



ARDEX

Liquid BackerBoard™

Self-Leveling Underlayment for Interior Wood and Concrete Subfloors

Smooths subfloors prior to the installation of tile and stone flooring

DOES NOT REQUIRE LATH MESH OR ADDITIVE

Walk on in 2 to 3 hours

Install tile and stone flooring in as little as 6 hours

Install up to 1 1/4" (32 mm)

Excellent coverage

Easy to mix - just add water – no additive required

Suitable with electrical in-floor heating systems

Portland cement-based

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ARDEX Liquid BackerBoard™

Self-Leveling Underlayment for Interior Wood and Concrete Subfloors

Description and Usage

ARDEX Liquid BackerBoard™ is a pourable, Portland cement-based material that replaces backerboard for a faster, easier, seamless installation over wooden subfloors, concrete, terrazzo, ceramic tile and epoxy, eliminating the need to cut, fit, glue and fasten. When used to smooth and level wood subfloors, ARDEX Liquid BackerBoard DOES NOT NEED LATH MESH. ARDEX Liquid BackerBoard is also suitable for use with in-floor electrical heating systems, and tile and stone can be installed in as little as 6 hours.

Substrate Preparation

Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products.

Concrete: All concrete substrates must be solid, thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds, sealers and any contaminant that might act as a bond breaker. If necessary, mechanically clean the floor down to sound, solid concrete by shot blasting, scarifying or similar. Over-watered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods. Acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means for cleaning the substrate. Sanding equipment is not an effective method to remove curing and sealing compounds.

Wood: Wood subfloors must either be solid hardwood flooring, a minimum of 3/4" (18 mm) tongue-and-groove, APA-rated Type 1, exterior exposure plywood, or OSB equivalent. Refer to ANSI A 108 AN-2 "General Requirements for Subsurfaces" and the TCA's "Handbook for Ceramic Tile Installation" for detailed information. All subfloors must be clean and completely free of all contaminants, including dust, oil, grease, wax, sealers, paint, varnish, etc. Do not use chemicals to clean the floor. Prepare wooden subfloors by sanding. The substrate must be dry and properly primed for a successful installation. Fill open joints with appropriate ARDEX patching compound prior to the installation of ARDEX Liquid BackerBoard.

Non-Porous Substrates: ARDEX Liquid BackerBoard can also be applied over certain non-porous substrates including terrazzo, burnished concrete, epoxy coating systems, and ceramic and quarry tile. The substrate must be clean including the complete removal of existing waxes and sealers, dust, dirt, debris and any other contaminant that may act as a bond breaker. Substrate preparation must be by mechanical means such as shot blasting. Do not use acid etching, sweeping compounds, solvents or adhesive removers.

For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Brochure.

PRIOR TO APPLICATION: Use 1/2" (12 mm) weather-stripping, caulking or similar to keep the ARDEX Liquid BackerBoard from flowing under cabinets or drywall, around plumbing or into adjacent rooms. Protect wall base and door moldings with painter's tape and plastic sheeting. Remove after the product has hardened (approx. 3 hours at 70°F/21°C).

Recommended Tools

ARDEX T-1 Mixing paddle, ARDEX T-10 Mixing Drum, ARDEX T-4 spreader, ARDEX T-5 Smoother, ARDEX MB-6.0 Measuring Bucket (6 qts. (5.7 liters) for 50 lb. (22.7 kg.) bag) and a 1/2" heavy-duty drill (min. 650 rpm).

Priming

Standard absorbent concrete must be primed with ARDEX P 51™ PRIMER diluted 1:1 with water. Apply evenly with a soft bristled push broom. Do not use paint rollers, mops or spray equipment. Do not leave any bare spots. Brush off puddles and excess primer. Allow primer to dry to a clear, thin film (min. 3 hours, max. 24 hours). Extremely absorbent concrete may require two applications of ARDEX P 51 to avoid the formation of bubbles and pinholes in the ARDEX Liquid BackerBoard. Make an initial application of ARDEX P 51 diluted with 3 parts water by volume. Let dry thoroughly (1 to 3 hours) and install a second application of ARDEX P 51 mixed 1:1 with water as stated above. For wooden subfloors, prime with undiluted ARDEX P 51. Apply with a short-nap or sponge paint roller leaving a thin coat of primer. Do not leave bare spots. Brush off puddles and excess primer. Allow drying to a clear, thin film (min. 3 hours, max. 24 hours). Low substrate temperatures and/or high ambient humidity may require longer drying times.

Non-porous substrates, burnished concrete, terrazzo, quarry, and ceramic tile must be primed with ARDEX P 82™ ULTRA PRIME. Follow the mixing instructions on container and apply with a short-nap or sponge paint roller leaving a thin coat of primer. Do not leave any bare spots. Brush off puddles and excess primer. Allow primer to dry to a thin, slightly tacky film (min. 3 hours, max 24 hours).

Do not install ARDEX Liquid BackerBoard before the primer has dried thoroughly.

Mixing and Application

Mix each 50 lb. (22.7 kg) bag with 6 quarts (5.7 L) of cold, clean water. Pour water in the mixing drum first then add ARDEX Liquid BackerBoard while mixing with the mixing paddle and drill. Mix thoroughly for 2 to 3 minutes to obtain a lump-free mix. **Do not overwater!** Yellowish foam while mixing, or settling of the sand aggregate while placing, indicates overwatering. This product should not be mixed by hand.

ARDEX Liquid BackerBoard has a flow time of 10 minutes at 70°F (21°C). Pour the liquid mix onto the floor and spread with the ARDEX T-4 spreader. Immediately smooth the material with the ARDEX T-5 smoother. Wear athletic shoes with non-metallic cleats to avoid leaving marks in the ARDEX Liquid BackerBoard.

Thickness of Application

Install at a minimum thickness of 1/8" (3 mm) over the highest point in the floor, which typically results in an average thickness of 1/4" (6 mm) over the entire floor. ARDEX Liquid BackerBoard can be installed up to 1 1/4" (32 mm) and can be tapered to match existing room elevations.

Wear Surface

ARDEX Liquid BackerBoard is not to be used as a permanent wear surface, even if coated or sealed.

Installation of Tile and Stone

For installations up to 1/2" (12 mm) thick, install tile and stone flooring after 6 hours. For installations thicker than 1/2" (12 mm), as well as for any installation of moisture sensitive stone, test for dryness as follows: 48 hours after installing ARDEX Liquid BackerBoard, place a piece of heavy plastic or a smooth rubber mat down over a 2' x 2' area. Wait 24 hours, then lift and inspect for surface darkening. Surface darkening means further drying is needed. Repeat this test at regular time intervals until no darkening is observed.

Notes

ARDEX Liquid BackerBoard can be used in areas exposed to intermittent topical moisture such as bathrooms or kitchens. However, do not use in areas of constant water exposure, as this may jeopardize the performance of the underlayment and floor covering.

For installations in intermittent wet areas, ARDEX recommends the use of an ARDEX 8+9™ Waterproofing Compound in conjunction with ARDEX Liquid BackerBoard. ARDEX 8+9 Waterproofing Compounds can be installed after 6 hours.

Always install an adequate number of properly located test areas, including the selected flooring, to determine the suitability of the products for the intended use. As tiles may vary, always contact and rely upon the tile manufacturer for specific directives such as intended end use of the product.

Never mix with cement or additives other than ARDEX approved products. Observe the basic rules of concrete work. Do not install ARDEX Liquid BackerBoard 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.

Precautions

ARDEX Liquid Backerboard is intended for application over adhesive residues on concrete subfloors only. Avoid installation over very warm floors (i.e., over hot machine shops or concrete floors containing heating systems, etc.) as heat might soften the remaining residue resulting in failure.

Technical Data According to ARDEX Quality Standards

All data based on a mixing ratio of 3 parts powder to
1 part water by volume at 70°F (21°C)

Mixing Ratio:	6 quarts (5.7 liters) of water per 50 lb (22.7 kg) bag
Coverage:	65 sq. ft. per bag at 1/8" (6m ² at 3mm) 32.5 sq. ft. per bag at 1/4" (3m ² at 6mm)
Flow Time:	10 minutes
Initial Set (ASTM C191):	approximately 30 minutes
Final Set (ASTM C191):	approximately 60 minutes
Compressive Strength (ASTM C109/mod – Air cure only):	3000 psi#(210 kg/cm ²) at 28 days
ASTM C627 rating (Robinson-Type Floor Tester):	Classified as extra heavy
Flexural Strength (ASTM C348):	700 psi (49 kg/cm ²)at 28 days
Walkable:	3 hours
Install Tile:	6 hours for most tile and stone flooring at 70°F (21°C) and 50% RH
Storage:	Store in a cool dry area. Do not expose bags to sun.
Shelf Life:	1 year if unopened
Warranty:	Please see the ARDEX SystemOne™ Warranty Brochure

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