

# ARDEX ARDICOAT™ 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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## **ARDEX ARDICOAT™ PLUS**

# Two component cement-based acrylic waterproofing compound

#### **Description and Usage**

ARDEX ARDICOAT™ 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

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: 7 days 150 (psi) ASTM D4541 177 28 days **Tensile Strength** 0.470 w/o mesh (psi) ASTM D 412 3800 w/mesh Elongation at Break (%): w/o mesh 11 **ASTM D 412** 9 w/mesh

Flexibility Mandrel Bend: 28 days passes 1/8" at 77°F

ASTM D522

Abrasion Resistance: 3000 cycles 0.20 (grams of weight loss) 6000 cycles 0.34

**ASTM D4060 Taber** 

CS-10 wheel

Water Absorption (%): 24 hours immersion 4.5

**ASTM D570** 

Waterproofing: 101.5

(hydrostatic pressure

in psi)

Water vapor permeability: 3.9

(perms) ASTM E 96 wet cup method

**Chloride Ion Penetration: 89.9** 

(% Reduction)
Modified NCHRP

Rapid Chloride: 550 (very low)

Permeability (Coulombs) ASTM C1202

**VOC's:** 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.

Pot Life/Working Time: 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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