

# ARDEX EP 2000<sup>™</sup> Substrate Preparation Epoxy Primer

Two-component epoxy preparation material

Primer for concrete and non-porous substrates such as terrazzo and epoxy coatings

Helps to minimize cracking in underlayments and toppings

Can be used as crack filling material

Especially suited for priming areas to receive ARDEX underlayments and toppings

Required primer for ARDEX DESIGNER FLOORS™

Solvent-free, low viscosity, 100% solids epoxy resin

Receives sand broadcast

Use for interior and exterior substrates

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# ARDEX EP 2000<sup>™</sup>

### **Substrate Preparation Epoxy Primer**

#### **Usage**

ARDEX EP 2000™ is a two-component epoxy preparation material formulated for use with ARDEX underlayments and toppings. It is especially suited to prime concrete and non-porous substrates prior to installing ARDEX self-leveling products. ARDEX EP 2000 is the required primer for ARDEX DESIGNER FLOORS™ using ARDEX SD-T® SELF-DRYING, SELF-LEVELING CONCRETE TOPPING. It can also be used as a crack filling material prior to the installation of ARDEX CD™ and ARDEX CD FINE™ CONCRETE DRESSING™ in exterior applications.

#### **Description**

ARDEX EP 2000 is a solvent-free, low viscosity, two-component, 100% solids epoxy resin that is used prior to the installation of ARDEX Engineered Cements® over concrete, as well as other structurally sound and solid substrates including terrazzo, ceramic tile, and epoxy coatings. A highly reactive epoxy, ARDEX EP 2000 produces an extremely hard surface and bonds tenaciously to the substrate to help minimize cracking in the ARDEX underlayment or topping. ARDEX EP 2000 is applied in one coat that will receive a sand broadcast layer.

#### **Substrate Preparation**

All concrete substrates must be solid, thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing and sealing compounds, and any other contaminant that might act as a bond breaker. Epoxy and other coating systems must be mechanically roughened to ensure a proper bond. If necessary, mechanically clean the substrate down to sound, solid concrete by shot blasting, scarifying or similar. Overwatered, frozen, or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. Acid etching and the use of adhesive removers, solvents, or sweeping compounds are not acceptable means of cleaning the substrate. The use of sanding equipment is not an effective method to remove curing and sealing compounds. Substrates must be dry and properly primed for a successful installation. Substrate temperatures must be a minimum of 50°F for the installation of ARDEX products. For further information, please refer to the ARDEX Substrate Preparation Brochure.

#### **Dormant Cracks and Saw-Cut Joints**

ARDEX EP 2000 has a low viscosity, and can therefore be used to fill small, non-moving cracks in existing concrete substrates. Cracks up to  $\frac{1}{16}$  in width should be filled with straight epoxy, while cracks up to  $\frac{3}{16}$  in width should be filled with epoxy that has been filled with fine sand (less than  $\frac{1}{50}$  of an inch in grain size, or 98.5% passing sieve size #35) at a ratio of 1 part by volume of ARDEX EP 2000 to  $\frac{1}{2}$  parts of sand. Once the cracks have been properly filled, proceed with the installation of the primer layer.

#### **Moving Joints and Cracks**

In no case should expansion joints, isolation joints or moving cracks be filled with this epoxy. All moving joints and cracks must be honored up through the ARDEX underlayment or topping and the floor covering or coating by installing a flexible sealing compound specifically designed for use over moving joints, such as silicone or similar.

Ardex cannot be responsible for problems that arise from expansion and isolation joints, existing cracks, or new cracks that may develop after the system has been installed.

#### **Recommended Tools**

Nylon brush, %" short-nap or long-nap paint roller, mechanical mixing paddle, and a ½" heavy-duty low speed drill.

#### **Mixing and Application**

A single 10 lb. container of ARDEX EP 2000 contains separate, pre-measured quantities of the hardener (Part A) and the resin (Part B). The hardening agent (Part A) is added to the resin (Part B). First, separate the two units to relieve the small amount of pressure that may have built up during storage. Reseat the top unit, and pierce the plastic cap at the top center of the unit with a sharp object all the way through the bottom of the top unit several times. Let the top unit drain completely into the bottom unit. Once empty, remove the top unit and thoroughly mix the two components together using a low-speed drill and mixing paddle.

Apply the freshly mixed epoxy to the prepared surface using a short-nap paint roller for smoother surfaces, or a long-nap roller for more uneven substrates. ARDEX EP 2000 can also be applied with a paintbrush for hard to reach areas and corners.

While this primer coat is still in a fresh state (maximum 30 minutes), broadcast an excess of fine sand (less than 1/50 of an inch in grain size, or 98.5% passing sieve size #35) consistently over the entire area. When broadcasting the sand, use a NIOSH approved dust mask in conformance with OSHA requirements regarding the handling of sand. Avoid standing or walking on the freshly applied primer when broadcasting the sand. Once an area has been completely covered with sand, the surface of the sand can be walked on, being careful not to expose the primer at any time. Use about ½ lb. of sand per square foot of area. Once the sanding process is complete, avoid all traffic over the surface for a minimum of 6 hours.

After 16 hours, broom sweep and vacuum the surface to remove all loose sand. Otherwise uncontaminated sand can be re-used on the next project. Protect this surface from construction traffic, dirt, and debris using Masonite® or similar until the ARDEX underlayment or topping is installed. The clean prepared surface of sand is the priming system for the ARDEX underlayment or topping. No additional priming is required. There is no limit to how long the sanded surface can remain before installing the ARDEX underlayment or topping provided that the surface does not become contaminated. Install the ARDEX underlayment or topping in accordance with printed instructions found in the corresponding ARDEX Technical Brochures.

#### **Notes**

ARDEX EP 2000 has a working time of approximately 30 minutes at 70°F. Lower temperatures will lengthen the working time, while higher temperatures will dramatically shorten it. Do not apply ARDEX EP 2000 if the temperature is below 50°F, or if the surface temperature of the substrate is within 5°F of the dew point.

Store container at room temperature (50°F to 90°F). Keep from freezing and heat. If the container is exposed to temperatures below 50°F, do not use, and contact the ARDEX Technical Service Department for more information.

#### **Precautions**

Once the ARDEX EP 2000 is thoroughly mixed, begin using it immediately and without interruption. Due to its high reactivity, this epoxy has a tendency towards intense heat build-up, especially when left in the original container. If this occurs, do not touch the container. Close the lid loosely and transport the container by the handle into a cool room or outdoors until it sets and cools.

ARDEX EP 2000 is irritating to the eyes and skin. Wear protective glasses and gloves during mixing and installation. Ensure that rooms are well ventilated. Carefully read and follow all cautions and warnings on the product label. Avoid any contact with eyes or skin. Repeated exposure can result in sensitization. In case of eye contact, wash thoroughly with water and consult a doctor. Can cause burns if left on skin. Harmful if swallowed. KEEP OUT OF REACH OF CHILDREN. For completely safety information, please refer to the Material Safety Data Sheet, or visit our website at www.ardex.com.

Physiologically and ecologically friendly when set. Never mix with cement or additives other than Ardex approved products. Do not install below 50°F surface temperature.

## Technical Specifications According to Ardex Quality Standards

**Mixing Ratio:** Add entire pre-measured

contents of Part A (the hardener)

into Part B (the resin)

**Coverage:** Approx 150-200 sq. ft. per

mixed unit depending on surface

profile

(0.2 lbs. per linear foot when

used as a crack filler)

Affect of pH (Immersion in Concentrated KOH with pH of 14):

No effect

**Working Time:** 30 minutes at 70°F/21°C

**Pot Life:** 30 minutes at 70°F/21°C

**Walkable:** Minimum 6 hours at 70°F/21°C

after sand broadcast

Cure Time Before Installing ARDEX Underlayment or

**Topping:** Minimum 16 hours at 70°F/21°C

**Packaging:** 10 lb./4.5 kg net weight

container

**Storage:** Store in a cool dry area.

Do not expose containers to sun. Keep from freezing. Keep

away from heat.

**Shelf Life:** One year unopened

**Warranty:** Ardex Engineered Cements

Standard Limited Warranty

applies.

Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations.

#### **Limited Warranty**

Ardex, L.P. warrants that if this product proves to have manufacturing defects and ARDEX is notified of such within six months from the date ARDEX shipped the product, ARDEX will replace the defective product f.o.b. factory. Such product replacement shall constitute the sole and exclusive remedy for any claim under this warranty. ARDEX does not authorize anyone, including ARDEX Representatives, to make any statements which supersede, modify or supplement the information provided on its printed literature or package labels without written confirmation from the Ardex Technical Service Department. Any installations proceeding without this confirmation, or misinstallations of the product, will void this warranty. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIÉS, EXPRESSED, IMPLIED, OR STATUTORY, AND IS STRICTLY LIMITED TO ITS TERMS. ARDEX MAKES NO WARRANTY OF MERCHANTABILITY OR SUITABILITY OF ITS PRODUCTS FOR ANY PARTICULAR PURPOSE. All product demonstrations are placed for illustrative purposes only and do not constitute a warranty of any kind. ARDEX SELLS ITS PRODUCTS UPON THE CONDITION THAT CUSTOMERS SHALL CONDUCT THEIR OWN TESTS TO DETERMINE THE SUITABILITY OF THE PRODUCTS FOR THE CUSTOMERS' INTENDED PURPOSES. UNDER NO CIRCUMSTANCES WILL ARDEX BE LIABLE FOR ECONOMIC, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOSSES OF ANY KIND WHATSOEVER ARISING OUT OF OR OCCASIONED BY THE SELECTION, USE, INSTALLATION, OR REPLACEMENT OF THESE PRODUCTS.

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