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%

For absorbent concrete

No minimum profile required

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

One-component system

Ready for use*, resealable and reuseable

Easy to use and apply

Water-based, Zero VOC

ASTM E96 < .1 perms

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ARDEX VB 100™

Fast-Track, One-Component Moisture Vapor Barrier

Description

ARDEX VB 100™ is a ready-to-use, one-component, water-based, two-coat system formulated to suppress excessive moisture in concrete. ARDEX underlayments may be installed over the second coat in as little as 60 minutes without priming. ARDEX VB 100 comes in a ready-to-use, resealable container.

Moisture and Dew Point

ARDEX VB 100 is suitable for moisture levels in concrete up to 100% RH.

Please note that very high RH levels (above 98%) 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 surface of the concrete must be dry at the time the ARDEX VB 100 is installed. For RH levels above 98%, verify concrete surface dryness by mat testing in conformance with ASTM D4263. The test must be conducted for at least 4 hours, which is the time required for ARDEX VB 100 to be set sufficiently. To ensure that condensation does not form, it is extremely important to check the surface temperature of the concrete just prior to installation to verify that this temperature is at least 5°F (3°C) higher than the dew point for the given temperature and humidity in the space and rising. For example, if the dew point temperature in the space is 60°F (16°C), the slab temperature must be 65°F (19°C) or higher and rising.

Substrate Preparation

All concrete substrates must be structurally sound and solid, surface dry and thoroughly clean and free of all dust, dirt, oil, grease, wax, asphalt, paint, latex compounds, curing and sealing compounds, form release and any contaminant that could act as a bond breaker. In order for the ARDEX VB 100 to obtain a solid bond, the concrete must be clean and absorbent. If necessary, mechanically clean the floor down to sound, solid concrete by shot blasting or similar and mechanically prepare the concrete to ensure the surface is porous. Over-watered, frozen or otherwise weak concrete surfaces also must be cleaned down to sound, solid concrete by mechanical methods. Sanding equipment is not an effective method to remove contaminants from concrete. Acid etching, solvents, sweeping compounds and adhesive removers are not acceptable means of cleaning the substrate. The concrete must also have a minimum tensile strength of 150 psi (10.5 kg/cm^2) for areas to receive normal foot traffic and 200 psi (14 kg/cm^2) for areas of heavy commercial traffic when tested in accordance with ASTM C1583.

Substrate and ambient temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products. The concrete substrate must be dry during installation and cure. If installing over an in-floor heating system, turn the heating system off 48 hours before, during, and at least 48 hours after the installation is complete. Once ARDEX products are installed, the temperature of the floor should not exceed 85°F.

For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Technical Data Sheet at www.ardexamericas.com.

Dormant Cracks and Dormant Saw Cuts

To achieve continuous moisture vapor suppression, dormant control joints and dormant cracks must be pre-filled with a two-part, low viscosity, 100% solids, rigid crack and joint filler, such as ARDEX ARDIFIX™. Dormant cracks and dormant 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 into the fresh material, and allow these areas to cure thoroughly. Remove all excess sand prior to proceeding with the ARDEX VB 100 installation.

Moving Joints and Moving Cracks

All moving joints and moving cracks must be honored up through the ARDEX VB 100, the ARDEX underlayment and the floor covering 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.

Recommended Tools

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

Application

*As some settling can occur, stir the ARDEX VB 100 with a wooden paint stirrer or similar prior to use to ensure that all components that have settled are in full suspension. **DO NOT MECHANICALLY MIX. DO NOT ADD WATER OR OTHER ADDITIVES!**

Immediately apply the freshly stirred ARDEX VB 100 to the prepared concrete. For best results, saturate a 3/8" nap roller and apply uniformly in a singular direction, and back roll. Once first coat has dried, repeat this process in a perpendicular direction. Typical application rate is 400 - 500 sq. ft. per gallon per coat (Note: Coverage may vary based on concrete surface profile, texture and porosity). Do not pour material directly on substrate, as this will prevent uniform coverage. Do not allow to puddle. To minimize the potential for pinhole formation, work the ARDEX VB 100 into the surface with the roller to ensure maximum penetration. ARDEX VB 100 can also be worked into the surface with a paintbrush for hard-to-reach areas and corners.

Once an area has been coated completely, allow this to dry to a tack-free film approximately 45 minutes (70˚F / 21˚C) for the first coat and approximately 60 minutes (70˚F / 21˚C) for the second coat.

NOTE: Do not allow more than 24 hours of dry time between coats. Extremely absorbent concrete and/or concrete with an ICRI concrete surface profile of 3 (CSP #3) or greater may require a third application of ARDEX VB 100. In such cases, allow the second coat to dry prior to applying the third coat in a perpendicular direction and at a coverage rate of 400 - 500 sq. ft. per gallon. Allow the third coat to completely dry (approximately 60 minutes) prior to proceeding.

If an ARDEX Underlayment will be Installed: Install an ARDEX underlayment within 24 hours. Do not exceed an installation thickness of 1/4" (6 mm). Please note that the trowel-applied underlayments approved for use over ARDEX VB 100 are ARDEX FEATHER FINISH®, ARDEX FEATHER FINISH® XF™, ARDEX SKM™ and 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 ARDEX VB 100 during the application of the trowel-applied underlayment. Please also note that a thin coat of a cementitious material applied over a non-porous surface may not create a porous bonding surface for the finish flooring. For this reason, it will be necessary to consult the flooring manufacturer for confirmation of any minimum thickness requirements for cementitious underlayments as well as for any additional considerations when installing over potentially non-porous surfaces.

If Direct Flooring will be Installed: The following flooring systems may be installed directly over ARDEX VB 100 without the use of an underlayment:

- Floating / non-adhered flooring systems
- Direct-bond, non-wood flooring systems that meet the following criteria:
  - The flooring must be installed with a pressure-sensitive adhesive in a pressure-sensitive application.
  - The pressure-sensitive adhesive must not be solvent based.
  - The pressure-sensitive adhesive must be roller- or spray-applied.
  - The pressure-sensitive adhesive must be suitable for use over non-porous substrates, such as multi-coat, water-based films on concrete.
  - The pressure-sensitive adhesive must be approved by the manufacturer for direct application over a moisture remediation system.
  - The pressure-sensitive adhesive must not adversely react and/or compromise the ARDEX VB 100.

Please note that the final coat of the ARDEX VB 100 must completely dry (approximately 60 minutes; 70˚F / 21˚C) prior to the installation of the floor covering. Care must be taken not to pierce or otherwise compromise the ARDEX VB 100 during the floor covering installation.

As the ARDEX VB 100-coated concrete will not absorb liquids from the adhesive (water), an adhesive installed directly over ARDEX VB 100 may need a longer open time than what is listed in the manufacturer's tech data sheet to enable the adhesive to sufficiently dry and to prevent the adhesive's moisture from being trapped between the flooring and the ARDEX VB 100.

Please also note that, under the following circumstances, the flooring cannot be installed directly over the ARDEX VB 100, and, therefore, the appropriate ARDEX underlayment must be installed:

- The adhesive is specified for use over a porous substrate. In this case, it is typically recommended that the underlayment be installed at a minimum thickness of 1/8" (3 mm).
- The surface of the concrete coated with ARDEX VB 100 is not flat and/or smooth enough for the installation of the floor covering.
- The adhesive will be installed with a notched trowel. Use of a notched trowel directly over ARDEX VB 100 has the potential to damage the ARDEX VB 100 and compromise its moisture mitigation capabilities.
- A wet-set adhesive (single- or two-component) will be used. These types of adhesives are not recommended for direct application over ARDEX VB 100.
- Wood flooring will be installed. Wood flooring adhesives are not recommended for direct application over ARDEX VB 100.

If moisture mitigation is required prior to installing an ARDEX topping, use ARDEX MC™ RAPID One-Coat Moisture Control System for Concrete to Receive ARDEX Products. Refer to the appropriate technical data sheets for further installation instructions.

It is not necessary to re-test the substrate for moisture emissions prior to installing the floor covering.

NOTE: Avoid all general traffic over the ARDEX VB 100 surface until the ARDEX VB 100 is completely dry (approx. 60 minutes). If the underlayment will not be installed immediately, protect the surface from construction traffic, dirt and debris using Masonite® or similar.

Notes

FOR PROFESSIONAL USE ONLY.

Clean all tools with water before the ARDEX VB 100 dries.

The installation of ARDEX VB 100 does not require calcium chloride testing of the concrete per ASTM F1869, nor does this ASTM standard permit this test over the top of concrete that has been treated with a moisture remediation system.

Do not apply ARDEX VB 100 if the surface temperature is below 50°F (10°C). Store at temperatures between 40 and 90°F (5 - 32˚C). Do not allow to freeze.

Do not reuse container. Dispose of packaging and residue in accordance with federal, state and local waste disposal regulations. Do not flush material down drains.

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 ARDEX Quality Standards

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

Coverage:	Approx. 1125 sq. ft. (27.6 sq. m) per unit at 2 coats Approx. 225 sq. ft. per gal. (5.5 sq. m per L) at 2 coats (Will vary with concrete surface profile, porosity and texture)
Effect of 14 pH Solution (ASTM D1308):	No effect
Walkable:	When completely dry (approx. 60 minutes); no max. provided surface is protected
Install Underlayment:	1 - 24 hours
VOC:	0 g/L
Packaging:	One 5 gal. (19 L) pail
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 Open containers remain usable for 6 weeks if sealed and stored under proper conditions. Keep container closed when not in use.
Warranty:	ARDEX L.P. Standard Limited Warranty applies. Extended system warranty is available. Please note that training by the ARDEX Technical Service Department is required for extended warranty eligibility. Please contact the ARDEX Technical Service Department for details.

Made in the USA.

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Visit www.youtube/ARDEX101 to watch ARDEX Americas product demonstration videos.

For easy-to-use ARDEX Product Calculators and Product Information On the Go, download the ARDEX App at the iTunes Store or Google Play.

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