

ULTIMATE SYSTEMS RUBBER TILE INSTALLATION GUIDE



ultimate
DESIGN

ultimate
TOUGH

INCLUDING:

**GENERAL RECOMMENDATIONS • INSTALLATION TOOLS CHECKLIST
SUBFLOOR REQUIREMENTS • TILE INSTALLATION • PRODUCT WARRANTY**

BEFORE YOU GET STARTED

GENERAL RECOMMENDATIONS

1. Read all product and subfloor preparation instructions, adhesive instructions, warranty and other disclaimers BEFORE you begin to install Ultimate Systems rubber tiles.
2. The installation surface and rubber tiles need to be clean and dry prior to installation. Subfloors to be installed with rubber tiles should be maintained at a consistent temperature from 24 to 48 hours before, during and after the installation. Ultimate Systems recommends an optimum temperature of 68°F (18°C) be maintained in the installation area.
3. Room temperature variations can affect rubber tiles as the material can expand (warm) or contract (cold). Temperature requirements for the flooring adhesive should be reviewed as well.
4. Prior to starting any installation, thoroughly review all rubber tiles. Verify the following for all tiles:
 - Material type, material color and style are correct
 - Material is supplied at the correct size and thickness
 - Amount of material supplied is correct
 - No visual defects are present on the material

Note: Skive/knife marks on product is an inherent characteristic of using recycled rubber and is not considered a defect.

***** IMPORTANT *****

ANY suspect or defective material must be brought to the attention of the supplier immediately. ABSOLUTELY NO CLAIMS WILL BE ACCEPTED AFTER THE MATERIAL HAS BEEN INSTALLED.

5. Rubber can expand and contract with temperature and humidity changes. The rubber tiles (and adhesive) should be acclimated to the installation room temperature for 24 hours. Allow additional time in colder temperatures or use room heaters to bring up the ambient air temperature. If heaters are used, be sure to maintain a consistent temperature throughout the installation process. See step 2 above.
6. If the rubber tiles are stored prior to installation, always lay the tiles flat. Rubber tiles stored on end will result in curled edges. Edge curl will result in raised seams and potential trip hazards. Always store rubber material on a clean, dry and flat surface. Ultimate Systems recommends storing rubber tiles at a minimum of 55°F (13°C) with less than 50% humidity.

7. For best results, Ultimate Systems recommends using a one-part polyurethane adhesive to glue the rubber tiles to the subfloor. Visit www.firstinrecycledflooring.com for recommended flooring adhesives.

***** IMPORTANT *****

DO NOT use petroleum-based products in conjunction with Ultimate Systems rubber tiles. This includes solvents, adhesives or sealants.

8. An adhesive bond test should be completed in several locations across the floor. Glue down 2' x 2' pieces of material with recommended adhesive and trowel and let set for 48 hours before trying to remove. The squares should be relatively difficult to pull up and there should be adhesive on the floor and rubber square.
9. Rubber tiles that are loose-laid in the installation area (to acclimate to room temperature), or permanently installed, should be securely covered with a tarpaulin or other protective material when other trade professionals are working in the area. If possible, install the tiles after all other work is completed in the immediate installation area.

RECOMMENDED INSTALLATION TOOLS

- Rubber gloves
- Safety glasses
- Knee pads
- Utility knife
- Extra knife blades
- Adhesive trowel (1/16" x 1/16" x 3/32")
- Polyurethane flooring adhesive
- 75 lb. sectional roller
- Metal carpenter's square
- Measuring tape
- Chalk line
- Pen or Marker
- Tarpaulin



VISIT ULTIMATE SYSTEMS' WEB SITE FOR RECOMMENDED FLOORING ADHESIVES & INSTALLATION TOOLS
www.firstinrecycledflooring.com

SUBFLOOR REQUIREMENTS

SUBFLOOR REQUIREMENTS FOR INSTALLATION

1. Ultimate Systems' rubber tiles (Ultimate Design or Ultimate Tough) may be installed over concrete, cement-type leveling bases, asphalt and wood subfloors.
2. All subfloors should be thoroughly cleaned, filled and primed. Remove all paint, varnish, oil, grease, dust, wax or any foreign substance that may decrease the bond strength of the polyurethane flooring adhesive. (Review ASTM 710 for more information.)
3. Verify the subfloor is dry, smooth and level. Subfloor surfaces should not vary more than 1/8" in ten feet.
4. Gypsum patching compounds and leveling products should not be used on subfloor surfaces.
5. **Stabilization of the subfloor is the sole responsibility of the installer and/or property owner.**

CONCRETE (OR LEVELED CEMENT-TYPE) SUBFLOORS

1. Concrete surfaces must be thoroughly cured, free from hydrostatic pressure, leveled and cleaned from any foreign materials such as dust, dirt, paint, oil and water prior to rubber tile installation.
 - Use a trisodium phosphate solution (or Xylol for rubber-based paint) to remove oil, grease or wax.
 - Remove paint, old adhesive or other foreign material by either machine sanding or scraping.
 - Thoroughly wash and rinse treated areas. Allow subfloor to completely dry.
2. To reduce the amount of adhesive required, concrete surfaces should be reasonably smooth.
3. Any separation of concrete layers, heaving, etc. is the sole responsibility of the installer and/or property owner.
4. Allow for good drainage of the installation area with either a well-defined gradient (1% or greater depending on the coverage size of the surface) or well-placed drainage pipe in lower spots of the area.
5. The existing concrete surface shall be free of significant cracks or gaps prior to the installation. Patch areas with a latex-based leveling/filler compound according to the manufacturer's guidelines. Allow compound to dry as directed.

CONCRETE (OR CEMENT-TYPE) SUBFLOORS (Continued)

6. New concrete, or the alike, should be allowed to cure for a minimum of 60 days prior to installing Ultimate Systems rubber tiles. The surface should be smooth and level.
7. Both moisture and pH tests should be conducted on concrete subfloors to determine if they are suitable for installation. Moisture should not exceed 3 lbs./1000 sq. ft. and pH level should be 7-10. (Review ASTM F1869 for water vapor emissions.)

WOOD SUBFLOORS

1. The wood subfloor should be in good condition, rigid, and free from movement. The subfloor should have good cross ventilation under the floor to prevent distortion.
2. The wood surface should be clean and free from any foreign materials such as dust, dirt, paint or protruding nails and screws. All damaged wood should be replaced.
3. The surface should be leveled, clean and dry before application. Trapped moisture may cause deterioration and premature rotting of the wood. The subfloor should be free from excessive cupping or warping.
4. The existing wooden surface shall be free of significant cracks or gaps prior to the installation. Patch areas with a plastic wood compound according to the manufacturer's guidelines. Allow compound to dry as directed.
5. Re-nail all loose boards. Replace worn or damaged boards. If necessary, sand floor to a level finish and prime. Wood subfloors can also be covered with a five-ply 5/8" (15.875mm) plywood or hardboard. Prime newly replaced floorboards.

SUBFLOOR REQUIREMENTS

ASPHALT SUBSURFACES

1. Asphalt subsurfaces must be hard enough not to melt during hot weather, leveled, and free from any foreign materials such as grease, oil, dust, paint and other contaminants. Avoid installation of rubber tiles on new asphalt until surface oil has had time to dissipate (Approx. 30 days after compacting) and drainage can be evaluated.
2. Any separation of asphalt or blacktop layers, heaving etc. is the sole responsibility of the installer and/or property owner.
3. Allow for good drainage of the installation area with either a well-defined gradient (1% or greater depending on the coverage size of the surface) or well-placed drainage pipe in lower spots of the area.
4. The existing asphalt surface shall be free of significant cracks or gaps prior to the installation. Fill cracks and gaps to level surface.
5. All rubber tiles installed on asphalt must be adhered using a polyurethane adhesive. See the company web site at www.firstinrecycledflooring.com for recommended adhesives.

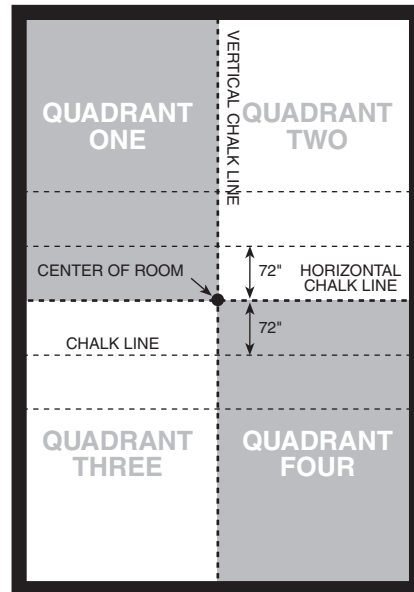
TILE INSTALLATION

PRIOR TO INSTALLATION

1. Installation of the rubber flooring will only be as good as the substrate it's installed over. If the substrate is uneven, the rubber will not lay flat. **A wet, greasy substrate is the first major cause of bonding failure.** Review "Subfloor Requirements" section starting on page 3.
2. Lay out the rubber tiles and allow the material to "relax." The material should be acclimated to the installation room temperature for 24 hours.
3. Ultimate Systems manufactures its tiles for each project in one shade-pattern-lot number as close as possible to the sample color. Since minor variations are inherent in resilient flooring products, it is highly recommended that the tiles be mixed during the dry fit process to create the most desirable appearance.
4. Dry lay the rubber tiles to check for any color variations or blemishes. If there is any type of defect or questionable color difference DO NOT INSTALL. Contact your supplier immediately.
5. Carefully read all adhesive application instructions prior to using the product.

INSTALLATION INSTRUCTIONS

1. Begin by locating the center of the room and setting chalk lines so the horizontal chalk line is square and perpendicular to the vertical chalk line. The room will be split into four quadrants.
2. Proceed to set additional chalk lines at 72-inch (1.83 m) intervals across the narrow part of the room. This will provide a common course to lay either 18", 24" or 36" rubber tiles. See diagram below.



TILE INSTALLATION (Continued)

INSTALLATION INSTRUCTIONS (Continued)

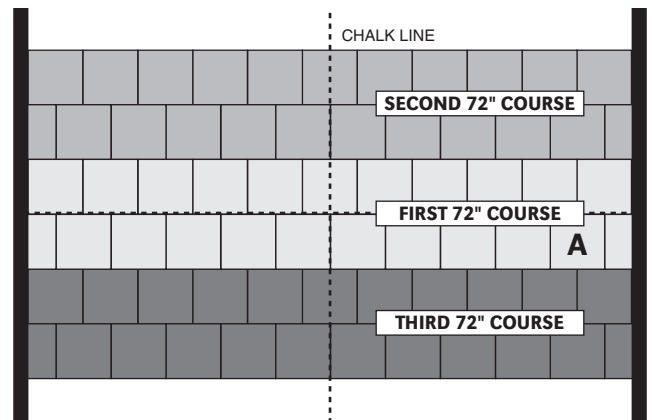
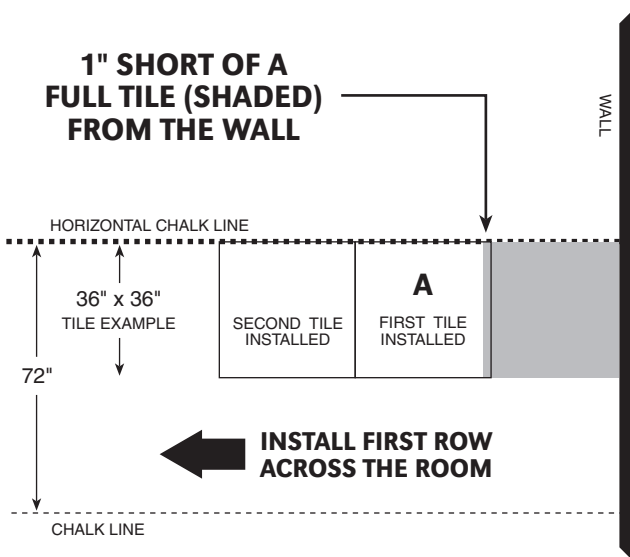
3. Apply adhesive using a 1/16" x 1/16" x 3/32" U-notch trowel. Spread adhesive perpendicular to seam areas to prevent excess adhesive from protruding through the seam. Use a new trowel for each new pail of adhesive. **DO NOT RE-NOTCH THE TROWEL.**
4. Review the flooring adhesive usage guidelines for spread rate and open times for curing. Higher temperatures and high humidity will cause the adhesive to set up quickly. Low temps and low humidity will cause the adhesive to set at a slower rate. The installer should monitor on-site conditions and adjust accordingly. **DO NOT LET ADHESIVE SKIM OVER.**
 - Approximately one 5-gallon pail of polyurethane adhesive should cover roughly 400 sq. ft.
 - If adhesive is spread more than 100 sq. ft. per gallon, a sufficient amount of adhesive has not been used to permanently adhere the tiles. However, keep in mind that rough surfaces will affect adhesive coverage.
5. Closely following the chalk line, install the first row of tiles. Start the first full tile (A) about 1" short of a full tile from the wall. This will ensure enough material has been left at the wall base. See detail diagram below.

6. Carefully set the tiles into the wet adhesive. Dropping tiles into the adhesive will trap air under the flooring. Do not exert pressure on the tiles – lay them naturally to ensure good contact with the adhesive. The idea is to establish the first course of installed tiles across the room. Make sure this course is properly set and even before continuing the tile installation.
7. **SQUARE TILES ONLY:** Start the second row of tiles halfway between the joint of the first two tiles to establish a staggered "brick wall" pattern. Installing by this method eliminates pressure on the tile corners and results in a better match at the seams.
8. Cut tiles to fit at the walls and proceed to roll the first 72" course of tiles using a 75 lb. sectional roller. Rollers over 75 lbs. may cause the tiles to stretch and should not be used. The first course can be rolled without walking on the tiles. Roll the tiles the length of the course and across the course for proper adhesion.

Failure to roll the tiles while the adhesive is still soft is the second major cause of bonding failure. Wet or greasy, etc. subfloors are the first.

BANKED TURNS: Immediately after rolling, weigh down the tiles with sandbags to allow the rubber to conform to the subfloor contour.

9. When the first course is completely installed, cut to the walls and rolled, start the second 72" course on one side of the starting course. The third course installed should be on the **OPPOSITE** side of the first course. By alternating sides from the starting course, maximum time is allowed for the adhesive to harden before installer traffic is forced onto the tiles. See the diagram below.



TILE INSTALLATION (Continued)

INSTALLATION INSTRUCTIONS (Continued)

Note: The adhesive is slippery when first spread and the tiles will shift position even if slightly disturbed. Use a quality masking tape (3M "Long-Mask" #2090 is preferred) to hold tiles together. **DO NOT USE DUCT TAPE.** Test tape adhesive to determine if the tape will hold the tile adequately and if it can be removed easily without leaving a residue or disturbing the position of the tile.

10. During the installation of the second, third and subsequent courses it will be necessary to walk on the newly installed tiles. Use caution as tiles can easily be kicked out of place. Tape tiles together to keep them in place during the job. Install as many full tiles as the adhesive spread will allow. Always be alert for tiles that may have been moved out of place. Use your foot to readjust any moved tiles and proceed to tape it to the adjacent tile(s).
11. Use a hand roller in areas where the larger roller cannot reach and on all seams after the floor has been rolled. If there are gaps in the seams, masking tape can be used to pull the seam together. For seam edges that are not lying flat, use a sandbag or other weighted object to hold-down the tile edge overnight. Once the floor has set, the tape may be removed.
12. If adhesive pushes up in the seams, immediately clean with a damp rag and mineral spirits. Cured adhesive on the floor is very difficult to remove. Ultimate Systems strongly recommends using gloves when applying floor adhesive.

Any adhesive outside the installed field of tiles should be removed before leaving the job at the end of the day. The next day it will be very hard and need to be chipped away before starting work.

***** IMPORTANT *****

DO NOT ALLOW foot traffic or rolling loads on the newly installed floor for a minimum of 24 hours. Permanent indentations in the adhesive could result and prevent a secure bond to the subfloor. For maximum strength, allow adhesive to cure for 72 hours.

POST INSTALLATION

Ultimate Systems' rubber tiles do not include a protective finish when shipped from the manufacturing facility. It is highly recommended that the newly installed rubber floor be protected using a tarpaulin or other cover until the floor can be cleaned and/or sealed.

INITIAL CLEANING: Do not wash the floor for at least 5 days after installation. An initial cleaning needs to be done to remove any dirt and grit from the job site and to prepare the floor prior to applying a sealer or finish. Failure to clean properly will cause finish bonding issues as well as the entrapment of dirt in the floor.

To avoid possible damage to the flooring, the following should never be used on the floor:

- Steel wool or abrasive brushes
- Abrasive or alkaline cleaners
- Solvents of any type.

Visit the company web site at www.firstinrecycledflooring.com for recommended floor cleaners and sealers.

CLEANING AND MAINTENANCE

For regular maintenance, review the *Ultimate Systems Rubber Flooring Cleaning & Maintenance Guide*.

The guide can be found online at www.firstinrecycledflooring.com. Click on the "Ultimate Service" button to access the "Technical Documents" link.

DISCLAIMER & WARRANTY

DISCLAIMER

The *Ultimate Systems Rubber Tile Installation Guide* represents typical installation methods. Generally accepted installation practices should be followed. Use of a trained installation professional is recommended for best results. Ultimate Systems does not warrant any installation work and specifically disclaims liability for any direct or indirect personal injury, property damage or other costs or losses resulting from incorrect or inadequate installations.

WARRANTY

Ultimate Systems LTD. shall warranty the flooring materials it has supplied to be free from manufacturing defects in MATERIAL ONLY for a period of one (1) year from date of substantial completion and the flooring contractor shall warrant the installation to be free from defects for the same period. The foregoing warranty is in lieu of and excludes all other warranties not expressly set forth herein, whether express or implied, including, but not limited to any implied warranties of merchantability or fitness.

Skive/knife marks on product is an inherent characteristic of using recycled rubber and will not be viewed as an appropriate reason for rejecting the final finished product.

Ultimate Systems LTD. and its contractors shall not be liable for incidental or consequential losses, damages, or expenses, directly or indirectly arising from the sale, handling or use of the goods, or from any other cause relating thereto, and their liability hereunder in any case is expressly limited to the replacement of goods of complying with this agreement, or, at their election, to the repayment of, or crediting Buyer with, an amount equal to the purchase price of such goods, whether such claims are for breach of warranty negligence.



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