

Karndean K99 HM

Technical Data Sheet



Karndean K99 HM is a trowel-applied solvent-free, acrylic adhesive specifically formulated for the installation of Karndean Luxury Vinyl Tile (LVT) and Luxury Vinyl Planks (LVP) in commercial or residential applications. This adhesive has minimal odor and is made with an antimicrobial system to protect the adhesive from bacterial and fungal growth.

KEY FEATURES

- High bond-strength & moisture resistance
- Low odor
- Solvent free

MOISTURE & ALKALI RESISTANCE

K99 HM is formulated to resist high amounts of moisture vapor from concrete substrates, allowing it to bond resilient flooring to substrates in conditions up to 99% RH, 11 lbs. calcium chloride, and up to 12.0 pH. Always measure the in-situ RH of concrete slabs in accordance with ASTM F2170, Calcium Chloride ASTM F1869, and test the pH of the slab as per ASTM F710.

DIRECTIONS FOR USE

Read and understand this data sheet completely before beginning installation. Follow the appropriate industry standards, including ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring as well as the appropriate Karndean installation guide.

ACCLIMATION of MATERIAL

At least 24 hours prior to installation, flooring materials and adhesives should be allowed to acclimate in the room where they are being installed. Room temperature should be kept between 65–85° F (18–27°C). If flooring and adhesive have been stored outside this temperature range, then it is recommended that time for acclimation be increased to 48 hours.

SUITABLE SUBSTRATES

Concrete substrates below 99%RH, 11 lbs. CC, and 12.0pH that are properly prepared in accordance with ASTM F710. Do not install any Karndean products on wood in contact with concrete. Any wood products in contact with concrete must be removed.

Wood substrates must be minimum ¼" APA-Certified Underlayment-grade plywood, or panels designed to be used as underlayment for resilient floors. OSB, particleboard, lauan, Masonite, and chemically treated plywood are not approved underlayment for Karndean glue down or LooseLay products.

Properly prepared single layer of existing, non-cushioned, well adhered VCT, LVT, sheet vinyl, ceramic tile, stone, or terrazzo floors may be installed over. A cement-based embossed leveler or skim coat/patch installed to manufacturer's instructions is highly recommended to prevent telegraphing of grout joints or embossing on the existing flooring.

Always perform an adhesive bond test to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

SURFACE PREPARATION

Surfaces must be clean, dry, and flat, free of voids, projections, loose materials, oil, grease, sealers, paints, and all other surface contaminants. Mechanically remove all surface contaminants by grinding or scarifying the substrate. Surface areas requiring patching or leveling must use portland cement-based patches and/or self-leveling underlayment. Refer to the appropriate Karndean installation guide for proper installation. Moisture-vapor barrier coatings are recommended for installations where moisture and/or alkalinity exceed the stated limits or might occur from the concrete substrate.

POROUS SUBSTRATES:

When installing vinyl plank or tile over a porous substrate, the adhesive should be allowed to flash with little to no transfer to finger when touched. Watch for the adhesive to change from white to translucent. Then check for proper adhesion (no slippage) to start installation of flooring. Loss of adhesion and job failure can result if the flooring is not installed within the 2-hour working time of the adhesive. Roll the installation in both directions with a 75–100 lb. 3-section roller immediately after the installation is complete.

NON-POROUS SUBSTRATES:

When installing vinyl plank or tile over a non-porous substrate, the adhesive should be allowed to flash with little to no transfer to finger when touched. This typically can require 20–45 minutes of drying time at suggested installation temperature and humidity. Watch for the adhesive to change from white to translucent. Then check for proper adhesion (no slippage) to start installation of flooring. Do not install flooring into wet adhesive on nonporous substrates. Loss of adhesion and job failure can result if the flooring is not installed within the 2-hour working time of the adhesive. Roll the installation in both directions with a 75–100 lb. 3-section roller immediately after the installation is complete.

LIMITATIONS

- This product is for interior installations only.
- Do not use this product where excessive moisture and alkalinity are present as specified previously.
- Test all concrete substrates for moisture per ASTM F2170 to determine RH or ASTM 1869 for Calcium Chloride. For concrete substrates exceeding 99% RH or 11 lbs. Calcium Chloride, treat substrate with a moisture-vapor barrier coating and refer to the product data sheet for installation instructions.
- Do not use this product when the substrate temperature is below 65°F (18°C) or above 85°F (30°C) or when the relative humidity exceeds 65%.
- Do not use on wet, dusty, contaminated, or friable substrates; do not use over substrates/slabs treated with sealers, curing compounds, chemical abatements, or chemical adhesive strippers; do not use in areas subject to hydrostatic head.
- Do not use on concrete substrates that have been chemically cleaned, chemically abated or on chemically treated plywood.
- Do not use to install Karndean Designflooring over asphalt-based (cutback) adhesive residues. We recommend using XL Brands TriSeal to isolate any cutback residue. Follow all manufacturer's instructions.

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LIMITATIONS (Continued)

- Do not use to install Karndean Designflooring products over wood in contact with concrete substrates.
- Do not allow heavy rolling loads for a minimum of 72 hours. Regular foot traffic may resume after 24 hours.
- K99 HM may be used over gypsum-based underlayment primed with Karndean Multi-Surface Primer, but only in dry, above-grade applications. Follow all Karndean Multi-Surface Primer instructions.
- Do not allow product to freeze.

TROWEL SELECTION

IMPORTANT: Use the specified trowel and replace the trowel blade when worn to ensure proper spread rate. Recommended trowel size for all applications of LVP and LVT is a 1/16" W x 1/32" D x 1/32" SP U-Notch trowel.

Trowel coverage 220–260 sq. ft./gallon



STORAGE AND SHELF LIFE

Store at temperatures between 65° F and 85° F (18°C and 30°C). Shelf life is two years from the date of manufacturing when kept closed and in original packaging. Do not allow K99 HM to freeze.

CLEANUP

As you work, immediately clean any adhesive from resilient flooring using a clean, damp cloth. Immediately clean all tools and equipment before adhesive cures. Use mineral spirits or denatured alcohol followed by a clean water rinse to remove dried adhesive. The product should be stored in the original container in a cool, dry place and out of direct sunlight.

VOLATILE ORGANIC COMPOUNDS (VOC)

5 g/L (as calculated per SCAQMD Rule 1168)

HEALTH AND SAFETY

Always refer to the Safety Data Sheet (SDS) prior to use for proper handling, cleanup, and spill containment. SDS may be obtained by calling 888-266-4343 and ask for Technical Services.

FOR PROFESSIONAL USE ONLY. NOT LABELED FOR CONSUMER USE. KEEP OUT OF REACH OF CHILDREN.

PACKAGING

1-gallon pails

4-gallon pails (48 pails/pallet)

LEED® CONTRIBUTION

LEED® v4 PROGRAM CREDITS (where applicable)

- IEQ Credit 4: Low-emitting materials
- VOC content is below that established by California SCAQMD Rule 1168
- California Section 01350 compliant

This low-VOC formulation may contribute toward LEED® credits under section EQ 4.1: Low-Emitting Materials — Adhesives & Sealants.

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DISCLAIMER:

Users should determine the suitability of this information or product for their own particular purpose or application. This adhesive does not protect floor coverings from the effects of pH and moisture. Please follow Karndean Designflooring installation instructions, paying special attention to moisture and pH limitations. K99 HM adhesive is not a moisture barrier and should not be installed/treated as such. This adhesive is not a substrate moisture sealer, does not form a protective barrier, and is only warranted to maintain an adhesive bond when used over bare, concrete substrates conforming within the specified restrictions of ASTM 2170 in-situ Relative Humidity, ASTM 1869 Calcium Chloride, pH readings, and ASTM F2659 topical impedance testing. A functional working moisture barrier/retarder under the existing slab must be in place to use this product.

NOTE:

Substrate surface moisture readings (ASTM F2659) found to be above the 4% acceptable range may void the warranty. Karndean Designflooring is not responsible for the misuse of this product.



CERTIFIED BY
SCS Global Services

Flooring Types	
LVT or LVP	Yes
Use Environments	
Offices/Light Commercial	Yes
Residential	Yes
Hospitality	Yes
Hospital/Healthcare	Yes
Heavy Commercial	Yes
Exterior	No
Continuous Wet Areas/ Showers, Commercial Kitchens	No
Substrates	
Concrete	Yes
APA Plywood	Yes
Gypsum Underlayment	Yes*
Well-Bonded Vinyl	Yes
Terrazzo	Yes
OSB Underlayment	No
Prepared Metal	No
Asphalt	No

Cured Physical Properties	
Full Return to Service	24 hours
Slab Moisture Limits	99%RH
pH Resistance	12.0 pH
Uncured Physical Properties	
Ease of Troweling	Extremely Easy
Odor	Slight
Flash Time Porous	10-20 minutes
Flash Time Non-Porous	20-45 minutes
Working Time	2 hours
Color	Off-white
Density (lbs./gallon)	9.0
Freeze/Thaw	Do Not Freeze
Chemical Properties	
Chemistry Type	Acrylic
Adhesive Type	Firm-Set
VOC**	5 g/l
Solvent Free	Yes
Flash Point	>212°F

* Use with Karndean Multi-Surface Primer

** As calculated per SCAQMD Rule 1168