A WARNING: This product can expose you to formaldehyde gas which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

CAUTION: ASBESTOS IN EXISTING FLOOR: Home Decorators Collections product does not contain asbestos. Existing installed resilient flooring and asphaltic adhesive may contain asbestos fillers or crystalline silica. Do not sand, dry sweep, dry scrape, drill, saw, bead-blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic "cutback" adhesive or other adhesive. See "Recommended Work Practices for Removal of Resilient Floor Coverings" (rfci.com) for detailed information and instructions on removing all resilient covering structures.

**WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

## **Safety and Health Precautions**

Power tools can be dangerous. Operate in strict accordance to manufacturer's operating instructions and safety precautions. Unsafe and improper use can cause serious injuries. Avoid inhalation and exposures to wood dust by mechanical means and by wearing personal protective equipment. Wear appropriate personal protective equipment (PPE) which includes NIOSH or OSHA approve dust masks, safety goggles and work gloves.

This flooring product comes with a manufacturer Limited Wear Warranty. The warranty applies to the original purchaser of the flooring. It warrants the original purchaser that the finish surface will not wear through for the duration of the stated warranty from the date of purchase. Contact our Customer Service Team at 800-986-3460 to request a written copy which provides detailed terms of coverage and limitations.

# **Pre-Installation**

### OWNER/INSTALLER RESPONSIBILITY

The owner is advised to be at home during the installation for consultation/direction. The owner and installer should discuss installation and layout to maximize satisfaction. If this is not possible, consultation should be done prior to installation. Installers should be familiar with installation guidelines from National Wood Flooring Association (woodfloors.org). The owner/installer assumes all responsibility for product quality of completed

PERFORM PRE-INSTALL INSPECTION. FOR CLAIMS PURPOSES, YOU ARE ALLOWED TO OPEN UP TO 4 BOXES FOR PRODUCT INSPECTION. DO NOT OPEN ALL THE BOXES. OPENING ALL THE BOXES CONSTITUTES YOUR ACCEPTANCE OF THE PRODUCT. INSPECT ALL THE PLANKS IN THESE 4 BOXES CAREFULLY. EXAMINE FLOORING FOR COLOR, FINISH AND QUALITY. IF YOU DISCOVER THAT PRODUCTS ARE DEFECTIVE, OR IF MATERIAL IS QUESTIONABLE, YOU SHOULD CONTACT THE RETAILER. IF YOU ARE SATISFIED, PROCEED WITH INSTALLATION.

Prior to installation, rack up planks from several boxes to ensure uniform distribution of colors, shades and characters in the installed flooring. Planks having similar widths should be placed together in the same row to minimize gaps between boards.

Bamboo floors are natural products containing natural variations in color, tone, grain, streaks, nodal marks and other characteristics. They are normal and it does not mean the product is defective.

Purchase flooring to be installed in one large area at the same time. Product purchased at a later time than the first purchase may vary beyond your expectations.

Accessories, trims and moldings are manufactured to coordinate with the varied appearances of the floor planks. Any exact matches are coincidental. Non-matching accessories are not defective products. This product is manufactured according to strict quality standards. In the event that defects are discovered in

the field, the industry standards permit a defect tolerance not to exceed 5%. An additional 5% (10% for diagonal installations) should be factored in for cutting wastage and grading allowances. During installation, inspect the planks continuously. Defects that can be seen from a standing position should be

Squeaking and clicking noises are the result of interactions among flooring, joists and subfloors when they move. Limiting the movements of the flooring system usually eliminates most of these noises. Sometimes, it is impossible to eliminate them completely and minor squeaking or clicking noises are to be accepted as normal flooring phenomenon.

Minor scratches can generally be repaired with the use of putty, stain or filler. It is an industry standard practice of flooring installation and it should be accepted as normal by the home owner.

To assure the warranty is not inadvertently voided, before proceeding with any activity that is not covered in this manual, please contact our Customer Support Team at 800-986-3460.

## **ACCLIMATION AND IN-SERVICE CONDITIONS**

cut off or held out. Installing defective planks implies acceptance.

NOTE: To obtain accurate moisture content readings, one must use a moisture meter designed for use with bamboo flooring.

Acclimation is the process of adjusting (conditioning) the moisture content of bamboo flooring to the environment in which it is expected to perform. The bamboo flooring is fully acclimated when its moisture content and dimensions (width and length) are stable. For example, the averaged dimensions and moisture content remain constant for 3 consecutive days. Flooring must acclimate for as long as necessary to reach fully acclimated stage. Acclimation time varies depending on geographical area, interior climate control and time of the year. Minimum acclimation time is 72 hours. Open the box and plastic wrap.

Elevate cartons from the floor by placing them on 2x2 in. lumber or equivalent. Place spacers (3/4 in. to 1 in. Elevate Cartons norm de noto by placing united in Carton. Intuition to equivalent. Frace spacers (3/4 int. of This sticks) between each layer or cross stack the layers for maximum exposure to ambient conditions. Acclimation temperature range is 60°F-80°F and relative humidity (RH) of 35%-55%. Conditions in which the floor was acclimated should be maintained continuously thereafter

## CONCRETE SUBFLOOR REQUIREMENTS

- Concrete subfloors must:
- Have minimum rated strength of 3000 psi.
   Be level to within 1/8 in. in a 6 ft. span or 3/16 in. in a 10 ft. span; no bumps or low spots. High spots can be removed by grinding; depressions can be filled with patching compound formulated for use in floor
- □ Be clean; no construction debris, soil, mud and any other objects on or adhering to the floor; if necessary,
- scrape and sweep away before the installation; no protrusions of nails, debris, metals should remain.

  New concrete slab must cure for at least 60 days. It must have a minimum 10 mil polyethylene sheet
- between the ground and the concrete.

  Be free from moisture related conditions which can damage the installed flooring.
- CONCRETE MOISTURE

Perform tests at locations around exterior doorways, near walls containing plumbing, near foundation walls and in the center of the room. Minimum sample size is 3 samples per 1000 sq. ft. of area and one test for every additional 1000 sq. ft. thereafter.

Test all concrete subfloors for moisture content and document the results. Visual checks are not reliable.

Moisture content should meet one of the following criteria:

 $\hfill =$  4.5% when tested using Tramex Concrete Moisture Encounter. □ Less than 3 pounds per 1000 sq. ft. per 24 hours when using Calcium Chloride test (ASTM F 1869).  $\hfill\Box$  75% when using Relative Humidity Testing (ASTM F-2170).

NOTE: Concrete moisture content may be acceptable the time of the test. These tests do not guarantee a 2 perpetual "dry" concrete slab. The concrete slab moisture content can vary at other times of the year. We are not responsible for moisture-related damage to installed flooring.

## LIGHT WEIGHT CONCRETE

Light weight concrete is concrete with a rated strength that is less than 3000 psi. Perform a quick check by drawing a nail across the top; if it leaves an indentation, it is probably light concrete.

For glue-down applications, the concrete must possess shear strength greater than the glue. If concrete rated psi is unknown, contact the adhesive manufacturer for guidance.

- ☐ The subfloor must be clean; no presence of construction debris, soil, mud and any other objects on or adhering to the floor; no protrusions of nails, debris, or metals should remain. If necessary, scrape and sweep the subfloor before the installation.
- ☐ The subfloor must be structurally sound and stable; no movements or squeaks; no loose panels or loose nails; no signs of ply de-lamination or other damages. Repair all shortcomings before installation.

  The subfloor must be flat; no visible bumps or low spots; the subfloor should be flat to within 1/8 in. in 6
- ft. span or 3/16 in. in 10 ft. Test for moisture using a reliable moisture meter. Perform tests at locations around exterior doorways, near foundation walls, near walls containing plumbing lines and in the center of the room. Measure 20 locations per 1000 sq. ft. Moisture content of the subfloor should be less than 12%. Moisture content difference between the subfloor and flooring should be 2% or less

On truss/joist spacing of 16 in. (406 mm) O/C or less, the industry standard for single-panel subflooring is a minimum 5/8 in. (19/32 in., 15.1 mm) CD Exposure 1 plywood subfloor panels (CD Exposure 1) or 23/32 in. OSB cheete Evnar are not tongued and grooved and there is not sufficient spacing or is inadequate, cut in the required spacing with a circular saw. Do not cut in expansion space on tongue and groove panels

## PARTICLE BOARD OR FIBER BOARD

## Only for floating installation.

**EXISTING FLOORS**Installation over existing floor requires the installer to consider potential issues related to moisture damage, adhesive failure and fastener failure. Contact the adhesive and fastener manufacturers respectively for their

specific instructions, recommendations and requirements. Acceptable floor coverings include: solid hardwood, linoleum, terrazzo, ceramic tile and other "moisture sealing

Unacceptable floor coverings include: carpet, needle punch felt, edge glued linoleum and other "moisture absorbing flooring."

## JOB SITE CONDITION

Prior to installation, the installer must ensure that at the time of installation, the job site conditions including subfloor/substrate, ambient temperature and relative humidity, and all impacting variables will not negatively affect the floor. The manufacturer will decline responsibility for damages associated with improper installation or poor site conditions. STORAGE AND CONDITIONS

## Do not store flooring in uncontrolled environmental conditions. For example, garages and exterior patios are

not acceptable areas to store flooring. Handle and unload bamboo flooring with care and store within the environmentally controlled site in which it is expected to perform. Flooring stored on a concrete slab should be elevated at least 4 in. to allow air circulation under cartons **EXISTING HOME** An existing home should have a consistent room temperature of 60°F-80°F and relative humidity (RH) of 35% 55%. Continual deviation from these conditions will affect the dimensions of flooring, especially bamboo. When using a heater during winter months, humidity may be much lower than the acceptable range. A humidifier is recommended to prevent excess shrinkage in bamboo flooring due to low humidity levels. During the warmer

months, maintain humidity levels using an air conditioner, dehumidifier, or by turning on your heating system NEW CONSTRUCTION OR REMODEL All work involving water, such as pouring basement concrete floors, drywall and plasterwork, plumbing, etc. must be completed well in advance of the floor delivery. Ensure that the building is enclosed. Where

building codes allow, permanent heating and/or air conditioning systems should be operating at least five days preceding installation and should be maintained during and after installation. If it is not possible for the permanent heating and/or air conditioning system to be operating before, during and after installation, a temporary heating and/or dehumidification system that simulates normal living (occupied) conditions can enable the installation to proceed until the permanent heating and/or air conditioning system is fully operational. Your job site should have a consistent temperature of 60°F-80°F and relative humidity (RH) of 35%-55% which should be maintained continuously thereafter.

### **BASEMENTS AND CRAWL SPACES**

Concrete slab or ground must be dry. The ground in the crawl spaces must be completely covered using 6 mil black polyethylene. Crawl space clearance between the earth and underside of joists should be no less than 18 in. and the perimeter vent area should be equal to 1.5% of the total square footage of the crawl space or as mandated by code.

## RADIANT HEATED SUBFLOOR

This product can be installed over a radiant heated subfloor. Operating surface temperature must be less than 84°F. Decrease temperature before installation. Increase temperature gradually after installation. Glue down installation may require additional installation requirements. Contact the glue manufacturer for specific recommendations. Contact the heater manufacturer for specific installation instructions.

## MOISTURE BARRIER AND MOISTURE RETARDER

CONCRETE SUBFLOOR For floating installation, use 6 mil polyethylene film or other means with equivalent permeability. Overlap the

edge seams and tape it together. Extend moisture barrier up to the wall about 1 in. high. For direct glue installation, use a moisture barrier if moisture levels exceed the requirement (see Concrete Moisture section).

# Use asphalt-saturated kraft paper or #15 or #30 felt that meets ASTM Standard D4869 or UU-B-790, Grade

length or width; wall openings with or without a door.

D. Overlap along the edge seams 2 in.- 4 in. wide. This retards moisture movement from below. Extend the moisture retarder to about 1 in. from the walls. Secure to the subfloor as necessary. SOUND CONTROL UNDERLAYMENT

Check with the sound control manufacturer for application guidelines. Generally, the less compressive

underlayment is preferred. **EXPANSION GAP** 

WOOD SUBFLOOR

A 1/2 in. expansion gap is required around the perimeter of the floor and between the floor and all vertical obstructions. Do not place permanently mounted structures such as kitchen counters/cabinets on the installed TRANSITION MOLDING Floating installation, transition T-molding is required in the following cases: floor spanning greater than 35 ft. in

NOTE: Floor areas interrupted by wall sections extending out of the wall; floor areas which are not rectangular may experience buckling or gapping if there is excessive floor expansion or shrinkage.

Tape measure . Moisture meter (wood, concrete or both) . Chalk line & chalk . Hammer . Electric power saw Carbide tipped saw blade for fine cut • NIOSH-designated dust mask • Hand saw or jamb saw • Eye protection • Straight edge or Spacers • Pry Bar • Mallet • Broom • Color matched wood putty • Tapping block • Pull bar Additional Supplies for Glue-Down Method: Flooring adhesive • Trowels • Adhesive remover for selected adhesive • Clean rags • Weight roller • Painters tape

# **Helpful Pointers**

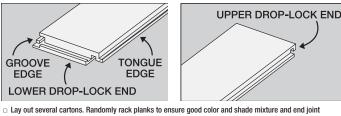
- Make sure your work area is well lit. Good visibility ensures that color is consistent and that visually defective planks are detected and removed. The minimum length of the first and last plank is 12 in. If the last plank will be less than 12 in., adjust the length of the first plank. The remainder of the last plank can be used as a starter board on the following rows. ☐ Using a shorter piece at undercut door jams will help when fitting flooring in place.

# CUTTING THE LAST ROW TO WIDTH

- Most often the entire length of the last row will need to be cut so that it is narrow enough to fit the remaining space.
- □ Measure the distance between the floor face edge (exclude the tongue) to the wall. Subtract 1/2 in. from this measurement for expansion gap. Draw a line. Cut through the line. Discard the excess piece. Proceed with the

# **Preparing for Installation**

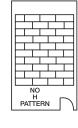
- □ Ensure subfloors are clean □ Understand the locking part of the flooring plank. The tongue is the thinner extension coming out of the side
- of the planks. The groove is the wider extension coming out of the other side of the floor plank. The ends do not have tongue and groove. There is an upper drop-lock end on one side and a lower-drop lock end on the other side



- spacing. Minimum end stagger is 6 in. Inspect plank quality and grading. □ Lay out trim moldings in advance and find planks whose shade closely matches. Set these aside for future
- $\ \square$  Remove the existing base, shoe molding or threshold carefully. They can be used to cover the 1/2 in expansion gap left around the edge of the room. Undercut doors and casings using a handsaw laid flat on a piece of scrap flooring Install the underlayment (if used) according to the underlayment manufacture instruction.
  - MIN 6







## Floating Installation 1 INSTALLING THE FIRST ROW

- a. When possible, begin installation from the straightest wall. If possible, install the floor perpendicular to the floor joists. b. Cut off the tongue from the first row planks.
- c. Allow a 1/2 in. expansion gap between the plank and the walls. Use spacers or board. d. Place the first plank with the groove sides facing away
- e. Place the upper drop-lock end of the second plank on the lower drop-lock end of the first plank. The ends do not click lock. Maintain a straight edge along the rows.
- f. Continue placing the succeeding planks to complete the row until you come to the last plank

