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

- Always check panels for defects such as chips and color or sheen differences under good light conditions. Also check that the channel is clean and free of debris.
- Due to dye-lot variations, when installing your click-lock hardwood for, it is best to use click-lock hardwood out of more than one box while installing or a an even look in your flooring.
- Your click-lock hardwood flooring MUST be allowed to acclimate to the environment of the installation area. Leave the closed packages in a horizontal position in the room for 48 hours prior to installation. Preferable temperature should be approximately 62-73°F (17-23°C) with a realative humidity of 45-60 percent. Humidity should never be allowed to drop below 30% as this may cause gapping.
- If existing baseboard moldings are difficult to remove, they may be left in place. Quarter round molding is all that is needed to cover the expansion space between flooring and baseboard.

TOOLS AND SUPPLIES REQUIRED ARE:

- Foam underlay, pressure senstitive polypropylene adhesive tape such as Tuck Tape or equivalent, spacers, saw, hammer, utility knife, pencil, tape measure, ruler.
- If installing over a crawspace or on a concrete floor, you must also install a 4 mil (or thicker) polyethylene vapor barrier under your foam underlay or use a convenient 2 in 1 foam underlay that has a vapor barrier built-in. When installing 2 in 1 foam underlay, butt seams and then completely seal using Tuck Tape.

SUITABLE TYPES OF SUBFLOORS AND FLOOR PREPARATION

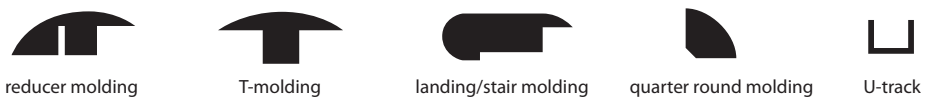
- The underfloor or subfloor must be thoroughly even, dry, clean and solid. Carpet staples or glue residue must be removed and floor must be clean to ensure proper installation.
- To check for eveness, hammer a nail into the center of the floor. Tie a string to the nail and push the knot against the floor. Pull the string tight to the farthest corner of the room and examine the floor at eye level for any gaps between the string and floor. Move the string around the perimeter of the room noting any gaps larger then 1/8" (3mm). Any floor unevenness of more the 1/8" (3mm) per 3 feet (1 meter) must be sanded down or filled in with an appropriate filler.
- Floors must be carefully check for moisture problems. Any moisture problems need to be solved before installation. New concrete needs to cure for at least 60 days before installation.
- **THIS PRODUCT IS NOT SUITABLE FOR DAMP ROOMS SUCH AS BATHROOMS, SAUNAS, ROOMS WITH DAMP CONCRETE, ROOMS WITH FLOOR DRAINS OR ROOMS THAT COULD POTENTIALLY FLOOD.**

BASIC INSTALLATION

- For installation on concrete or any floors over a crawl space a vapor barrior MUST be lad down first. Use 4 mil poly. Run the poly 2" (5cm) up the walls and overlap seams 18" (45cm). Tape seams.
- All flooring installation require foam underlay. Run the foam underlay in the same direction as the click-lock hardwood panels. Underlay should be butted side by side with no overlap. Tape seams together. **Diagram 1.**
- You will need to remove the tongue, on the long side of the panels that face the wall, from the appropriate amount of panels for your first row. This is to ensure that the face of the click-lock hardwood is well under the finished trim when installed. Use a utility knife to score through the tongue seveal times until it easily snaps off.
- Start in a corner by placing the first panel with its trimmed side facing the wall. Use spacers along each wall to maintain an expansion space of 5/16"-3/8" (8-12mm) between the wall and the flooring. **Diagram 2.**
- **REMEMBER THAT THIS PRODUCT IS PRIMARILY WOOD AND NEEDS ROOM TO EXPAND AND CONTRACT. AT NO POINT SHOULD YOU ATTACH THE FLOOR TO ANY SURFACE.**
- To attach your second panel, insert the end tongue of the panel into the end groove of the first panel. Lower the panel flat to the floor. Line up edges carefully. **Diagram 3.**
- Continue connecting the first row until you reach the last full panel. Fit the last panel by rotating the panel 180° with the wood vaneer side upward, place beside row, mark and the saw off excess. Attach as described above. **Diagram 4.**
- When using a handsaw cut on the decorative surface. If you are using a jig or circular saw, cut with the wood vaneer side down to avoid chipping. **Diagram 5.**
- Begin the next row with the off cut piece from the previous row to stagger the pattern. Pieces should be a minimum of 8" (20cm) long and joint offset should be at least 16" (40cm). **Diagram 6.**
- To start your second row, push the side tongue of the panel into the side groove of the very first panel at about 45°. When lowered, the plank will click into place. **Diagram 7.**
- Attach the second panel of the new row first on the short side. Push this panel as close as possible to the previous row. To attach its long side; tilt both panels in the new row at 45° and push into the groove of the previous row. Lower to the floor. Continue laying remaining panels in the manner. **Diagram 8/9.**
- To fit the last row, lay a panel on top of the previous row. With the tongue to the wall, lay another panel upside down on the one to be measured and use it as a ruler. Don't forget to allow room for spacers. Cut the panel and attach into position. **Diagram 10.**
- Door frames and heating vents also require expansion room. First cut the panel to the correct length. Then place the cut panel next to its actual position and use a ruler to measure the areas to be cut out and mark them. Cut out the marked points allowing the necessary expansion distance on each side. **Diagram 11.**
- You can trim door frames by turning a panel upside down and using a handsaw to cut away the necessary height so that panels slide easily under the frames. **Diagram 12.**

FINISHING MOLDING

- Reducer molding is used to finish flooring when the adjoining surface is lower the the laminate flooring or when the flooring meets carpet. Position the U track 1.4" (7mm) between each edge of the flooring. Screw, nail or glue down the track directly to the subfloor and then insert the reducing strip into the track.
- T-molding is used to finish flooring when two level surfaces meet in doorways or for expansion joints. Install same as above. If your room is more than 23' (7m) wide you will need to allow for an expansion joint.
- Landing molding is used to finish flooring on landings or stair edges. Moldings need to be glued and screwed down to the sub-floor for safety and stability. Color fill should be used to cover counter sunk screws.
- To finish the perimeter of the room install quarter round molding using finishing nails. Quarter round molding is nailed directly into the baseboard.



MAINTENANCE AND CLEANING

- Preferable temperature should be approximately 62-73°F (17-23°C) with a relative humidity of 45-60 percent. Humidity should never be allowed to drop below 30% as this may cause gapping.
- Do not use a wet spray micro fiber mop. Use a well rung out damp cloth to clean up any dirt and footprints but avoid using excessive moisture. All spills should be cleaned up immediately. Never use wax, polish or scouring agents as they may dull or distort the finish. You can use acetone or a cleaner specially formulated for hardwood to remove stubborn marks.
- To avoid scratches apply felt pads to your furniture legs and use only soft rubber casters. Protect high traffic areas with runners and area rugs.
- It's a good idea to save a few boards in case of accidental damage. Boards can be replaced or repaired by a flooring professional.

SIRVASE LEER ATENTAMENTE TODAS LAS INSTRUCCIONES ANTES DE COMENZAR LA INSTALACION, PORQUE UNA INSTALACION INCORRECTA ANULARA LA GARANTIA.

- Con buena luz compruebe que los paneles no tienen defectos, como astillas o un color o brillo desiguates. También compreuebe que la ranura esté limpia y sin restos.
- Debido a las variaciones del lote de tinte, cuando instale la madera dura con bloqueo de clic, es mejor usar madera dura con bloqueo de clic de más de una caja mientras instala o una apariencia pareja en su piso.
- El material haga clic en madera dura DEBE aclimatarse al ambiente donde se instalará. Antes de hacer la instalación, deje los paquetes cerrados y enposición horizontal, dentro del cuarto, durante 48 horas. La temperatura ideal deberá mantenerse entre 17 y 23 grados centigrados (62 a 73 °F), con una humedad relativa de 45 a 60 %. La humedad nunca deberia descender a menos de 30%, porque puede producir serpraciones.
- Si los zócalos no se quitan con facilidad, puede dejarlos instalados. Lo único que se necesita para cubrir el espacio entre el piso y el zócalo es el cuarto bocel.

HERRAMIENTAS Y MATERIALES NECESARIOS:

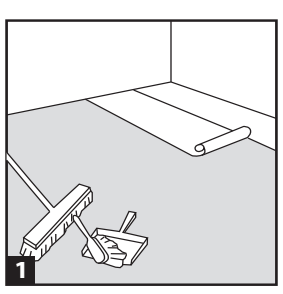
- Capa subyacente de espuma, cinta adhesiva de pollpropileno aplicable a presión, como cinta adhesiva tuck o equivalente, espaciadores, sierra, martillo, cuchillo para uso general, lápiz, cinta métrica, regla.
- Si la instalacón se hace encima de un sótano bajo o en un piso de hormigón, tableién deberá colocar una pelicula hidrófuga de polietileno de 4 milipulgadas (o más gruesa debajo de la capa de espuma o utilizar una espuma subyacente que ya tenga una película hidrófuga. Al instalar este tipo de espuma, empalme las costuras y luego séllelas muy bien con la cinta adhesiva de polipropileno.

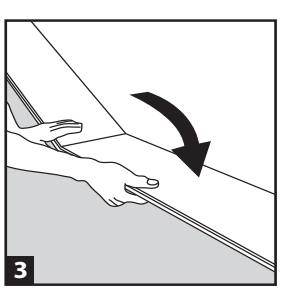
TIPOS APROPIADOS DE CONTRAPIOSY PREPARACION DEL PISO

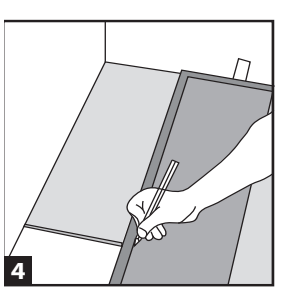
- El entarimado primario o contrapiso debe estar nivelado, limpio y ser sólido. Se deberán quitar las grapas de alfombra o los residos de pegamento que tengo y el piso deberá limpiarse para que la intalación se haga como corresponde.
- Para verificar si el piso está nivelado, martille un clavo en el centro. Ate un hilo al clavo y apriete el nudo contra el piso. Tire del hilo hasta el rincón más lejano del cuarto y mire el piso a nivel del ojo para ver si hay espacios entre el hilo y el piso. Mueva la punta del hilo alrededor del perímetro del cuarto y tome nota de cualquier espacio mayor de 3 mm (1/8 pulg.). Toda desigualdad del piso de más de 3 mm (1/8 pulg.) por 1 m (3 pies 2 pulg.) se deberá lijar o rellenar con un tapaporos apropiado.
- Se debe examinar muy bien el estado de los pisos para saber si hay problemas de humedad. Si los hay, deberán solucionarse antes de hacer la instalación. El tiempo de curado del hormigón nuevo es de 60 días por lo menos, por lo tanto, la instalación deberá hacerse pasado este período.
- **NO CONVIENE USAR ESTE PRODUCTO EN CUARTOS HUMEDOS, COMO BANOS, SAUNAS, PIEZAS CON HORMIGON HUMEDO O CON DRENAJES EN EL PISO, NI CUARTOS QUE PUDIERAN INUNDARSE.**

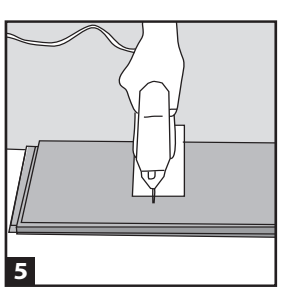
INSTALACION BASICA

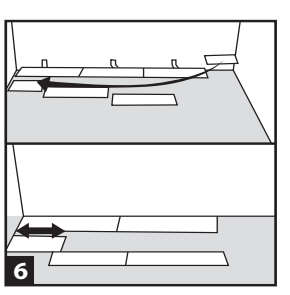
- Para la instalación en pisos de hormigón o en cualquier piso que esté encima de un sótano bajo se DEBE colocar primero una película hidrófuga. Use una película de polipropieleno de 4 milipulgadas. Colóquela en el piso y en la parte inferior de las paredes, hasta una altura de 5 cm (2 pulg.). Traslape las costuras 45 cm (18 pulg.). Una las costuras con cinta.
- Todas las instalaciones de pisos requieren una capa subyacente de espuma. Coloque dicha espuma en la misma dirección de los paneles haga clic en madera dura. La espuma debe empalmarse sin traslapos. Una las costuras con cinta. A los paneles que formarán la primera fila, será necesario sacales la lengüeta del lado largo que va frente a la pared. Esto asequrará que la supeficie decorativa del haga clic en madera dura quede bien por debajo del cuarto bocel cuando esté instalado. Utilice un cuchillo de uso general para hacer varias incisiones en la lengüeta hasta que ésta se desprenda fáclimente.
- Comience por uno de los rincones, colocando el primer panel con el lado recortado de frente a la pared. Utilice espaciadores a lo largo de las paredes para mantener un espacio de 8 a 12 mm (5/16 pulg. a 3/8 pulg.) entre la pared y los paneles, por si se expanden. Para unir el segundo panel e inserte la lengüeta de su extremo corto en la ranura del extremo corto del panel receptor. Baje el panel para que quede totalmente apoyado sobre el piso. Alinee los bordes cuidadosamente. Continúe uniendo los paneles de la primera fila hasta llegar al último panel completo. Para que quepa el último panel completo. Para que quepa el último panel, hágalo girar 180° con el lado decorativo hacia arriba, colóquelo junto a la fila, marque lo que sobra y corte el excedente con la sierra. Instale el panel seqún se describe más arriba. Cuando use una sierra manual, corte sobre la superficie decorativa del panel. Si utiliza una sierra caladora o circular, corte el panel con el lado decorativo hacia abajo para evitar que se astille. Comience la fila siguiente con el pedazo cortado de la fila anterior para escalonar el motivo decorativo. Los pedazos deben tener un mínimo de 20 cm (8 pulg.) de largo y las uniones transversales deben estar descentradas por lo menos 40 cm (16 pulg.) con respecto a las de la fila contingua. Para comenzar la segunda fila, empuge la lengüeta del lado largo del panel en la ranura del primer panel de la primera fila, a un ángulo de unos 45°. Cuando lo baje, el panel entrará en su lugar con un clic. Para unir el segundo panel de la nueva fila, inserte primero el extremo corto. Coluque este panel tan cerca de la fila anterior como sea posible. Para unir el lado largo, incline ambos paneles de la nueva fila a unángulo de 45° y empüjelos en la ranura de los paneles de la fila anterior. Bajae los paneles para que queden apoyados sobre el piso. Siga uniendo los paneles restantes de la manera descrita. Para que entre la última fila, ponga un panel encima de la fila anterior. Con la lengüeta hacia la pared, ponga otro panel al revés sobre el que se medirá y úselo como regla de medir. No se olvide de dejar espacio para los espaciadores. Corte el panel y colóquelo en su lugar. Los marcos de puerta y salidas de calefacción también requieren un espacio de expansión. Primero corte el panel de al longitud correcta. Después coloque el panel cortado junto a su posición real, mida con una regla las áreas que se cortará y márquelas. Corte en los puntos marcados, dejando el espacio necesario para expansión a cada lado. Usted puede recortar los marcos de las puertas poniendo un panel al revés y usando un serrucho para cortar la altura necesaria; de este modo los panels se deslizarán fácilmente debajo de los marcos.

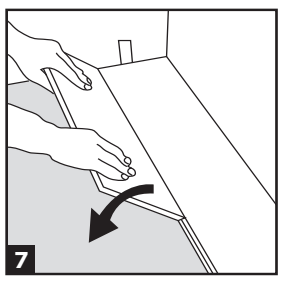


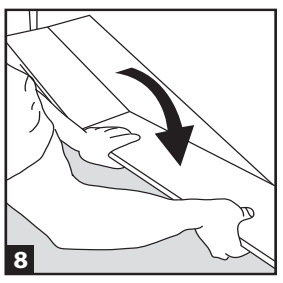


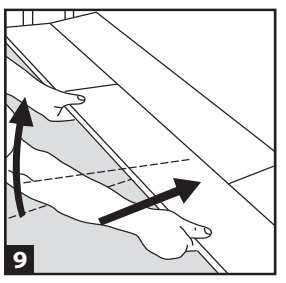


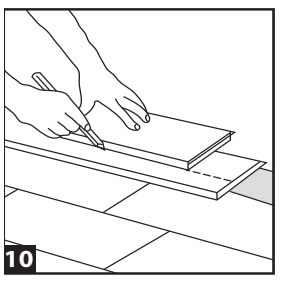


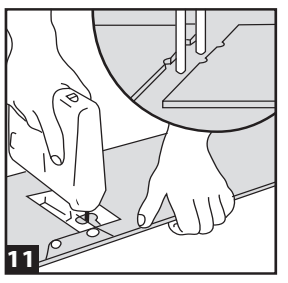












MOLDURA DE TERMINACION

- La moldura reductora se utiliza para el acabado del piso, cuando la superficie colindante es más baja que el piso laminado o cuando el piso laminado termina en un piso alfombrado. Coloque el riel en U a una distancia de 7 mm (1.4 pulg.) entre los bordes del revestimiento de piso. Atornille, clave o peque el riel directamente al contrapiso y luego inserte la cinta reductora en el riel.
- La moldura en T se utiliza cuando dos superficies a nivel se encuentran en los umbrales o para las juntas de expansión. Instálela de la misma manera que se explicó anteriormente. Si el cuarto tiene más de 7 m (23 pies) de ancho deberá utilizar una junta de expansión.
- La moldura del rellano se utiliza para acabar el piso en los rellanos o bordes de escaleras. Las molduras deben pegarse y atornillarse al contripiso para mayor seguridad y estabilidad. Se debe utilizar un tapaporos de color para cubrir los tornillos avellandados.
- Para acabar el perímentro del cuarto, instale el cuarto bocel con clavos de terminación. El cuarto bocel se clava directamente en el zócalo.

MANTENIMIENTO Y LIMPIEZA

- La temperatura ideal deberá mantenerse entre 17 y 23 grados centigrados (62 a 73 °F), con una humedad relativa de 45 a 60 %. La humedad nunca deberia descender a menos de 30%, porque puede producir serparaciones.
- No use un trapeador de microfibras con pulverizador. Para limpiar cualqeier suciedad y huella, utilice un trapo húmedo bien escurrido y evite al mismo tiempo la humedad excesiva. Cualquier cosa que se derrame se deberá limpiar inmediatamente. Nunca use cera ni agentes de pulir o de fregar, porque pueden quitar el brillo o arruinar el acabado. Para las marcas diffíciles de sacar, es posible utilizar acetona o un limpiador de laminado.
- Para evitar que se raye el piso, coloque protectores de fieltro en las patas del los muebles y use solamente rueditas de goma blanda. Proteja las áreas de mucho paso con alfombrillas y alfombras.
- Conviene guardar algunos paneles por si hubiese daños accidentales. Los tableros pueden ser cambiados o reparados por un instalador profesional de pisos.

LifetimeFloors

READ ALL OF THESE INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION. IN ADDITION TO THESE INSTRUCTIONS, WE RECOMMEND THAT THE INSTALLER FOLLOW ALL INSTALLATION GUIDELINES SET FORTH BY THE NATIONAL WOOD FLOORING ASSOCIATION (WWW.NWFA.ORG). WHERE THESE INSTRUCTIONS DIFFER FROM NWFA GUIDELINES, THIS DOCUMENT TAKES PRECEDENCE.

Lifetime Floors Engineered Flooring Installation Instructions

PRIOR TO INSTALLATION

It is the installer's responsibility to ensure that all of these General Conditions are met prior to installation, and that all specific installation instructions below for the installation method you have chosen (Glue Down, Nail Down, or Floating Floor plus, when applicable, Radiant Heat Systems) are followed carefully. When installed according to these instructions, Lifetime Floors Engineered Hardwood Flooring is approved for use above, on and below grade. When installing below grade, use the Floating Floor installation method.

It is the installer's responsibility to inspect the flooring for proper color, grade, gloss, visible manufacturing defects, damage, or otherwise unsatisfactory appearance. **Do not install damaged or visibly unsatisfactory material. Installing a plank constitutes acceptance of its appearance.** If necessary, contact your local retailer, distributor, or Lifetime Floors regarding any unsatisfactory material PRIOR TO INSTALLATION.

If installing over radiant heat, read the 'Radiant Heat Systems' section below before finalizing product selection or beginning installation. Careful adherence to these guidelines is required for a successful and fully warranted installation. Certain wood species and plank sizes are not warranted for installation over any type of radiant heat. Lifetime Floors does not offer a warranty on ANY flooring installed over electric radiant heat systems. Only hydronic (water) systems may be approved. In wood flooring installations over radiant heat, moderate surface checking, cracking (especially at the ends of boards and around knots), shrinkage, gapping between planks, and slight cupping are all to be expected and do not constitute a product defect.

NOTE: when nailing wide-plank flooring to a wood subfloor, we recommend both nailing and gluing to prevent potential squeaks in the floor, although gluing is only *required* when nailing down planks wider than 7.5". (See below under 'Nail + Glue Installation Instructions' for details.)

GENERAL CONDITIONS - ALL INSTALLATION METHODS

Environmental Conditions

To help minimize moisture-related expansion and contraction, verify the following conditions prior to installation:

- All exterior walls, windows, and doors must be in place and the building envelope closed during acclimation and installation.
- All wet work such as painting, drywall, masonry, and concrete must be completed and dry.
- Basements and crawl spaces must be dry and well ventilated. Crawl spaces must be a minimum of 18" high from the ground to the bottom of the joist. Dirt floors in crawl spaces should be covered with a 6.10 mil black plastic to reduce moisture migration. Seams should overlap and be sealed with waterproof tape. Perimeter crawl space cross ventilation should equal 1.5% of the square footage. Vents must remain open year round.
- Exterior grading should be complete and drainage should move away from the building structure with a minimum drop of 3" in 10'.

Acclimation

Ensure that the flooring has been properly acclimated to the site conditions prior to installation. Permanent HVAC should be on and operational and maintained between 60.75°F with relative humidity of 35%-55% for a minimum of 7 days prior to delivery, as well as during and after installation of the flooring. Humidity levels below 35% may cause movement in the flooring, including gapping between pieces and possible cupping and cracking in the face. Use of a humidification/dehumidification system may be required to maintain proper humidity levels, particularly over radiant heat.
The flooring must be delivered to the jobsite and the packages opened a minimum of 5 days prior to the start of the installation. Additional special requirements apply when installing over radiant heat. See below under 'Radiant Heat Systems' for details.

Subfloor Conditions

Subfloors must be:

Clean - Subfloors must be scraped clean and free of debris. Sweep and /or vacuum all debris from the subfloor. Debris on the subfloor may cause over-wood and uneven surfaces in the finished floor, poor fit between planks, and poor adhesive bond in glue-down installations.

Flat - Subfloors must be flat to within 3/16" over any 10' radius and 1/8" over any 6' radius.

Check the flatness using a straight edge, laser line or string line. Grind, scrape, sand or shim all high or low spots. On concrete subfloors, grind all high areas and fill low areas using a quality cementitious leveling compound. Ensure that all fasteners securing the subfloor are set flush.

Dry - Check and record all moisture and temperature conditions prior to installation. Visually check the jobsite for potential moisture problems. Look for signs of water intrusion around window and doors. Check for mold or fungus on walls and all other areas. Water intrusion may necessitate structural repairs and/or create conditions unsuitable for flooring installation.

- Plywood and composite subfloors should be checked using a calibrated moisture meter. Be sure to use the correct moisture meter setting for the species being checked. Carefully follow the moisture meter manufacturer's operation instructions. Moisture readings should not exceed 10% in any location and the moisture variation between the subfloor and the flooring should not exceed 2% at time of installation. **No claims will be considered without a documented moisture test. The only approved testing method is a Calcium Chloride test.**
- Concrete subfloors must be fully cured, at least 60 days old, and should have minimum 6-mil polyfilm between the concrete and ground. Lightweight concrete can hold more moisture and may take longer to dry out to an acceptable moisture content.
- Installations over concrete require the use of a Calcium Chloride test per ASTM F 1869, or an in-situ Relative Humidity test using probes inserted into holes drilled into the concrete. Test all areas where wood will be installed. The results of the Calcium Chloride tests should not exceed 3 lbs per 24 hours per 1000 square feet, and in-situ test results should not exceed 75% RH. Carefully record all results.
- NOTE: These tests give a snapshot of moisture conditions at the time of the test, but do not reflect the permanent year-round condition of the substrate. If Gluing Down on concrete that is on or below grade, it is highly recommended to use a concrete sealer approved by the manufacturer of the adhesive you have chosen, even if you believe the concrete is dry. Lifetime Floors Hardwood is not responsible for site related moisture issues.
- More stringent requirements regarding the dryness of the subfloor apply when installing over radiant heat. See below under 'Radiant Heat Systems' for details.

Structurally Sound - Wood subfloors must be well fastened. Use screws every 6" and replace subfloor panels/boards as necessary to eliminate all movement and squeaking.

Acceptable subfloor types:

- CDX plywood - at least 5/8" thick for joist spacing up to 16" on center, minimum 3/4" thick for joist spacing greater than 16" on center (19.2" maximum). Plywood subfloors installed over concrete must be installed in accordance with the guidelines set forth by the National Wood Flooring Association (NWFA) - www.nwfa.org).
- OSB - at least 3/4" thick, PS 2.92 rated or PS 1.95 rated.
- Existing hardwood flooring over a suitable subfloor as outlined above. Existing floor must be well-fastened, smooth, and for Glue Down installations, unfinished.
- Underlayment grade particleboard (minimum 40 lb. density) - Glue Down/Floating Floors only.
- Concrete slab - Glue Down/Floating Floors only. Concrete must be at least 3000 lbs. density for Glue Down installations.
- Lightweight concrete (gyperete) - Floating Floors only. Gluing to concrete that is less than 3000 lbs. density is NOT WARRANTED. Lifetime Floors Hardwood provides no guarantee that lightweight concrete or gyperete will remain structurally sound during the life of the floor. Separation of the flooring from the subfloor caused by deterioration or fracturing of the substrate will not be considered a product failure.
- Ceramic tile - Floating Floor only. Tile must be well-adhered and flat to 3/16" over any 10' radius.
- Resilient tile & sheet vinyl - Glue Down/Floating Floors only; for glue-down, tile/vinyl must be new and non-urethane-coated.

Preparing the Perimeter

- Undercut door trim, jambs and casings to the thickness of the flooring plus any adhesives or underlayments you plan to use.
- All wood flooring expands and contracts with changes in humidity. It is essential to install the floor leaving adequate expansion space between ALL sides of the flooring and ALL vertical obstructions, including door trim, jambs, studs, plumbing, cabinets, etc. This space will be covered with base molding. Failure to provide adequate expansion space in any single location can cause damage to the entire floor.

- Minimum expansion space for 9/16" - 34" thick flooring is 5/8"
- Minimum expansion space for 5/16" - 1/2" thick flooring is 1/2"

Layout
On wood subfloors, if the subfloor is fastened to joists or trusses, the flooring should be installed perpendicular or at a 45° angle to the joists/trusses. If possible, use an outside wall as the starting wall.
No contiguous area of installed flooring should exceed 30' across the widths of the planks or 50' along the lengths of the planks. For spaces wider or longer than these dimensions, add expansion space midway through the span and cover with a T-molding or other transition piece.

General Tools and Accessories recommended (all installation methods):

- Pencil
- Tape Measure
- Safety Glasses
- Utility Knife
- Moisture Meter
- Hammer
- Shim Wedges
- Tapping Block
- Rubber Mallet
- Carpenter square
- Pry-bar or pull-bar
- Wood Filler
- Scraper-Dust Mask
- Rags
- Chalk Box & Chalk -Recommended Saws: power miter saw, table saw, jamb saw
- **If tape is needed (we recommend avoiding its use if possible), use ONLY 3M Advanced Delicate Surfaces 2080EL Tape, and be sure to remove any tape within 20 minutes of application. Leaving tape on for more than 20 minutes or using the wrong type of tape will damage the finish. Never tape protective covering directly to the floor - only tape it to itself.**

Once all of these General Conditions are met, continue the installation using the instructions for the type(s) of installation you have chosen (Nail Down, Nail + Glue, Glue Down, Floating Floor, and Radiant Heat Systems).

<u>NAIL DOWN INSTALLATION INSTRUCTIONS</u> - for planks up to 7.5" wide
(If nailing down planks wider than 7.5", follow the 'Nail + Glue Installation Instructions' below.)
Lifetime Floors Hardwood Engineered Wood Flooring can be nailed to plywood, OSB and existing wood flooring meeting the requirements outlined above under `Subfloor Conditions.'

For Nail Down Installations, you will need the General Tools and Accessories, plus:
- Nail set
- Tack Stapler or 1" roofing nails (for felt)
- 6-d Finish Nails or Pneumatic Finish Nailer with 1 1/4" to 1 1/2" fastener
- Edge or Blind Stapler/Nailer (Manual or Pneumatic) with 1 1/2" - 2" Fasteners for flooring 5/8" - 3/4" thick, or 1.1/4" to 1.1/2" fasteners for flooring 5/16" - 9/16" thick (always do a test plank to verify that fasteners are seating properly and not causing dimpling on the surface)
- 15 lb. roofing felt, #15 hardwood floor underlayment felt, or Aqua Bar underlayment paper

Nailing Down the Floor
1. After installing 15 lb. felt or Aqua Bar per the manufacturer's instructions, measure out from the starting wall the width of one flooring plank plus the appropriate expansion space for that thickness of flooring. Mark two points toward each end of the starting wall and snap a chalk line along the full length of the wall through the marks.
2. Lay the tongue side of the first row of flooring along the chalk line. Face nail (top nail) the first row of flooring in place. Place the fasteners approximately 3/4" from the wall side (groove side) of the flooring board every 4" to 6". Continue the first row installation blind/edge nailing every 4" to 6" along the tongue and every 2" to 3" from every end joint. Note: Blind/edge nailing of the first row may require the installer to use 6-d finish nails or the pneumatic finish nailer along the tongue.
3. Continue the installation across the room, blind/edge nailing every 4" to 6" and 2" to 3" from each end joint. Stagger end joints by at least 8". Avoid creating "H" patterns (where an end joint is adjacent to another end joint in the second to last row installed). Use cut ends to start the subsequent row, discarding any pieces shorter than 8".
4. Trim the last row of flooring to maintain the minimum expansion space at the far wall.
5. At the far (finish) wall, it may be necessary to face-nail the last 2.3 rows due to the angle of the stapler/nailer. The last row or two of flooring may need to be pulled together using a pulling bar.
6. Complete the installation by reinstalling or installing new base moldings.

<u>NAIL + GLUE INSTALLATION INSTRUCTIONS</u> - required when nailing down planks over 7.5" wide, recommended when nailing down all planks over 5" wide.
Lifetime Floors Hardwood Engineered Wood Flooring can be nailed + glued to plywood, OSB and existing wood flooring meeting the requirements outlined above under `Subfloor Conditions.'
For Nail # Glue Installations, you will need the General Tools and Accessories, plus:

- Adhesive: Franklin 741, 811, or Bostik Best urethane wood flooring adhesive or equivalent -Adhesive Remover recommended by the manufacturer of the adhesive selected
- Adhesive Trowel recommended by the manufacturer of the adhesive selected
- Nail set • Tack Stapler or 1" roofing nails (for felt)
- 6-d Finish Nails or Pneumatic Finish Nailer with 1 1/4" to 1 1/2" fastener
- Edge or Blind Stapler/Nailer (Manual or Pneumatic) with 1 1/2" - 2" Fasteners for flooring 5/8" - 3/4" thick, or 1.1/4" to 1.1/2" fasteners for flooring 5/16" - 9/16" thick (always do a test plank to verify that fasteners are seating properly and not causing dimpling on the surface)

Nailing # Gluing the Floor:

1. Measure out from the starting wall the width of one flooring plank plus the appropriate expansion space for that thickness of flooring. Mark two points toward each end of the starting wall and snap a chalk line along the full length of the wall through the marks.
2. Trowel spread the adhesive on the subfloor along the chalk line wide enough to allow the first row of flooring to be installed, being careful not to cover the line. Follow the adhesive manufacturer's recommendations for wet lay times before proceeding to the next step.
3. Lay the tongue side of the first row of flooring along the chalk line. Face nail (top nail) the first row of flooring in place. Place the fasteners approximately 3/4" from the wall side (groove side) of the board every 4" to 6". Once the face nails are set, use 6-d finish nails or the pneumatic finish nailer to blind/edge nail along the tongue of the first row, every 4" to 6" and every 2" to 3" from every end joint. Check to make sure the first row is still straight along the chalk line before proceeding.
4. Trowel spread enough adhesive to install 2-3 more rows.
5. Install the second row by sliding the groove side on to the tongue of the first row. Blind/edge nail it in to place, with fasteners every 4" to 6" and 2" to 3" from each end joint. Stagger end joints by at least 8".
6. Continue nailing and gluing 2.3 rows at a time in this manner across the room. Avoid creating "H" patterns (where an end joint is adjacent to another end joint in the second to last row installed). Use cut ends to start the subsequent row, discarding any pieces shorter than 8".
7. Most adhesives require that the installer clean the adhesive off the flooring boards during the installation. Follow the adhesive manufacturer's recommendations for this procedure
8. Trim the last row of flooring to maintain the minimum expansion space at the far wall.
9. At the far (finish) wall, it may be necessary to face-nail the last 2.3 rows due to the angle of the stapler/nailer. The last row or two of flooring may need to be pulled together using a pulling bar.
10. Complete the installation by reinstalling or installing new base moldings.
11. Do not allow foot traffic on the floor for 24 hours after installation is complete.

<u>GLUE DOWN INSTALLATION INSTRUCTIONS</u> - for all plank widths

Lifetime Floors Hardwood Engineered Flooring can be glued down to concrete, plywood, OSB, underlayment grade particleboard, and existing wood floors meeting the requirements outlined above under General Conditions/Subfloor Conditions. Lifetime Floors Hardwood Engineered Flooring can also be glued to other surfaces such as well-adhered sheet vinyl, vinyl tile, ceramic, etc., but the performance of the adhesive is the responsibility of the adhesive manufacturer and careful adherence to the adhesive manufacturer's installation instructions for that particular subfloor surface is crucial. Lifetime Floors Hardwood does not warrant the adhesive bond between the subfloor and the wood flooring.

For Glue Down Installations, you will need the General Tools and Accessories, plus:

- Adhesive: Franklin 741, 811, or Bostik Best urethane wood flooring adhesive or equivalent - Adhesive Remover recommended by the manufacturer of the adhesive selected
- Adhesive Trowel recommended by the manufacturer of the adhesive selected - Masking Tape: 3M Advanced Delicate Surfaces 2080EL Tape

Gluing Down the Floor

1. Measure out from the starting wall the width of one flooring plank plus the appropriate expansion space for that thickness of flooring. Mark two points toward each end of the starting wall and snap a chalk line along the full length of the wall through the marks. Install backer boards as guides along the wall side of the chalk line. Anchor the backer boards in place with screws or finish nails. Over concrete subfloors, anchor the backer boards with concrete screws or concrete nails. These boards will be removed later.
2. Lay the first row of flooring, but do not glue into place. Align the tongue side of the flooring boards against the backer board. Dry lay the next two rows of flooring in place, sliding the tongue into the groove. End joints should be staggered by at least 8". Pull the rows of flooring boards out away from the backer board approximately 24" to allow

for the glue to be spread.

3. Trowel spread the adhesive on the subfloor along the backer board wide enough to allow the first three rows of flooring to be installed. Follow the adhesive manufacturer's recommendations for wet lay times before proceeding to the next step.
4. Install the first row of flooring, pressing the tongue to the backer board. Slide the tongue of the next row of flooring into the groove of the first row and continue until the first three rows are done.
5. If tape is needed to hold boards together, use ONLY 3M Advanced Delicate Surfaces 2080EL Tape, and be sure to remove any tape within 20 minutes of application.
6. Trowel spread adhesive and continue the installation across the room. Trim the last row of flooring to maintain the minimum expansion space at the far wall. Be careful not to move the installed flooring out of position. Using knee-boards can help prevent movement. Some flooring boards may need to be tapped or pulled into place with a tapping block or pull bar.
7. Most adhesives require that the installer clean the adhesive off the flooring boards during the installation. Follow the adhesive manufacturer's recommendations for this procedure.
8. Once the room is finished, remove the backer boards at the starter row.
9. Dry lay the first row of flooring to replace the backer board. Trowel spread the adhesive on the back of the flooring boards (not on the subfloor) and install the flooring, sliding the groove onto the tongue of the already installed starter row. Doorways and other openings may require installation of the flooring the same way. Slide the flooring boards under the previously cut door trims and casings.
10. Complete the installation by reinstalling or installing new base moldings.
11. Do not allow foot traffic on the floor for 24 hours after installation is complete.

FLOATING FLOOR INSTALLATION INSTRUCTIONS

Lifetime Floors Hardwood Engineered Wood Flooring can be installed as a floating floor system over almost all types of subfloors including Plywood, OSB, Existing Wood Floor, Vinyl, Vinyl Tile, and Ceramic Tile provided they are clean, flat, dry and structurally sound, meeting the requirements outlined above under `Subfloor Conditions.' Note: Lifetime Floors Hardwood Engineered Wood Flooring boards must be at least 4" wide to be installed as a floating floor system.

For Floating Floors, you will need the General Tools and Accessories, plus:

- Tongue and Groove Glue: Franklin Titebond III or Equivalent PVA adhesive
- Underlayment Pad: -1/8" thick Two-in-One pad (pad plus vapor barrier) or -1/8" thick pad with 6 mil polyfilm sheeting
- Masking Tape: 3M Advanced Delicate Surfaces 2080EL Tape

Floating the Floor

1. If installing over underlayment pad plus a separate layer of polyfilm, install the 6 mil polyfilm first, taping all seams with waterproof tape, and then install the pad. Roll out the first run of pad from wall to wall parallel to the starter wall. On the installed pad mark two points toward each end of the starting wall and chalk a line the full length of the wall through the marks. This is the starter line.
2. Lay the first row of flooring using only long boards. The first flooring board and the last flooring board in this row should be a minimum of 12" long and cut to provide the appropriate expansion space on each end. Apply a 1/8" continuous bead of T&G glue on the bottom side of the groove of each end joint. Align the tongue side of the starter row along the chalk line and engage the end joints together. Use shims along the long wall and at both ends of the row to keep the floor in place and maintain the right expansion space.
3. Lay the second and third row of flooring boards. End joints should be separated by a minimum of 8" from the adjacent row. Spread a 1/8" bead of T&G glue along the bottom side of the long groove and each end joint groove on the second row of flooring. Engage the groove side of the second row with the tongue of the starter row. Engage the end joints at the same time, aligning them and cutting at the end of each row to allow for appropriate expansion space. Continue this procedure for the third row. These three rows must be aligned straight to ensure that the rest of the installation remains straight.
4. Continue using the same procedure. If boards do not easily engage together, use a tapping block or pull-bar. Use masking tape as needed to keep the boards together and rows straight. Remove all tape within 20 minutes of application. Use only the 3M Advanced Delicate Surfaces 2080EL Tape.
5. Avoid working on top of the installed flooring to prevent breakage of the glue joint.
6. Complete the installation by reinstalling or installing new base moldings.
7. Do not allow foot traffic on the floor for 24 hours after installation is complete.

RADIANT HEAT SYSTEMS

NOTE: the following Lifetime Floors Hardwood plywood-backed products are NOT WARRANTED in installations over radiant heat:

- **All Hickory products, regardless of plank dimensions**
- **All products with plank widths greater than 8"**

The following products ARE WARRANTED for use over hydronic radiant heat:

- **European Oak, White Oak, Red Oak, Ash or Walnut with planks not wider than 8"**

If the product you plan to install is not described above, please contact Lifetime Floors Hardwood for clarification before finalizing product selection.

In all installations over radiant heat, the warranty will be void if any of the following requirements and instructions are not adhered to:

- The radiant heat system must be hydronic (using warm water). Lifetime Floors Hardwood Engineered Flooring is not warranted over electric radiant floor heat systems.
- The heat system must be designed for wood flooring and have an outside temperature sensor and in-floor direct contact temperature sensors.
- The system controller must be designed for wood flooring and have a temperature control mechanism that will not allow the surface temperature of the subfloor to exceed 82°F.
- The system must be kept on and within 15°F of normal operating temperature AT ALL TIMES.
- For concrete subfloors, conduct and document Calcium Chloride Tests per ASTM F1869. Test results must not exceed 2.0 lbs. per 1000 square feet per 24 hours.
- For wood subfloors, use a pin type meter to document the moisture content of the subfloor. Moisture readings should not exceed 8% in any location and readings for the subfloor must be within 2% of the flooring at the time of installation.
- Relative humidity at the jobsite must be maintained between 35% and 55% at all times. Failure to maintain proper humidity levels will void all warranties.
- The radiant heat system must be on and operating at normal output a minimum of 14 days prior to the start of the installation.
- Wood flooring must be delivered to the jobsite and acclimated to the installation environment a minimum of 7 days prior to the start of the installation.
- Temperature in the installation area must be controlled between 60°F and 80°F at all times. - Maximum surface temperature of the wood flooring can never exceed 82°F.
- Excessive heat, rapid heating, and/or failure to maintain humidity levels between 35% and 55% may cause cracking, cupping and other forms of failure and will void the warranty.
- NOTE: in wood flooring installations over radiant heat, moderate surface checking, cracking (especially at the ends of boards and around knots), shrinkage, gapping between planks, and slight cupping are all to be expected and do not constitute a product defect.

Once these instructions and requirements are met, continue the installation by following the instructions for your specific installation method as outlined above.

CARE AND MAINTENANCE

Lifetime Floors Hardwood floors are coated with different types of coatings. Different coatings require different maintenance procedures. The cleaning/maintenance products recommended for one coating may damage a floor finished with another type of coating. Before cleaning your floor, confirm what type of coating it has. If your floor is from one of our standard collections, use the chart below to identify the coating type. See below under 'Cleaning' for detailed instructions for each coating type.

General Care - All Coating Types

- Flooring should be one of the last items installed in a project. In order to protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner, use a breathable protective covering such as Ram Board. Do not use Red Rosin paper, as it may discolor the finish, and do not use polyfilm or other non-breathing coverings as they can cause damage from humidity buildup. Clean the floor thoroughly before laying the covering to ensure that no debris is trapped underneath. Tape pieces of protective covering together but do not tape them to the wood flooring.
- Place walk-off mats at all entrances to collect dirt and debris that could damage or dull the flooring finish. - Install felt

floor protectors underneath all furniture.

- In areas such as bathrooms, kitchens, and spaces where food service occurs, top-coating a urethane-coated floor will help prevent against moisture damage. In heavy food service areas such as restaurants, two to three top-coats may be required. Contact Lifetime Floors Hardwood for advice on how to top-coat the specific flooring product you have selected.
- Do not allow people to wear spiked heels on the floor, which will damage even the hardest wood floors and finishes.
- Pet claws should be properly trimmed at all times.
- Work boots and shoes that may have pebbles lodged in the soles should be removed prior to entering. - Sweep or vacuum frequently. Most damage to wood floor finishes is caused by debris that is walked on. - All mats or rugs should be cleaned on a regular basis. They should also be moved occasionally to allow natural color changes caused by light to occur evenly in all areas.
- Never wet-mop your floor, and always clean up spills and standing water as soon as possible. With oil-finished floors, water left for prolonged periods may cause water-spotting. With water or any other cleaning agent, be sure to thoroughly ring out the applicator or mop prior to applying it to the floor. A damp mop is fine as long as the moisture is limited to an amount that will evaporate almost immediately. Moisture that is allowed to seep into the seams between the planks may cause damage to your flooring. Do not allow soiled mats or rugs to stay on the floor as they can trap moisture on the surface.

CLEANING

Floors Coated with UV Urethane:

- Clean the floor regularly with Bona Hardwood Floor Cleaner or Basic Coatings SqueakyTM Commercial Floor Cleaner. Do not use waxes, oils, oil soaps, or petroleum-based cleaners under any circumstances.
- When it becomes necessary to refinish the floor, we recommend the top-coating and re-coatings systems from Bona (www.bona.com) and Basic Coatings (www.basiccoatings.com).

Floors Coated with Oxidative Oil or UV Oil:

DO's

- Immediately after installation, mop the floor with WOCA Oil Refresher Natural or, for the white colors listed below, WOCA Oil Refresher White, in these concentrations:
  - UV Oil (all collections except Castello): 1 part Oil Refresher to 40 parts water (3 oz/gal)
  - Oxidative Oil (Castello collection only): 1 part Oil Refresher to 20 parts water (6 oz/gal)
- For regular cleaning, mop with WOCA Soap Natural or, for the white colors listed below, WOCA Soap White. These are concentrates that are mixed with water. They not only clean, but also help keep the floor nourished and better protected (sealed) by leaving a thin layer of coconut and soy fats. Frequent cleaning with WOCA Soap will extend the time before re-oiling becomes necessary.
- When cleaning with WOCA products, use a cotton mop (not micro-fiber). Use a second rinse bucket of clean water to remove dirt from the mop before re-soaking it in the cleaning solution. Change the rinse bucket water frequently.
- For convenient spot cleaning, use WOCA Soap & Spray Natural or, for the white colors listed below, Soap & Spray White, which are pre-mixed with water for immediate use.
- For more difficult stains, use WOCA Spot Remover. If a mop or rag does not remove the spot, try scrubbing gently with a 3M 4100 Super Polish White Pad.
- Two to four times a year, depending on traffic, clean with WOCA Oil Refresher Natural or, for the white colors listed below, WOCA Oil Refresher White. This will introduce a small amount of oil to freshen the finish and extend the time before a re-oiling becomes necessary. If water is not beading on the floor or the floor seems to scuff easily, these are signs that more frequent Refresher is needed. If the finish is getting hazy, you may be using the Refresher too frequently. Reduce the frequency and use Soap instead.
- Light scratches are best repaired by hand rubbing WOCA Master Floor Oil Natural, WOCA Master Floor Oil White, or a Master Color Oil on the affected area using a cloth. If necessary, first clean the area to be repaired with WOCA Wood Cleaner. Be sure the area is dry before applying oil. Leave the oil to absorb for a short period of time before thoroughly buffing and removing the oil from the surrounding area.
- Sweep or vacuum frequently. Oil finishes soak into the wood, protecting from within rather than forming a barrier above, so the natural wood texture is felt at the surface. Debris left on the floor can get ground into the grain by foot traffic and become more difficult to remove.

DON'T's

- Never use ammonia, vinegar, petroleum-based cleaners, wax, polish, household dust treatment chemicals, abrasive cleaners, scrubbing pads, furniture cleaners, or any other non-WOCA brand product to clean your oil-finished floor.
- Avoid mopping the floor with just water. Always use WOCA Soap or Oil Refresher.
- Avoid using a micro-fiber mop, which over time may gradually remove oil from the floor.

- WOCA Wood Cleaner is not intended for regular cleaning. It is an aggressive cleaner that strips some of the oil from the floor. Other than using it for small repairs as described above, do not use WOCA Wood Cleaner unless you are preparing the floor for a new coat of oil.

COMMERCIAL SPACES

- For commercial floors that require frequent cleaning, use WOCA Master Soap. The Master Soap is formulated to allow virtually daily cleaning without leaving behind residue, which may cause excessive buildup over time.
- On commercial floors, apply WOCA Oil Refresher or WOCA Oil Refresher White three to four times a year.

See the WOCA website (www.woodcareusa.com) for more details and instructional videos.

Lifetime Floors Hardwood wants every customer to be happy and satisfied with their purchase. If there are claims or questions, or in the event that you are not totally satisfied with your hardwood floor, contact your local retailer first. If the retailer is unable to answer your questions you may contact Lifetime Floors Hardwood in writing at the following address:

Attn:
Customer Service
Lifetime Floors, Inc.
736 Mariposa Road
Modesto, CA 95354