



FitZone Fitness Performance Vinyl Tile (PVT) Technical Manual

Installation · Maintenance · Warranty

Manufactured in the U.S.A.

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Check website for updates

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Installation

I. JOB SITE CONDITIONS

1. Installation should not begin until after all other trades are finished in the area. If the job requires other trades to work in the area after the installation of the floor, the floor should be protected with an appropriate cover.
2. Areas to receive flooring should be weather tight and maintained at a minimum uniform temperature of 65°F (18°C) for 48 hours before, during, and after the installation.

II. SUBFLOORS

1. Permitted subfloors include concrete, Portland-based patching and leveling materials, and wood.

NOTE: Gypsum-based patching and leveling compounds are not acceptable.

NOTE: The selected Portland-based patching and self-leveling materials must be moisture resistant and rated to withstand the RH moisture levels on the project.

2. Wood Subfloors – Wood subfloors should be double constructed, rigid and free from movement with a minimum of 18 inches of well-ventilated air space below.
3. Underlayments – The preferred underlayment panel is American Plywood Association (APA) underlayment grade plywood, minimum thickness of 1/4-inch, with a fully sanded face.

NOTE: Particleboard, chipboard, Masonite and lauan are not considered to be suitable underlayments.

3. Concrete Floors – Concrete shall have a minimum compressive strength of 3000 psi. New concrete slabs should cure for a minimum of 28 days before installation. Concrete must be fully cured and permanently dry.

III. SUBFLOOR REQUIREMENTS AND PREPARATION

1. Subfloors shall be dry, clean, smooth, level, and structurally sound. They should be free of dust, solvent, paint, wax, oil, grease, asphalt, sealers, curing and hardening compounds, alkaline salts, old adhesive residue, and other extraneous materials, according to ASTM F710.
2. Subfloors should be smooth to prevent irregularities, roughness, or other defects from telegraphing through the new flooring. The surface should be flat to the equivalent of 3/16 in (4.8 mm) in 10 ft (3.0 m).
3. Mechanically remove all traces of old adhesives, paint, or other debris by scraping, sanding, or scarifying the substrate. Do not use solvents. All high spots shall be ground level and low spots filled with a Portland-based patching compound.
4. All saw cuts (control joints), cracks, indentations, and other non-moving joints in the concrete must be filled with a Portland-based patching compound.
5. Expansion joints in the concrete are designed to allow for expansion and contraction of the concrete. If a floor covering is installed over an expansion joint, it will likely fail in that area. Use expansion joint covers designed for resilient flooring.
6. Always allow patching materials to dry thoroughly and install according to the manufacturer's instructions. Excessive moisture in patching material may cause bonding problems or a bubbling reaction with the adhesive.

HAZARDS:

SILICA WARNING – Concrete, floor patching compounds, toppings, and leveling compounds can contain free crystalline silica. Cutting, sawing, grinding, or drilling can produce respirable crystalline silica (particles 1-10 micrometers). Classified by OSHA as an IA carcinogen, respirable silica is known to cause silicosis and other respiratory diseases. Avoid actions that may cause dust to become airborne. Use local or general ventilation or provide protective equipment to reduce exposure to below the applicable exposure limits.

ASBESTOS WARNING – Resilient flooring, backing, lining felt, paint, or asphaltic “cutback” adhesives can contain asbestos fibers. Avoid actions that cause dust to become airborne. Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize. Regulations may require that the material be tested to determine the asbestos content. Consult the document “Recommended Work Practices for Removal of Existing Resilient Floor Coverings” available from the Resilient Floor Covering Institute.

LEAD WARNING – Certain paints can contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state, and local laws and the publication “Lead Based Paint: Guidelines for Hazard Identification and Abatement in Public and Indian Housing” available from the United States Department of Housing and Urban Development.

7. Kiefer USA recommends our K-Tak 99 adhesive. Moisture must be measured using the RH Relative Humidity test method per the ASTM F2170 test standard and not exceed 99% RH.

If RH levels exceed 99% RH, stop and correct the situation.

8. In the event that a moisture mitigation system is required, it must conform to the ASTM F3010 Standard Practice for Two-Component Resin Based Membrane Forming Moisture Mitigation Systems for use Under Resilient Floor Coverings.
9. Perform pH tests on all concrete floors. If greater than the allowable limit of the selected adhesive, neutralize prior to installation.
10. Adhesive bond tests should be conducted in several locations throughout the area. Glue down 3' x 3' test pieces of the flooring with the recommended adhesive and trowel. Allow to set for 72 hours before attempting to remove. A sufficient amount of force should be required to remove the flooring and, when removed, there should be adhesive residue on the subfloor and on the back of the test pieces.

IV. MATERIAL STORAGE AND HANDLING

1. Material should be delivered to the job site in its original, unopened packaging with all labels intact.
2. Material must be stored inside in a climate-controlled environment not to exceed 85°F (30°C)
3. The material and adhesive must be acclimated at room temperature for a minimum of 48 hours before starting installation.
4. Store cartons of tile flat and squarely on top of one another, allowing for air flow around stacks when un-palletized. Locate material away from vents, direct sunlight, etc. Storing cartons in direct sunlight may prevent proper acclimation by inducing thermal expansion/contraction.
5. When palletizing on a jobsite, a 5/8" or thicker plywood must be first placed on the pallet to protect the cartons and material.
6. Do not stack pallets!
7. **Inspect all materials for visual defects before beginning the installation. No labor claim will be honored on material installed with visual defects. Verify the material delivered is the correct style, color, and amount. Any discrepancies must be reported immediately before beginning installation.**

V. INSTALLATION

1. Make the assumption that the walls you are butting against are not straight or square. Using a chalk line, make a starting point for a row of tiles to follow. The chalk line should be set where the first seam will be located.
2. Mix the tiles from 5 or 6 cartons as you install.
3. The Performance Vinyl Tile (PVT) is non-directional.
4. Align the first row of tiles to the chalk line. The minimum usable salvage length is 6".

NOTE: Special care should be taken not to sharply fold or crease the material. This can result in permanent visual damage to the PUR wear layer which is not covered under Kiefer's product warranty.

NOTE: It is very important that the first row of planks is perfectly straight.

NOTE: Always have a factory edge, seam to seam. Position all cut tile ends against a wall, etc.

VI. INSTALLATION – Adhesive Application

1. Begin the application of the K-Tak 99 using a 1/16" square- notched trowel
2. K-Tak 99 **should not be mixed**; it is specially formulated for use right out of the pail.
3. Spread the adhesive and wait 30 to 60 minutes for it to flash off. Take care not to spread more K-Tak 99 than can be covered with planks in under 4 hours.

Installation Type	Flash Time [†]	Working time ^{††}
<i>Pressure Sensitive Installations</i>	30 to 60 minutes	Up to 4 hours

[†] Flash time is the recommended amount of time for a freshly applied adhesive to remain exposed to the air before the installation of a floor covering.

^{††} Working time is the maximum amount of time that an adhesive can remain exposed to the air and still effectively bond to the floor covering.

NOTE: Flash time and working time vary based on temperature, humidity, substrate porosity, trowel size, and jobsite conditions.

NOTE: Do not allow adhesive to cure on your hands or the flooring. Immediately wipe off excess adhesive with water! Cured adhesive is very difficult to remove from hands, and we strongly suggest wearing gloves.

4. Lay the planks into the flashed adhesive, applying hand pressure along the plank as it is being laid into the adhesive. Do not allow the material to "flop" into place; this may cause air entrapment and bubbles beneath the flooring.
5. Roll the floor with a 100 lb. roller to ensure proper adhesive transfer. Overlap each pass of the roller by 50% of the previous pass to ensure the floor is properly rolled. Roll the width first and then the length.
6. Roll again within the first 60 minutes.
7. Repeat for planks installed that day.
- NOTE:** Never leave adhesive ridges or puddles that can telegraph through the material.
8. Keep traffic off the floor for a minimum of 24 hours. Floor should be free from light rolling loads for a minimum of 72 hours.

NOTE: Chair mats are recommended. The absence of the chair mats is considered abuse.

Maintenance and Assigned Responsibilities

It is the Specifier's responsibility to:

- Mandate covering and protection of floor from damage and construction debris until construction is complete.
- Assign to the appropriate party responsibility for the initial cleaning of floor following published procedures.

Kiefer USA recommends our environmentally friendly line of maintenance products, including Kiefer Clean.

It is the General Contractor's responsibility to provide:

- A building or installation area that is fully enclosed from the elements, e.g., finished roof, windows, doors, etc.
- Temperature that is climate controlled with a minimum uniform temperature of 65° F for 48 hours prior to, during, and after the flooring installation, for acclimation of flooring materials.
- Protection for those areas of the flooring that are subject to direct sunlight through doors or windows by having the doors or windows covered for such time until the installation of the material is complete.
- Protection for flooring from damage and construction debris by using an appropriate floor covering until such time that the recommended initial cleaning may be performed.

NOTE: Rubber feet or rubber mats may cause permanent staining to vinyl surfaces. Kiefer USA does not recommend that equipment with rubber feet or the use of rubber-backed mats on vinyl floors.

NOTE: Chair mats are recommended.

Maintenance

The Performance Vinyl Tiles incorporate a polyurethane reinforcement that resisting soiling and scuffing and allows the use of a polish-free maintenance regime.

NOTE: Entry systems / walk off mats reduce the soil that is tracked onto floor and reduce maintenance.

Cleaning Procedures

INITIAL CLEANING

1. Wait a minimum of 24-48 hours before conducting the initial cleaning.
2. Remove all loose debris, dust and grit by sweeping or vacuuming.
3. Ensure that all traces of adhesive are removed from the surface of floor using a clean white cloth dampened with mineral spirits.
4. Damp mop with a neutral cleaner such as Kiefer Clean.
5. If required, dry buff with a 1000 rpm plus rotary machine fitted with a white pad

ROUTINE MAINTENANCE

1. Mop, sweep or vacuum to remove dust and loose dirt.
2. If required, spot mop to remove stubborn marks with Kiefer Clean neutral cleanser.
3. Damp mop or use an auto scrubber with properly diluted Kiefer Clean neutral cleaner on a regular basis.
4. Wet scrub as needed with red scrubbing pad/ soft nylon brush to prevent accumulation of soil build up.

PERIODICALLY

1. Assess the appearance of the floor. If the floor has dirt build-up, use a low-speed scrubber (175-300) fitted with a red cleaning pad, using a neutral or alkaline detergent, as appropriate.
2. Rinse thoroughly and allow to dry.
3. Dry buff to restore finish.
4. Cleaners and detergents should be diluted as per the manufacturers' instructions.

NOTE: Always follow the SDS info, and dilute cleaners and detergents per the manufacturer's instructions.

5. Fit protective feet to table and chair legs to prevent scratching.
6. These maintenance instructions are intended for our PUR floor covering products, which have a polyurethane reinforcement.

NOTE: Regular cleaning is more beneficial and cost effective than occasional heavy cleaning.

Approved FitZone Fitness Performance Vinyl Tile Maintenance Products		
Manufacturer	Initial Cleaning	pH Neutral Cleaner
www.kieferusa.com	Kiefer Clean: 4-6 oz /gal cool water	Kiefer Clean

Warranty

Kiefer USA guarantees our FitZone Fitness Performance Vinyl Tiles (PVT) to be free from defects in workmanship and materials affecting wearing properties, and to meet all published PVT specifications at time of manufacturing, provided that the product has been installed in accordance with the installation instructions issued by us. These warranties only apply to the original purchaser.

Please see the Kiefer USA Warranty Guide for length specifics.

Any defect must be notified to us in writing, and we reserve the right to inspect and investigate any alleged defect. If after this investigation we consider the material to be defective, at the discretion of Kiefer USA, the sole remedy against the seller will be to repair, to replace, or to issue a credit not exceeding the selling price of the defective goods. If product is no longer available, Kiefer USA reserves the right to substitute similar product of equal value and/or quality.

This warranty does not cover defects arising from any of the following:

1. Excessive Moisture
2. Chemical Reaction
3. Corrosion
4. Extremes in temperature
5. Abnormal usage above which the product is specified
6. Wear from chairs or other furniture without proper floor protectors and chair mats
7. Indentations, scratches or surface damage caused by improper maintenance, misuse, negligence, spike heeled shoes, pebbles, sand, or other abrasive materials
8. Sub-floor irregularities causing premature wear
9. Dissatisfaction due to improper installation and/or maintenance
10. Labor on material installed with obvious defects
11. Labor costs on repair or replacement material
12. Any discoloration or bond failure as a result of unapproved adhesives or improper substrate preparation
13. Staining or discoloration caused by rubber feet, rubber castors, rubber-backed mats, etc.
14. Damage resulting from unapproved floor care products
15. Purchase of "seconds", "remnants", or other (non-first quality) flooring materials are not covered under this warranty.

These warranties are in lieu of any other warranty expressed or implied. Kiefer USA shall not be liable for any incidental or consequential damages which may result from a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific rights, and you may also have rights which may vary from state to state. To know what your legal rights are in your state, consult your local or state Consumer Affairs Office or your State Attorney General. For complete and latest warranty information, please call Kiefer USA at 800-322-5448.