



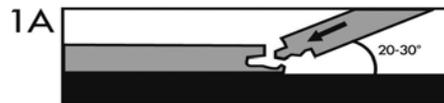
Click-Lock Flooring Installation Instructions

General:

Green Choice Click Lock Flooring is designed to be installed with or without using glue. The panels can be clicked together simply, with the ingenious shape of the tongue and groove. This style of flooring is unique in that you can install the planks using either of two installation methods:

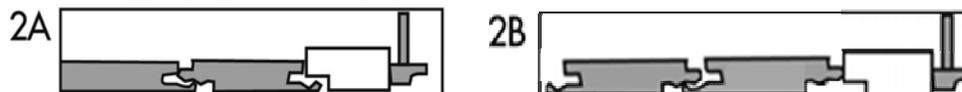
Method A (Angle-In installation method)

- Position the panel to be installed at an angle of 20 to 30° to the panel already installed.
- Move the panel gently up and down while exerting forward pressure. The panels will automatically click into place. You can either insert the tongue into the groove, or the groove onto the tongue. The tongue into the groove is the easiest method. (See diagram)



Method B (Flat Installation method)

- The panels can also be tapped into each other without lifting. For this method, you must use a special tapping block. The planks should not be joined with a single tap and the tapping block should be sitting flat on the floor. To avoid damaging the panels, you must tap them together gradually. (See diagram)
- Use this method only in cases where you are unable to use the Angle-In method. The rest of your floor should be installed using the Angle-In method.



Pre-Installation guidelines:

These installation guidelines are at the suggestion of Green Choice Flooring International, Inc. and are intended to help our customers develop a plan to install their Green Choice flooring. It is also recommend that you consult a professional hardwood flooring installer, as well as the National Hardwood Flooring Association at 800-422-4556, or www.nwfa.org for further instructions.

Please carefully inspect all flooring material before installation. Warranties and claims are not covered after materials with visible defects have been installed. Verify that the correct product has been provided (species, color, grain, size, and quantity). Bamboo, Eucalyptus, Mosaic, and Mulberry are products of nature. Variations in color and grain patterns are normal. Stain saturation variation or lack of saturation into the wire brush/distressed voids is considered normal. Be sure to add at least 5% to 10% additional material, based on industry standards, to your actual square footage to allow for cutting and waste. Green Choice Flooring will not be responsible for installation of any defective material, the quality of installation, or any costs associated with a poorly installed floor. If any product is deemed unacceptable, please contact your supplier immediately, as any flooring that has been installed is considered accepted by the owner and installer.

Things to consider before installation:

- The click lock system can be floated or glued. With a floating installation, you can walk on the floor during and immediately after installation.
- You can choose where you want to begin. Think about what will be the easiest way to install the floor. Whether you are left handed or right handed, you can work in the direction you prefer.
- Make sure that panels are mixed sufficiently when you install them so that you do not end up with too many identical, light or dark panels next to each other.
- Check all panels in daylight before and during installation. Defective panels must never be used.
- The floor must be installed under the correct environmental conditions. The ideal conditions are 65-75 degrees F and at a relative humidity of 40-60%.
- In order to allow for some seasonal expansion and contraction, it is vital that the floor is able to expand and contract. For this reason, make sure you leave a ½” expansion gap on all sides of the floor, around pipes, thresholds, under doors and around any fixed/stationary objects (floor vents, kitchen islands etc.)
- Large rooms greater than 20 feet in any direction must have ½” expansion joints. Expansion joints can be finished using a molding that is attached to the sub-floor. Some installations may require a channel attached to the subfloor for molding installation.
- Make sure the end joints of the panels in two successive rows are never in line. Always ensure that the joints are staggered by at least 6 inches.

Job-site conditions and planning requirements:

The building in which the flooring will be installed must be completely enclosed. All windows and doors must be fully functional. Any drywall, masonry, concrete or plaster work must be finished and allowed sufficient time to completely dry. If these conditions are not followed, the moisture level of the air could be too high. HVAC systems must be operational for at least 10 days prior to installation. The room temperature must be within a range of 65 to 75 degrees. The relative humidity level of the air must be between 40% and 60% and remain this way year round. Wood is a product that will expand and contract depending on the moisture content of the air. These conditions are also necessary to properly acclimate your flooring to its new home. Gaps in your flooring can be seasonal and can be greatly minimized by using the HVAC systems to equalize the moisture level of the air. Failure to equalize the moisture level may result in changes to the appearance of your flooring, including gapping, cupping and cracking. Be sure to acclimate your flooring, before installation, by opening boxes and removing shrink wrap film to let air circulate around your flooring. Acclimation should occur for a minimum of 4 days and may progress more slowly in some climates due to the higher density of strand woven material. Suitable acclimation has occurred when the moisture content is within 2% of the subfloor’s moisture level. Continue to take moisture readings of the flooring and subfloor throughout installation to

ensure even acclimation. Be sure that the moisture meter that you are using is designed to read a strand woven product, if applicable, and that you are using the correct setting for the species of wood being installed. Please consult the NWFA Guidelines for more detailed information on regional acclimation.

During the inspection of your subfloor, you must determine the moisture level using a metering device for either concrete or wood depending on the type of sub-floor you have. The level of moisture in your subfloor will also be dependent on whether or not you have a crawl space or a full basement. With crawl spaces there should be a minimum of 24" from the dirt floor to your joists. You must also lay down a polyethylene (6 mil) film as a vapor barrier to minimize moisture transfer from the crawl space to your sub-floor. Crawl spaces should also be well ventilated.

Tools for Installing the Floor:

For best results, it is essential that you follow the installation instructions exactly. Besides the normal tools for installing floor (i.e. rubber soft mallet, saw, pencil, tape measure etc.) you will also need the following tools:

- Pull bar
- Spacers (½")
- Special tapping block
- Low adhesive Painter's tape
- Floor maintenance products
- Vapor barrier sheeting

It will generally be necessary to cut some flooring panels during installation. To obtain a clean cut, use a high quality fine toothed blade, with the flooring wear surface side facing down when you use a jigsaw, saber saw or circular handsaw, and facing up when you use a handsaw, table saw or a crosscut saw. Make use of painter's tape or similar to reduce edge splinters. Sanding the cut edge with 180 to 220 grit sand paper, will burnish the edge smooth.

Preparing the room:

Check that doors can still open and close before the floor has been installed (with a minimum of 3/8" clearance). Dry fit a piece of flooring material to check this.

Make sure that the sub-floor is flat, clean and dry. Any unevenness greater than 1/16" over the length of 40" must be leveled out. To level any unevenness in the sub floor, use a leveling compound to fill in, and grind down high spots. Loose areas in wood sub-floors should also be checked. To avoid any possible squeaks in your sub-flooring, make sure to nail or screw every 6" along joists. Sub-floors should be a minimum of 5/8" to 3/4" thick. 5/8" thick CDX plywood is recommended for 12" and 16" on center floors. 3/4" CDX plywood is recommended for 24" on center floors. Always check local building codes for other requirements.

Concrete sub-floors should be checked and measured by a qualified person with a concrete moisture meter at each outside wall as well as several times in the interior of the floor. Other concrete moisture tests are also acceptable when performed by a qualified person. Make sure concrete is fully cured for at least 45 days. Please consult with your concrete provider to determine the timeframe for being fully cured. There must not be a difference of more than 2% between the moisture level of the flooring and the moisture level of the sub-floor. The moisture content of the sub-flooring must not exceed 10%. If the difference is more than 2%, the source of the moisture must be located and corrected before installation. Concrete floors should always have the moisture barrier extend to the exterior so that no moisture can weep in.

If a calcium chloride test shows moisture content greater than 3 lbs. per 1,000 square feet, there is too much moisture present and the source of moisture must be located and corrected before installation. Do not install over concrete unless you are sure it remains dry year round. Areas that are currently dry may become wet in the future.

A 6 mil vapor barrier or adhesive with vapor barrier qualities is recommended for some installation environments. Please consult with a qualified flooring installation professional. To prevent future issues with cupping, buckling, or expansion it is strongly recommended that all installations utilize a vapor barrier.

Beginning your Installation:

Make sure to open several different cartons of flooring to begin working out of at the same time. This will ensure the best possible color and grain distribution. Please be sure to consult with the end consumer to plan the layout so as to meet their color variation expectations.

Concrete – New

- The sub-floor should be clean, free from dirt and other debris, and relatively flat and level. Normal requirements call for no more than 3/16" difference in a 10ft radius. Any unevenness greater than 1/16" over the length of 40" must be leveled out. To level any unevenness in the sub floor, use a leveling compound to fill in, and grind down high spots. While it may not be critical to be exact, it will provide a more solid base for the flooring which will help to eliminate movement or hollow sounds when walked on.
- Let the vapor barrier run up the wall 2" before cutting to size.

Concrete – Renovation

- The sub-floor should be clean, free from dirt and other debris, and relatively flat and level. Normal requirements call for no more than 3/16" difference in a 10ft radius. Any unevenness greater than 1/16" over the length of 40" must be leveled out. To level any unevenness in the sub floor, use a leveling compound to fill in, and grind down high spots. While it may not be critical to be exact, it will provide a more solid base for the flooring which will help to eliminate movement or hollow sounds when walked on.
- Remove all wall base, shoe molding, and cut door casings. Wall base and shoe molding can be replaced after the floor is installed.
- Remove any old floor covering (carpet, felt etc.) first.
- Sealed floor covering (PVC, linoleum, VCT etc.) does not have to be removed if it is in good condition with no loose pieces.
- Let the vapor barrier run up the wall 2" before cutting to size. Molding pieces will be attached to cover this later.

Wood Subfloor

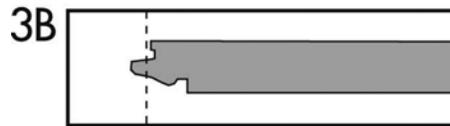
- The sub-floor should be clean, free from dirt and other debris, and relatively flat and level. Normal requirements call for no more than 3/16" difference in a 10ft radius. Any unevenness greater than 1/16" over the length of 40" must be leveled out. To level any unevenness in the sub floor, use a

leveling compound to fill in, and grind down high spots. While it may not be critical to be exact, it will provide a more solid base for the flooring which will help to eliminate movement or hollow sounds when walked on.

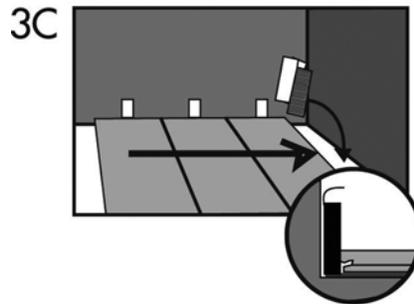
- Remove all wall base, shoe molding, and cut door casings. Wall base and shoe molding can be replaced after the floor is installed.
- Remove any existing floor covering.
- Make sure the sub-floor is stable. Nail down any loose parts, sand high spots, and use a leveling compound to fill in low spots.
- Let the vapor barrier run up the wall 2" before cutting to size. Molding pieces can be attached to cover this later.
- Install panels crosswise to the direction of the existing sub-floor.
- It is necessary that the crawl space under the plank floor be sufficiently ventilated. Remove any obstacles and provide sufficient ventilation (minimum of 1-1/2") of total ventilation space per 40" of floor. The moisture content of the subfloor should not exceed 10%.

Plank Installation:

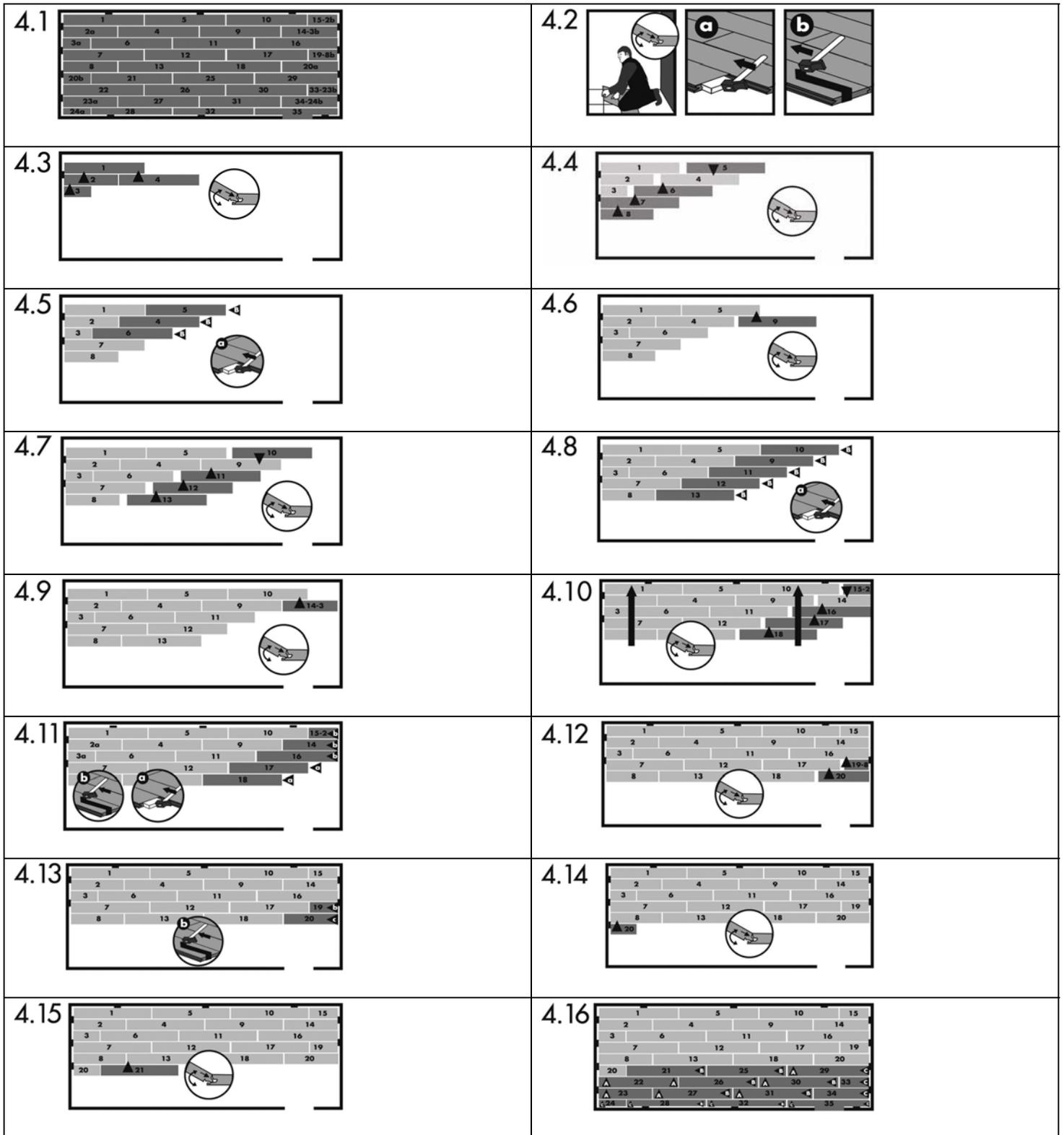
Begin the first row with a whole plank. First cut off the tongue on both the long and short sides (see diagram 3B)



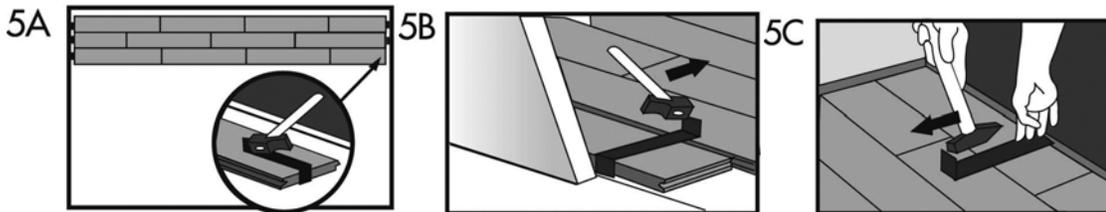
Put the plank with the cut off side against the wall. Put spacers between the planks and the wall. This will ensure that your expansion joint is wide enough (1/2"). (see diagram 3C)



The diagrams below indicate where the panels are clicked together by angling up and down or where they are tapped together flat. Follow the diagrams precisely. (See diagrams 4.1 through 4.16.)



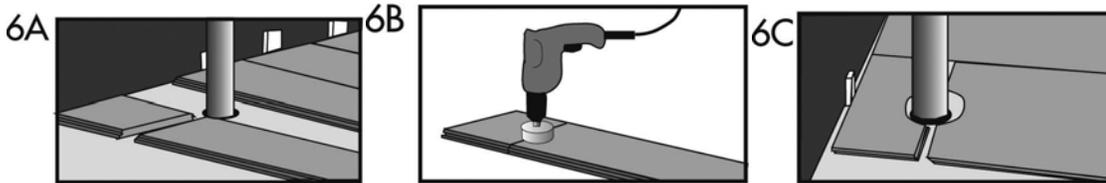
In places where it is too difficult to install the planks with the tapping block (i.e. against the wall,) you can tap them together using the pull bar and a hammer (see diagrams 5A-5B-5C.)



There must be a ½” expansion gap between the last row and the wall. Keep this in mind when cutting the last row of panels.

Installation Obstacles:

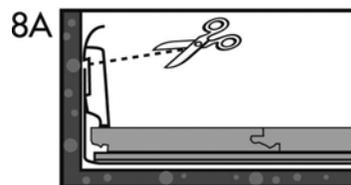
In rows where there is a pipe or other obstacle, make sure the obstacle falls exactly in line with the short side of two panels. Take a drill bit with the same diameter as the pipe plus ½” for expansion. Click the panels together on the short side and drill a hole in the center of the joint between the two panels. Now you can install the panels in the floor. (See diagrams 6A, 6B, 6C.)



Finishing:

Remove all spacers; Install the molding on the wall, over the plastic membrane that runs up the wall from under the floor. Never attach the molding to the floor.

This method allows the floor to expand and contract under the molding. (See diagram 8A.)



For a perfect finish around pipes, use a rosette, or flexible, moisture-free caulk.

In places where profiles or skirting cannot be placed, fill expansion gaps with flexible, moisture-free caulk.

Radiant Heat Installations:

Please consult with the RPA (Radiant Professionals Alliance, 877-427-6601, www.radiantprofessionalsalliance.org). Green Choice Flooring is not warranted for use over radiant heat systems heated by electric elements. Hydronic systems are the only suitable types of systems when planning to install a wood floor on the surface. These Hydronic systems must include temperature sensors in the floor and have thermostat(s) outdoors that allow the system to regulate the

water temperature allowing for expected heat loss. Installations of flooring in buildings, or multi-level complexes where the water temperature is not regulated individually per room area are not warranted.

Prior to and during installation over radiant heat, moisture testing must be done by a qualified person and documented as explained in these installation instructions.

The subfloor surface must not ever exceed 82°F in any location. The thermostat setting must always remain within 15°F of the normal operational setting, and should never be turned off. Excessive heat, rapid heating, and/or failure to maintain humidity levels between 40% and 60% are likely to cause cracking, cupping and other forms of floor failure. Slight surface checking (cracking), particularly at the ends of planks, should be expected for radiant heat installations and are not a product failure. Concrete must be allowed to properly cure and dry prior to installation. The Hydronic system should then be operated at 2/3 maximum output for a minimum of 2 weeks prior to installation of flooring to allow the moisture levels between the subfloor, flooring and relative humidity to equalize. This procedure must be followed regardless of the time of year. Four (4) days prior to flooring installation, adjust the thermostat to 65°F. As always, relative humidity of the jobsite must be maintained between 40% and 60%. Use of a humidification/dehumidification system may be required to maintain the proper humidity levels, particularly over radiant heat. Failure to maintain proper humidity levels will void all warranties. Beginning 48 hours after installation, slowly raise the temperature of the heating system to its preferred operating temperature over a period of 5 days.



Practical Click- Lock Flooring Installation Tips

- It is recommended that the industry standard of 5-10 percent be added to the actual footage of required flooring materials as an allowance for cutting and waste during installation.
- Installation of a factory-finished hardwood floor requires more care than a conventional floor to prevent damaging the floor's finish during installation. Frequent use of a vacuum cleaner during installation is highly recommended to eliminate sawdust and wood chips.
- Care should be taken to remove all sand, grit and any other debris which could act as an abrasive and scratch your flooring.
- A sharp, fine-tooth (finishing) circular/miter saw blade is recommended for cutting. The use of painter's tape on the area to be cut makes for a cleaner cut.
- Always use a tapping block and never hit flooring directly to avoid fracturing the flooring edge. A small piece of your flooring makes a good tapping block.
- It is recommended that door casings be cut at the bottom so flooring will fit under it instead of scribing the flooring to fit around the door jambs.
- Leave ½" space at each wall or obstruction for expansion of flooring. The expansion gap can be covered with molding.
- Take care of moisture problems or potential problems BEFORE installation. Special precautions should be taken below grade. A vapor barrier between the sub-floor and the boards will help keep the humidity content of the flooring more stable. If your flooring installation is hampered by a moisture problem, contact a professional installer to improve the situation. A moisture test should be performed on any sub flooring before installation occurs by a qualified person.
- To avoid a pattern of end joints, cut the initial boards in each row at varying lengths so that all the board ends are staggered throughout the installation. Ensure that the joints are at least six inches apart.
- Before installing, lay out the flooring in a rough fashion according to how you would like it to appear. Arrange the flooring's natural range of color in a manner that is pleasing to your eye, keeping in mind the preferences of the owner. Remember, like other natural products, some color variation is expected in flooring.
- Slightly bent or bowed boards are not defective. These boards may be a little harder to install, but they will lie flat after installation. Use of weights may assist in this application.
- Green Choice accessories should be pre-drilled to avoid cracking or splitting. We recommend that a runner be used on all stair installations to minimize scratching caused by the step and scuff tendency of traffic.