



RECOMMENDED MANUFACTURER INSTALATION AND MAINTENANCE INSTRUCTIONS

READ COMPLETELY BEFORE STARTING INSTALATION:

All installed planks will be considered as accepted by the installer and/or homeowner. Any defects should be reported to FRISCH COCONUT PALM immediately for inspection and/or replacement.

Tools & Accessories:

- Rubber mallet
- Tenon saw, hand saw or circular saw
- Electric drill, with a 3/32 inch (2mm) bit
- Square and measuring tape
- Chalk line
- Flooring screws (to solidify sub-floor when installing over wooden sub-floor)
- Safety glasses
- Broom and dust pan

Additional Tools & Accessories needed for Nail-Down installation

- Hardwood flooring nailer (manual or pneumatic)
- Claw hammer and nail punch
- Hardwood flooring nails (2in. / 5cm) - 1 box or 1000 nails per 18.6 sq.m / 200 sq.ft.
- Screw shank finishing nails (2.5 / 6.3cm) or regular finishing nails
- Construction paper or #15 felt floor liner (when installing over wooden sub-floor)

Additional Tools & Accessories needed for Glue-Down installation

- Recommended Adhesive & Adhesive Remover is Bostik EFM (Engineered Floor Adhesive)
- 3M Scotch Blue 2080 tape
- Trowel

General Installation Notes:

- The humidity of a room can vary due to many factors; the change of seasons is an example. The floor must be able to expand and contract in all directions.
- Flooring of natural origin has slight variations in shade and grains. It should be installed from several cartons at the same time to ensure good color and shade mixture.
- When possible, pre-select and set aside boards that blend best with all horizonatally mounted moldings used to assure a uniform final appearance. Install these boards adjoining the moldings.
- Be attentive to staggering the ends of the boards in adjacent rows. They should be staggered at mid point when the boards are of equal lenght. When installing boards of random lenght ensure that the staggered lenght is at least 4 - 6" (10 -15cm.) This will help ensure a more favourable overall appearance of the floor.
- Allways allow a minimum 1/4" (6mm) expansion around all vertical obstructions.



Preparation for glue-down and nail-down:

Care should be taken in transporting and handling the flooring material. Store the flooring in a dry place, with adequate space for air to circulate under cartons. If delivery is to a construction site, the flooring should be placed inside a building that is sufficiently enclosed to ensure the flooring will be protected from weather. Concrete work, plastering, and all other moisture-related work should be thoroughly dry. Install a #15 felt floor liner or construction paper under the sub-floor placed over concrete.

For proper installation and cohesion with the sub-floor, hand scrape flooring should be acclimated in the same room in which it will be installed. Using an accurate commercial moisture meter, be sure the moisture content of the room meets the tests described below.

Moisture Test: Before installing the handscraped flooring a wooden sub-floor, check the sub-floor for moisture using an accurate commercial moisture meter. The moisture difference between the sub-floor and the engineered flooring must be not greater than 4%. The moisture content of the sub-floor itself must not exceed 12%.

All concrete sub-floors should be tested for moisture content by a Tamex Concrete Moisture Encounter meter. Visual checks may not be reliable. This test does not guarantee a dry slab. All concrete slabs should have a minimum of 6mil (thousands of an inch) poly film moisture barrier between the ground and concrete.

IF YOU ARE UNABLE TO MAKE AN ACCURATE MOISTURE TEST, IT IS RECOMMENDED THAT YOU REMOVE THE PACKING AND LET THE ENGINEERED PLANKS ACCCLIMATE STACKED IN THE ROOM FOR AT LEAST SEVEN DAYS. The installer and/or owner have full responsibility for moisture testing to ensure that the wood sub-floor and the concrete slab (when applicable) are within acceptable limits.

Moisture Barrier: A sheet-vinyl or polyethylene moisture barrier should be placed under the sub-flooring installed on top of concrete. Over wood floors, apply 1/4" (6.35mm) to 3/8" (9.5mm) plywood with proper nail attachment. If a wood sub-floor is used above soil a 6-mil polyethylene moisture barrier should be placed over the soil to prevent moisture from getting into the engineered flooring. all seams of the moisture barrier should be taped.

Special notes:

1.) On all concrete floors, the carpeting and under padding must be removed to avoid possible humidity problems.

2.) For floors with radiant heating: The radiant heating system must be operational and you have to make sure to turn on your thermostat on at least 1 week prior to installation to avoid drastic variations in the floor moisture content. Turn off heat and let sub floor cool down to room temperature 3-4 hours prior to starting job.

BEFORE installation begins, ascertain that the heating system is designed and controlled for wood flooring and that the circuit does not include other flooring covering types. failure to do so may cause excessive heat damage and shrinkage.

NOTE: Refer to radiant heat system manufacturer's precautions for nail down installation. Beware of nailing through radiant tubing or mesh. After installation, turn system back on immediately. The finished floor surface must not exceed 85° F (29° C) throughout the life of the floor. Radiant heating systems normally create dry heat that can lower interior humidity levels. It may be necessary to add humidity with humidifiers to maintain the recommended (35-55%) and prevent damage to the wood floor. Following the installation you should maintain the room temperature below 80°F (26°C).

Installation over sub-floors: Sub-floors must be structurally sound and must be constructed on-or above-grade. Engineered flooring can be nailed-down over sub-floors made of: wood; sheathing grade; vinyl tile; plywood (3/4" / 19mm); Oriented Strand Board (OSB: at least thick 3/4" / 19mm). Ensure that sub-floor has no freedom. If it does use flooring screws to firmly secure sub-floor against wood supports.

Installation over concrete and tile sub-floors: Flooring can be glued directly to smooth concrete. Do not install over a concrete sealer or painted concrete; if present remove by sanding or grinding.



Use an appropriate dust mask. Recommended sub-floors for a glue-down installation are concrete or ceramic tile.

Ventilation: Adequate air circulation is important to prevent moisture from accumulating. Crawl spaces should be ventilated year round. Be sure that there is no standing water or moisture at the soil level.

Installation Procedure:

Step 1: Doorway and Wall Preparation (all Installation Methods)

Undercut door casings and jambs. Remove any existing base, shoe mold or doorway thresholds. These items can be replaced after installation. All door casing and jambs should be undercut.

Step 2: Establish a Starting Point (All Installation Methods)

Installation parallel to the longest wall is recommended for best visual effect; however, the floor should be installed perpendicular to the flooring joists unless subfloor has been reinforced to reduce subfloor sagging. When possible, always begin layout or installation from the straightest wall, generally an outside wall. In at least two places at least 18" (46cm) from the corner, measure out equal distance from the starting wall and snap a chalk line. The measurements must be the sum of the width of the flooring plus an additional 3/4" (19mm) to allow for 1/2" (13mm) expansion space and the width of the tongue.

Step 3: Installing First and Second Rows (Nail down only)

Use the longest, straightest boards available for the two first rows. For random and alternate width with products, use the widest plank for the first row. Align tongue of first row on chalk line. The groove should be facing the starting wall. Pre-drill 13mm (1/2") from back (groove) edge, 1-2" (2.5-5cm) from each end, and at 6" (15cm) intervals when possible. Fasten using 4 or 6d finishing nails or 1" (2.5cm) pneumatic finish nails/brads. Countersink the nails. Pre-drill and blind-nail at an angle through the tongue of the first row every 1-2" (5cm) from the ends and spaced in 3-4" (7.6-10cm) intervals. Countersink nails to ensure flush engagement of groove with the following rows until stapler can be used. Alternatively use a pneumatic finish nailer and install nails/brades at the same intervals with a minimum length of 1" (2.5cm). End-joints of adjacent rows should be staggered a minimum of 4-6" (10-15cm) when possible to ensure a more favourable overall appearance.

Step 4: Spreading the Adhesive (Glue-Down Application Only)

Spread adhesive with the trowl recommended by Bostik for use with Bostik for use with Bostik EFA over a prepared area that will be covered in the following 30-90 minutes. Please follow adhesive usage information found on purchased adhesive product. Spread sufficient amounts of recommended adhesive with the recommended trowel in an area that can be covered in 30-90 minutes (see adhesive manufacturer's instructions).

If necessary, nail a sacrificial row with 1" (2.5cm) nails on the dry side of your chalk line to help hold the first row into place. Avoid installing from the surface of the flooring. If necessary distribute weight using a kneeler board.

Step 5: Installing the Floor (Nail Down Only)

Use minimum 1" (2.5cm) nail recommended by the stapler/nail-gun manufacturer 1-2" (2.5-5cm) with a nozzle specific to the thickness of the plank. Nails should be placed 1-2" (2.5-5cm) from the ends spaced at 3-4" (8-10cm) intervals. Fasten sacrificial boards to the floor. At least two boards, side by side must be used to indicate proper machine adjustments. Check for surface damage, air-pressure setting, tonguedamage, edge blistering etc. , before proceeding. Once proper adjustments have been made, remove and destroy the boards. Install the remainder of the floor working from several cartons. The 1-2 rows will need to be face-nailed when clearance does not permit blind nailing with stapler or brad nailer. Pre-drill and face-nail or pneumatically nail on the tongue side following the nailing pattern used for the first row.



Step 6: Installing the Floor (glue-down Application Only)

Use the longest, straightest boards available for the first two rows. For random and alternate width products, use the widest plank for the first row. The first row of planks should be installed with the groove lined up on the chalk line. The tongue should be facing the starting wall. The first row must be aligned and seated in the adhesive, as all additional rows will be pushed back to this original row. Remove tongue to allow for expansion space if necessary on row adjoining wall.

When installing products wider 3-1/4" (8cm), as this the case, apply a bead of carpenter's wood glue to all the end grooves prior to installing into the adhesive. When installing pieces, the end-joint first as close to side (long) tongue and groove as possible and then slide together tightly to engage side (long) joint tongue and groove. To avoid adhesive bleed-through and memory pull-back, avoid sliding pieces through the adhesive as much as possible when placing them in position.

During the installation occasionally remove a piece of flooring from the sub-floor and inspect the back for proper adhesive transfer. Adequate adhesive transfer is necessary to achieve proper bonding.

Check for a tight fit between all edges and ends of each plank. End-joints of adjacent rows should be staggered 4-6" (10-10cm) when possible to ensure a more favorable overall appearance.

To eliminate minor shifting or gapping of product during installation, use 3M ScotchBlue 2080 tape to hold the planks together. After installation is complete, remove all the 3M ScotchBlue 2080 tap from the surface of newly installed flooring. Do not let tape remain on flooring longer than 24 hours. Avoid tape that may leave an adhesive residue and may damage the finish. If necessary, use weights to flatten boards with bows until adhesive cures in order to prevent hollow spots. Boards that cannot be flattened should be cut in length to reduce the bow or not used.

Be sure not to spread adhesive too far ahead of your work area.

Complete the installation using this same technique for the remainder of the floor.

Avoid heavy foot traffic on the floor for at least 24 hours.

Step 7: Complete the Installation (all Installation Methods)

Remove all tape and clean floor with the recommended wood flooring cleaner. (see adhesive container for specific information)

Install or re-install transition pieces that may be needed, such as Reducer Strips, T-moldings, or Threshold. Nail moldings to the wall, not to the floor.

Inspect the floor filling in all minor gaps with the appropriate blender filler.

If the floor is to be covered for temporary protection, use a breathable material such as cardboard. Do not cover with plastic.

Maintenance

- Sweep or vacuum as often as necessary to remove any loose dirt or grit before it can scratch the floor.
- When a spill occurs, soak up the bulk liquid promptly.
- In areas of excessive traffic and wear, please make use of runners or area rugs.
- Use felt protectors under heavy pieces of furniture and chairs.
- Use protective mats at all exterior entrances.
- Spiked heels or shoes in need of repair can severely damage your floor.
- Never use oil soaps, wax, liquid or other household products to clean your floor.
- Keep animal nails trimmed.
- Never slide or roll heavy furniture or appliances across the floor.
- Proper care and maintenance can extend the life of your floor for many years.