
INSTALLATION GUIDELINES/Site-Finished Signature Naturals



FINE BAMBOO FLOORING, PANELS & WORKTOPS

Please read Teragren LLC's [warranty](#), maintenance instructions, and **ALL** of the following guidelines before opening any packaging or beginning your flooring installation. This information is provided as a courtesy to our customers and is meant to be understood as an installation guideline only.

Teragren LLC recommends using the services of a professional hardwood flooring installer. For more information and for guidelines on the installation of hardwood flooring, please contact the *National Wood Flooring Association* (800-422-4556) or review their [website](#).

Because bamboo is a natural fiber, it is not uncommon for natural variations in color to occur within and between individual flooring planks. Teragren's [warranty](#) does not cover variations in color either in individual planks, between the planks, or the variations in color between our product samples and the installed flooring. An industry standard of 5% material overage should be added to the actual square footage required for cutting and grading allowances.

Prior to installation, the installer and/or homeowner should inspect all material to ensure the material received matches the work order. Any visible defects or discrepancies should immediately be reported to your distributor or dealer. Installation of any material serves as acceptance of that material as delivered.

It is considered the installer/owner's responsibility not to install flooring having finish, manufacturing, or unacceptable naturally occurring material variations. Individual planks with defects should not be installed or the defect should be cut-out prior to installation. The Teragren warranty does not cover materials with visible defects once they are installed.

Teragren LLC makes no warranty or guarantee of the quality of the chosen installer's work or of a particular installation performed by the installer. Teragren LLC disclaims all liability for any errors or improprieties in the installation of its products by an installer.

Pre-Installation Notes

It is considered the sole responsibility of the installer/owner to determine if the job site's sub-floor and environmental conditions are suitable for the installation of Teragren flooring and trim.

Teragren flooring should be allowed to acclimate on the job site for a minimum of 3 days. Open each box and remove the shrink-wrap and foam, and stack the flooring planks off the ground to allow for complete air circulation. This acclimation period should occur at expected normal room temperature and humidity levels before and after installation. Damp or cold conditions before and during installation should be avoided. The maximum difference in moisture content between the sub-floor and the flooring material should be no more than 3%. On-site humidity levels should remain between 40% and 60%. It is important to note that gaps in the floor may come and go seasonally due to temperature and relative humidity changes. The amount of movement depends upon the temperature, moisture content of the flooring and sub-flooring (wood moves as moisture content rises and falls) and the dimensional stability of the material.

Teragren Signature Naturals solid-strip, site-finished bamboo flooring is best applied by nailing, stapling or gluing the planks to a wood sub-floor. Note: If gluing directly to a concrete slab, installation may only be done at or above grade. **Do not install below grade.** These Teragren products may also be installed over radiant floor heating systems (see Radiant Heating Systems section below). Note: Teragren manufactures other prefinished bamboo flooring styles for installation below grade.

Tools Recommended

Nail or Staple Installation: Hammer (1 lb.), tape measure, chalk line, carpenter's square, scribing block, flat bar, 1/2" wedges, saw, chop saw, manual or pneumatic tongue & groove flooring stapler or nailer, 1-1/2" to 2" long 15-1/2 gauge 1/2" crown staples or equivalent, or for the nailer 1-1/2" to 2" 15-1/2 gauge cleats, moisture barrier such as 15-lb. asphalt saturated felt paper or equivalent.

Glue-down Installation: Hammer (1 lb.), tape measure, chalk line, carpenter's square, scribing block, flat bar, 1/2" wedges, saw, chop saw, premium wood flooring adhesive, low-adhesive painters tape.

Sub-Floors

Wood sub-flooring surfaces must be clean, dry and, if gluing the flooring, free of contaminants that would interfere with an adhesive bond. A moisture-vapor retardant such as 6-mil polyethylene film should be placed in crawl spaces. Fix any squeaks or movement in the sub-floor prior to installation. The sub-floor surface must also be level and smooth prior to the installation of any flooring. High spots should be sanded flat. Teragren recommends using 3/4" CDX plywood as a nailing substrate or for a glue application, 5/8" CDX plywood for 12" on center and 16" on center floors, and 3/4" CDX plywood for 24" on center floors. A sub-floor of 1-1/8" plywood over joists at 16" on center is recommended for an optimal installation.

Concrete sub-floors must be tested for moisture in more than one place for consistent readings. Teragren recommends using the Calcium Chloride Test Method to quantify the volume of moisture vapor radiating from a concrete slab surface over time and if vapor pressure exceeds 3 lbs. per 1000 sq. ft. in 24 hours to not install the floor. Concrete should be checked for flatness prior to installation and any low spots or voids should be filled to a minimum of 3/16" within a 10' radius or 1/8" in a 6' radius, and high spots ground to surface. Surface must be smooth and free of debris, oils, grease and solvents.

Nail or Staple Down

Prior to installation, place 15-lb. asphalt saturated felt paper or equivalent, meeting ASTM D4869 standards, over the entire sub-floor following the manufacturer's instructions. Installed flooring should be square with the space and perpendicular to the joists, leaving a 1/2" expansion space from base plate or wall. Starter rows should be held firmly in place by wedging or blind nailing. Once starter rows are secure, additional rows should be blind-nailed directly above the tongue at a 45° to 50° angle to the face of each plank. Fasteners should be spaced at 10" to 12" intervals per plank. Nails or cleats should not be placed closer than 6" from the end of planks to prevent splitting of the tongue. When choosing a nailer, be certain the model is appropriate for the tongue-and-groove profiles so as not to damage the edge or surface of the flooring. Successful installation testing has been performed by the manufacturers of the following staplers and nailers:

Bostitch Mark III & Mark III Foot Kit
Port-A-Nails Model 402 Manual Nailer
Port-A-Nails Model 421 Portamatic Nailer
Port-A-Nails Model TL Portamatic Nailer Hammerhead
Port-A-Nails Model 472 Stapler Hammerhead S
Other staplers and nailers may work equally well.

Glue-down Installation

For glue-down applications, Teragren recommends using a premium wood-flooring adhesive which contains no water (for example, Bostik's Best). The sub-floor must be extremely flat, and the flooring should be square with the space and run perpendicular to the joists leaving a 1/2" expansion space from base plate or wall. Starter rows should be held firmly in place by wedging or blind nailing. Once the starter rows are secure, apply the adhesive in a Wet-Lay or Walk-on-Work method of installation. It is helpful to apply weight to hold flooring down during drying time. All adhesive spillage should be removed immediately, using methods defined within the adhesive manufacturer's instructions, to prevent permanent damage to the flooring.

Wet-lay Method: Apply adhesive directly to substrate with a suitable trowel. Immediately place flooring onto "wet" adhesive. Follow all of the adhesive manufacturer's instructions.

Walk-on-work Method: Apply adhesive directly to substrate with a suitable trowel and allow it to develop tack (which could take an hour or more depending on temperature and humidity). Once the adhesive is tacky begin installing the flooring directly onto the adhesive. Immediately roll finished installation with 150-lb. roller. The room, flooring and adhesive should all be conditioned at room temperature for 72 hours before and after installation. Follow all of the adhesive manufacturer's instructions.

On Floors Wider Than 20'

In an effort to minimize expansion, floors that are wider than 20' may require more or less spacing depending on geographical area, interior climate control and time of the year installed. In some areas, additional spacing may not be necessary. Where spacing is required, use a washer or removable spacer to leave additional space every few rows and/or start in center of room and work out to both sides. *Reference: National Wood Flooring Association Technical Reference Manual.*

Radiant Floors

Teragren solid-strip site-finished bamboo flooring is suitable for installation over many radiant heating systems as long as the surface temperature of the installed flooring never exceeds 85°F. Due to the fact that radiant heating systems create “dry” heat, it is essential that the relative humidity in the installation environment be maintained between 40% and 60% and that the maximum difference in moisture content between the sub-floor and the flooring material never exceed 3%. The owner/installer assumes sole responsibility for ensuring that the job site has environmental conditions/controls suitable for the installation of Teragren bamboo flooring over the chosen radiant heating system. The radiant heat system needs to be in operation for at least 7 days prior to installation, shut off 4 hours prior to installation, and then returned to operation once the installation is complete. When choosing an installer for application over radiant heat, consider a member of the Radiant Panel Association.

Sanding Guidelines

Due to the close tolerances to which Teragren products are milled, a properly installed floor requires only enough sanding to remove any minor height differences between planks to achieve the degree of smoothness desired. Teragren does not recommend sanding with 36 or 40 grit abrasives, especially across grain due to the tendency to tear up fibers from the flooring. Teragren recommends the following sanding procedures:

Belt or drum sander:

First cut:	60 or 80 grit, oblique to grain both ways
Edger:	First cut: 80 grit
Clean and Sweep:	
Belt or drum sander:	Second Cut: 80 or 100 grit, with the grain
Clean and Sweep:	Spot fill or trowel-fill floor
Belt or drum sander	Fine Cut: 100 or 120 grit
Edger:	Fine Cut: 100 or 120 grit
Clean and Sweep:	Hand sand perimeter and scraped areas or use oscillating sander if stain is to be applied. Use buffing machine and 100-180 grit screen and up to 180 grit pad if floor is to have a natural finish. Use 100-120 grit screen if stain is to be applied.

Stains & Finishes

Any common hardwood flooring finish may be applied. As an environmentally conscious company, Teragren prefers to use non-toxic oil or water-based urethanes.

Maintenance

Teragren recommends vacuuming or sweeping in order to remove dirt and grit prior to cleaning the flooring. Remove any liquid spills promptly. Exposure to the sun and ultra-violet light can accelerate oxidation (color- change). Periodically rearrange rugs and furniture to allow for consistent aging of the flooring. Use area rugs in high traffic areas. Install wood guards on the feet or legs of furniture.

Do not use wax, oil soap or other household cleaners. Teragren recommends using either *WoodWise Floor Cleaner* by [Design Hardwood Products](#) (800.424.7092), or *Bona Swedish Formula® MicroPlus Hardwood Floor Cleaner* by [BonaKemi USA, Inc.](#) (800.574.4674).

Proper care and maintenance can extend the life of your floor for many years; however, at some time a re-coat or total refinishing may be desirable. To re-coat your floor and remain in conformance with the Teragren warranty, follow the manufacturer’s instructions at either of the following:

[Basic Coatings](#) Tykote Sandless Re-coating System (800.441.1934) or *BonaPrep™ Re-coating Adhesion System* by [BonaKemi USA](#) (800.872.5515).

Contact your Teragren distributor or retailer for more information or [email tech support](#).



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