

# ARDEX ARDICOAT<sup>™</sup> PLUS Two component cement-based acrylic waterproofing compound

Portland cement-based, acrylic-modified, fiber-reinforced waterproofing membrane Fiber reinforcement enhanced strength Highly flexible to bridge hairline cracks Reduces chloride penetration by 90% Low VOC's – Solvent-free Trowel or spray apply on horizontal and vertical surfaces Suitable for institutional, commercial and residential applications Breathable membrane

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# **Description and Usage**

ARDEX ARDICOAT<sup>™</sup> PLUS is a two component system consisting of a liquid acrylic emulsion and a blended cement powder that produce an easy to apply waterproof coating for all types of concrete and masonry on horizontal or vertical surfaces above, on and below grade. Typical applications include foundations, block wall, balconies, parapet wall, planter boxes, non-potable water tanks and fountains.

#### **Substrate Preparation**

All substrates must be solid, thoroughly clean and free of oil, wax, grease, asphalt, existing patching materials, curing and sealing compounds, and any contaminant that might act as a bond breaker. Over watered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods such as scarifying, scabbling or similar. Sand blasting and high pressure water blasting (min. 3000 psi) are also acceptable, though the surface must then be allowed to dry prior to proceeding with the installation. Acid etching, solvents, sweeping compounds and sanding are not acceptable means of preparing the substrate.

# **Recommended Tools**

A 1/2" to 3/4" (12 to 19 mm) low speed heavy-duty mixing drill, mixing paddle, mixing buckets, margin trowel, steel trowel or hopper gun and/or spray equipment

# **Mixing and Application**

Pour the liquid into the mixing container and add the powder while mixing at low speed (400 to 600 rpm). After all of the powder is added, mix for at least 3 minutes to a uniform lump-free consistency. Once mixed, the working time is approximately 30 to 90 minutes, depending upon jobsite conditions. Apply the mixed ARDEX ARDICOAT PLUS to the prepared substrate using a trowel or spray equipment at a 1/16" (1.5 mm) thickness.

Where required, reinforce dormant cracks and transitions where there are changes of plane or change in materials using ARDEX ARDICOAT<sup>TM</sup> PLUS MESH Glass Fiber Reinforcing Mesh. Apply the ARDEX ARDICOAT PLUS at a thickness of 1/16" (1.5 mm) to the substrate and immediately lay the mesh into the ARDEX ARDICOAT PLUS. Work the product through the mesh with a steel trowel to ensure that the fabric is completely encapsulated. When doing large areas, overlap the mesh a minimum of 2 1/2" (64 mm). At corners and transitions, use two layers of mesh. Allow the first coat to dry for one to two hours, and then apply a finish coat.

# **Curing and Sealing**

ARDEX ARDICOAT PLUS needs to cure a minimum of 24 hours before sealing or overcoating. This time will vary with air temperature, humidity and surface temperature. Do not install if rain, freezing or continuous high humidity is expected in the first 24 hours.

#### Notes

Never mix with cement or additives other than ARDEX approved products. Observe the basic rules of concrete work. Do not install below 50°F (10°C) surface and air temperatures. Install quickly if substrate is warm, and follow warm weather instructions available from the ARDEX Technical Service Department.

Always install an adequate number of properly located test areas, including the selected finish, to determine the suitability of the products for the intended use. As finishes vary, always contact the local ARDEX representative or ARDEX Technical Service Department for intended end use of the product.

# Precautions

ARDEX ARDICOAT PLUS contains Portland cement and crystalline silica. Avoid eye and skin contact. Mix in a well ventilated area and avoid breathing powder or dust. KEEP OUT OF REACH OF CHILDREN. Carefully read and follow all cautions and warnings on the product label. For complete safety information, please refer to the Material Safety Data Sheet or visit our website at www.ardex.com.

# Technical Data According to ARDEX Quality Standards

Quality Standards		
All data based on recommended mix ratio at 70°F (21°C)		
Material Requirements:	88 to 100 ft <sup>2</sup> at 1/16" (8.2 to 9.3 m <sup>2</sup> per 15 L pail at 1.5 mm)	
Adhesion to Concrete: (psi) ASTM D4541	7 days 28 days	150 177
Tensile Strength (psi) ASTM D 412	w/o mesh w/mesh	0.470 3800
Elongation at Break (%): ASTM D 412	w/o mesh w/mesh	11 9
Flexibility Mandrel Bend ASTM D522	:28 days pa	sses 1/8" at 77⁰F
Abrasion Resistance: (grams of weight loss) ASTM D4060 Taber CS-10 wheel	3000 cycles 6000 cycles	0.20 0.34
Water Absorption (%): ASTM D570	24 hours immersion 4.5	
Waterproofing: (hydrostatic pressure in psi)	101.5	
Water vapor permeability: (perms) ASTM E 96 wet cup method	3.9	
Chloride Ion Penetration : (% Reduction) Modified NCHRP	89.9	
Rapid Chloride: Permeability (Coulombs) ASTM C1202	550 (very low)	
VOC's: Pot Life/Working Time:	100 g/L, SCAQMD 1113 This product complies with US EPA (40 CFR 59) and SCAQMD (Rule 1113) VOC emission standards for architectural coatings VOC less than 100 g/L. 30 to 90 minutes	

Walkable:	Light foot traffic in 24 hours
Coat or Seal	24 hours
Time to Traffic:	Once sealer is dry per sealer manufacturer's recommendations.
Color:	Gray/White
Packaging:	5 gallon container yields 4 gallons of finished product Component A: 2.3 gal (8.9 L) Component B: 25 lb (11.3 kg) bag
Storage:	Store in a cool dry area. Protect from extreme heat (90°F/32°C), direct sunlight and freezing.
Shelf Life:	One year if unopened
Warranty:	ARDEX Engineered Cements Standard Limited Warranty Applies

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