

EXTENDING THE LIFE OF EXTRACTED NATURAL RESOURCES

Tire Veneer Installation

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Before Starting Installation

1. Read all product and subfloor preparation instructions, adhesive instructions, warranty and other disclaimers BEFORE you begin to install Tire Veneer.

2. The installation surface and Tire Veneer need to be clean and dry prior to installation. Subfloors to be installed with Tire Veneer should be maintained at a consistent temperature from 24 to 48 hours before, during and after the installation. The optimum and recommended temperature is 68 °F (18°C) and should be maintained in the installation area.

3. Room temperature variations can affect Tire Veneer as the material can expand (warm) or contract (cold). Temperature requirements for the flooring adhesive should be reviewed as well.

4. Mechanical handling may be necessary to move the Tire Veneer near to where it will be installed.

5. Prior to starting any installation, thoroughly inspect all Tire Veneer and verify -

- Material type, material color and style are correct
- Material is the correct size and thickness
- Amount of material supplied is correct
- No visual defects are present on the material

Note: Skive or knife marks on product is an inherent characteristic of compression molded recycled crumb rubber and is not considered a defect.

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

6. Tire Veneer can expand (warm) or contract (cold) with temperature and humidity changes. The Tire Veneer 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. A full pallet of rolled material, depending upon the outside temperature can take as long as 5 to 7 days to acclimate if left on the pallet. If possible, the rolls or tiles should be positioned near where they will be installed, unrolled or unstacked to allow for faster acclimation. If heaters are used, be sure to maintain a consistent temperature throughout the installation process. See step 2 above. Tire Veneer rolls are wound tightly upon packaging and will retain a certain amount of memory when unrolled.

7. If Tire Veneer rolls or tiles are stored prior to installation, always lay the rolls on their side and lay tiles flat. Tire Veneer rolls or tiles stored on end will result in curled edges. Edge curl will need to be trimmed straight before installing the material. Always store rubber material on a clean, dry and flat surface. It is recommended that Tire Veneer be stored at a minimum of 55 ° F (13 ° C) with less than 50% humidity.

8. For best results, use a one-part polyurethane adhesive to glue Tire Veneer to the subfloor. See Tire Veneer Accessories for Installations for adhesive recommendation.

***** IMPORTANT *** DO NOT use petroleum-based products in conjunction with Tire Veneer. This includes solvents, adhesives or sealants.**

9. An adhesive bond test should be completed in several locations across the floor. Glue down 2' x 2' pieces of rubber with recommended adhesive 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.

10. Tire Veneer that is 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 Tire Veneer after all other work is completed in the installation area.

Recommended Installation Tools

• Rubber gloves	• Safety glasses	• Knee pads
• Measuring tape	• Metal carpenter's square	• Chalk line
• Pen or Marker	• Utility knife	• Extra knife blades
• Polyurethane flooring adhesive	• Adhesive trowels (1/16" x 1/16" V-notch)	• 75 lb. sectional roller
• 3M "Long-Mask #2090 tape	• Mineral spirits	• Tarpaulin

Subfloor Requirements

1. Tire Veneer 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 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 rolled goods 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 should 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.
 6. New concrete should be allowed to cure for a minimum of 60 days prior to installing Tire Veneer. 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. See Wagner Meters at – <http://www.wagnermeters.com/concretemoisture.php> for digital measuring of concrete moisture. (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.

Prior to Installation

1. Installation of the Tire Veneer 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 of this document.
2. Roll out the Tire Veneer rolls and allow the material to "relax." The material should be acclimated to the installation room temperature for at least 24 hours.
3. Tire Veneer tiles are die-cut or water jet cut, ready to install. Rolls come pre-edged, however it is always advisable to check the edges before installing.

4. Orders for more than one roll of rubber will be marked with letters (i.e. "A", "B", "C") to insure that each roll is positioned correctly during installation. Roll "A" should be positioned next to roll "B" and so on. If rubber rolls are installed out of sequence, each roll could potentially result in undesirable seam gaps.
5. Pre-cut Tire Veneer rolls being sure to leave 1" to 2" of extra material at the beginning and end of the roll. This will allow for an exact fit against a wall or for seaming at each end. Trim rolls to fit upon adhering to the subfloor. When possible, any cuts should be against the wall.
6. Carefully read all adhesive application instructions prior to using the product.

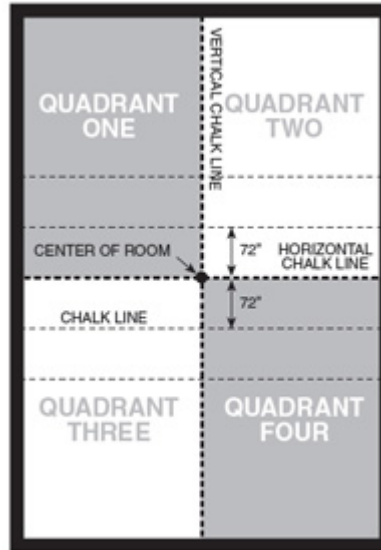
Roll Installation Instructions

1. Beginning along a straight wall, lay the first sheet of Tire Veneer. If the walls are not square, use a chalk line to lay the sheet.
2. Apply adhesive using a 1/16" x 1/16" V-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.**
3. 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.**
4. Fold the first sheet of Tire Veneer lengthwise (half the width of the roll) and spread the adhesive over the subfloor using the u-notch trowel.
5. Lay the material into the wet adhesive carefully. Dropping the rubber sheet into the adhesive will trap air under the flooring.
6. Immediately roll the rubber flooring with a 75 lb. roller. Roll the width first, then the length. Roll flooring again in 30 - 45 minutes. Failure to roll the sheet while the adhesive is still soft is the second major cause of bonding failure. **BANKED TURNS:** Immediately after rolling, weigh down the flooring with sandbags to allow the rubber to conform to the subfloor contour.
7. Repeat steps #4 through #6 for the second half of the first sheet.
8. Position the second sheet flush against the first sheet. Do not place pressure on the first sheet as the glue will still be wet and may shift the sheet. Verify there are no gaps between the rubber sheets and the seams are tight.
9. Continue to place the rubber material adjacent to the previous sheet laid until the entire floor is covered. Immediately roll each sheet with a 75 lb. roller.
10. Hand roll all seams after the floor has been rolled. If there is some gapping in the seams, masking tape (3M "long Mask" #2090 is preferred) can be used to pull the seams together. **DO NOT USE DUCT TAPE** as it may leave a residue. Once the floor has set the tape may be removed.
11. 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. Gloves are strongly recommended when applying floor adhesive.

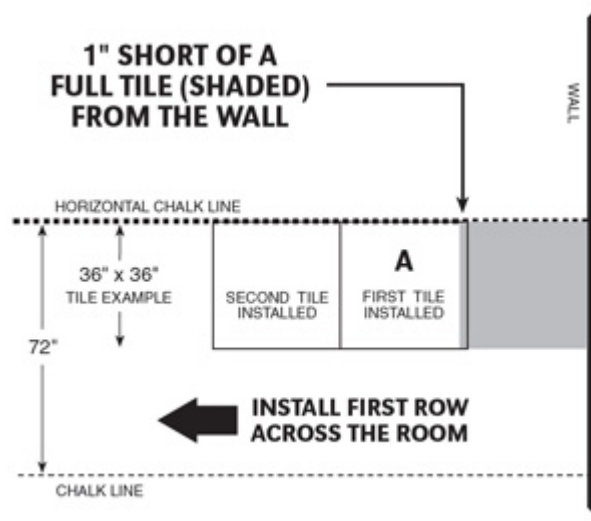
*****IMPORTANT*** DO NOT ALLOW foot traffic or rolling loads on the newly installed floor for a minimum of 24 hours. Permanent indentations in the adhesive could result and prevent a secure bond to the subfloor. For maximum strength, allow adhesive to cure for 72 hours.**

Tile 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 thus be split into 4 quadrants.
2. Proceed to set additional chalk lines at 72-inch (1.83m) 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.



3. Apply adhesive using a 1/16" x 1/16" V-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 RENOTCH THE TROWEL.**
4. Review the flooring adhesive usage guidelines for spread rate and open times for curing. Higher temperatures and humidity will cause the adhesive to set up quickly. Low temperatures and low humidity will cause the adhesive to set up at a lower rate. The installer should monitor the on-site conditions and adjust accordingly. **DO NOT LET THE ADHESIVE SKIM OVER.**
 - Approximately one 5 gallon pail of polyurethane adhesive should cover roughly 375 sq. ft. (75sf/gal).
 - If adhesive is spread more than 100 sf per gallon, an insufficient amount of adhesive has been used and the tiles will not be permanently bonded. Rough surfaces will require more adhesive.
5. Closely following the chalk line, install the first row of tiles. Start the first full tile (A below) about 1" short of 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 tile and cause bubbles or blisters. 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 on installed tiles across the room. Make sure this course is properly set and even before continuing the tile installation.

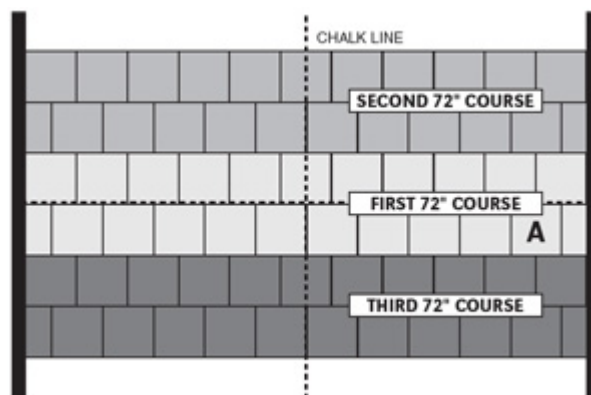
7. SQUARE TILES ONLY: Start the second row of tiles halfway between the joint of the first two tiles to establish a staggered joint or "brick wall" type pattern. Installing by this method eliminates pressure on the tile corners and results in a better match at the seams.

8. Cut tiles 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, weight 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 diagram below.



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 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 laying 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. It is strongly recommended that gloves be worn when apply the 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

Tire Veneer does 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.

RUBBER ODOR: All products made with SBR rubber, including automobile tires, have a distinct rubber odor. The Tire Veneer will eventually off-gas leaving no noticeable odor. Under ideal conditions, the Tire Veneer, upon arrival to the job site, should be unpacked immediately and the tiles or rolls laid out near where they are to be installed. This will allow them to off-gas or "breathe" as they acclimate. The more time available for this the better. Recognizing that ideal conditions rarely exist, after installation, increasing the room temperature as high as possible overnight will accelerate the off-gassing process.

See Tire Veneer Accessories for Installations for recommended floor cleaners and sealers.

Cleaning & Maintenance

For regular maintenance, review the Tire Veneer Maintenance & Care guide

Temporary Flooring

Tire Veneer may be installed unbonded for temporary usage. Double faced carpet tape is often used to keep tiles from shifting or to hold down the ends of rolls.

Non-Flooring Applications

Tire Veneer tiles or rolls may be installed on vertical surfaces for wall protection or a pin-up material.

HEAT ABSORPTION: Tire Veneer, being a primarily black color, will absorb heat energy when exposed to sun light. It will release this heat energy when exposure to the sun ends. When Tire Veneer is used vertically as a pin-up or bulletin board material in an enclosed case, it is important to allow adequate ventilation at the bottom and at the top of the case so that the stored heat energy in the Tire Veneer can be passively vented out of the case to prevent condensation on the interior glass surface from the cooling exterior conditions when sun exposure ends.

CUTTING TIRE VENEER: Tire Veneer may be cut with a utility knife or similar razor-blade type tool. Tire Veneer may also be drilled, punched, laser cut, water-jet cut, die cut and rough-cut with hand or power saws. The material requires considerable cutting pressure and when cutting by hand. It cuts best one sheet at a time using a metal straight edge.

ADHESIVE OPTION: Experience has shown that a high quality contact adhesive such as 3M Scotch Grip 1357 Neutral High Performance Contact Adhesive provides excellent results for installing Tire Veneer to any substrate including vertical or curved surfaces.

Please contact us if you need further information or help with a specific application.