ARDEX VB 100™

Fast-Track, One-Component Moisture Vapor Barrier

Reduces moisture vapor emissions in concrete to acceptable levels for floor coverings

For RH readings up to 100%

No minimum profile required - concrete must be clean and absorbent

No priming required prior to installation of ARDEX underlayments

Fast drying - install ARDEX underlayments in as little as 60 minutes after applying the second coat

Meets permeability performance requirements of ASTM F3010

One-component system

Ready for use*; resealable container

Easy to use and apply

Water-based, 0 VOC

ASTM E96 < 0.1 perms

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ARDEX VB 100™

Fast-Track, One-Component Moisture Vapor Barrier

Suitable Substrate

Standard absorbent (porous) Concrete (structurally sound)

Suitable Applications

Moisture control for:

- ARDEX underlayments with floor coverings (Maximum 1/4" / 6 mm; For thicker applications, use ARDEX MC RAPID)
- Certain directly applied floor coverings
- Not for use beneath ARDEX toppings. For moisture control beneath ARDEX toppings, use ARDEX MC RAPID.

Jobsite Conditions

During installation and cure, substrate and ambient temperatures must be a minimum of 50° F / 10° C. If installing over an in-floor heating system, turn the heating system off 48 hours before, during and at least 48 hours after completion of the installation.

Concrete relative humidity levels (RH; ASTM F2170) may be as high as 100%. Very high RH could be indicative of external water infiltration from inadequate drainage, leaks, broken pipes, etc. Verify that all external sources of water are controlled sufficiently prior to installation.

The concrete surface temperature must be at least 5°F (3°C) higher than the dew point, and rising, for the given temperature and humidity in the space to prevent condensation.

The concrete surface must be dry during installation and cure. As needed, verify concrete surface dryness by mat testing (ASTM D4263) for a minimum of 4 hours.

Step 1: Substrate Preparation (Proper Prep™)

Substrate must be clean and absorbent (ASTM F3191). For full details on Proper Prep, reference the following articles at ardexamericas.com/services/properprep:

- Article 1: Preparing Concrete for Bonded ARDEX or HENRY Applications
- Proper Prep Brochure

If necessary, mechanically clean the substrate by shot blasting or similar means. Do not use acid etching, adhesive removers, solvents or sweeping compounds, as these are bond breakers. Sanding is not an effective method to remove contaminants from concrete.

Substrate must be dry and alkali free. All substrates must be sound, solid and thoroughly clean of all bond-breaking contaminants, including but not limited to: overwatered or otherwise loose or weak material; dirt, dust, wax, grease, paints and oils; all curing compounds and sealers; and all adhesive residues.

For concrete surface profiles too rough to receive a uniform film thickness (above CSP #3): Contact the ARDEX Technical Service Department before proceeding further.

Step 2: Treating Joints and Cracks

All moving joints, including expansion joints and isolation joints, as well as all moving cracks, must be honored up through the entire flooring system, including the finishing course. Under no circumstances should this product, the moisture control system, the selected primer or any other component of the flooring system be installed over these. For topping applications, dormant joints must also be honored.

All dormant joints and dormant cracks greater than a hairline (1/32"/ 0.8 mm) that will not be honored must be pre-filled with ARDEX ARDIFIX™ Low Viscosity Rigid Polyurethane Crack and Joint Repair and sand broadcasted to refusal in strict accordance with the technical data sheet.

Step 3: Application

Recommended Tools

Wooden paint mixing stirrer, paint tray, short-nap paint roller and paintbrush

Application

Stir with a wooden paint stirrer or similar to ensure all components that have settled are in full suspension. Do not mechanically mix or mix with other additives or With water.

Approximate Coverage: 400 - 500 sq. ft. / gallon (9.8 - 12.2 m^2 / L) Per Coat (Dependent on surface profile, density and porosity.).

All dry times are calculated at 70°F (21°C). Drying time is a function of jobsite temperature and humidity conditions. Low substrate temperatures and/or high ambient humidity will extend the drying time. Adequate ventilation and heat will aid drying.

Do not pour material directly on substrate, as this will prevent uniform coverage. Do not allow to puddle.

Allow each coat to dry to a tack-free film prior to application of subsequent coats and/or proceeding with the next installation step (approximately 45 minutes for first coat, 60 minutes for subsequent coats). Apply each coat in a perpendicular direction to the previous coat.

Immediately apply freshly stirred product to the prepared concrete. Saturate a 3/8" nap roller, apply uniformly in a singular direction, and back roll. Apply at least 2 coats; highly absorbent and/or rough concrete (CSP 3 or greater) may require a 3rd coat.

To minimize the potential for pinhole formation, work the product into the surface with the roller to ensure maximum penetration. Apply with a paintbrush in hard-to-reach areas, edges and corners. Coat the area completely prior to proceeding.

Note: It is not necessary to retest the substrate for moisture emissions prior to proceeding with the next installation step.

- Calcium chloride testing (ASTM F1869) is not permitted by ASTM over the top of concrete that has been treated with a moisture control system.
- Relative humidity testing (ASTM F2170) requires drilling down into the concrete substrate, which would effectively delete the moisture control course in the test area, rendering it obsolete.

Note: If the next installation step will be delayed, protect the surface from construction traffic, dirt and debris using Masonite or similar.

Step 4: Underlayment and/or Finish floor covering

Underlayment Installation (if / as needed)

Maximum Thickness of Application: 1/4" / 6 mm (For thicker applications, use ARDEX MC RAPID)

Where applicable, install the ARDEX product in accordance with the instructions found in the corresponding ARDEX technical data sheet prior to proceeding with the next installation step.

Note the following approved ARDEX underlayments:

- All ARDEX self-leveling underlayments
- Select ARDEX trowel applied underlayments
  - ARDEX FEATHER FINISH®
  - ARDEX FEATHER FINISH®XF™
  - ARDEX SKM™
  - ARDEX GPS ™

*A trowel without sharp edges, such as a pool trowel, a plastic trowel or a rubber float, must be used to avoid damage to the underlying moisture control course during application of the trowel-applied underlayment.

Direct application of Finish floor covering

Floor coverings approved for direct application over moisture control course without installation of an ARDEX underlayment:

- All floating / non-adhered flooring systems
- Direct-bond, non-wood flooring systems:
  - Flooring must be installed with a pressure-sensitive adhesive in a pressure-sensitive application.
  - The pressure-sensitive adhesive must not:
  - Be solvent based.
  - Adversely react with and/or compromise the moisture control system.
  - The pressure-sensitive adhesive must be:
    - Roller- or spray-applied
    - Approved by the manufacturer for direct application over a moisture control system
    - Specified for installation over non-porous surfaces

The surface of the coated concrete must be flat and smooth enough for the installation of the floor covering, and the adhesive must be approved for use over non-porous surfaces, including moisture control systems; otherwise, an ARDEX underlayment must be installed.

Where applicable (see Application Selection Table below), follow flooring and adhesive manufacturer recommendations to install flooring, taking care not to puncture or otherwise damage the moisture control layer. It must also be ensured that there is no absorption of liquids, including water or other solvents, from the adhesive into the epoxy coated concrete.

Follow the adhesive manufacturer's recommendations for installation over a non-porous coating system, which may require smaller notched trowels and/or longer open times. When installing pressure sensitive adhesives directly over a moisture control system, it may be necessary to allow a longer cure time than indicated by the manufacturer. An extended curing time will allow the adhesive to fully dry and prevent the adhesive's moisture from becoming trapped under the flooring.

Step 5: Tool Cleanup

Clean all tools with water before product dries.

Notes

Intended for use by professional contractors who are trained in the application of this product and/or similar products. Not sold by ARDEX through home improvement centers. For information on ARDEX Academy trainings, visit ardexamericas.com. Never mix with cement or additives outside of our written recommendations. In accordance with industry standards, and to determine the suitability of the products for the intended use, always install an adequate number of properly located test areas including the finish flooring. As floor coverings vary, always contact and rely upon the floor covering manufacturer for specific directives, such as maximum allowable moisture content, adhesive selection and intended end use of the product.

Observe the basic rules of concrete work, including the minimum surface and air temperatures detailed above. Install quickly if the substrate is warm, and follow the warm weather installation guidelines available on our website. If the installation is not proceeding as expected: Contact the ARDEX Technical Service Department before proceeding further. Dispose of packaging and residue in accordance with prevailing regulations. Do not flush material down drains. Do not reuse packaging.

Precautions

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

Technical Data According to Manufacturer Quality Standards

Physical properties are typical values and not specifications. Mixing and Testing completed at 70°F / 21°C.

Coverage:	400 - 500 sq. ft. / gallon (9.8 m^2 / L) Per Coat (Dependent on surface profile, density and porosity.)
Permeability:	<0.1 perms (ASTM E96)
Effect of 14 pH Solution (ASTM D1308):	None
Walkable:	When completely dry (approximately 1 hour); no max. provided surface is protected
VOC:	0
Packaging:	5 gal. (19 L) Unit 1 gal. (3.78 L) Unit
Storage:	Store in a cool, dry area. Do not leave units exposed to sun. Keep from freezing. Keep away from heat.
Shelf Life:	12 months, if unopened and properly stored 6 weeks after opening if tightly closed and properly stored
Warranty:	ARDEX L.P. Standard Limited Warranty applies. For full warranty details: www.ardexamericas.com/services/warranties. Extended system warranty is available. Please note that training by the ARDEX Technical Service Department as well as the submittal and approval of an ARDEX MC™ Pre-Installation Checklist is required for extended warranty eligibility. Please contact the ARDEX Technical Service Department for details.

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Visit www.youtube.com/ARDEX101 to watch ARDEX product demonstration videos. For recommended installation tools, visit DTA USA at www.dtausagroup.com. For easy-to-use ARDEX Product Calculators and Product Information On the Go, download the ARDEX App.

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