

# INSTALLATION INSTRUCTIONS FOR ENGINEERED FLOORING

## Our Commitment to the Homeowner

*Creative At Home Inc.* is committed to providing homeowners with the best in wood flooring products. We take great pride in every aspect of our business to ensure that the quality of our products exceeds your expectations.

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### *Special Considerations for CRAFT Flooring*

1. Please note that the standard box length is 8'. All 8' boxes contain a mixture of plank lengths ranging from 12" to 96". Some products may also contain box lengths of 11', 10' and 12'.
  2. Although the lengths of the CRAFT planks are not truly random (there are fixed lengths ranging from 1' to 12'), a random look can easily be achieved when time is taken to prepare the layout. Rack out the floor before nailing or gluing down to randomly distribute grain and colour variances. Avoid clusters of light or dark colours and avoid the creation of discernible patterns such as "H" joints or "steps" (see diagram on page 6 of Installation Instructions).
  3. Each board must have T&G glue bonding the end joints together. Adhesive must be applied to the bottom of the groove. We recommend using: Titebond 2104, Roberts 1406, or Deccobond 18.
  4. CRAFT hardwood flooring and mouldings are manufactured in compliance with accepted industry standards, which permit a defect tolerance and grading tolerance not exceeding 5%.
  5. Once installed, any board is considered as having been accepted by the installer and owner.
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## IMPORTANT HOMEOWNER & INSTALLER INFORMATION

PLEASE READ ALL INSTRUCTIONS AND WARRANTY INFORMATION CAREFULLY  
**PRIOR TO PREPARATION AND INSTALLATION** OF YOUR NEW FLOOR.

*Creative At Home*, the manufacturer of CRAFT, wants you, the Homeowner, to be completely satisfied with your floor. It is very important that you or the installer inspect the boards carefully before installation because once the flooring has been installed it will be considered as having been accepted by the installer and homeowner. If the homeowner is absent during the installation, the installer must exercise good judgment.

CRAFT Engineered Hardwood Flooring can be installed on, above or below grade. Please refer to the *Installation Application Methods Chart* to determine suitable applications for CRAFT Engineered Hardwood Flooring. (Find this diagram after last page of this document.)

## Radiant Floor Heating systems

All CRAFT Engineered Hardwood Flooring can be installed over Radiant Floor Heating systems. Further installation instructions for Radiant Floor Heating systems can be found on *page 9*. The warranty form must be forwarded to Creative At Home ([warranty@creativeathome.com](mailto:warranty@creativeathome.com)) prior to installation.

## Storage and Handling

**IMPORTANT: Always store in a controlled environment that is as close to normal living conditions as possible.** Do not store CRAFT Hardwood in a garage or basement where the wood may be subjected to extreme temperatures and/or humidity changes. Damage to flooring caused by improper storage is not covered by CRAFT limited warranties.

## Care Throughout Installation

Prefinished hardwood floor installation requires a little more time and precaution than unfinished flooring. Handle with care to avoid damaging board surface or finish.

- The room must be kept clean throughout the installation process.
- Cut boards outside the room where the floor is being installed to avoid dust and debris on your new floor.
- Cover installed portion of the floor with a breathable protective wrapping such as building paper or cardboard.
- Never lay tools, toolboxes or nails on your new hardwood floor.
- Restrict traffic from other trades on the hardwood floor during and after installation.
- A touch-up kit for minor repairs during and after installation may have been included with the purchase of your hardwood. Otherwise, please contact your dealer/retailer if you require one.
- Touching up minor blemishes with stain markers or putty is an acceptable form of repair.

## INSTALLER AND OWNER RESPONSIBILITY

Wood floors are a product of nature and therefore are not perfect. CRAFT hardwood flooring and accessories are manufactured in compliance with accepted industry standards, which permit a defect tolerance and grading tolerance not exceeding 5%. Because of the natural colour variation in wood flooring from piece to piece, and the variety of box lengths, work out of a minimum of 4 cartons at a time (*as described in the Special Considerations box on page 1*). This will ensure a beautiful blend of shading.

Prior to installation, the installer and owner must make sure that every subfloor inspection and pre-installation requirement listed in this guide is satisfactorily met or exceeds minimal specifications. **Final grade, manufacturing, finish quality check and approval of product before installation remains the sole and joint responsibility of owner and installer**, even if the owner is absent at the time of installation. The installer must exercise sound judgment before and during the installation. If a board does contain a minor defect or imperfection, simply cut off the flawed piece and discard it, or use it in a closet or another hidden place. **Once installed, any board is considered as having been accepted by the installer and owner.**

CRAFT hardwood floors are covered by a Limited Lifetime Structural Warranty that may be voided due to improper installation or failure to follow the instructions and recommendations provided by the manufacturer, or through the use of inappropriate tools or materials.

## BEFORE INSTALLATION

### Site Preparation

To ensure a successful installation, the following site conditions requirements must be met. Hardwood floor installation should be the very last step of any construction or renovation project.

### Evaluation of the job site & moisture content

Before installation, inspect the job site thoroughly to determine if the subfloor and conditions are acceptable. Check the following:

- Flooring will not be exposed to excessive periods of high humidity.
- Crawl spaces are well cross-ventilated and ground is 100% covered with 6 mil black poly and a minimum of 18" to the underside of the joists.
- Vents are located throughout the foundation (a minimum of two) and open year-round, with total openings equal to 1.5% of the square foot area of the crawl space. (Example: a 1000 sq. ft. crawl space should have a total of 15 sq. ft of vent space.)
- The building is closed in, with outside windows and doors installed.
- All work involving water or moisture (plumbing, plaster/drywall, ceiling and wall finishes, painting, etc.) has been finished with enough time to allow complete drying prior to installation of the flooring.
- Exterior landscaping is complete and graded away from the building. Gutters and downspouts in place and directing water away from the foundation.
- Prior to installation, the heating system has been operational for one week, maintaining a temperature of 22°C (72°F).
- Relative humidity (RH) must be 30–50%.
- Pre-select flooring boards that will blend with any mouldings to be installed, and lay aside until needed. This will ensure that the moulding will blend with the adjoining board.

### Subfloor preparation

#### Installation over Plywood Subfloors

- The plywood subfloor should be within a 2% difference of the CRAFT floor's moisture level. The plywood subfloor moisture content must not exceed 12% before delivery of the flooring. Moisture content above recommended levels could cause moisture-related problems after installation. If the moisture reading is too high, postpone delivery and installation of material. Locate the source of the moisture and correct if needed. Raise heat and increase ventilation until proper conditions are met.
- Installation requires a minimum of 5/8" (16 mm) plywood, or 3/4" (19 mm) approved OSB chipboard subfloor, if installed over 16" (400 mm) centre-to-centre joist sub-structure.
- Particleboard is not an approved subfloor.
- Wooden subfloor must be securely fastened down to joists to prevent any movement or squeaks. Thoroughly inspect and replace existing floor or subfloor that shows evidence of water damage or structural weakness.
- Subfloor surface should be as level as possible and should not vary more than 3/16" (5 mm) within a 10' (3 m) radius. If necessary, flatten down any irregularities and fill any uneven spots with levelling compound.
- Floor must be installed perpendicular to the joists unless an additional layer of 1/2" plywood is used when installing parallel to the joists.
- Remove all baseboards, base mouldings, shoe mouldings, doorway thresholds, etc.
- Undercut all doorjamb.
- Remove debris or obstacles such as cleat nail heads, dried glue and/or any other material, and then vacuum.

## Installation over Concrete Subfloors

- Measure the moisture of the concrete. The moisture must not exceed 4%; 3 lbs./24 hours/1000 square feet with calcium chloride testing or 75% RH with in situ testing.
- Concrete must be a minimum of 45 days old prior to any testing being conducted.
- Concrete must be flat within 3/16" over 10". If not, grind down the high spots or fill the low spots with an appropriate floor levelling or patching compound.
- Use minimum 3/4" or thicker exterior grade plywood. To fasten the plywood to the concrete, use powder actuated nail gun or hammer-driven concrete nails. When installing plywood over concrete use 1-1/2" staple or cleat.
- Installed floor patch (if required) must be within moisture limits prior to installation.
- Debris must be removed and floor vacuumed. Once the site conditions have been met, have the flooring delivered.
- Use a good quality urethane adhesive such as *Bostik's*, *Titebond* or *Sika* adhesive systems for concrete subfloors where manufacturer offers a *Bond Warranty*. We recommend the installer follow the adhesive manufacturer's instructions carefully for subfloor preparation, moisture testing, and installation so that all parties are covered by these warranties. Not warranted by *Creative At Home* beyond finish warranty.

Once the site conditions have been met, have the flooring delivered into the rooms where the installation will occur a minimum of 48 hours before installation is to begin. This will allow the wood to acclimatize to the recommended indoor conditions.

## Tools

Safety glasses • Vacuum • Scraper • Table Saw • Level • Mitre Saw • Hand saw or jamb saw • Chalk Line • Tape measure • Square Hammer • Rubber Mallet • Finishing nails • Pry or pull bar • Touch-up kit • Power drill & 3/32" bits • Slip tongues (optional) • Utility Knife • Wood and/or concrete moisture metre • Rubber mallet • Pneumatic nailer • Flooring screws • Manual nailer • #15 black felt paper • Adapter to fit nailer for engineered flooring • Air compressor for pneumatic nailers (set to 70–80 psi) • Use 2" 16-gauge cleats or 2" 15-gauge staples • Use 1-1/2" 18 gauge cleats for 5/8" product

## Nailer tips

To avoid damaging boards during installation:

- Use quality nails or staples that are approved for use in the nailer or stapler and are the correct size and gauge.
- Ensure that the nailer base remains clean and free from nicks at all times. When not in use, refrain from laying nailer directly on floor.
- Ensure that the nailer base sits flat on the floor and plumb against tongue before nailing board down. Use a test piece to ensure that the fastener is properly seated in the correct position in the reveal pocket at the back of the tongue. Adjust the nailer or air pressure to achieve proper placement of the fasteners.
- Set and check air pressure regularly. Different hardwood species or subfloor types require specific air pressure settings.
- Before starting the installation, test and become familiar with the nailer operation.
- Practice use on a few offcuts before proceeding with the installation.

## FASTENER WITH PARTIAL GLUE-DOWN INSTALLATION FOR PRODUCTS 7" AND WIDER

RECOMMENDED ADHESIVES								
BRAND:	BOSTIK							
PRODUCT:	BEST	BST	PROCURE	EFA+	VAPOUR LOCK	ULTRASET SINGLE STEP	GREEN FORCE	PRO-MSP
CRAFT APPROVED	✓	✓	✓	✓	✓	✓	✓	✓
WARMBOARD Radiant Floor Heat Approved	✓	✓	✓	✓	✓		✓	✓

RECOMMENDED ADHESIVES									
BRAND:	TITEBOND						SIKABOND		
PRODUCT:	801	811	821	771	991	231	T21	T54	T55
CRAFT APPROVED	✓	✓	✓	✓	✓	✓	✓	✓	✓
WARMBOARD Radiant Floor Heat Approved		✓	✓	✓					✓

RECOMMENDED ADHESIVES												
BRAND:	MAPEI ULTRABOND ECO				BONA		STAUF					
PRODUCT:	975	980	985	995MB	R850T	R851	SMP840	SMP960	CBR970	PIC850	PUK455	PUM950
CRAFT APPROVED	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WARMBOARD Radiant Floor Heat Approved	✓	✓			✓	✓						✓

### Additional materials for glue-down installation:

The recommended cartridge adhesives are: Bostik Best, Sika Construction, Mapei 905 and Bona 850T • Trowel as recommended by adhesive manufacturer • Adhesive cleaner as recommended by adhesive manufacturer • 3M blue adhesive tape recommended by manufacturer

***PL Brand or equivalent construction adhesives are NOT recommended and if used will void the warranty***

### Preparation

- Measure the room carefully to ensure that the new floor can be installed squarely and evenly.
- Choose starting point or wall.
- Choose layout angle; 90° or 45° angle to joists is recommended.
- Because of the variety of plank lengths, and the natural colour variation in wood flooring from piece to piece, **work out of a minimum of 4 open cartons of varied box length at a time** to ensure a beautiful blend of shading and board pattern. **Please see *Special Considerations* box on page 1 for important further instruction.**
- Using a chalk line, measure the width of the flooring plus 3/4" for expansion gap, and trace a line parallel to the starting wall. For example, if using 6" boards, trace guideline at 6¾" from starting wall. **Starting with a straight, square line is imperative to a successful installation.**
- The moisture-cured polyurethane adhesive may be spread one of two ways:
  1. Before laying the board down, apply a glue strip down the centre of the back of each board in an "S" pattern to ensure proper coverage, then proceed to mechanically fasten with nails and cleats as outlined below.
  2. Apply a glue strip, using the adhesive manufacturer's recommended trowel, directly on the plywood subfloor every 8" across the width of the plank, alternating with the nailing schedule as outlined below.
- In some installations it may be beneficial to spread the adhesive as a complete full spread

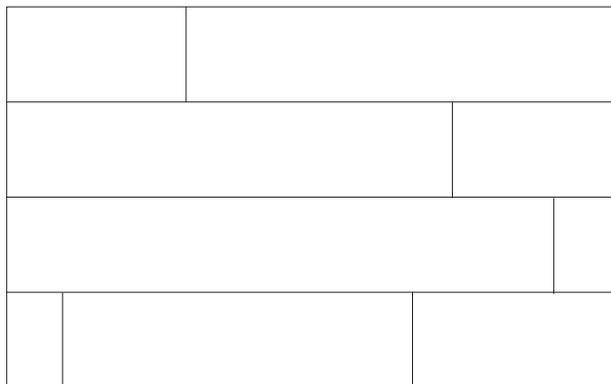


for the first 2-3 rows combined with top nailing the first row. This will allow for faster use of the nailing gun.

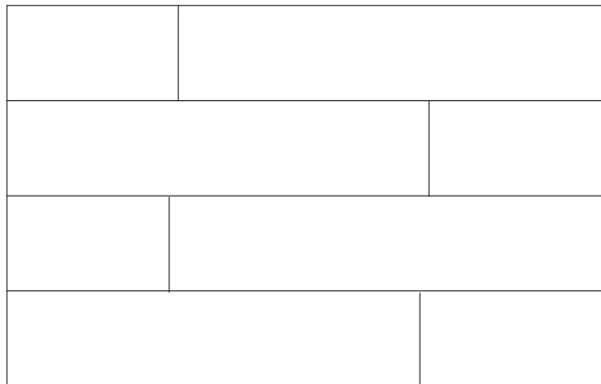
- Spread only enough glue adhesive as per adhesive manufacturer's instructions.
- **For a perfect fit, it is very important that urethane adhesive does not seep into the grooves at any time. Urethane adhesive that gets onto the finished surface must be cleaned off with adhesive manufacturer's recommended cleaner right away.**
- Planks can be set directly into the wet adhesive.
- Lay the starting strips with the tongues facing away from the wall along the chalk line. Using flooring or casing nails, top nail every 6-8" into the face of the strip as close to the wall as possible. Do not position a nail closer than 2" from the end of a board. Each board must be fastened with a minimum of two nails. These nail holes will be hidden by the baseboard after installation. **Pre-drilling the nail holes will prevent cracking.** Set the nail with coloured putty to match the wood. Each board must have glue bonding the end joints together.
- Starting no closer than 2" from the end of each board, drill pilot holes into the tongue at a 45° angle every 6-8" with shank nails, or use a 2" brad nailer. Set the nails, making sure that the heads are completely set. Each board must be fastened with a minimum of two nails. Make sure nails are not proud of the tongue, or flooring may not fit tightly together.
- Measure and cut the last board in the first row, leaving a 1/4" space between the wall and the end of the board. To minimize trim waste, select a board long enough for the row end so that the remaining end may be long enough to start the following row.
- The first board of the second row must be at least 6" longer or shorter than that of the first

row. Leave a 1/4" gap between the wall and the end of the board.

- Lay out 7 or 8 rows at a time of the flooring, end to end in a staggered pattern with the end joints a minimum of 6" apart. This will allow you to see what the pattern will look like after they have been installed. Ensure that you have a good mix of colours and nuances of tone through the boards. Now is the time to make any changes to the layout.
- Depending on the width of the boards being installed, you may have to manually nail the first 3-4 rows. After that, you can switch to a floor-nailing tool that drives staples or cleats. The floor is to be nailed every 6-8" and 2-3" from the ends of each board. Each board, regardless of its length, must be nailed a minimum of two times. Each board must have glue bonding the end joints together, and adhesive must be applied to the bottom of the groove. We recommend using: *Titebond 2104, Roberts 1406, or Deccobond 18.*
- Complete the last 3-4 rows manually as you did the first few rows. You may have to rip-saw the last row of boards to leave the required 3/4" expansion gap alongside the finishing wall.
- If applicable, install transition mouldings, stair nosings and reducers.
- If applicable, reinstall baseboard and trims, making sure to nail them into the walls. DO NOT nail them into the floor as this will restrict floor movement.
- When installation is complete, vacuum and cover flooring to prevent damage until project is complete.
- Using 3M blue tape, tape the strips together to ensure that the installed strips do not move after they have been installed.
- Wait 8-12 hours before allowing any traffic on the floor.
- Remove tape, sweep and clean floor.



Correct end board layout (end matches form random pattern)



Incorrect end board layout (end matches form pattern at 1" increments)

## FULL GLUE-DOWN INSTALLATION

### Additional materials for glue-down installation:

- Recommended adhesives: *Bostik Urethane adhesive (Bostik BEST, or BST; Mapei Eco 980, Eco 985, or Eco 995MB; Franklin 811 ; Stauf 850 or 455; SikaBond T54, T55 or T21, BONA R851)* • Trowel recommended by manufacturer • Recommended adhesive cleaner • 3M blue adhesive tape

***PL Brand or equivalent construction adhesives are NOT recommended and if used will void the warranty***

### Preparation

- Measure the room carefully to ensure that the new floor can be installed squarely and evenly.
- Check the subfloor for flatness and ensure that it is secure. Clean the subfloor so that it is free from any contaminants.
- Thoroughly sweep/vacuum.
- Choose starting point or wall.
- Choose layout angle; 90° or 45° angle to joists is recommended if installing on plywood.

### Installing the floor

- Because of the variety of plank lengths, and the natural colour variation in wood flooring from piece to piece, **work out of a minimum of 4 open cartons of varied box length at a time** to ensure a beautiful blend of shading and board pattern. **Please see *Special Considerations box on page 1* for important further instruction.**
- Using a chalk line, measure the width of the flooring plus 3/4" for expansion gap, and trace a line parallel to the starting wall. For example, if using 6" boards, trace guideline at 6¾" from starting wall. **Starting with a straight, square line is imperative to a successful installation.**
- Install boards with tongue facing away or toward the wall.
- Lay out several rows at a time, from different boxes of the flooring, end to end in a staggered pattern with the end joints a minimum of 6" apart. This will allow you to see what the pattern will be like after the floor has been installed. Now is the time to make any changes.
- Spread only enough glue adhesive as per adhesive manufacturer's instructions.
- **For a perfect fit, it is very important that urethane adhesive does not seep into the grooves at any time. Urethane adhesive that gets onto the finished surface must be cleaned off with adhesive manufacturer's recommended cleaner right away.**
- Planks can be set directly into the wet adhesive.
- Do not allow adhesive to cure before laying planks into the adhesive.
- Working from left to right, lay the first row end to end and cut the final piece of the row to fit, leaving a 3/4" expansion gap against the wall. Use the remainder of the cut piece as the starting point of the second row if its minimum length is 12" or more.
- Each board must have glue bonding the end joints together, and adhesive must be applied to the bottom of the groove. We recommend using: *Titebond 2104, Roberts 1406, or Deccobond 18.*
- Using 3M blue tape, tape the strips together to ensure that the installed strips do not move after they have been installed.
- Occasionally lift a board to check for adequate adhesion transfer (minimum of 110% of the board).
- Proceed the same way in the following rows.
- A last board puller or pry bar may be used to position the last boards in a row.
- Wait 24 hours before allowing any traffic on the floor.
- Restrict heavy furniture placement for 24 hours.
- Remove tape, sweep and clean floor.
- Allow the urethane-based adhesive to dry and cure before covering. Refer to adhesive manufacturer's instructions.
- Do not cover the floor with non-porous material such as plastic or vinyl, as the adhesive needs proper ventilation to cure.

# INSTALLATION INSTRUCTIONS, CARE AND WARRANTY OVER RADIANT FLOOR HEATING SYSTEMS

CRAFT *Engineered Hardwood* floors are warranted over Radiant Floor Heating systems as long as both the *NWFA Installation Guidelines* and the following guidelines on this section are followed when installing the floor. Additionally, the *Homeowners' Responsibility Form* (attached) must also be read, signed, and submitted to *Creative At Home* as acknowledgement of understanding the basic responsibility of the homeowner, and our *Care & Maintenance Guidelines* must be properly followed thereafter.

## Subfloor Preparation

- Prior to the installation over concrete, sufficient time must be allowed for the slab to dry and cure (normally 30-60 days). Starting a radiant heat system embedded inside a concrete subfloor prior to it being cured could have a negative impact on its structural integrity.
- Turn the system on for a period of 5-16 days at 2/3 of the system's maximum temperature to remove residual moisture. Halfway through the period, increase the temperature to the system's maximum output for two days.
- Once the slab or subfloor is dried, turn the system off for 1-2 days prior to installation. The temperature of the subfloor cannot exceed 20°C (68°F) at installation time. This is to allow the adhesive to cure properly.

## Heating and Moisture Control

- 24-48 hours after the installation has been completed, gradually increase the temperature of the system by 3°C (5°F) each day.
- It is essential to maintain a relative humidity of 30-50% throughout the year, and this is especially important when using Radiant Floor Heating systems due to the dry heat that these systems create. If necessary, permanent and/or portable humidifiers should be employed to achieve the required conditions.
- At time of installation, the maximum difference between the moisture content of the flooring and the subfloor must never be more than 2%.
- The heat produced by the Radiant Floor Heating system must NEVER at any time exceed 29°C (85°F). Allowing the heat produced by the Radiant Floor Heating system to exceed this can severely damage any engineered wood floor.
- When turning the Radiant Floor Heating system on or off, it is imperative to avoid increasing or reducing the temperature of the subfloor by more than 3°C (5°F) per day.
- Upon turning the Radiant Floor Heating system on for the first time (or having been turned off for a lengthy period), be sure to introduce gradual heating over the course of several days so that the wood can properly acclimate.

## ADDITIONAL INFORMATION

For additional information on applications that may not be covered in these instructions, please refer to the National Wood Flooring Association (NWFA) installation guidelines at [www.nwfa.org](http://www.nwfa.org).

Please ask your wood flooring provider if you have any further or more specific questions or concerns. They will be happy to help you protect your wood floor investment.

# FLOATING INSTALLATION FOR ENCORE PRODUCTS

## Preparation

- Ensure the subfloor is suitable and properly prepared. Verify that the moisture content of both the subfloor and flooring is within allowable limits before commencing installation. Ideally within 2% of one another up to a maximum of 4%.
- 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.
- 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.
- When installing over concrete, an additional vapor etarder 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.
- When installing Encore flooring in a kitchen all expansion spaces subject to moisture or plumbing leaks must be sealed using a mildew resistant 100% silicone sealant. Fill the expansion space in front of the sink and dishwasher, around the refrigerator and icemaker, exterior door/s and any other area subject to flooding. It is recommended that kitchen cabinets be installed prior to installing Encore flooring. Install the plank up to the kick plate of the cabinets, leaving a minimum ¼" expansion space.
- Cover the expansion space with a quarter round molding. Encore flooring is not suitable for a floating installation in bathrooms or laundry rooms near toilets, bathtubs and shower stalls.
- Install an underlay over the entire subfloor surface. The seams should butt, not overlap.

## Installing the floor

- Open several packages of flooring and rack and inspect boards. 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. Undercut door jambs and existing baseboards to allow enough room for flooring and underlayment and ensure that the proper moisture content is obtained through acclimation. When levelling the subfloor, maintain a tolerance of 3/16" over 10' and 1/8" over 6'. Use of spacers are required to ensure proper expansion width is maintained around the entire perimeter. The maximum length of installation without an expansion moulding (t-mould) is 40' lineal ft . Note: Larger rooms require additional expansion space. Add 1/16" to the width of the expansion space for every 3' the room extends beyond 25'. Dimensions exceeding 40' in length or width – it is recommended to use a T-Molding for proper expansion. 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. 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.
- Always glue the end joints together using a noncrystallizing wood flooring glue (e.g. Deccobond 18, Roberts 1406 or Titebond 2104). Apply glue in a 1/8" bead to upper edge

of groove portion of joint only. Set joints closed using a hammer and tapping block. Never use a hammer directly on the tongue and groove joints as damage to the joint may result. Throughout the entire installation, clean up excess glue immediately according to glue manufacturer's instructions.

- Begin your second row and run a 1/8" bead of glue along the upper edge of the groove on the long side and the right hand end joint. Align left hand edge with first row and set in place, engaging long side joint. Tap joint closed and clean any excess glue. Repeat for subsequent boards in second row. Use off-cuts if lengths are suitable (preferably 8" or longer) and stagger end joints as required.
- When second row is completed, tape the boards with 3M Scotch-Blue™ 2080 or Frog Tape®. Do not use regular masking tape as it will leave a residue of adhesive on the surface and void the warranty.
- After one hour, resume installation using same technique for gluing and setting joints. Open new packages several at a time and rack and inspect boards as described above. Use off-cuts if lengths are suitable and stagger butt joints as required. Maintain 1/2" expansion space at all perimeter walls and other vertical obstructions.

## Completing The Installation

- Sweep or vacuum floor.
- Clean the floor with proper hardwood floor cleaner
- Install transition pieces, i.e. thresholds, t-moldings, baseboards and quarter rounds. Nail moldings to wall, not the floor.
- Inspect final floor for nicks and or minor gaps – fill with appropriate color wood putty.
- Unused material should be left with owner and stored in a dry place in case future repairs are needed.
- Use plywood or hardboard when moving heavy appliances or furniture across floor.
- To keep the joints tight while the adhesive sets up, tape the entire floor with either 3M Scotch-Blue™ 2080 or Frog Tape®. Be sure to remove the tape at the end of each workday; do not leave it on the floor overnight. Under no circumstances should the tape be left on the floor for longer

than 12 hours, as damage to the finish may result and void the warranty. After tape has been removed, install moldings and transitions as required. Ensure baseboard moldings are applied to the wall, not the floor.

- If the flooring was installed over a radiant heating system, wait 24 hours after installation or until the adhesive has fully cured before turning the system back on. Bring the temperature of the system up gradually, in 5 degree F (2 degree C) increments. Never allow the surface temperature of the floor to exceed 85 degrees F (29 degrees C) and avoid dramatic temperature changes; always adjust the system gradually in 5 degree F (2 degree C) 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.

## 24 HOURS AFTER INSTALLATION

- Install a floor protection membrane where appropriate.

## FLOOR PROTECTION DURING CONSTRUCTION

- After installation, if you choose to protectively cover the floor, cover the floor completely, since some species are light-sensitive and uncovered areas may change color. Use a covering material with a vapor permeance (perm rating) of 1 perm or more (tested in accordance with ASTM E-96) to avoid trapping moisture/vapor on or within the floor. Any covering should be taped, using a low-adhesion tape, to base or shoe moldings. Avoid taping to finished flooring. When taping paper or sheets together, tape them to each other, not to the floor.
- **NOTE: Our products are not warranted against squeaking, popping or crackling when using floating installation methods. Some squeaking, popping or crackling is normal and possible when using floating installation methods. These symptoms may be aggravated in arid areas or during dry conditions.**

# Application Techniques for Installation

APPLICATION:		FLOATING			STAPLE/NAIL W/PGD			FULL GLUE DOWN					
SUBSTRATE:		PLYWOOD									CONCRETE		
LOCATION:		ABOVE GRADE	BELOW GRADE	ON GRADE	ABOVE GRADE	BELOW GRADE	ON GRADE	ABOVE GRADE	BELOW GRADE	ON GRADE	ABOVE GRADE	BELOW GRADE	ON GRADE
ENCORE	7"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	8"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PRESTIGE	7"				✓	✓	✓	✓	✓	✓	✓	✓	✓
	8"				✓	✓	✓	✓	✓	✓	✓	✓	✓

**Note:** All CRAFT Engineered Flooring can be installed over Radiant Floor Heating systems. Please follow the *Creative At Home* and *NWFA* installation guidelines. Please submit the Homeowner Responsibility Form prior to installation.

**Note:** For ALL CRAFT Flooring products, we recommend gluing the end butt joints with Tongue & Groove adhesive applied to the bottom of the groove, for optimal performance.