LATITUDES 7.5

INSTALLATION & MAINTENANCE INSTRUCTIONS | HARDWOOD

PLEASE READ ALL INSTRUCTIONS CAREFULLY, BEFORE YOU BEGIN INSTALLATION. IMPROPER INSTALLATION WILL VOID WARRANTY.

OWNER/INSTALLER RESPONSIBILITY

• The installer assumes all responsibility for final inspection of product quality.

• This inspection of all flooring should be done before installation.

• Carefully examine the flooring for color, finish and quality before installation.

• Use reasonable selectivity and hold out or cut off pieces with glaring defects, whatever the cause.

• If material is not acceptable contact your flooring dealer prior to installation.

• Before the installation of any flooring product, the installer must determine that the environment of the job site and the condition and type of subfloor involved is acceptable; ensuring that it meets or exceeds all the requirements stipulated in the installation instructions that follow.

• The manufacturer declines responsibility for job failure resulting from inappropriate or improperly prepared sub-floors, job site environmental deficiencies or improper care and maintenance.

• The use of stain, filler or putty for the correction of defects during installation should be accepted as normal procedure.

• When your flooring is ordered, a 5-10% waste factor, depending on layout, must be added to the actual square footage amount needed. (Diagonal installations may require more).

CAUTION: WOOD DUST – sawing, sanding and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans. If power tools are used they should be equipped with a dust collector. If high dust levels develop, use an appropriate NIOSH-designed dust mask. Avoid dust contact with eyes and skin. In case of irritation, flush eyes and skin with water for at least 15 minutes. If irritation persists, contact a physician.

JOBSITE INSPECTION

• In new construction, flooring is to be the last product installed.

• Engineered hardwood flooring should be protected from moisture at all times during transportation, storage and installation. The flooring must be stored in a dry place prior to installation. Be sure to provide a 4" air space between the flooring cartons and the on-grade concrete subfloor to ensure airflow and to prevent flooring from absorbing moisture from the concrete subfloor. The wood subfloor should not exceed 13% moisture content. Use a reliable wood moisture meter to measure and document the moisture content of both the wood subfloor and the wood flooring. The difference between the moisture content of the wood subfloor and the wood flooring must not exceed 2%.

• All work involving water or moisture (plumbing, acoustical ceilings, drywall taping, etc.) must be completed prior to flooring being installed.

• The flooring cannot be delivered until the building has been closed in and cement work, plastering, painting and other materials are completely dry. Concrete and plaster should be cured at least 60 to 90 days.

• Permanent HVAC (heating/air conditioning) systems must be operating for at least 14 days before installation, maintaining a constant room temperature between 60°-75° F and a relative humidity of 35-55%. Exterior drainage-including gutters and downspouts must be in place and drain away from the building.

• Engineered Hardwood Floors can be installed on, above, or below grade, although they are not recommended for full bathroom installations. Basements and crawl spaces must be dry. Crawl spaces must be a minimum of 24" from the ground to the underside of the joists. A vapor barrier (6-8 mil black polyethylene film) must be put in crawl spaces with joints overlapped and taped.

• Check basements and under floor crawl spaces to be sure they are dry and well ventilated to avoid damage caused by moisture.

• Hardwood flooring should be acclimated to the environment in which it is expected to perform. Open cartons without removing the flooring and allow the flooring to acclimate to live-in, jobsite conditions prior to installation.

• Controlling wood moisture content is critical for success. Acclimate the new flooring inside the home in consistent indoor temperatures of 60°-75° F and indoor humidity levels of 30%-50% for approximately 72 hours or until the difference between the moisture of the wood subfloor and wood flooring does not exceed 2%. Continue to acclimate the flooring until you meet these requirements. The length of the acclimation time is not the determining factor. The goal of acclimation is to reach a balance between the core of the new flooring with its surroundings before assembly, fastening or installation. Acclimation is the responsibility of those overseeing the project. Not following the above recommendations can negatively impact board performance and can result in excessive movement, squeaks, board gapping, board-edge cupping, finish and other related issues.

Note: The relative humidity of any room can be checked with a hygrometer.

Note on bowing: The boards may be slightly concave or convex when removed from the carton. Once they are properly installed they will lay flat.

SUBFLOOR MOISTURE

• Check the moisture content of both the sub-floor and the hardwood flooring with quality calibrated pin moisture. Wood sub-floor must not exceed 2% moisture content difference between acclimated hardwood flooring and sub-floor. If sub-floor exceeds this amount, the source of the moisture needs to be located and eliminated before installation.

SUBFLOOR FLATNESS & INTEGRITY

• Wood floors must be flat, clean, dry, structurally sound, free of squeaks and free of protruding fasteners.

• For installations using mechanical fasteners of 1-1/2" and longer, the subfloor should be flat to within 1/4" in 10 feet or 3/16" in 6 feet radius.

• For glue-down installations and installations using mechanical fasteners of less than 1-1/2", the subfloor should be flat to within 3/16" in 10 feet or 1/8" in 6 feet radius.

• If peaks or valleys in the subfloor exceed the tolerances specified above, sand down the high spots and fill the low spots with a leveling compound or other material approved for use under wood flooring. However, it is the builder's or general contractor's responsibility to provide the wood-flooring contractor with a subfloor that is with the tolerances listed above.

ACCEPTABLE SUBFLOORS

Floating Installation: can be installed over any sound, flat structural surface meeting or exceeding building codes.

Nail/Staple-Down or Glue-Down Installation:

• Minimum: APA Approved 5/8" (15mm) CDX Grade Plywood; minimum 40 lb. density

• Preferred: 3/4" (19mm) CDX Grade Plywood or 3/4" (23/32") OSB Underlayment Grade (PS2 Rated) on 16" center floor joists properly nailed

• Existing wood floors (installed perpendicular to new floor)

• Resilient Tile or Vinyl

• Nailing over concrete: Must have a minimum of 3/4" plywood installed as a screed/sleeper system with a minimum of 6 mil polyethylene film vapor barrier secured to the slab. All concrete subfloors should be tested for moisture content

WARNING: Do not nail/staple over particle-board or radiant heated subfloors!

• Using improper adapters and pressure settings can cause severe damage to the flooring while using a nail/staple-down installation. Using the correct adapter and pressure will set the nail/staple correctly in the tongue. It is vital that the tool is adjusted properly so the nails/staples/cleats are being positioned at the proper angle. Air pressures set too high can cause damage to the tongue, putting blisters on the face of the flooring and malting it difficult to install adjoining boards. A good test is to set the pressure initially at 70 PSI and adjust it until the staple properly sets in the tongue.

• The manufacturer is not responsible for damage caused by mechanical fasteners. If you need to remove a nail/staple/cleat that has gone in crooked, do not pull straight up from the tongue. This will damage the surface of the board. Instead, pull out the staple from the tongue at the front of the board with all pressure from the hammer's head directed into the subfloor.

Concrete Slab	Ceramic, Terrazzo, Marnie, or Slate
Acoustic Concrete	Resilient Sheet Vinyl or Tile - one layer well bonded
Cork (acoustic)	Metal

FLOAT-IN INSTALLATION TOOLS NEEDED

- Broom
- Terry Cloths
- Moisture Meter
- Circular or Hand Saw
- Hand/Jamb Saw
- Hammer
- Nail Punch
- Pry/Pull Bar
- Utility Knife
- 3M-Blue Painter's Tape
- Pencil
- Tape Measure
- Safety Equipment (goggles,masks)
- Miter or Table Saw
- Chalk Line and Chalk
- Rubber Mallet (light colored)
- Finish Nails
- Tapping Block
- Floating Floor Foam Underlayment
- Hardwood Floor Cleaner

NAIL/STAPLE INSTALLATION TOOLS NEEDED

- Broom
- Terry Cloths
- Moisture Meter
- Circular or Hand Saw
- Hand/Jamb Saw
- Hammer
- Pneumatic Brad Nailer with 1" brads or drill bit 4d-6d screw shank nails
- Nail Punch
- Pry/Pull Bar
- Stapling Machine
- 6mil polyethylene film
- Pencil
- Tape Measure
- Safety Equipment (goggles,masks)
- Miter or Table Saw
- Chalk Line and Chalk
- Rubber Mallet (light colored)
- 15lb asphalt saturated felt
- Duct Tape
- Glue Coated Staples
- Utility Knife
- Hardwood Floor Cleaner

GLUE-DOWN INSTALLATION TOOLS NEEDED

- Broom
- Terry Cloths
- Moisture Meter
- Circular or Hand Saw
- Hand/Jamb Saw
- Hammer
- Nail Punch
- Pry/Pull Bar
- 3M-Blue Painter's Tape
- Pencil
- Tape Measure
- Safety Equipment (goggles,masks)
- Miter or Table Saw
- Chalk Line and Chalk
- Rubber Mallet (light colored)
- Finish Nails
- Trowel
- Hardwood Floor Cleaner

GENERAL TIPS

• Open 4 to 5 separate cartons at one time and mix the pieces to maximize the color and shade variations.

• Install the product parallel to the longest wall to provide the most appealing visual effect.

• Distribute lengths, avoiding "H" patterns and other discernible patterns in adjacent runs. Stagger end joints of boards row to row a minimum of 10" for planks wider than 5" for better visual effects and structural stability on mechanically fastened installation.

• Allowing for a 1/2" minimum expansion gap around all vertical obstructions is CRITICAL! Wood expands and contracts with changes in humidity. Wood will buckle and/or cup if an adequate expansion space is not allowed for. ALWAYS allow for expansion space when making cuts around or beside vertical objects (i.e. walls, pipes, etc.).

DOORWAY/WALL PREPARATION

• Undercut or notch-out door casings 1/16" higher than the thickness of the floor being installed.

• Remove existing base and shoe molding on wall as well as doorway thresholds. These can be reapplied after the installation is complete.

ESTABLISH A STARTING POINT: FLOATING, NAIL/STAPLE-DOWN AND GLUE-DOWN INSTALLATION

An exterior wall is usually the straightest and best reference line to start the installation from. If possible, the direction of the flooring being installed should be at right angles to the floor joists. Establish a starting line by leaving a minimum 1/2" expansion gap around all vertical obstructions. In at LEAST 2 places, measure out equal distances from the starting wall. It is recommended to measure 3-1/8" out from the starting wall and 12" - 18" in from the comers. Mark these points and snap a working chalk line parallel to the starting wall allowing the required expansion space between the starting wall and the edge of the first row of flooring. Plan the floor layout (width-wise) so you don't have to rip the last row NARROWER than 1". You may have to rip the FIRST row to ensure the LAST row is at LEAST l" wide.

FLOAT-IN INSTALLATION GUIDE

INSTALLING FOAM UNDERLAYMENT

• Install your first row in the SAME direction you will be installing the hardwood flooring.

• Extend the underlayment a few inches up the wall on either side.

• Trim this excess underlayment off AFTER installing the hardwood, but BEFORE you install trim or moldings.

• If a non-adhesive underlayment (on the seams) is used, tape all seams together.

INSTALLING 6 MIL POLYETHYLENE FILM

• Install your first row in the SAME direction you will be installing the hardwood flooring.

• Extend the underlayment a few inches up the wall on either side.

• Trim this excess underlayment off AFTER installing the hardwood, but BEFORE you install trim or moldings.

• Overlap the 6 mil Polyethylene Films 18" and tape them together to form an adequate moisture barrier (if installing over a concrete subfloor).

INSTALLING THE FIRST ROWS

• Install the first 4 rows together initially, allowing them to dry before installing the rest of the floor. This will ensure that the remainder of the floor is straight while installing.

• Select your first board. Remember to take boards from multiple boxes while installing. Do not install 2 pieces from the same box in a row-mix the colors and shades while installing to get a more favorable overall look. Also, remember to stagger the end-joints of adjacent rows at least 6" to create a more appealing look for the floor.

• The groove of the boards should be facing the starting wall. Use the longest boards available for the starter row. Apply a continuous bead of adhesive to the groove on the end of the board. Products with the end tongue on the LEFT should be installed right to left; if on the RIGHT they should be installed left to right.

• Complete the first row. Remember to keep a 1/2" expansion space on all sides touching the wall. Install wedges all along the wall against your first row to maintain that expansion space while you're installing. AVOID installing any boards shorter than 16" in the first four rows.

• Use the pull/pry bar to install the last board in the row. Install wedges into the expansion space and tighten.

• Once boards are installed, wipe off glue squeeze-out immediately with a clean, damp (not dripping wet-just damp) cloth.

• Using the 3M Blue Painter's Tape, tape the boards together after they have been glued and tapped together. This also ensures that the boards will remain tightly connected to each other while they dry.

• Start the second row by applying a continuous bead of adhesive to the inside groove on the length and end of the boards.

• Tap the boards together using a TAPPING BLOCK. Do NOT hammer directly on the tongue of the product-this will smash the end of the tongues making it impossible to install the next board to it.

• Install the remaining 3 rows the same way. Allow to set and dry before installing the rest of the floor.

• Remember to insert the wedges on the ends (as necessary) to restrain the movement of the floor while you are installing.

• Complete the floor, gluing the wood together as described above, and tape the boards together after you have cleaned up the squeeze out to ensure a tight fit.

• After you have finished and the floor is dry, remove all of the tape and clean the floor using a hardwood flooring cleaner.

• Trim all of the floating floor underlayment and install (or re-install) any trims or moldings as may be needed. Remember to nail the moldings into the WALL, NOT the FLOOR.

• Inspect the floor closely, filling in any gaps with a hardwood filler or matching putty.

• If further construction is necessary after the hardwood is installed, you can protect the installed floor by laying a quality rosin paper or other paper that allows the floor to breathe, taping it to the baseboards. NEVER use plastic, solid rubber, or polyethylene film to cover the installed floor since they both trap moisture and will damage the installed hardwood (creating cupping or swelling issues).

STAPLE-DOWN INSTALLATION GUIDE

INSTALLING VAPOR BARRIER

• Install 15 lb. Asphalt Saturated Felt Paper on the wood subfloor prior to installation; roll out the material in the same direction as the flooring will be installed; allowing the Felt Paper to extend 3”-4” up the walls.

• Position the Felt Paper so that the chalk line can be seen clearly (you may need to cut the Felt Paper back from the wall just enough to see it).

• Staple or tape at the comers to hold the Felt Paper in position.

• Overlap the Felt Paper by 1” and duct tape the seams.

NOTE: While 15 lb. Asphalt Saturated Felt Paper is an excellent vapor barrier, it is NOT considered a moisture barrier. If a moisture barrier is needed (if floating or nailing over concrete using the screed/sleeper system), a 6 mil polyethylene film is required-with the edges overlapped 18” and taped.

INSTALLING THE FIRST ROWS

• Make sure to use the straightest, longest boards available when installing the first two rows.

• Line up the tongue of the first row with the starting point chalk line. The groove of the boards should be facing the starting wall.

• Using a pneumatic brad nailer, face-nail the groove side of the boards (first row only) ½” from the edge at 6” intervals and l”-2” from each end; then at a 45° angle down through the nailing pocket on top of the tongue. Another option is to pre-drill the face-nail holes ½” from the groove edge of the first row, 1”-2” from each end, and at 6” intervals. Pre-drill at the same intervals at a 45° angle down through the nailing pocket on top of the tongue. Face-nail the groove side where it is pre-drilled. When the face-nailing is complete, blind-nail at a 45° angle using 4d or 6d nails. Countersink all nails to ensure the next boards install smoothly. Make sure to use a nail set to countersink the nails; failure to do so can damage the surface of the wood. Keep blind-nailing the following rows until the stapler can be used.

• As listed above in General Tips, distribute lengths, avoiding “H” patterns and other discernible patterns in adjacent runs. Stagger end joints of boards row to row a minimum of 10” for planks wider than 5” for better visual effects and structural stability on mechanically fastened installation.

• Make sure you are using the correct staple gun, adapter, fasteners, and PSI setting on the compressor.

• Practice installing on an extra piece of wood Check for any damage to the board (surface damage, tongue damage, etc.). Make any adjustments and corrections BEFORE you start installing the rest of the floor. Once you have made your adjustments, destroy the ‘‘practice’’ board.

REMINDER: Take boards from multiple boxes while installing. Do not install 2 pieces from the same box in a row - mix the colors and shades while installing to get a more favorable overall look. Also, remember to stagger the end-joints of adjacent rows at least 10” to create a more appealing look for the floor.

• Begin installing with several different rows at a time, securing each board with at least two fasteners. To avoid splitting the board, put the fasteners 3”-4” apart and 1”-2” from the ends. Make sure you press firmly together before fastening to eliminate gaps between the boards.

• The last one or two rows will need to be installed similar to the first two rows. They will need to be face-nailed where blind-nailing is not possible. Brad-nail or pre-drill and face-nail on the tongue side matching the nailing pattern used in the first row.

• The final row should be ripped to size and face-nailed. If it is less than 1” wide, it should be glued to the previous row BEFORE that row is installed and the two joined pieces should be face-nailed as one board.

GLUE-DOWN INSTALLATION GUIDE

• Use only the proper adhesive.

• Make sure to use the appropriate trowel to get the correct coverage rate with the adhesive. It is recommended to use a V-Notch trowel with these dimensions when using a Urethane Adhesive: ¼” D x 3/16” W x ½” SP x 5/16” Foot. This trowel will leave the correct ridges of

adhesive on the floor (with very little adhesive between the ridges).

• Do not apply the adhesive if the room temperature or subfloor is colder than 65° F.

WARNING: Actual working time with adhesive varies depending on the environmental conditions of the structure. The manufacturer will not be responsible for improper application of adhesives.

NOTE: Urethane adhesive can sometimes be difficult to clean off if you do get some on top of the hardwood you are installing. Make sure to have a Urethane Adhesive Remover or Mineral Spirits and a Terry Cloth readily available to remove excess adhesive.

• Make sure to use the straightest, longest boards available when installing the first two rows.

REMINDER: Take boards from multiple boxes while installing. Do not install 2 pieces from the same box in a row; mix the colors and shades while installing to get a more favorable overall look. Also, remember to stagger the end-joints of adjacent rows at least 10" to create a more appealing look for the floor.

• Line up the groove of the first row with the starting point chalk line. The tongue of the boards should be facing the starting wall. Align and securely seat the first row in the adhesive-all additional rows will be pushed back to this row. It must be straight!

• When installing individual pieces, connect the end-joints first as close to the long tongue and groove as possible. Then slide (push) the long tongue and groove together as tightly as possible. Try to avoid sliding the pieces through the adhesive as much as possible-this will help negate memory pull-back (boards pulling apart once they are in position) and adhesive bleed-through (excess adhesive squeezing out vertically through the joints). You may need to use a scrap piece of the same product as a tapping block to help align the product.

• If the first row needs help staying in place, you can nail a board (using 1" concrete nails) on the dry side of your starting chalk line to stabilize it.

• Double check the edges and ends of your installed planks-they should all have a tight fit.

• Remember to stagger the end-joints of adjacent rows at least 6" to create a more appealing look for the floor.

• Be sure not to spread your adhesive too far ahead of your work area! If the adhesive skins over and starts to dry, preventing a proper bond between the floor and the wood, remove the old and spread new adhesive. You must have adequate adhesive transfer to ensure the floor will be installed correctly. You can double check the holding strength of the adhesive by occasionally lifting a board and checking the transfer of the adhesive.

• Once the boards are tightly fitted together, use the 3M 2090 Blue Painter's Tape to hold the planks together while the adhesive dries. Make sure to clean any urethane adhesive off of the surface of the wood with mineral spirits or urethane adhesive remover BEFORE you apply the tape! If the adhesive dries on the surface of the wood it is VERY difficult to remove. After the installation is complete, remove all of the Blue Painter's Tape from the surface of the flooring. Remove the tape within **24 hours**.

NOTE: Do not use Masking Tape! Masking tape leaves a sticky residue on the surface of the wood which is very difficult to remove.

• Continue with this method while installing the rest of the floor. Rip the final boards in last row to fit and allow at least ½" of expansion space.

• After all excess adhesive and tape are removed; thoroughly clean the floor using a hardwood cleaner.

• Re-install any moldings, door trim, end caps, etc. to complete the job. Make sure to nail any moldings into the wall-do not nail molding into the floor!

• To prevent surface damage to the floor avoid rolling heavy appliances and furniture across it. Use cardboard, plywood, or airlifts if possible.

• If further construction is necessary after the hardwood is installed, you can protect the installed floor by laying a quality rosin paper or other paper that allows the floor to breathe, taping it to the baseboards. NEVER use plastic, solid rubber, or polyethylene film to cover the installed floor since they both trap moisture and will damage the installed hardwood (creating cupping or swelling issues).

PIPES, FLOOR VENTS AND OTHER OBJECTS

Each case is unique, the general rule is to carefully measure before you cut and remember to leave the ½" expansion space. Expansion space will be covered with pipe rings or molding when the installation is completed.

MOLDINGS & FLOOR VENTS

If your room is more than 27' x 35' wide you will need to allow for an expansion joint. Expansion joints use T-molding and can be positioned in any inconspicuous place.

Complete the installation by allowing the tongue and groove adhesive to dry as specified on the bottle, remove the expansion shims and install floor vents, transition molding and wall molding as needed. See your dealer/distributor for available products.

RADIANT HEAT GUIDELINES

The Latitudes Collection Hardwood Flooring is suitable for installation over water-based radiant heating systems capable of maintaining a surface temperature at or below 85° F. The radiant heating system needs to be in floor and in operation for at least 7 days prior to installation, shut off 4 hours prior to flooring installation, and then returned to operation once the installation is complete. If using an adhesive to "glue-down" the Manufacturer's Engineered Hardwood Flooring, please confirm with the adhesive manufacturer the suitability of the adhesive for use with radiant heating systems. Please refer to www.radiantpanelassociation.org for more information.

It is up to the owner/installer to confirm the suitability of any radiant-heating system for the intended end-use. The selection and use of any radiant heating system is at the sole discretion and responsibility of the owner/installer.

DISCLAIMER

For all situations not covered by these specific installation instructions, please refer to the NWFA (National Wood Flooring Association) current installation guidelines.

See the NWFA website at www.nwfa.org for more information.

GENERAL TIPS: FLOOR REPAIR

If the floor becomes scratched or dinged, it can be repaired with a putty, filler, or touch-up kit. If a board is severely damaged, it may need to be replaced, which can be done by a qualified flooring technician.

GENERAL TIPS: HARDWOOD & SEASONS

Once the floor is installed it is critical to keep it well maintained. The manufacturer is not responsible for improper maintenance of the floor. Wood floors will be slightly affected by varying levels of humidity within your building. To make sure the floors are protected for as long as possible, it is VITAL for you to keep the relative humidity levels between 30% - 50%. Below are some recommendations on how to achieve that in the different seasons:

Wet/Humid (wood expands): Heaters are not generally used during these months. Therefore the floor holds in the humidity and expands. To maintain a proper humidity level, use a dehumidifier air conditioner. You can also tum on your heater every once in a while during the summer months-this will help lower the humidity in the building. Make sure the expansion space is not blocked in any way!

Dry (wood contracts/shrinks): Wood-burning stoves and electric heating systems are used a lot during winter months-creating very dry conditions indoors. The low humidity causes the wood to contract and shrink-leaving gaps between individual boards. To prevent this, use a humidifier to keep the humidity level between 30% - 50%.

MAINTENANCE & CLEANING FOR HARDWOOD FLOORS

Do not use a wet spray micro fiber mop, or wet swiffers. Never use wax, polish, abrasive cleaners or scouring agents as they may dull or distort the finish.

For normal everyday cleaning use a broom or a DRY swiffer to sweep up any debris. For hard to clean spots use a lightly damp cloth or mop to clean or you can use a hard surface spray cleaner, just spray a light mist on the floor and then mop with a DRY micro fiber mop. Avoid using excessive moisture. Too much moisture can cause warping, or buckling which is not covered under warranty. All spills should be cleaned up immediately.

Use protective pads under furniture.
USE CAUTION: Planks are slippery when wet.

It's a good idea to save a few panels in case of accidental damage. Planks can be replaced or repaired by flooring professional.

RECOMMENDED SPRAY CLEANER: FRESHFLOORS by WF Taylor
RECOMMENDED ADHESIVE: MS PLUS by WF Taylor

Contact your flooring retailer with questions or concerns regarding your flooring purchase.