



# **Installation Guide**

## **Product Suitability:**

Karndean Knight Tile & Plank is suitable for all interior floor surfaces, above, on or below grade, and over concrete or wood sub-floors. Also, when used in conjunction with the K91 adhesive, it is suitable for installation over existing vinyl floors. Subfloor preparation and installation procedures must conform to **RFCI specification IP-2**. All RFCI Specifications can be referenced at: [www.rfci.com/int\\_ARF-Standards.htm](http://www.rfci.com/int_ARF-Standards.htm) .

## **Testing and Acclimatizing:**

It is essential to conduct a calcium chloride test (moisture test) on all concrete floors. The test should be conducted around the perimeter of the room, at columns, and where moisture may be evident. The moisture emissions from the concrete should not exceed 3.0 lbs. per 1000 square feet in 24 hours. During this preliminary moisture testing period, Karndean Knight Tile & Plank should be present at the job site to allow an appropriate period for the product to acclimatize. **This is very important:** Failure to do the calcium chloride test can result in expansion / contraction of the vinyl plank. If the concrete exceeds moisture limitations, the installation should not proceed until the problem is corrected. A moisture problem can be corrected by sealing the concrete with any one of the many brands of concrete sealers available. After the sealer has been applied, re-test to ensure that the problem has been corrected. It is essential that the correct adhesive is used as the sub-floor can change from porous to non-porous when using a sealer. It is important to note that a moisture test indicates conditions at the time of testing only. The flooring contractor cannot be held responsible if the moisture appears in the future, causing adhesive failure. Please note that new concrete sub-floors contain a high percentage of moisture and must be allowed to dry out. Industry standard is 90 day dry out time. The drying time will depend on several conditions, such as the type of concrete used, average air temperature and thickness and location of the slab.

## **Sub-floor Preparation:**

Underlayment panels are used to correct deficiencies in the subfloor and to provide a smooth, sound surface on which to attach Karndean Knight Tile and Planks. There are numerous suitable underlayment panels, such as Structurwood, Multiply, and Masonite brand underlayment, the most common of which is 1/4" APA underlayment grade plywood. Particle board, strand board and flake board are not RFCI recommended under-layments, and therefore are not recommended for use as a subfloor to Karndean flooring. Always fasten underlayment panels in accordance with the manufacturer's recommendations as any failure of the underlayment or Karndean flooring product as a result of the under-layments is the responsibility of the underlayment manufacturer. Suitable underlayment with a fully sanded surface and a minimum thickness of 1/4" is preferred. The sub-floor must be free of any foreign material, such as dust, grease, oil, polish, loose material or any other separating agents that may cause staining, telegraphing or adhesive failure. Concrete sub-floors are also suitable provided the concrete's moisture content is within the specified parameters. Seams, cracks, indentations and other sub-floor irregularities should be patched using a Portland based patching compound or leveler. Other types of levelers, such as calcium sulfate / plaster / gypsum based compounds are not recommended, as they may harbor and promote mildew growth, provide low indentation resistance and offer poor bond and adhesion strength. When installed with the K91 adhesive, Karndean Knight Tile and Plank may be installed over a single layer of non-cushioned resilient flooring, provided the following conditions have been met:

1. The existing flooring must be fully adhered and well-bonded;
2. The sub-floor or underlayment that is under the existing resilient floor must meet the requirements of the existing floor and the Karndean floor;
3. any cuts, gouges, dents or other irregularities in the existing floor and any existing embossing or texture must be leveled to prevent telegraphing;
4. Any waxes or finishes must be completely removed and rinsed with clean water; and if existing floor has been installed over concrete, on or below grade, one calcium chloride moisture test must be performed for every 1000 square feet. The results of the test must meet the requirements of both the existing floor and the Karndean floor. Moisture tests should be conducted over an area where the existing floor and adhesive has been completely removed.

## Adhesives:

### K-91 High Tack Pressure Sensitive Adhesive -

Use **K-91** Adhesive when applying Karndean Tile & Plank over porous subfloors, such as concrete or wood, and non-porous floors, such as existing vinyl floors.

For installation over porous surfaces, adhesive may be used either wet or as a pressure sensitive adhesive. To use wet, apply adhesive with the recommended trowel, see side of adhesive pail, and allow to flash-off for 5 to 10 minutes before installing flooring. Lay tile or plank into wet adhesive. Adhesive must transfer 100% to floor product to ensure proper bond. To use as a pressure sensitive adhesive, allow drying to a tacky state and then install flooring within 3 hours. Within 30 minutes after installation is complete, roll and cross roll entire floor with a 100 pound sectional roller. Use hand roller in areas which cannot be reached with larger roller. Check 1 to 2 hours after installing flooring material and roll again if necessary.

For installation over non-porous surfaces, apply adhesive with the recommended trowel, see side of adhesive pail, and allow to dry completely from yellow to tan and lay in the tile or plank within 3 hours. The highly aggressive pressure sensitive grip prevents slippage and minimizes seam gaps. Drying time is 45 to 90 minutes and will vary due to installation site temperature and humidity. Installation over areas of incomplete drying can result in job failure. Within 30 minutes after installation is complete, roll and cross roll entire floor with a 100 pound sectional roller. Use hand roller in areas which cannot be reached with larger roller. Check 1 to 2 hours after installing flooring material and roll again if necessary.

### K-92 2-Part Epoxy Adhesive -

#### **K-92 ADHESIVE IS ONLY USED IN AREAS SUBJECT TO EXCESSIVE TEMPERATURES AND MOISTURE!**

Use **K-92** Adhesive two-part epoxy when applying Karndean Tile & Plank over porous subfloors, such as concrete or wood, and non-porous floors, such as existing vinyl floors.

For installation over porous surfaces, apply adhesive with the recommended trowel, see side of adhesive pail. Install flooring into wet adhesive. Adhesive must transfer 100% to back of flooring to ensure proper bond. Do not spread more adhesive than can be laid into within 30 minutes. Open time is approximately, depending upon installation site temperature, humidity, and porosity of the subfloor. Within 30 minutes after installation is complete, roll and cross roll entire floor with a 100 pound sectional roller. Use hand roller in areas which cannot be reached with larger roller. Check 1 to 2 hours after installing flooring material and roll again if necessary.

For installation over non-porous surfaces, apply adhesive with the recommended trowel, see side of adhesive pail, and allow adhesive to flash off for 15 minutes. Open time will depend upon installation site temperature and humidity. Adhesive must transfer 100% to back of flooring to ensure proper bond. Within 30 minutes after installation is complete, roll and cross roll entire floor with a 100 pound sectional roller. Use hand roller in areas which cannot be reached with larger roller. Check 1 to 2 hours after installing flooring material and roll again if necessary.

**Please Note** – It is **HIGHLY RECOMMENDED** that a professional installer is used to install your Karndean vinyl flooring. Rugrats Flooring Inc (owner of [www.installerstore-flooring.com](http://www.installerstore-flooring.com)) will not be held liable for mistakes / problems / damaged flooring due to not following this advice. Please make sure to follow all guidelines and steps before even attempting to install your new Karndean flooring. Improper installation will void Karndean's warranty.