



Knight Premium Flooring Installation Instructions

****If this is a new construction installation please see the “Installation Requirements For New Construction” located on the last page of the document first.****

Knight Premium Flooring tiles are composed of more than 70% natural quartz. Knight Premium Flooring reinforced vinyl floor tiles are extremely tough, durable and easy to maintain. The high quartz content provides for exceptional durability and superior wear resistance.

Preparation

- **Substrates**

- Must be free of contaminants or any substance that would prohibit strong, sound bonding such as:
 - Sealers
 - Curing compounds
 - Dirt
 - Grease
 - Waxes
 - Old adhesives
 - Weak concrete

- **Surface Level**

- The surface should be level to within 1/8” in 10 feet.
- All construction seams, holes, indentations and irregularities should be filled level with the surrounding substrate to remove irregularities from telegraphing through the finished floor

- **Underlayment**

- Use a Portland cement based underlayment for spot patching, filling and small area leveling.
- Sand underlayments smooth after they have been cured.

Subfloors

- **Concrete Subfloors**

- Should be clean, smooth, dry and free from structural defects.
- All curing compounds, sealants, contaminants, old mastics, dirt, dust and debris must be removed prior to installing tiles.
- A bond test is recommended over any floor where foreign substances have been removed. Install several tiles in random areas according to installation directions. Allow the adhesive to set up for 24 hours. If the adhesive easily removes from the slab, then this would indicate that the slab is contaminated and will require further preparation to accept tiles.

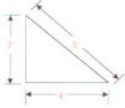
- Mechanical abrasion techniques are recommended over chemical means to remove any contaminants, paint, mastic, etc. Asphalt based adhesives may contain asbestos. Check before attempting to remove old adhesives which may contain asbestos. Encapsulation of the old adhesive may be a better option.
 - Chemical compounds may leave residue that would adversely affect the bond of the new floor.
 - Cracks, minor crevices, small holes, indentations and control joints should be filled with Portland cement based patching compound designed for that purpose.
 - Feather edging and sanding of the patched area may be necessary to prevent telegraphing of the finished floor.
 - Self-leveling underlayments must be allowed to properly cure before applying Knight Premium Flooring tiles.
 - New or existing concrete subfloors should meet ASTM F 710, "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. Structural Lightweight Concrete must have a compressive strength greater than 3500 P.S.I. Refer to ASTM F710.
 - New concrete substrates should be allowed to dry for several months with adequate ventilation.
 - HVAC should also be used to help cure the concrete slab.
 - HVAC should be operating several weeks before, during and after the installation. Installation temperature should be 65° to 80° Fahrenheit.
 - On or below grade slabs should have vapor barriers installed.
 - Knight Premium Flooring tiles should only be installed on visibly dry concrete containing less than 5lbs moisture based on standard Calcium Chloride testing (ASTM F 1869). If higher than 5lbs. see note below.
 - Where curing agents have been used they must first be removed before conducting the test to obtain accurate test results.
 - All concrete floors should have an alkalinity test performed before installation of Knight Premium Flooring tiles. Use a ph pencil. Subfloors should have a ph level of 9 or below. If 9 or higher ph levels are found, the subfloor must be neutralized before starting installation.
 - **Note:** If concrete is reading higher than 5lbs. Per 1,000 sq. ft. per 24 hours, use special adhesive as recommended by Knight Premium Flooring.
 - **Note:** Many different types of underlayment products such as self-leveling cements, gypsum based leveling and patching compounds are recommended for patching and leveling. All guarantees regarding the suitability of any products rest with the manufacturer and installer of the product used and not with Knight Premium Flooring.
- **Wood Subfloors**
 - Use only APA underlayment type plywood i.e. APA Underlayment EXT or consult the APA-The Engineered Wood Association for performance rated subfloors panels.
 - Wood subfloors should have a minimum of 18 inches of ventilated air space.
 - Seams of plywood should be staggered in a half bond.
 - Butt edges should allow expansion of 1/16". Plank or strip wood floors should be sheathed with plywood
 - **Not recommended:** particleboard, chipboard, flake-board, OSB (orientated strand board) and similar types of constructed board.
 - **Not Recommended:** installation of Knight Premium Flooring over sleepers on or below grade concrete slabs.
- **Resilient Floors**
 - Knight Premium Flooring will only perform as well as the substrate floor.

- **Existing resilient floors should be removed whenever possible.**
 - If it is not practical to remove the resilient floor you may install directly to a single layer of resilient commercial flooring provided:
 - The existing resilient floor covering is smooth and not embossed or cushioned. Install only over homogeneous tiles. (VAT, VCT, Solid Vinyl). These products generally have lower psi values than Knight Premium Flooring tiles and can negatively affect Knight Premium Flooring tiles performance, which is why it is recommended they be removed whenever possible.
 - The floor is firmly adhered and properly installed.
 - All polishes and finishes have been completely removed.
 - Before proceeding with the installation a bond test should be conducted to determine if all bond inhibitors have been removed.
 - Glue down tile in several areas to verify that the subfloor permits suitable bonding. Choose areas that are light in traffic such as near columns or walls to test bond compatibility. Knight Premium Flooring will not be responsible for installation problems due resilient subfloor inadequacies.
- **Other substrates**
 - Terrazzo
 - Terrazzo must smooth, dry and clean. Any irregularities or depressions must be leveled. All polishes and finishes must be completely removed. A bond test must be conducted before proceeding with the installation. Terrazzo metals (divider strips) must be sealed before overlay. Divider strips should also be properly imbedded (level).
 - Tile
 - Tile should well bonded and free of waxes, sealers or finishes. A leveling compound to make the surface uniform and level should be used after all bond-inhibiting contaminants are removed. Follow manufacturer's instructions.
 - Steel Deck
 - Steel deck should be free of dirt, rust, oil or other contaminants. Steel decking should be cleaned with mineral spirits to remove impurities generally found on steel. Irregularities must be leveled using a latex-patching compound. Follow directions of leveling compound manufacturer for bonding to steel.

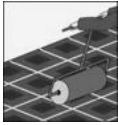
Installation



- Sweep or vacuum properly prepared substrate.
- Knight Premium Flooring tile must be installed with the **directional marking on the back all aligned in the same direction**. Using one wall as a guide, make sure all tiles are set with the lines running parallel and toward that one wall. The unique Knight Premium Flooring tile manufacturing process produces a directional effect in the shading. Check diagram on cartons for correct orientation. See the following installation diagram.
- **Do not force** Knight Premium Flooring tiles into place, snugly set tile against one another.
- **Install tiles from one box**, then start new box. Do not mix boxes or pallets. Install from the last produced tiles to the first produced of the order to insure proper shade distribution.



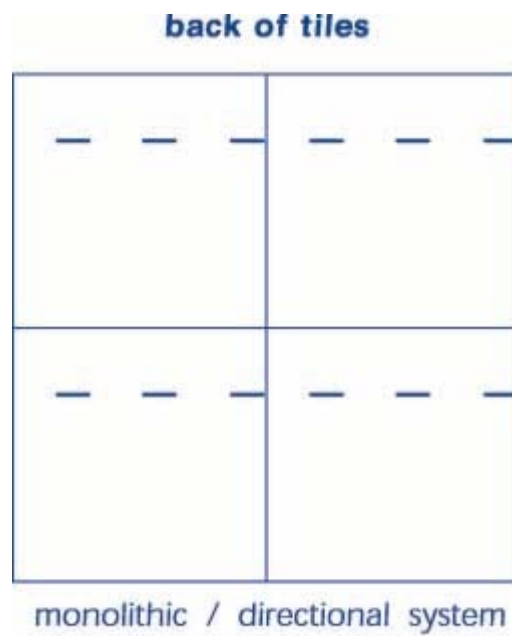
- Find the center of the room by measuring opposite wall in each direction and marking the exact mid point of each wall. Mark your chalk lines to each mid point. Ensure that your lines are square by using the 3, 4, 5 squaring method. Mark 3' from intersection of point of north/south chalk line. Mark 4' from intersection of east/west chalk line. Measure the 3' mark to the 4' mark. The result if your lines are square will be 5'.
- **Note:** you may have to adjust lines to take into account door openings, cuts along the perimeter or specific design criteria to make the best aesthetic lay out of the floor. Dry lay several tiles to determine the best way to proceed.
- Spread adhesive according to label directions. Use adhesive as recommended for job site conditions. Each adhesive has special characteristics. Following the specific instructions will help produce a successful installation.
- Floor should be rolled within one hour after setting. Use a 100 lb. Floor roller. Roll in each direction to flatten out trowel notches and insure adequate transfer of adhesive. Clean off excessive adhesive on face of tile before it dries.
- Periodically check adhesive transfer on the back of tile. Tile should have 100% adhesive transfer to insure proper bonding. **Do not set tile in adhesive that has “skinned” over.** Remove and discard any adhesive that has skinned over and use fresh adhesive.
- Tile can be cut with a guillotine type tile cutter, utility knives, jig saw or table saw.
- **Protect floor after installation from other trades and construction traffic.** (See Installation Requirements for New Construction).



Recommended Adhesives

- **Premium Pressure Sensitive Adhesive**, (normal installation conditions, 5 lbs per 1000 sf/ 24hrs).
- After floor areas have been installed protect from traffic according to adhesive instructions to allow the adhesive proper set up time.
- Floors should not be wet mopped until adhesive has sufficiently cured. Check with adhesive manufacture.
- Before turning floor over to end-user properly clean floor. Provide owner with maintenance instructions for proper care of floor.
- **Note:** Maintenance instructions are available through our representative network or our web site.

Installation Diagrams



For assistance please call local sales representative or contact Knight Premium Flooring directly at

**1-800-356-0740
www.KPFlooring.com**

INSTALLATION REQUIREMENTS FOR NEW CONSTRUCTION

Care and protection of **Knight Premium Flooring** tile on the jobsite is critical. The instructions listed below should always be observed. All procedures set forth by Knight Premium Flooring must be followed to ensure manufacturer's warranty. Proper care includes, but is not limited to:

1. **Protect floor after installation.** Use drop cloths, rosin paper, etc., while performing tasks which could scratch, mar, or otherwise damage floor. Make sure ladders are equipped with rubber feet.
2. Do not slide or drag pallets or heavy equipment across floor. Wheel or carry material over floor.
3. When construction is complete, inspect the floor for any damaged or misaligned tile and replace.
4. Carefully remove debris such as tape, labels, gum, drywall compound, etc. If any debris is encountered that can not be removed or the tile has been adversely affected; replace tile.
5. After it is established the floor installation is sound and free of defects, sweep or vacuum floor.
6. Use neutral cleaner. Follow directions on label and clean floor thoroughly. Inspect for any squeegee marks, tire tracks or streaks of dirty solution left behind during cleaning. Also inspect baseboards and corners. With a clean mop head, bucket and clear water, erase these marks and allow the floor to dry.

STOP! The floor is now ready for the finish to be applied.

The floor must be cured prior to stripping and finishing. The environment (moisture/humidity) may prolong the curing process.

7. Refer to the maintenance section for the stripping and finishing application guidelines. Follow the directions for applying the stripper and floor finish if needed.

Note: any imperfections that still exist prior to finishing **will be visible through the finish.** If the suitability of the floor is questionable; contact **Knight Premium Flooring Technical Support** at **866.850.8836** before finish application.