This flooring must be installed with floating, glueless installation only. This flooring should NOT be installed using fasteners or adhesives of any kind. Use of adhesives or glue may result in damage to the floor and may void the product warranty.

This product may be installed:
- in rooms on, above or below ground level
- over plywood, OSB or concrete subfloors, or direct on hard surface flooring

This product may be installed over a radiant heating system:
- if the floor is NOT made with Jatoba or Maple hardwood. These wood species must not be used with radiant heating systems.
- the installation conforms to Kentwood’s Special Instructions for Installation over Radiant Heat (available from your dealer or at kentwoodfloors.com).

**NOTE: SPECIAL INSTRUCTIONS FOR INSTALLATION OVER RADIANT HEAT APPEAR THROUGHOUT THIS BROCHURE. THESE INSTRUCTIONS APPLY ONLY TO STYLES OF FLOORING THAT ARE SPECIFICALLY APPROVED FOR USE OVER RADIANT HEAT AND MEET THE CONDITIONS GIVEN ABOVE. INSTALLATION OF NON-APPROVED PRODUCTS, OR INSTALLATION OF APPROVED PRODUCTS IN A NON-APPROVED MANNER, OVER RADIANT HEATING SYSTEMS WILL VOID THE PRODUCT WARRANTY.**

This product should NOT be installed in bathrooms or laundry rooms.

**INSTALLER’S / OWNER’S RESPONSIBILITY**

As a natural product, wood contains inherent variations in color, grain and appearance and other visual imperfections. KENTWOOD floors are manufactured in accordance with accepted industry standards which permit a defect tolerance not to exceed 5%. These may be the result of manufacturing or naturally occurring characteristics of the material. It is recommended that a 5% cutting or grading allowance be added to the total square footage when calculating the quantity of flooring required. It is the sole and joint responsibility of the installer and owner to conduct a quality inspection of all pieces of KENTWOOD flooring before installation. Any pieces of flooring that appear to contain a manufacturing defect should not be installed. Flooring that has been installed will be deemed to have been installed and accepted by the installer and owner, even if the owner is not present at the time of installation. If defects are found, please contact your dealer.

It is the sole responsibility of the flooring installer to ensure that the job site, subfloor and installation tools and materials meet or exceed all applicable industry standards.

KENTWOOD accepts no responsibility for problems arising from non-compliance or improper sitesite conditions, expansion space, and temperature and humidity levels.

**SITE PREPARATION:**

**Installation in newly-constructed home**

Installation of flooring is one of the last jobs of a new home construction. Prior to installing your KENTWOOD flooring, ensure that:
- the building is completely enclosed with all doors and windows in place and securable, including a door from an attached garage to house interior
- all concrete, masonry, plastering, drywall, texturing, painting, finishes, or other work is complete and thoroughly cured and dry
- basements and crawlspace are dry. Crawlspace must have no standing water; crawlspace must also have a vapor barrier and adequate ventilation in accordance with local building codes.
- gutters and downspouts are in place, directing water away from the building
- HVAC systems are fully operational, enabling heat and humidity levels to be controlled and maintained throughout the home

- subfloor is properly prepared for installation
- if installing over radiant heat, ensure that the system is in full working order and has been fully tested and running for a minimum of two weeks prior to installation. The system should be turned off for 24 hours prior to installation in the install zone.

**Installation in existing home (Renovation)**

Installation in an existing home must meet the same conditions as a new home. If part of a larger remodeling project, ensure that all wet work (painting, wallpapering, texturing, etc.) is completed and thoroughly dry before commencing flooring installation. In addition:
- remove all furniture, artwork and other valuables from installation area
- remove baseboards and moldings
- undercut door casings (use a piece of the flooring as a depth gauge)
- remove existing flooring, if necessary ( Carpets and underlay must be removed, but most styles of ELEMENTS by KENTWOOD floors with locking joint systems can be installed directly over other flooring types, including sheet or tile vinyl, parquet, etc. Ask your dealer if you’re in doubt.)

**Climate control**

Conditions at the job site must be maintained with the temperature between 65-75°F (18-24°C) and humidity at 35-55% before, during and after the installation. Flooring material should not be delivered to the job site until the job site has been met and maintained for one week prior to installation if installing over a wood subfloor, two weeks if installing over concrete. Following installation, these conditions should be maintained at all times to ensure proper performance of the floor.

When temperature and humidity have met the conditions detailed above, material may be delivered to the job site. If stacking the boxes, cross-stack to ensure good air flow between layers. Do not lay boxes directly on concrete subfloors; elevate them on blocks. Do not open the boxes; leave closed until ready to commence the installation, and then open only as needed.

**Subfloor preparation**

Like many home improvement projects, one of the most critical parts of installing ELEMENTS by KENTWOOD flooring is proper preparation of the subfloor before installing the product. Take the time to do this step completely and thoroughly.

The installer and customer are jointly and solely responsible for ensuring that the subfloor is suitable for the flooring application and properly prepared for installation. This includes:
- All subfloors must be clean, dry, structurally sound and flat to within 1/8” in 8’ (or 3mm in 1m). Plywood subfloors must meet local building code requirements (US: minimum 3/4” T&G plywood or 23/32” T&G OSB. Canada: minimum 5/8” T&G plywood or 3/4” T&G OSB). They must be secure to the joists, free of squeaks and protruding fasteners.

**Moisture content**

All subfloors must be tested for moisture content according to NWFA guidelines, and the moisture content of both subfloor and flooring must be within allowable limits before commencing installation. The moisture content of plywood or OSB subfloor must not exceed 12%. The moisture content of the flooring must be within 4 percentage points of the subfloor.

Concrete subfloors must be fully cured (60 days) prior to installation. Moisture content of the slab should not exceed 3 lb / 1000 sq/ft / 24 hours.

If the flooring is being installed over a radiant heating system, moisture content of the slab should not exceed 2 lb / 1000 sq/ft / 24 hours. The system should be turned off in the install zone for 24 hours before installation begins and left off for the duration of the installation period.

**Color racking**

Real wood, cork and bamboo flooring contains natural variations in color and grain pattern. In order to prevent color “grouping” or repetitive grain patterns in the finished floor, it is recommended that boards be racked (visually sorted) before installation to create a satisfactory and pleasing color arrangement. Immediately prior to installation, unstack 1 or 2 cartons to get a sense of the range of color variation and arrange the planks to achieve a satisfactory appearance.

When racking, inspect all boards for visible manufacturing defects. Boards with manufacturing defects in excess of industry standards (5% of total quantity) may be replaced by the dealer under the terms of the product warranty. Once installed, boards will be considered to have been accepted by the customer and will not be eligible for replacement. (See Warranty for details.)

**Expansion space**

ELEMENTS by KENTWOOD flooring will expand and contract with changes in ambient temperature and humidity. To allow for this, during installation leave a 3/8”(10mm) expansion space around the entire perimeter of the floor between the flooring and the walls. Also leave expansion space where the flooring will meet any vertical obstacle, such as stairs, pipes, door sills, tiles, cabinets etc.

**NOTE:** In climates with extreme variations in humidity (beyond the range of 35 to 55%), or in large
installations (800+ feet), a larger expansion space may be required. If installing the floor in a room measuring more than 30 ft (10m) by floorboard width, or more than 30 ft (10m) measured by board length, leave an expansion gap in the center of the space and cover it with a T-cap molding. The gap should be wide enough to allow 3/8” (10mm) expansion space on each side of the T-cap base. An expansion gap at T-cap should be used. Drop in any door threshold where the flooring is being carried through into an adjoining room.

**Special Instructions For Installation Over Radiant Heat**

If installing over radiant heat, place approved heat sensors on the subfloor in accordance with Kentwood’s Special Instructions For Installation Over Radiant Heat. A minimum of 5 sensors must be placed for every 1000 square feet of flooring installed. Sensors and complete Special Instructions For Installation Over Radiant Heat are available from your KENTWOOD dealer.

**Vapor Barrier & Underlayment**

If the flooring is being installed on a concrete sub-floor, or over a crawlspace, or below ground level, a vapor barrier is installed. Using 6 ml polyethylene sheeting, lay a single layer of sheeting over the entire subfloor. Allow an 8” overlap between seams, and seal the seams with duct tape along their entire length. Leave an excess of 4” of sheeting extending up the wall at all outer edges and hold in place with blue or painter’s masking tape. (This excess will be trimmed away later.)

Install an appropriate underlayment over the entire subfloor surface. There are various types of underlayment available. Consult your dealer to decide on a suitable choice for your situation. Install the underlayment according to the manufacturer’s instructions. NOTE: If using an underlayment with integral vapor barrier, a separate vapor barrier does not need to be installed.

**NOTE:** Some styles of ELEMENTS by KENTWOOD floors have underlayment built in to the board construction. These floors do not require any additional underlayment during installation, however they will still require the installation of a vapor barrier if conditions are as described below. If you are unsure of the underlayment and vapor barrier requirements for your flooring installation, consult your dealer.

**Starting Wall**

For best results, ELEMENTS by KENTWOOD flooring should be installed with the boards running parallel to incoming sunlight. When you have determined the direction that the flooring will run, decide which will be your starting wall – usually the longest wall adjacent to the wall with the windows. It is important that the flooring be installed in perfectly straight rows parallel to the starting wall. To verify that the starting wall itself is straight, measure out 12 inches from each end of the wall and snap a chalkline parallel to it. Measure the distance from the line to the wall every 2 or 3 feet. If it is consistent, the wall is straight.

If there is a variance anywhere of more than a quarter inch, you may need to trim the edge of the first row of floor boards to match the shape of the wall.

**INSTALLATION**

**NOTE:** The patented Unilin locking joint system used in this flooring enables boards to be fitted together in two ways. REMEMBER: DO NOT USE GLUE OR FASTENERS OF ANY KIND WHEN INSTALLING THIS PRODUCT.

**Angle-In Installation**

Hold the new board at an angle of 20 to 30° to the previously installed board, and engage the tongue and groove joint at the butt end of the boards. Move the new board gently up and down while exerting gentle pressure along the long side of the board. The long side joint will click into place, locking the joint. This is the easiest method for installation and should be used for most boards.

**Flat Installation:**

The new board is laid flat on the floor aligned to the previously installed board, and, using a specially designed Unilin tapping block (available from your dealer) the boards are tapped together gently until the joint locks. Do not try to close the joint with the block; use a series of light taps until the joint closes completely. This method should only be used in situations where the Angle-In method is not feasible, or for tapping closed joints that have not locked completely.

Open 1 or 2 packages of flooring and inspect boards to ensure there are no manufacturing defects. Remember, boards that have been installed will be deemed to have been inspected and accepted by the customer. Select your starting wall and check for features as described above. Decide in which direction you want to install (the flooring can be installed left to right, or right to left). This manual will describe a left-to-right installation.

Begin at the left hand end of the starting wall. Have a quantity of 3/8” (10mm) spacers handy. Begin with a full board. Saw off the tongue on both the long and short sides of the board, and place the board with the sawn butt end against the wall on the left, and the sawn long side facing the starting wall, but set out about two feet from the starting wall. Insert a spacer at the left end of the board and nudge the board against the wall. When you get to the final row, measure the distance to the far wall and ‘rip’ a row of boards to fit the gap — remember to leave 3/8” (10mm) expansion space against the far wall.

To finish the job, trim away the excess vapor barrier around the perimeter of the floor and remove the expansion spacers. Install moldings, trim and transitions. Moldings and transitions must be affixed either to the subfloor or to the wall – never to the flooring itself.

Before you move furniture onto the floor, take a moment to protect your new floor by putting felt pads on all furniture and accessories. For complete care and maintenance instructions, consult the product warranty. Please read thoroughly before you begin using your ELEMENTS by KENTWOOD floor.

If the flooring was installed over a radiant heating system, when you turn the system back on bring the temperature of the system up gradually, in 5° increments. Never allow the surface temperature of the floor to exceed 82° F (28°C) and avoid dramatic temperature changes; always adjust the system gradually in 5° increments. It is recommended that a dedicated quick recovery thermostat be installed to allow the temperature of the radiant heating system to be accurately controlled.