

CLICK TOGETHER

Click together engineered longstrip hardwood flooring

Click together cork flooring

Click together bamboo flooring

PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING THE INSTALLATION

KENTWOOD floors must be installed in accordance with the following instructions. Failure to do so may void the product warranty.



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This ELEMENTS by KENTWOOD flooring installs quickly and easily using a patented joint system developed by Unilin. This system allows the individual planks to be clicked together with no gluing required and allows for a much quicker installation than traditional glued floating floors. Please read the complete installation instructions before commencing installation.

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 fasteners may result in damage to the floor and may void the product warranty

This floor may be installed:

- On, above or below grade
- With click together floating instructions
- Over OSB, plywood or concrete subfloor

This floor may be installed over radiant heat if:

- The specific product style is approved for use over radiant heat (certain species and styles
- Are not approved)
- The floor is installed with glue down or floating installation
- The system is an hydronic (hot water) heat system, or an electric system specifically designed for use with hardwood flooring (must be approved by Kentwood Technical Services)
- The system has an exterior thermostat in addition to interior controls
- The installation conforms to the conditions specified in the Special Instructions for Installation over Radiant Heat (available from your kentwoodfloors.com)
- If approved heat sensors are not installed under the floor in accordance with the Kentwood 'Special Instructions for Installations Over Radiant Heat Systems, Kentwood accepts no responsibility for any damage to the floor caused by a radiant heat system. Such damage is not covered by the product warranty.

KENTWOOD accepts no responsibility for any damage to the floor caused by a radiant heat system. Such damage is not covered by the product warranty.

This floor should **NOT** be installed in a bathroom, laundry room or any area that may experience elevated humidity (sauna, sunroom, etc) Such use will void the product warranty.

KENTWOOD floors are for indoor use only, in residential or light commercial applications. The use of a certified installer is recommended for all installations.

For Technical Assistance in Canada, please call: **1-800-992-3163**

For Technical Assistance in the USA, please call: **1-800-851-3841**

or email techserv@metrofloors.com

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 not be warrantable.

INSTALLER'S / CUSTOMER'S RESPONSIBILITY

It is the responsibility of the installer and/or customer to ensure that the KENTWOOD product meets or exceeds their expectations for visual appearance and manufacturing quality.

Because KENTWOOD floors are made from real wood, every piece of KENTWOOD flooring will have a unique appearance, often with naturally-occurring variations in color, texture and grain pattern. Showroom samples and photographic reproductions may not represent the full range of color, texture and grain variations and milling tolerances which can occur in the product itself. It is strongly recommended that, prior to commencing installation, the customer and installer open several boxes of product and loose lay the boards on the floor. Examine the product carefully to ensure that it meets the customer's expectations for appearance, color and visual character and quality before proceeding with the installation.

If the visual appearance or manufacturing quality of the product is deemed unacceptable, it should not be installed. Flooring that has been installed will be deemed to have been inspected and accepted by the installer and customer, even if the customer is not present at the time of installation. Every piece of flooring should be inspected and if any piece does not meet expectations of quality, it should not be installed.

KENTWOOD floors are manufactured in accordance with accepted industry practices which permit a defect tolerance not to exceed 5%. These defects may be the result of manufacturing or naturally occurring characteristics of the material. It is recommended that a minimum 5%

cutting or grading allowance be added to the total square footage when calculating the quantity of flooring required. Boards that are judged to be defective should not be installed or should be installed in an inconspicuous location where they will not be noticeable (e.g. inside a closet).

It is the sole responsibility of the installer to ensure that the job site, subfloor and installation tools and materials meet or exceed these instructions and any applicable industry standards. KENTWOOD accepts no responsibility for problems arising from incorrect or improper site preparation or installation procedures.

For further information on installation standards and guidelines, call

In Canada: 1-800-992-3163:

In the US: 1-800-851-3841

or email techserv@metrofloors.com

SITE PREPARATION**INSTALLATION IN NEWLY-CONSTRUCTED HOME**

Installation of wood flooring is one of the last jobs of a new home construction. Prior to installing a wood floor, the following conditions must be met:

- The building is completely enclosed with all outside doors and windows in place and securable, including a door from an attached garage to house interior
- All concrete, masonry, plastering, drywall, texturing, painting, tiling and other wet work is complete and dry basements must be dry, within recommended temperature and humidity ranges, with no standing water and adequate cross-ventilation in accordance with NWFA guidelines

BEFORE INSTALLATION

PRODUCT INSPECTION & SITE PREPARATION

- Crawl spaces must be dry, with no standing water and adequate cross-ventilation in accordance with local NWFA Guidelines. Exposed earth crawl spaces must also have a vapor retarder (ASTM D 1745 Standard) installed to NWFA guidelines
- Gutters and downspouts are in place, directing water away from the building
- Landscaping is directing water away from the building
- HVAC systems are fully operational, enabling heat and humidity levels to be controlled and maintained throughout the home, and have been operating for a minimum of 5 days prior to installation
- Subfloor is properly inspected and prepared for installation in accordance with these instructions
- 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 and jambs (use a piece of the flooring as a depth gauge)
- Remove existing flooring, if necessary
- If installing over radiant heat, it is strongly recommended that a radiant heat technician be consulted prior to installation to ensure that the heating system can be operated effectively at temperatures acceptable to the wood flooring. The system should be turned off for 24 hours prior to installation in the install zone

CLIMATE CONTROL

Conditions at the job site must be maintained with the temperature between 60 - 80°F (15 - 26°C) and humidity at 30-50% before, during and after the installation.

In areas with extreme climate conditions it may be necessary to use humidifiers or dehumidifiers to ensure the humidity is kept within the recommended range.

Flooring material should not be delivered to job site until these conditions have been met and maintained for five days prior to installation.

Following installation, these conditions should be maintained at all times to ensure proper performance of the floor. See Warranty for details.

Required interior conditions for hardwood flooring are temperature of 60 - 80°F (15 - 26°C) and relative humidity of 30 to 50%. When these conditions have been established at the job site, material may be delivered to the site. Do not deliver flooring to job site if climate conditions have not been met and maintained as described above otherwise damage to product may result.

When flooring has been delivered to the job site, leave the boxes closed until ready to commence the installation, and then open only as needed.

BEFORE INSTALLATION**PRODUCT INSPECTION & SITE PREPARATION****MOISTURE CONTENT**

All wood flooring must be tested for moisture content prior to installation to ensure moisture content is within allowable limits. When ready to commence installation, open several boxes of product and test and record moisture content of the flooring using a reliable and accurate moisture testing device. Wood flooring should have a moisture content between 6 and 9 %.

SUBFLOOR PREPARATION

The installer is responsible for ensuring that the subfloor is suitable for the flooring application and properly prepared for installation.

All subfloors must be flat, clean, dry, structurally sound, and free of squeaks and protruding fasteners. The subfloor must be flat to within 3/16" over 10 feet, or 1/8" in 6 feet radius.

Plywood or OSB subfloors the minimum acceptable thickness of the subflooring will be determined by the truss/joist spacing.

Truss/joist spacing. (Measured on center)	Minimum acceptable thickness, 4' x 8' sheets
16" (406mm) or less	<ul style="list-style-type: none"> • 5/8" (19/32", 15.1mm) CD Exposure 1 Plywood or • 23/32" Exposure 1 OSB
More than 16", up to 19.2" (488mm)	<ul style="list-style-type: none"> • 3/4" (23/32", 18.3mm) T&G CD Exposure 1 Plywood, glued and mechanically fastened, or • 3/4" (23/32", 18.3mm) Exposure 1 OSB, glued and mechanically fastened
More than 19.2" (488mm) to a maximum of 24" (610mm)	<ul style="list-style-type: none"> • 7/8" T&G CD Exposure 1 Plywood, glued and mechanically fastened, or • 7/8" Exposure 1 OSB, glued and mechanically fastened or • Two layers of subflooring

In addition to meeting or exceeding the minimum acceptable thickness requirement, the subfloor must be secure to the joists, and free of squeaks and protruding fasteners. Subfloor moisture content must not exceed 12%, and the variance in moisture content between the full thickness of the subfloor and the flooring boards must not exceed 3 percentage points, based on a minimum of 20 tests per 1000sf.

Concrete subfloors must be dry, clean and free of non-compatible sealers, waxes, oil, paint, drywall compound, or other bond-breaking substances. (Check for the presence of sealers by applying drops of water to the slab. If the water beads up, there may be sealers or oils.) All slabs must be tested for moisture content using test method ASTM F2170-11 or equivalent and must return a reading of 75% relative humidity or less.

RACKING

Real wood flooring contains natural variations in color and grain pattern. In order to prevent color clustering 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, unpack several cartons to get a sense of the range of color variation and arrange the planks to achieve a satisfactory appearance.

BEFORE INSTALLATION

PRODUCT INSPECTION & SITE PREPARATION

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When racking, distribute lengths where possible. Avoid 'H' patterns, stair-steps and other discernible patterns in adjacent rows. When racking, a general rule is to stagger the end joints by a minimum of double the board width (e.g. for boards 5" / 125mm wide stagger joints a minimum of 10" / 250mm).

For products 3" to 5" (8 - 13cm) in width do not use boards of less than 6" (15cm) in length.

For products over 5" (13cm) in width do not use boards of less than 12" (30cm) in length.

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

Wood flooring will expand and contract with changes in ambient temperature and humidity. To allow for this, during installation leave a 1/2" 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 obstruction, such as stairs, pipes, door sills, tiles, cabinets etc.

For installations over radiant heat, product & installation procedure must also conform to conditions listed in 'PRODUCT USE' above.

During installation of flooring pieces, push or gently tap boards flush to the previous row. Tap against the tongue; tapping the groove may damage the edge. To prevent damage to the finish, avoid

tapping the face of the board with a rubber mallet. Use of tapping block is recommended to avoid splintering, and edge damage.

REMINDER FOR INSTALLATIONS OVER RADIANT HEAT: Prior to flooring installation, ensure that the radiant heat 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.

Ensure subfloor is suitable and properly prepared. Verify moisture content of both subfloor and flooring is within allowable limits before commencing installation.

All floating floor installations require that an underlay be installed over the subfloor before laying the floor itself. Some installations may require the installation of an additional vapor barrier in addition to the underlay.

Some styles of ELEMENTS by KENTWOOD floors have underlayment built in to the board construction. These floors do not require any additional underlay 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 underlay and vapor barrier requirements for your flooring installation, consult techserve@metrofloors.com

If the flooring is being installed on a concrete subfloor, a vapor barrier with a permeance rating 0.15 or less (as per NWFA guidelines), must be installed in addition to the underlay. To install a perm class 1 vapor retarder with a permeance rating .15 or less, use 6 mil polyethylene sheeting. Lay a single layer of poly over the entire subfloor. Overlap seams by 12" and seal all seams and any tears or slits with moisture proof tape.

If the flooring is being installed on a plywood or OSB subfloor that is over a crawlspace or below ground level, a vapor retarder with a permeance rating 0.7 – 10 (as per NWFA guidelines), must be installed. Many underlay products (eg Kentwood Kombo) include an integral vapor barrier has a minimum permeance rating of .7; if using one of these products, an additional vapor barrier is not required.

When installing over concrete, an additional vapor retarder with a permeance rating 0.15 or less must be installed in addition to the underlay, even if the underlay is a '3-in-1' product that has an integral vapor retarder. The vapor retarder

component of these products inhibits moisture transmission but do not meet the specifications of a vapor retarder with a permeance rating 0.15 or less. Install the vapor barrier before installing the underlay.

Next, install Kentwood Kombo underlay or equivalent over the entire subfloor surface. The seams should butt, not overlap.

Open several packages of flooring and rack and inspect boards. (See Racking, above.) Select starting wall and snap a chalk line to use as a guide. Set first row of boards in place with the groove side facing the starting wall, using chalk-line as a guide to ensure the flooring is laid in a perfectly straight line. Set expansion spacers between the flooring and the starting wall.

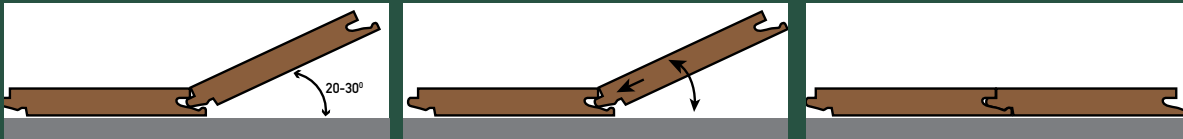
FLOATING CLICK TOGETHER INSTALLATION

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.

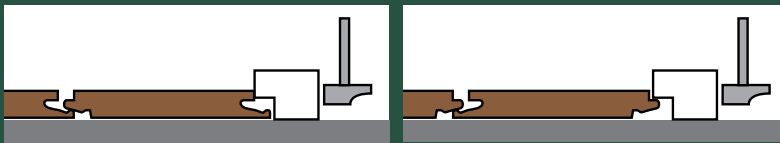
Angle-In Installation [Angle/Angle]

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.

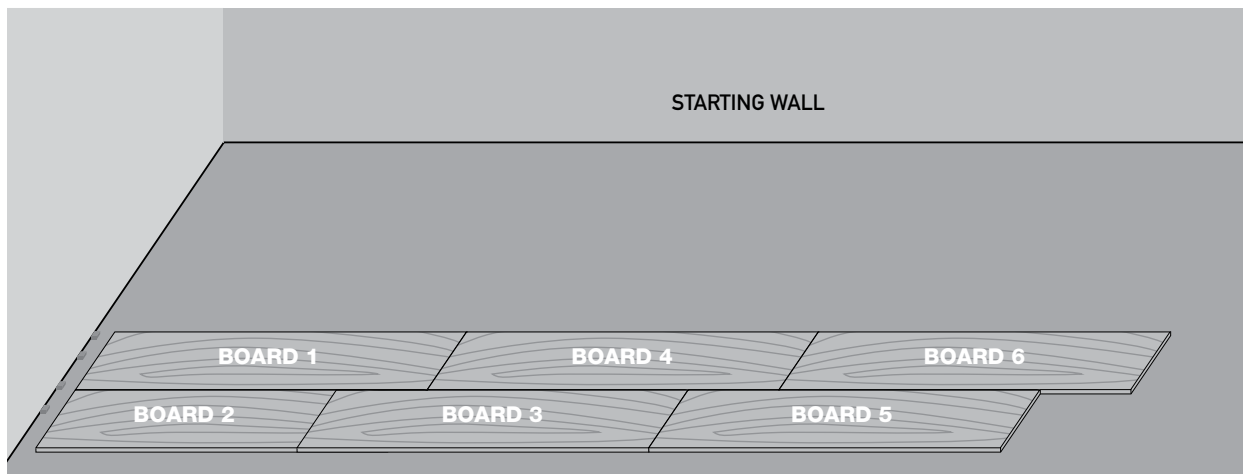


Flat Installation [Angle/Tap]

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 a single hit on 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.



Begin at the left hand end of the starting wall. Start 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.



CORRECT ORDER FOR INSTALLATION OF FIRST BOARDS

Take a shorter board to begin the second row, and angle in to position against board 1, fitting together the long side joint. Place a spacer at the left hand end of the second board. NOTE: Lay a heavy object like a full box of the flooring on the end of the first two boards to help keep them in position while you continue the installation.

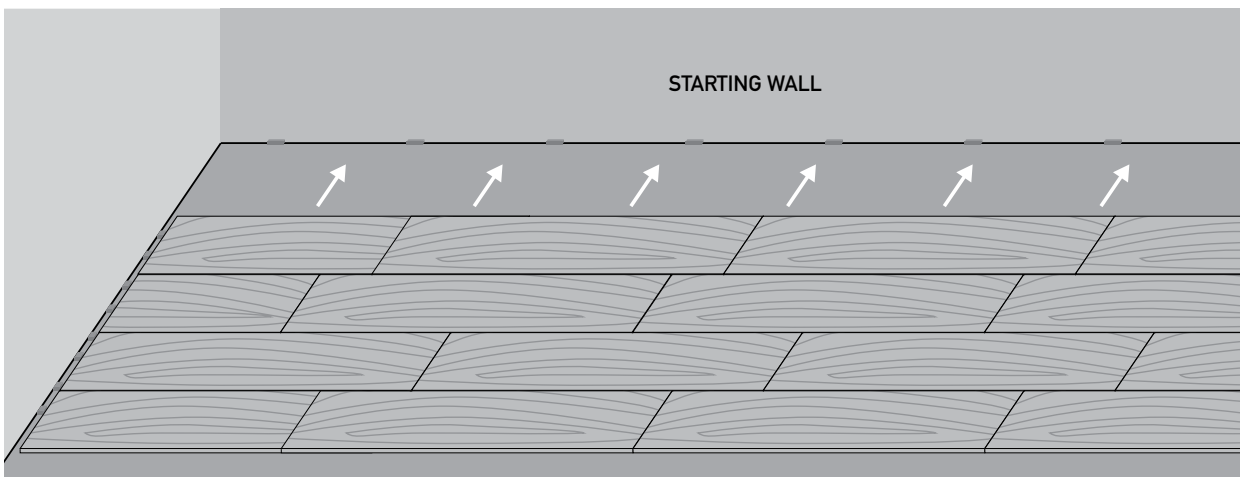
Install board 3. Hold it at angle and fit the butt end joint into the end of board 2. Drop board 3 slightly to engage the butt joint, then lift board 2 & 3 together and move gently up and down while pressing forward until the long side joint of board 3 locks into board 1.

If installing product with board lengths of 48" (1200mm) or less, do not use offcuts less than 6" in length and stagger all butt joints by minimum of 6". If installing product with board lengths over 48" / 1200mm, do not use offcuts less than 12" in length and stagger all butt joints by minimum of 20".

Take board 4 and saw off the tongue joint on the long side only. Hold it at angle and fit the butt end joint into the end of board 1. Drop board 4 slightly to engage the butt joint with board 1, then lift board 1 & 4 together and move gently up and down while pressing forward until the long side joint of board 4 locks into board 3. (Kneeling on board 3 while you do this will help hold everything in place.)

Install board 5 in the same fashion as board 3. Install board 6 in the same fashion as board 4. Continue until you have completed two full rows. At the end of the row, cut boards to fit, but remember to leave expansion space at the end of the row as well.

Start rows with a variety of different lengths of boards. You can also use off cuts from previous row ends to begin new rows, as long as they are minimum length [see NOTE above]. Remember to stagger butt joints by the recommended minimum distance.

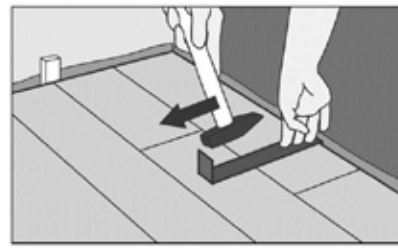
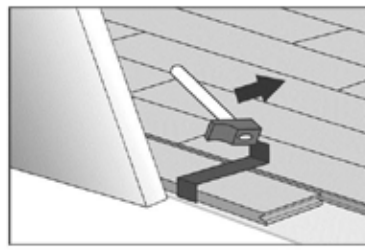
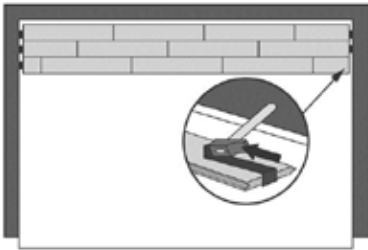
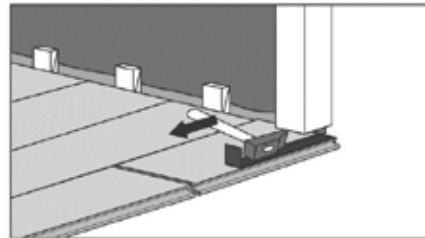
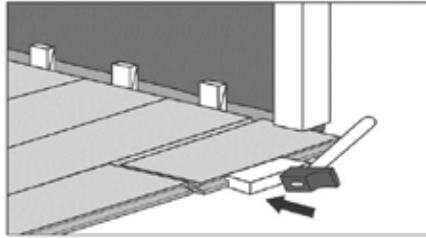


AFTER 3 OR 4 ROWS ARE COMPLETE, SLIDE THE ENTIRE ASSEMBLY AGAINST THE STARTING WALL.

Continue installing in this manner until you have completed three or four full rows. Insert a series of expansion spacers along the starting wall and slide the assembled flooring against the starting wall.

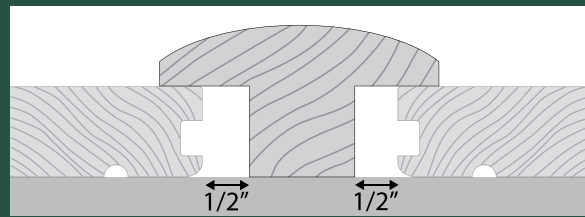
If a board cannot be angled into place – if it is under a door jamb or other obstacle, for example - use the flat installation method. Lay the board flat on the floor and, using a special Unilin tapping block and hammer, gently tap along the edge until the joint is closed. Tap gently and repeatedly; do not use excessive force. To close a butt joint, use a series of light taps. To close a long side joint, tap gently and repeatedly along the entire length of the joint.

Use tapping block and pull bar to work under door frames and other obstacles.



Continue with the installation throughout the rest of the room. Maintain 1/2" expansion space at all perimeter walls and other vertical obstructions.

Where the flooring transitions from one room to another in a doorway or archway, leave an expansion gap at the threshold and cover with a T-cap molding. The gap should be wide enough to accommodate the molding and expansion space on both sides. Ensure the molding is glued to the subfloor and not to the flooring.



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 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.

It is essential that a floating floor has freedom to move and is not impeded in any way from doing so. In addition to expansion space, ensure nothing is attached to the floor in such a way that the floor

becomes affixed to the subfloor below. Cabinetry, closet tracks, chair rails etc should not be mounted on the floor in such a way that they are impeding the movement of the floor.

If the flooring was installed over a radiant heating system, bring the temperature of the system up gradually, in 5°F (2°C) increments per day. Never allow the surface temperature of the floor to exceed 80°F (26°C) and avoid dramatic temperature changes; always adjust the system gradually in 5°F (2°C) increments per day. It is recommended that a dedicated thermostat be installed to allow the temperature of the radiant heating system to be accurately controlled.

ON COMPLETION OF THE INSTALLATION

- Sweep or vacuum the floor and clean lightly with Therapy by Kentwood Spray Cleanser to ensure the floor is delivered to the customer looking its best
- Use of steam assisted cleaning mops will cause damage and void warranty.
- Ensure the homeowner or site supervisor is cognizant of the need to maintain heat and humidity at the required levels at all times
- Ensure the homeowner or site supervisor has been given a copy of the Kentwood care & maintenance guidelines (available online at kentwoodfloors.com)
- Complete a visual inspection of the installation with the homeowner or site supervisor. Inspect the floor from a standing position in non-reflected light. Touch up nail holes or slight imperfections with appropriate touch up putty or stain according to accepted industry practice.
- Complete the installation record form for future reference

If the floor is not being put into use immediately, the use of a floor protection membrane is strongly recommended. Use a material with a Perm Class 3 vapor permeance rating to avoid trapping moisture/vapor on or within the floor. When using floor protection, be sure to:

- Cover the entire floor to avoid exposing a partial area to sunlight causing an uneven color change
- Overlap the seams of the membrane and tape them to each other. Never tape the membrane directly to the floor.
- Run membrane to the perimeter walls and tape to the base or shoe mouldings using low adhesion masking tape.

24 HOURS AFTER INSTALLATION

- Remove blue tape if necessary
- Install a floor protection membrane where appropriate (see above)
- If the flooring was installed over a radiant heating system, bring the temperature of the system up gradually, in 5°F (2°C) increments per day. Never allow the surface temperature of the floor to exceed 80°F (26°C) and avoid dramatic temperature changes; always adjust the system gradually in 5°F (2°C) increments per day. It is recommended that a dedicated thermostat be installed to allow the temperature of the radiant heating system to be accurately controlled.