

KOVARA[®] AB 300 Moisture Barrier

Product Description

KOVARA[®] AB 300 membrane is a patent-pending, self-adhered, pre-fabricated moisture barrier designed to protect floor coverings from staining, warping and adhesive deterioration that may result from water vapor emissions and alkaline salts infiltrating through the concrete slab.

KOVARA[®] AB 300 membranes self-adhere directly to the concrete subfloor with its own specialty designed moisture and alkaline-resistant adhesive suitable in conditions up to 99.50% relative humidity. The unique adhesive bond addresses membrane movement or buckling when heavy rolling loads and heavy foot traffic are expected. The unique adhesive is protected by a split release liner until placement.

Product Advantages

- Installation in a fraction of the time of fluid-applied moisture barriers
- Self-adhered to subfloor with a specialty designed adhesive to prevent movement under heavy rolling loads and foot traffic
- Split adhesive release liner allows quick peel-and-stick application
- Reduced labor costs and improved project capacity for contractors
- Reduced downtime and business disruption for building owners
- Does not require an intact under slab vapor barrier (ASTM-E-1745)
- No shot blasting or surface grinding required
- Self-leveling surface preparation only needed for uneven floors
- Backed by 10-year limited replacement warranty (details below)
- Patent pending

Supply

Thickness	41 mils (not including 2 mil release liner)
Roll Size	5' x 100' (500 sq. ft.)
Roll Weight	90 lb.
Shelf Life	1 year
Pallet quantity	12 rolls

Product Uses

KOVARA[®] AB 300 membranes can be used under any of these approved floor coverings:

- Carpet tile
- VCT – vinyl composition tile
- LVT / LVT – luxury vinyl tile / luxury vinyl plank
- Homogeneous sheet vinyl
- Rubber flooring
- Engineered wood
- Laminate flooring
- Bamboo
- Resilient sports flooring

The following specialty floors require review to verify existing conditions and use to ensure the best installation; please contact your local GCP flooring sales rep or GCP Technical Services for review:

- Heterogeneous sheet vinyl
- Ceramic tile
- Porcelain tile
- Natural Stone
- Broadloom carpet
- Wood court flooring

For each roll of KOVARA® AB 300 membranes, the following additional installation components are required for sealing seams:

- 1-2 rolls of KOVARA® Double-Sided Tape
- KOVARA® MBX Topical Seam Tape is not required for KOVARA® AB 300 installations

Safety and Handling

Read and understand the product label and Safety Data Sheet (SDS) for each system component. All users should acquaint themselves with this information prior to working with the products and follow the precautionary statements. SDSs can be obtained by contacting GCP toll free at 1-866-333-3SBM (3726).

Warranty

KOVARA® moisture barriers are backed by a limited 10-year replacement warranty. You can find the entire KOVARA® AB 300 membrane warranty information at gcpat.com, or contact your GCP Applied Technologies sales representative for details. KOVARA® AB 300 is not designed or warranted for use in resisting liquid water pressure, a condition referred to as Hydrostatic Pressure. Therefore, do not use KOVARA® AB 300 where standing water or glistening water is present on the slab.

Technical Services

KOVARA® AB 300 membrane customers benefit from GCP's Technical Service team, providing field support for successful job completion. Please contact GCP with any questions on the proper use of KOVARA® products on 617-499-2822.

Installation Guidelines

Slab RH Testing and Pre-Installation Requirements

All concrete slabs, regardless of grade, should be tested for moisture content using the approved method of RH in-situ probe testing in accordance to the latest version of ASTM F-2170-19e. Slabs should only be tested 28 days after pour and once the slab has been allowed to realize appropriate service conditions, which includes permanent HVAC operations and complete enclosure of the space.

Acclimate all flooring materials and adhesives in accordance with the flooring manufacturer's recommendation. Floors and the planned installation space should be conditioned at least 48-72 hours prior to the start of the installation. Environmental conditions should remain constant during the installation and after the installation is completed. Permanent HVAC should be in operation and set to between 65 °F - 85 °F.

Always inspect KOVARA® AB 300 membranes, KOVARA® tapes, and flooring materials for physical damage and/or defects. The installation of defective or damaged materials will void any future rights to a claim.

KOVARA® AB 300 membrane installations, including floor preparation and finished flooring, should not be started or installed where further trade work on or above the product will be required. Always read the associated documentation and installation instructions for all flooring, adhesives and underlayment to be installed.

When selecting adhesives, KOVARA® AB 300 membranes are considered a non-porous surface. The appropriate adhesive, recommended trowel size and/or spread rate should be specified by the flooring manufacturer. If considering adhesives classified for wet-set applications, contact GCP Technical Services for specific application recommendations.

All of the recommended work practices contained in these guidelines are in conformance with the most recent version of ASTM F710-19e and acceptable industry guidelines as approved by the Resilient Floor Covering Institute (RFCI). The installation contractor is solely responsible for determining the suitability of a slab, moisture testing and use prior to starting the installation of KOVARA® AB 300 membranes.

The concrete slab should be smooth, dry, clean and structurally sound. Dust and other contaminants may have a detrimental effect on the bond of the KOVARA® AB 300 membranes and KOVARA® tapes to the substrate and overall performance of the system.

All surface cracks, grooves, depressions, control joints or other non-moving joints greater than 1/8" should be filled and sanded smooth with the plane of the substrate using modified Portland cement patching compounds or an epoxy injection. Crowns in slab or protrusions should be smoothed in the same manner. Patching materials should be allowed to completely dry prior to the application of KOVARA® AB 300 membrane and finished flooring materials.

Existing adhesives should be completely removed to provide a tack-free substrate. Please follow the RFCI's "Recommended Work Practices for Removal of Existing Floor Covering and Adhesive." Substrates that have been installed with cutback adhesives should only be removed in strict accordance with local, state and federal guidelines. Please contact KOVARA® Technical Services 617-499-2822.

Do not use gypsum- or plaster-based patching compounds underneath KOVARA® AB 300 membranes. Areas requiring deep fill, other than a skim coat, should only be repaired using a MRP (moisture resistant patch) or exterior grade patching/repair compound. Consult the manufacturer for additional recommendations on these types of substrate repair products.

1.0 Concrete Substrate Preparation

1.1 Moisture testing and Pre-Installation Recommendations All concrete slabs, regardless of grade, should be tested for moisture content using the approved method of RH in-situ probe testing in accordance to the latest version of ASTM F-2170. Slabs should only be tested 28 days after pour and once the slab has been allowed to realize appropriate service conditions, which includes permanent heat/HVAC operations and complete enclosure of the space.

1.2 Acclimate all flooring materials and adhesives in accordance with the flooring manufacturer's recommendation. Floors and the planned installation space should be conditioned at least 48-72 hours prior to the start of the installation. Environmental conditions should remain constant during the installation and after the installation is completed. Permanent HVAC should be in operation and set to between 65°F - 85°F.

1.3 Always inspect KOVARA® AB 300, KOVARA® tapes, and flooring materials for physical damage and/or defects. The installation of defective or damaged materials, in most cases, may deny any future rights to a claim.

1.4 KOVARA®AB 300 installations, including floor preparation and finished flooring, should not be started or installed where further trade work on or above the product will be required. Always read the associated documentation and installation instructions for all flooring, adhesives and underlayment to be installed.

1.5 When selecting adhesives, KOVARA®AB 300 is considered a non-porous surface. The appropriate adhesive, recommended trowel size and/or spread rate should be specified by the flooring manufacturer. If considering adhesives classified for wet-set applications, contact GCP Technical Services for specific application recommendations.

2. Concrete Substrate Preparation Recommendations

2.1 The concrete must have been placed in accordance with ACI 302.1R Guide for Concrete Floor and Slab Construction and ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.

2.2 The slab flatness will have a tolerance of 1/8" in a 10' maximum plane variation.

2.3 Before proceeding with any work, inspect the subfloor surface and report in writing to the Project Manager and the General Contractor any visible defects on the surface such as cracks, bumps, rough areas or variations in flatness.

2.4 Check the subfloor for grease, oil, paint, marker, spills, dust or any contamination that may adversely affect the adhesion of the flooring. Mechanically clean the subfloor per the existing conditions. Petroleum products such as cutting oils and hydraulic fluid will penetrate the concrete and become a bond breaker. Areas affected by these oils must be bead-blasted to remove all contaminated concrete.

2.5 Mechanically remove any existing adhesive residues, paint over spray, sweeping compounds, dirt, debris or anything that may act as a bond breaker from the surface of the concrete. Where concrete sealers or curing compounds are present they must be completely, mechanically removed via diamond grinding.

2.6 Sanding is not sufficient to completely remove curing compounds. The concrete slab, new or old, must be tested for moisture. We recommend having the tests performed by a recognized engineering firm. The ICRI website (International Concrete Repair Institute) has a list of certified moisture technicians for the USA:
<http://www.icri.org/Certification/Find-CCSMTTs.asp>.

2.7 To minimize the potential for telegraphing, all dormant or non-moving cracks should be repaired with a rigid, two-component, polyurethane crack injection product. Moving joints such as expansion or isolation joints must be honored up through the installation in accordance to ASTM F710-19e. Various resilient products have the propensity to telegraph even the smallest subfloor irregularity. Factors such as flooring material construction, thickness, color, and gloss level combined with different types of adhesive and local conditions such as lighting and maintenance can dramatically change how susceptible even similar flooring types will be to telegraphing. KOVARA® DS tape lines or KOVARA® AB 300 adhesive may be visible from certain angles under certain circumstances.

3.0 All of the recommended work practices contained in these guidelines are in conformance with the most recent version of ASTM-710-19e1 and acceptable industry guidelines as approved by RFCI. The installation contractor is solely responsible for determining the suitability of a slab, moisture testing and use prior to starting the installation of KOVARA® AB 300.

3.1 All KOVARA® Floor Moisture Barriers membrane shall only be installed onto concrete floors that have been properly prepared following the method outlined in ASTM F710-19e1.

3.2 The surface of concrete floors to receive resilient flooring shall be dry, clean, smooth, and structurally sound. They shall be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, film-forming curing compounds, silicate penetrating curing compounds, sealing, hardening, or parting compounds, alkaline salts, excessive carbonation or laitance, mold, mildew, and other foreign materials that might affect the rate of moisture dissipation from the concrete, the adhesion of resilient flooring to the concrete or cause a discoloration of the flooring from below. All surface cracks, grooves, depressions, control or other non-moving joints greater than 1/8" should be filled and sanded smooth with the plane of the substrate using modified Portland cement patching compounds or an epoxy injection. Crowns in slab or protrusions should be smoothed in the same manner. Patching materials should be allowed to completely dry prior to the application of KOVARA® and finished flooring materials.

3.3 Existing adhesives should be mechanically removed to provide a tack-free substrate. Please follow the RFCI's (Resilient Floor Covering Institute) "Recommended Work Practices for Removal of Existing Floor Covering and Adhesive." Substrates that have been installed with cutback adhesives should only be removed in strict accordance with local, state and federal guidelines. If the slab has been abated using a chemical process, immediately contact GCP Technical Services for additional installation recommendations.

3.4 Do not use gypsum- or plaster-based patching compounds underneath KOVARA® membranes. Areas requiring deep fill or self-leveling other than a skim coat / feather edge, should only be repaired using a moisture resistant skim coat, self-levelers or exterior grade patching/repair compounds. Cementous or Synthetic Gypsums self-leveling products may be used to level concrete surfaces. Consult GCP Applied Technologies KOVARA® Technical services and your manufacturer for additional recommendations on these types of substrate repair products.

4.0 KOVARA® AB 300 Membrane Installation

4.1 Begin by laying 5'0" on-center chalk guidelines for KOVARA® Double Sided Tape. These lines will serve as an outside guide for the tape, to increase accuracy. If starting at a wall, adjust initial measurement by 2" (4'10") to allow tape to center properly. Place the KOVARA® Double Sided Tape using the chalk lines as the guidelines for the outside edges keeping the tape straight and flat. Pass over the tape using a 6" putty knife to ensure flat and consistent bond with the substrate. **DO NOT REMOVE THE RELEASE FILM FROM THE KOVARA® DOUBLE SIDED TAPE AT THIS TIME.**

4.2 Unroll KOVARA® AB 300 membrane with seams centered on KOVARA® Double Sided Tape. Dry fit membrane net to within ¼" of all walls, being careful to not create compression and back bubbling at seams and vertical changes. At each seam, fold back both sheets of KOVARA® AB 300 membrane halfway, to expose KOVARA® Double Sided Tape, taking care not to move the membrane from its original position. Remove exposed half of release liner from both KOVARA® AB 300 membrane segments and remove release liner from KOVARA® Double Sided Tape. Gently roll the exposed membrane back into place, taking care not to fold or flop the material into a position that would cause buckling or bubbles. Do not place KOVARA® AB 300 membranes onto exposed KOVARA® Double Sided Tape without removing the membrane release liner, as the release liner will adhere to the tape.

4.3 Continue process, removing release liners and adhering all KOVARA® AB 300 membranes to substrate. Small fill pieces can be rolled in the length to remove the liner, or completely removed and placed back into place with adhesive exposed.

4.4 Complete the installation by hand rolling the seam line to secure the bond.

5.0 Finished Flooring Installation

5.1 Sweep the KOVARA® AB 300 membrane to remove any installation debris, dust or dirt that may have accumulated during the application. Complete the finished flooring installation in accordance with all manufacturer guidelines. Apply the adhesive directly to the surface of the KOVARA® AB 300 membrane in accordance with the manufacturer's recommendation for non-porous substrates.

5.2 With the continuous advancement of flooring technologies, it is impossible to list all of the products that can be effectively installed using KOVARA® AB 300 membranes. If your product is not included in the list of approved floor coverings, please contact GCP Technical Services for additional information. Always follow the specific flooring manufacturer's recommendations for installation over non-porous substrates.

5.3 Perform necessary planning and layout of all flooring materials. We recommend lighter chinks as they will be clearly seen on the surface of the KOVARA® AB 300 membrane. Always adjust the layout to avoid seam joints falling directly over a KOVARA® AB 300 membrane seam.

5.4 Caution should be taken to ensure the KOVARA® AB 300 membrane is not cut, damaged or punctured. Some adhesives may take longer to flash off and cure compared to installations over porous concrete. Always use a new trowel with the recommended notch for each application.

5.5 **DO NOT** install broadloom carpeting requiring crab stretching, stay nailing or heavy knee-kicking to align patterns; they can cause distortion to the KOVARA® AB300 membranes.

5.6 Do not mechanically fasten wood flooring through KOVARA® AB 300 membranes. Regarding floating flooring systems, carefully follow all flooring manufacturer’s recommendations for the installation. When using a thin-set application method for ceramic, porcelain, or stone tile, either a polymeric modified or unmodified setting material is acceptable. Refer to the local building codes and ANSI/TCNA guidelines for approved installation practices.

5.7 When using a roll on or spray adhesive it is recommended that a single pass skim coat be applied to the mineral top coat.

6.0 Initial Maintenance

6.1 Upon completion of the finished flooring installation, KOVARA® AB 300 membranes require a minimum of 120 hours (5 days) before conducting initial ‘wet’ cleaning or maintenance. Failure to follow this requirement may result in improper adhesive curing and/or failure of the adhesive bond. Always clean and maintain flooring with neutral pH cleaning products.

PROPERTY	TYPICAL VALUE	TESTING METHOD
Permeance	<0.1 perms	ASTM E96-B
Maximum PH Allowed	12	-
Fungi and Mold Resistance	Does not sustain mold growth	ASTM G21
Flammability	Passes	ASTM D2859
Dimensional Stability	Meets most floor covering requirements	ASTM D7570
Radiant Panel	Meets Class I	ASTM E648
Smoke Density	<450	NFPA 258
Residual Indentation Passes	(<0.005 in @ 250 lbs.)	ASTM F970

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