



**QUARTZ
CONCEPTS**

QuartzScapes

Knight Premium Flooring™ Installation Instructions

****If this is a new construction installation please see the “Installation Requirements For New Construction” located on the 6th page of this 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.

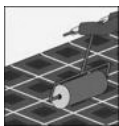
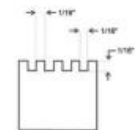
- A bond test is recommended over any floor where foreign substances have been removed. Install several tiles in random areas according to installation directions. Allow the adhesive to set up for 24 hours. If the adhesive easily removes from the slab, then this would indicate that the slab is contaminated 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 8lbs moisture based on standard Calcium Chloride testing (ASTM F 1869). If higher than 8lbs. 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 10 or below. If 10 or higher ph levels are found, the subfloor must be neutralized before starting installation.
 - **Note:** If concrete is reading higher than 8lbs. 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 to resilient subfloor inadequacies.
- **Other substrates**
 - Terrazzo
 - Terrazzo must be 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 be 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.

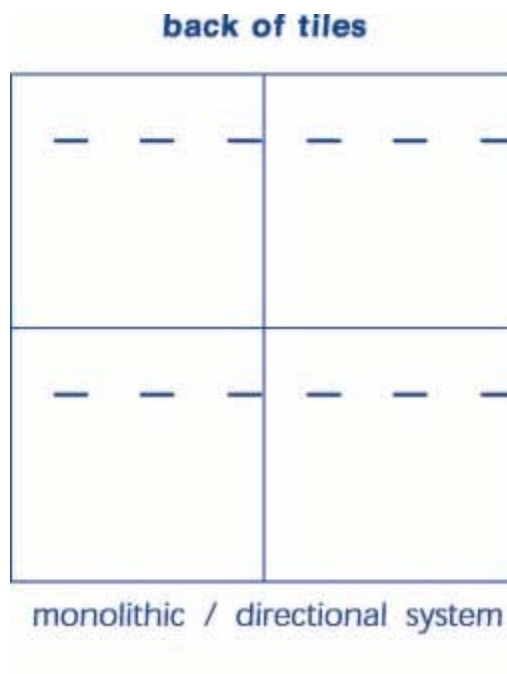


- **Do not force** Knight Premium Flooring™ tiles into place, snugly set tile against one another.
- **Install tiles from one box**, then start new box. Do not mix boxes or pallets. Install from the last produced tiles to the first produced of the order to insure proper shade distribution.
- Find the 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, 8 lbs per 1000 sf/ 24hrs).
- **Hard-Set Adhesive** (quick-set, cures hard, 8 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 KPF 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 the floor installation is sound and free of defects, sweep or vacuum floor.
6. Use a 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 **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 finishing application.



Knight Premium Flooring Floor Stripping Guidelines

NOTE: The following are general guidelines for stripping a floor. Please follow the floor stripper manufacturer s instructions for best results.

1. Remove all objects that can be moved from the area to be finished. To prevent unwanted entry into work area, cordon area using caution cones and/or safety tape and lock any doors leading onto the floor, if safety allows.
2. Carefully scrape away tape, labels, gum or attached surface debris while avoiding any damage to floor. Vacuum or dust mop the floor.
3. After reading all directions and cautions, apply stripper to floor, making sure to follow the suggested dilution ratios on the label.
4. Large areas are best controlled by stripping in stages. After liberal application, allow the stripping solution to remain on the surface to be stripped for 5 minutes before scrubbing.
DO NOT ALLOW STRIPPER TO DRY ON FLOOR.
5. Scrub the floor using a machine equipped with the correct stripping pad or brush.
NOTE: Check the machine being used is applying adequate pressure to the pad in order to ensure effective removal of old finish.
6. After scrubbing is complete, test to see if all old finish has been successfully removed. Using a squeegee, pull stripper solution to expose a small portion of floor. With a putty knife, apply firm pressure and push the blade across the floor for several inches. If any sticky, gummy residue is collected all the old finish has not been removed. The stripping process will need to be repeated. Conduct this test wherever incomplete release of finish is suspected.
7. When finish removal is complete, pick up used solution with a mop or wet vac. Wash floor with clear water making sure stripper is removed. Remove rinse water with a mop or wet vac. Allow floor to dry.



Prior to finish application be sure the floor has been properly cleaned and stripped (if necessary). Be sure work area cautions are indicated. Refer to the *Floor Stripping Guidelines*.

Knight Premium Flooring Floor Finish Application Guidelines

NOTE: The following are general guidelines for finishing a floor. Please follow the floor finish manufacturer s instructions for best results.

1. Finish may be applied using a lamb's wool applicator, gravity flow applicator, or rayon mop. Typical commercial applications employ the mop and bucket technique. To avoid contamination of floor finish, always use **new**, rayon, "Finish" mop heads specifically designed for the application of floor finish.
2. Line the mop bucket with a new plastic trash can liner before pouring in the finish. This will ensure against product contamination while aiding in clean-up.
3. Add floor finish to the bucket, do not dilute. Load the mop head by submerging in finish. Avoid allowing handle to make contact with finish. Agitate gently while allowing the head to absorb finish (approximately 15 seconds).
4. Lift mop over bucket, allow excess finish to drain from head. NOTE: Do not wring mop. Wringing excess from a finish mop forces air bubbles into the product and may contribute to a poor job.
5. A standard "figure-eight" pattern is suggested in applying finish as it allows for the most effective and efficient delivery of finish to floor. Be sure previous coat has been dry (tack free) for at least 15-30 minutes before applying next coat. For optimum gloss and durability apply 2 to 4 coats.
6. **Always** allow proper dry time between coats. **Never** use a fan to speed-up or "shock dry" a floor. Shock drying contributes to uneven drying and can lead to "streaking" of subsequent coats and job failure. Dry time varies. Humidity and temperature; ventilation and film thickness all have an impact on dry time.
7. If contaminants are encountered, dispose of the finish within the bucket and replace the mop head. **Never** return unused finish to the original container. Properly dispose of all unused finish.
8. Maintain the finished floor by damp mopping with a solution of neutral cleaner. Heavy traffic lanes may be recoated as required. Gloss can be maintained by spray buffing.