment	х			x
ARDEX TL PATCH <sup>®</sup> Tile Leveler, Underlayment Patch and Skimcoat	x		x	x

Expansion joints must be provided over existing moving joints, and where substrate materials change composition or direction, per ANSI A108 AN-3.7 and TTMAC guidelines.

# \*\*Note on Curing Compounds

Test areas of ARDEX 8+9 can be installed and evaluated over concrete slabs that have been treated with either silicate or acrylic resin curing compounds. These compounds must be installed in strict accordance with the compound manufacturer's written recommendations. If a silicate type has been used, all residual salts must be removed.

Please be advised, however, that there are a number of curing compounds sold today that are wax- or petroleum-based emulsions. These are permanent bond breakers that must be removed completely prior to patching or leveling. Dissipating compounds must also be removed completely by mechanical means prior to installing any ARDEX material.

It is imperative to be able to determine the type of curing compound that was used before proceeding. Any curing compound that cannot be identified should be completely, mechanically removed.

# **Recommended Tools and Accessories**

ARDEX M-6W Mixing Bucket<sup>\*\*\*</sup>, ARDEX T-2 Ring Mixing Paddle, ARDEX SK MESH, ARDEX SK DRAIN<sup>™</sup> Mesh Reinforcement Fabric for Drain Tie-Ins, 3/16" x 3/16" V-Notch Trowel, high speed drill, margin trowel, putty knife, 3/8" nap paint roller and paintbrush

\*\*\*When mixing commercial-sized units of ARDEX 8+9, a minimum 6-gallon capacity is needed. ARDEX recommends the ARDEX M-6W Mixing Bucket for this purpose.

# **Mixing and Application**

ARDEX 8+9 can be mixed to two different consistencies – caulking or paintable. Using the mix ratios below, pour the ARDEX 8 liquid into the mixing bucket first, and then add the ARDEX 9. **Do not add water or additives!** For best results, mix with an ARDEX T-2 Ring Mixing Paddle and a high speed drill for 2 - 3 minutes. Just prior to application on the substrate, the mixture should be stirred again to ensure a creamy, smooth, lump-free consistency.

# **Caulking Consistency**

- For one 9 lb. (4 kg) bag of ARDEX 9, use approximately 2/3 of the 1 gallon unit (approximately 2/3 gallon / 2.5 L) of ARDEX 8.
- For one 27 lb. (12 kg) bag of ARDEX 9, use approximately 2/3 of the 3 gallon unit (approximately 2 gallons / 7.56 L) of ARDEX 8.
- To mix small batches of the caulking consistency, mix one 2/3 part of ARDEX 8 with one part of ARDEX 9 powder by volume.

Use this consistency to fill around floor or wall penetrations, for corner and floor/wall joints and around pipes. The unused portion of the trowel grade mixture can be blended back with the balance of the liquid ARDEX 8 and used in the paintable consistency. Follow by applying ARDEX SK MESH, alkali resistant tape or similar material over the corner or penetration using the paintable consistency of ARDEX 8+9, and then smooth over the area with a putty knife.

## **Paintable Consistency**

- For one 9 lb. (4 kg) bag of ARDEX 9, use an entire 1 gallon (3.78 L) unit of ARDEX 8.
- For one 27 lb. (12 kg) bag of ARDEX 9, use the entire 3 gallon (11.34 L) unit of ARDEX 8.

To mix small batches of the paintable consistency, mix one part of ARDEX 8 with one part of ARDEX 9 by volume. Apply the first coat of the paintable mixture to the surface with a paint roller. Use a paintbrush to coat reinforced corners, edges and around drains. Coat the entire area and allow thorough drying (30 - 45 minutes). A second layer is required to obtain a waterproof and/or crack isolation membrane, and must be applied at a 90° angle to the first coat. Total thickness should be 1/32" (0.79 mm) minimum. Allow the final layer to dry thoroughly (approximately 1 hour at 70°F/21°C) prior to installing the tile using ARDEX setting materials. Once the final coat is dry to the touch, cover ARDEX 8+9 with mortar within 24 hours to avoid dust contamination. If dust contamination occurs, clean with a damp ARDEX sponge before applying mortar.

#### Mesh Reinforcement for Drains and Changes of Plane

For drain tie-ins, corners, changes in plane and individual cracks or saw cuts use standard width 4 7/8" (120 mm) ARDEX SK MESH, alkali resistant tape or similar material. For corners, changes in plane and individual cracks or saw cuts, begin the installation by applying the referenced items with ARDEX 8+9 mixed to a paintable consistency. Without allowing the ARDEX 8+9 to dry, lay the fabric into the fresh ARDEX 8+9 and key it in with the smooth side of a clean trowel or the elbow of a roller. Immediately proceed to install 2 coats of paintable consistency ARDEX 8+9 over the whole surface to be waterproofed. For drain tie-ins, apply the paintable consistency mixture of ARDEX 8+9 around the edges of a drain using a paintbrush. Lay the ARDEX SK DRAIN or similar drain mesh in the fresh ARDEX 8+9 and key it in with the flat side of a trowel. Immediately proceed with two coats of paintable consistency ARDEX 8+9 over the drain mesh and the entire surface to receive waterproofing. **NOTE:** When installing ARDEX 8+9 with mesh, special care should be taken to ensure no wrinkles are left in the installed mesh.

## **Tile Installation and Flood Testing**

Tile can be installed over ARDEX 8+9 once the final coat has dried (approximately 1 hour, depending on ambient conditions). If flood testing is required, please note that the final coat of ARDEX 8+9 must first cure for a minimum of 4 hours.

## **Crack Isolation**

ARDEX 8+9 can be used as a crack isolation membrane in accordance to ANSI A118.12. ARDEX 8+9 will isolate minor, in plane substrate cracking up to 1/16" (1.5 mm) when used without mesh and up to 1/8" (3 mm) when used with mesh.

If ARDEX SK MESH is to be used for crack isolation over a large, cracked area, first apply a layer of ARDEX 8+9to the substrate using a  $3/16" \times 3/16"$  V-Notch trowel. Special care should be taken to ensure no wrinkles are left in the installed mesh.

# **Crack Bridging**

ARDEX 8+9 can be used to bridge existing dormant, non-structural cracks up to 1/8" (3 mm) wide with no vertical displacement. ARDEX SK MESH, alkali resistant tape or similar material must be placed over the crack.

# ANSI Test Results A118.10 (Waterproofing) and A118.2 (Crack Isolation)

Property	Test Method	ANSI Specification	Test Results		
Fungus Resistance	A118.10 Section 4.1	No Growth	Pass		
Seam Strength	A118.10 Section 4.2	> 8 lbs. / inch width	48 lbs. / inch width		
Breaking Strength	A118.10 Section 4.3	> 170 psi (12 kg/cm²)	865 psi (61 kg/cm²)		
Dimensional Stability	A118.10 Section 4.4	+/- 0.7%	0.00%		
Waterproofness	A118.10 Section 4.5	No Water Penetration	Pass		
Shear Bond Strength to Cement Mortar					
Shear Strength After Water Immersion (7 day)	A118.10 Section 5.4	> 50 psi (5 kg/cm²)	90 psi (6 kg/cm²)		
Four Week Shear Strength	A118.10 Section 5.5	> 50 psi (5 kg/cm²)	132 psi (9 kg/cm²)		
System Crack Resistance					
Standard Performance (without mesh)	A118.12 Section 5.4	> 1/16" and $< 1/8"$	Pass		
High Performance (with mesh)	A118.12 Section 5.4	> 1/8"	Pass		
Point Load	A118.12 Section 5.2	> 1000 lbs.	> 3,300 psi (232 kg/cm²)		
Robinson Test	A118.12 Section 5.3	As Specified	Extra Heavy		

## Technical Data According, To ARDEX Quality Standards

All data based on a mixing ratio of 1 unit of ARDEX 8 to 1 unit of ARDEX 9 at 70°F (21°C). Physical properties are typical values and not specifications.

#### Mixing Ratio

Paintable Consistency:	1 gallon (3.78 L) of ARDEX 8 per 9 lb. (4 kg) of ARDEX 9 For small batches, 1 part ARDEX 8 to 1 part ARDEX 9 by volume
Mixing Ratio Caulking Consistency:	2/3 gallon (2.5 L) of ARDEX 8 per 9 lb. (4 kg) of ARDEX 9 For small batches, 2/3 part ARDEX 8 to 1 part ARDEX 9 by volume
Coverage:	100 sq. ft. (2 coats) over drywall Approx. 70 sq. ft. (2 coats) over concrete
Pot Life:	Up to 45 minutes
Drying Time:	30 - 45 minutes for initial coat Approx. 60 minutes for final coat
Flood Test:	Begin 4 hours after the second coat has been applied
<b>Colors Available :</b>	Gray and White
VOC:	0
Sizes Available:	Convenient Kit: ARDEX 8 (liquid): 1 gallon (3.78 liters) bottle and ARDEX 9 (powder): 9 lb. (4 kg) bag
	Commercial Size: ARDEX 8 (liquid): 3 gallon (11.34 liters) bottle and ARDEX 9 (powder): 27lb. (12 kg) bag
Storage:	Store in a cool, dry area. Do not expose packages to sun. Keep liquid from freezing.
Shelf Life:	1 year
Warranty:	ARDEX L.P. Standard Limited Warranty applies. Also eligible for the ARDEX SystemOne <sup>™</sup> 25-Year Limited Warranty when used in conjunction with select ARDEX mortars and grouts.

# **IMPORTANT TECHNICAL UPDATES**

**Technical update effective June 28, 2018:** ARDEX Tile Mortar Thicknesses over Membranes

#### Notes

FOR PROFESSIONAL USE ONLY.

All tools should be cleaned with water immediately after use. ARDEX 8+9 is not recommended for roofing applications or as exterior primary waterproofing over indoor spaces.

As always, ARDEX recommends the installation of test areas to confirm the suitability of the product for the intended use.

Never mix with cement or additives other than ARDEX approved products. Observe the basic rules of tile work. Do not install below 50°F (10°C) surface temperature.

\*For submerged applications, please contact the ARDEX Technical Service Department.

ARDEX 8+9 can also be used to adhere ARDEX DS 70<sup>™</sup> Acoustic Mat installations. For more information, please refer to the appropriate technical data sheets.

Store at temperatures between 40 and 90°F (5 - 32°C). Do not freeze. Do not reuse container. Dispose of packaging and residue in accordance with federal, state and local waste disposal regulations. Do not flush material down drains.

#### **Precautions**

Carefully read and follow all precautions and warnings on the product label. For complete safety information, please refer to the Safety Data Sheet (SDS) available at www.ardexamericas.com.

Made in the USA.

Content updated 2021-1-6. Published 2021-03-29. Supersedes all previous versions. Check www.ardexamericas.com for most recent version and for technical updates, which may supersede the information herein.

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