



ARDEX EP 2000™

Substrate Preparation Epoxy Primer

Two-component epoxy preparation material for the installation of ARDEX underlayments and toppings

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

Required primer for decorative applications of ARDEX self-leveling toppings

Helps to minimize cracking in underlayments and toppings

Can be used as crack filling material

Can be used to provide secondary top-down waterproofing

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

Receives sand broadcast

Use for interior and exterior substrates

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ARDEX EP 2000™

Substrate Preparation Epoxy Primer

Description and Usage

ARDEX EP 2000™ is a solvent-free, low viscosity, two-component, 100% solids epoxy resin primer formulated for use with ARDEX underlayments and toppings. It is especially suited to prime concrete and other structurally sound and solid substrates, including terrazzo, epoxy coatings and ceramic and quarry tile, prior to installing ARDEX products.

ARDEX EP 2000 is the required primer for the following ARDEX flooring systems: ARDEX Designer Floors™ using ARDEX SD-T® Self-Drying, Self-Leveling Concrete Topping; the ARDEX Polished Concrete System (APCS) using ARDEX PC-T™ Polished Concrete Topping; and ARDEX PANDOMO® Floor and FloorPlus Systems using ARDEX PANDOMO® CF1 Commercial Design Leveling Compound, ARDEX PANDOMO® CF3 Commercial Design Leveling Compound, ARDEX PANDOMO® K1 Design Leveling Compound and ARDEX PANDOMO® K3 Design Leveling Compound.

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. It can also be used as a crack filling material prior to the installation of ARDEX cements.

Substrate Preparation

For all of the substrates listed below, acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means for cleaning the substrate. Overwatered, frozen or otherwise weak surfaces must be mechanically prepared until sound and solid. Substrates must be dry for a successful installation. Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products. For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Brochure at www.ardexamericas.com.

CONCRETE: All concrete substrates must be structurally sound and solid, surface dry and thoroughly clean and free of oil, wax, grease, asphalt, paint, latex compounds, curing and sealing compounds and any contaminant that could act as a bond breaker. The concrete must have a minimum tensile strength of 200 psi (1.38 N/mm²) when tested in accordance with ASTM C1583.

Mechanical preparation of the surface is required to obtain a minimum ICRI concrete surface profile of 3 (CSP 3). Substrate preparation must be by mechanical means, such as shot blasting. Broom sweep and vacuum the prepared surface.

NON-POROUS SUBSTRATES: Approved non-porous substrates, such as epoxy coating systems and ceramic and quarry tile, must be mechanically cleaned and profiled to ensure a proper bond.

Recommended Tools

Epoxy mixing paddle, low speed drill, short-nap paint roller or notched squeegee (smoother surfaces), long-nap paint roller (more uneven surfaces) and a paintbrush.

Dormant Cracks and Dormant Saw Cut Joints

ARDEX recommends the use of a two-part, low viscosity, rigid crack and joint filler, such as ARDEX ARDIFIX™, to fill small, non-moving cracks and non-moving saw cuts in existing concrete substrates. Cracks greater than a hairline in width (1/32" / 0.79 mm) and saw cuts must be filled in strict accordance with the installation instructions provided by the ARDEX Technical Service Department. Once the dormant cracks and dormant saw cuts have been filled properly, broadcast sand to refusal, and allow these areas to cure thoroughly prior to proceeding with the ARDEX EP 2000 installation.

Moving Joints and Moving Cracks

All moving joints and moving cracks must be honored up through the ARDEX EP 2000, the ARDEX underlayment or topping and the floor covering or sealer by installing a fully flexible sealing compound designed specifically for use in moving joints, such as ARDEX ARDISEAL™ RAPID PLUS.

ARDEX cannot be responsible for issues arising from expansion and isolation joints, saw cuts or new or existing cracks that may develop, widen or become more narrow after the system has been installed.

For questions regarding the appropriateness of specific joint treatment compounds, please contact the ARDEX Technical Service Department at 888-512-7339.

Mixing and Application

Each individual unit of ARDEX EP 2000 comes in a 10 lb. (4.5 kg) unit containing separate, pre-measured quantities of hardener (Part B) and resin (Part A). After opening each container, stir the individual components thoroughly before blending. The hardening agent (Part B) is added to the resin (Part A). Pour all of the hardener into the resin portion, and mix thoroughly for a minimum of 3 minutes using a low speed drill and an epoxy mixing paddle. Once mixed, pour some of the epoxy back into the hardener container, mix for 10 seconds, and then pour all of the contents back into the resin container. Mix for an additional 30 seconds before applying.

Apply the freshly mixed ARDEX EP 2000 to the prepared concrete surface in a uniform direction at an approximate application rate of 150 to 200 sq. ft. (13.9 to 18.5 sq. m) per unit, depending on surface profile. Use a short-nap paint roller or notched squeegee with back-rolling for smoother surfaces, and a longer nap roller for more uneven substrates. ARDEX EP 2000 can also be worked into the surface with a paintbrush for hard to reach areas and corners. While this coat is still in a fresh state (maximum 30 minutes), broadcast an excess of fine sand (less than 1/50" in grain size or 98.5% passing sieve size #30 or #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. Do not stand or walk on the freshly applied epoxy when broadcasting the sand. Once an area has been covered completely with sand, the surface of the sand can be walked on, being careful not to expose the epoxy at any time. Use approximately 1 lb. of sand per sq. ft. of area. Once the sand broadcast is complete, avoid all general traffic over the surface for a minimum of 6 hours.

After 16 hours, broom sweep and vacuum the surface to remove all loose sand. The clean, prepared surface of the 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 open before installing the ARDEX underlayment or topping provided that the surface does not become contaminated. If the underlayment or topping will not be installed immediately, protect its surface from construction traffic, dirt and debris using Masonite or similar. Install the ARDEX underlayment or topping in accordance with the printed instructions found in the corresponding ARDEX technical brochure.

Top-Down Waterproofing

In addition to being used as a single-coat primer application, ARDEX EP 2000 can be used in a double application for secondary top-down waterproofing when used in combination with ARDEX underlayments and toppings. The ARDEX EP 2000 waterproofing system is suitable for use over standard absorbent concrete and certain non-porous substrates, including ceramic and quarry tile. Additionally, ARDEX EP 2000 can be used for interior or exterior installations that are subject to top-down moisture, provided that the appropriate ARDEX underlayment or topping is then installed and used in accordance with its written recommendations.

For the waterproofing application, two coats of ARDEX EP 2000, both with sand broadcast, are required. Install the first coat of ARDEX EP 2000 as recommended in the Mixing and Application section above. After a 6-hour cure and the removal of all excess sand, apply a second coat at a 90° angle to the first. Immediately broadcast sand

to refusal into the fresh epoxy (max. 30 minutes). Please note that due to the textured sand surface of the first coat of ARDEX EP 2000, the coverage of the second coat will be diminished (approximately 100 sq. ft./9.2 m² per unit). After a 16-hour cure and the removal of excess sand from the second coat, the ARDEX EP 2000 is ready to accept the installation of ARDEX underlayments or toppings, as suitable to jobsite conditions.

Prior to proceeding with this application, treat cracks and joints as outlined in the above Dormant Cracks and Dormant Saw Cut Joints and Moving Joints and Moving Cracks sections. ARDEX cannot be responsible for water passing through any moving cracks or moving joints, nor through any new cracks that may develop after the system has been installed.

In addition, when considering ARDEX EP 2000 for waterproofing, please be aware that a waterproofing application of ARDEX EP 2000 beneath an ARDEX leveling compound does not change the water resistance properties of the leveling compound or of the finishing materials to be installed. The products selected should be appropriate for the environment in which they will be installed.

Finally, please be advised that ARDEX EP 2000 is not to be used as a roofing system, or as any part of a roofing system.

Notes

FOR PROFESSIONAL USE ONLY.

ARDEX EP 2000 has a working time of approximately 30 minutes at 70°F (21°C). Lower temperatures will lengthen the working time, while higher temperatures will shorten it dramatically. Do not apply ARDEX EP 2000 if the surface temperature is below 50°F (10°C).

Once the ARDEX EP 2000 is mixed thoroughly, use it immediately and without interruption. Due to its high reactivity, this epoxy has a tendency toward intense heat buildup, 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 to a cool room or outdoors until it sets and cools.

Precautions

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

Technical Data According To ARDEX Quality Standards

All data based on 70°F (21°C) installation temperatures.
Physical properties are typical values and not specifications.

Mixing Ratio:	Add entire pre-measured contents of Part B (Hardener) into Part A (Resin).
Coverage on CSP 3 Prepared Concrete:	Approx. 150 to 200 sq. ft. (13.9 to 18.5 sq. m) per mixed unit of ARDEX EP 2000 (Will vary with surface profile)
Working Time:	30 minutes
Pot Life:	30 minutes
Walkable:	6 hours after sand broadcast
Install underlayment or topping:	Min. 16 hours; no max. provided surface is protected
VOC:	0 g/L, calculated and reported, SCAQMD 1113
Packaging:	10 lb. (4.5 kg) unit
Storage:	Store in a cool dry area. Do not leave containers exposed to sun. Keep from freezing. Keep away from heat.
Shelf Life:	1 year, if unopened
Warranty:	ARDEX Engineered Cements Standard Limited Warranty applies.

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