



Updated May 2017

Barrier 20 Collection

Installation Instructions

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

- Always check Extruded Waterproof Core Luxury Vinyl Plank and Tile (EWC LVT) panels for defects such as chips and color or sheen differences under well-lit conditions. Also check that the click channel is clean and free of debris. Always work out of multiple boxes to mix product to achieve proper pattern repeat and color appearance. Color variations between flooring, samples, and replacement material is expected and is not a product defect.
- If the appearance of a board is questionable for either dimensions or appearance, the installer should not use this piece. A replacement carton can be obtained through your dealer in a reasonable time.

NOTE: EWC LVT can be installed above, on and below grade. The product may be installed either as a floating floor or by direct glue down method on approved wood or concrete subfloors. Direct glue down applications require a full spread adhesive manufactured exclusively for LVP and LVT only. Never use an adhesive that is recommended for multiple products. Follow the manufacturer's installation instructions when full spreading our EWC.

Walls, subfloors, and installed floors in buildings and houses move. A minimum of ¼" gap for expansion is recommended between the EWC LVT and any adjacent perimeter wall, vertical structure, or wood based floor (laminated or hardwood).

SUBFLOOR PREPARATION

EWC LVT is a waterproof product. Moisture will not damage the product. When installed, it does not produce a moisture barrier nor does it protect the walls or structure of the home. Only installing a moisture barrier in a crawl space or under the EWC LVT over a concrete floor can insure this. Please see the below Subfloor Requirements section for moisture limits to protect the home from moisture damage.

JOBSITE PREPARATION BEFORE INSTALLATION

The responsibility for installation of EWC LVT is with the local job site installer. Every plank and/or tile must be inspected prior to installation for color variation, finish condition, sheen

variation, and quality. This inspection should be conducted with proper lighting available. Any boards that are not acceptable **SHOULD NOT BE INSTALLED**. Contact your dealer immediately to obtain replacement boards. Palmetto Road is not responsible for the installation of flooring with obvious defects.

It is the responsibility of the local job installer to insure that the jobsite and subfloor meet the requirements of these installation instructions. Palmetto Road is not responsible for failure of this EWC LVT flooring caused by unsatisfactory jobsite and/or subfloor conditions.

Crawl spaces – when installing a moisture barrier in a crawl space, minimum crawl spaces of 18” are required from the ground to the underside of the joists. A vapor barrier of 6-20 mil thick polyethylene film with 6” sealed lap joints should be used. Moisture resistant tape should be used as the vapor barrier sealant at the lap joints. Venting for the crawl space should be at least 1.5% of the crawl space square footage. Vents should be located for cross-ventilation of the crawl space. Local regulations should prevail at all times.

Before floor installation, the room conditions in the installation area (temperature and moisture) should be at normal year-round conditions for at least one week prior to and during flooring installation. Recommended installation room conditions are temperatures between 45-105 degrees F. Never install below 45 degrees or above 105 degrees F.

SUBFLOOR REQUIREMENTS

All subfloors must be dry, structurally sound to support the floor and to protect the home from moisture, free of debris and foreign matter, and flat to 3/16” in a 10-foot radius.

For concrete floors, the subfloor should be firm, flat, dry, and clean. This includes both old and new concrete floors. New concrete slabs must cure in well-ventilated conditions for at least 60 days minimum before installing the floor. Concrete should have a minimum-6mil polyfilm moisture barrier between the concrete and ground. Maximum moisture level per the Calcium Chloride test method is 9lbs. per 1000 cft in 24 hours. The maximum level of relative humidity per ASTM 2170 test method is 90%.

EWC LVT subfloors must be dry and properly secured to accept a top floor. The subfloor must be secured every 6” along joists with nails or screws to avoid squeaking. The floor must be leveled and flat. High spots must be ground down and low spots must be filled with a Portland cement leveling compound.

NOTE:

- **EWC LVT is not approved for installation over any type of carpet.**
- **Never install EWC LVT over any type of floating floor. All subfloors that are not concrete must be firmly bonded.**
- **Never install EWC LVT over a below grade VCT (vinyl composition tile).**

Tiles including ceramic, resilient, and sheet vinyl must be well bonded to the subfloor, must be level and flat, and must be clean. Existing vinyl floors should not be sanded as they may contain asbestos.

INSTALLATION TOOLS

EWC tapping blocks

¼" Spacers

Pull bar

Saw

Utility knife

Pencil

Tape measure

Ruler

Acceptable subfloor types:

CDX Underlayment Grade Plywood (minimum of 5/8" thickness) Underlayment Grade

Particleboard (only for floating installation) OSB (minimum ¾", 23/32" thickness)

Concrete slab

Ceramic Tile

Resilient Tile – one layer well bonded

Sheet Vinyl – one layer well bonded

NOTE: There are 2 different types of tapping blocks to be used with our EWC planks. Tapping block (black in color) number one is to be used with our standard 4-foot-long planks (Tidewater Collection). Tapping block number two (white in color) is to be used for use with our EWC XL long board (Barrier 20 Collection). XL and Long Board products have a specially designed larger Unilin lock and require a larger tapping block for proper installation.

The tapping block was specially designed for installing this EWC LVT product with a licensed Unilin drop and tap click joint. The tapping block must be used on every panel to ensure the positive locking of the joint and to validate the product warranty.

BASIC INSTALLATION OF EWC LVT

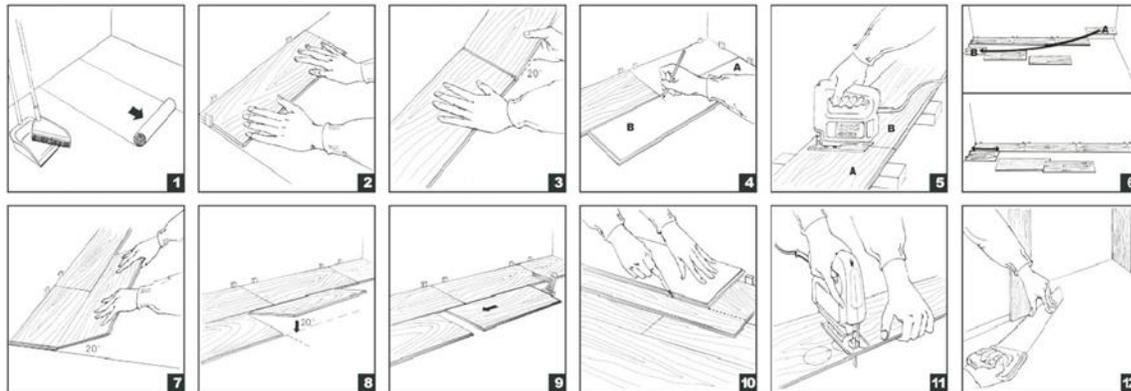
While EWC LVT is dimensionally stable, buildings, walls, and existing hardwood and laminate floors will expand and contract. Because of this, we recommend for all installations, both floating floor and glue down types, that an expansion gap of ¼" be left for expansion between EWC LVT, any vertical surface, an adjacent perimeter wall or wood-based floor (laminate or hardwood).

As stated earlier, always work out of multiple boxes to mix product to achieve proper pattern repeat and color mix for the look of natural wood. A minimum of 3 boxes of product is recommended. Inspect each plank or tile in good light for visual defects. If they show visual

faults or damage, do not install them. It is the responsibility of the installer to insure that the appearance of the finished floor meets the consumer's expectations.

EWC LVT is an indoor product. It will not be warranted when installed in locations or conditions not recommended for this product.

Recommended use temperatures are between 45 – 105 degrees F.



The use of an acceptable underlayment is recommended under the EWC LVT floor in installations where sound abatement is needed. If the product is purchased with attached pad, additional underlayment is not needed. If the product does not have attached pad but needs one to be installed for sound, we recommend the use of EWC LVT Sound Solutions underlayment for sound reduction. Run the foam underlay in the same direction as the EWC LVT panels. Underlayment should be butted side by side with no overlap. Tape the butted seams together. **Diagram 1.**

Remove the tongue on the side of the panels that face the wall. This is to ensure that the decorative surface of the EWC LVT floor is well under the finished trim when installed. Use a utility knife to score through the tongue several times until it easily snaps off.

Start in a corner by placing the first panel with its trimmed side facing the wall. Use space along each wall to maintain an expansion space of 6mm (1/4") between the wall and the flooring.

Diagram 2.

To attach the second panel, insert the end tongue of the panel into the end groove of the first panel at a 20-degree angle. Lower the panel flat to the floor. Line up the 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 degrees with the pattern side upward, place it beside the row, and mark it. **Diagram 4.**

Saw off the excess plank. Attach as described above. **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 20cm (8") long and joint offset should be at least 20cm (8"). **Diagram 6.**

Start the second row by pushing the long side tongue of the panel into the long side groove of the very first panel at about a 20-degree angle. When lowered, the plank will click into place. **Diagram 7.**

Attach the second panel of the new row on the long side as described above. Push this panel as close as possible to the previous row. **Diagram 8.**

To attach this second panel to the previous panel, lightly tap the end using the EWC tapping block. Continue along in the same fashion. **Diagram 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 ¼" spacers. Cut the panel and attach it 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.**

Door frames can be trimmed 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**

INSTALLING UNDER A DOOR JAMB:

1. Installation under door jambs may require that the top of the groove be reduced in size.
2. Using a small plane, chisel or knife shave off the ledge of the groove.
3. Place a bead of glue on the bottom lip of the groove then set the board in place and tighten with a pull bar.
4. Insert the tongue into the groove and engage with a pull bar. Hold the board in place with 3M Scotch-Blue™2080 Tape only as all other tape may damage the finish of the flooring. Diagram 12

Remove the spacers and you are ready to install finishing molding.

FINISHING MOLDING

Reducer molding is used to finish flooring when the adjoining surface is lower than the EWC LVT flooring or when flooring meets carpet. For Tidewater and Barrier 20 Collections: Position the U

track 7mm (1.4") 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 and add expansion when two level surfaces meet in doorways. Install the same as above. Residential Installations do not require the use of T Moldings.

Commercial Installations will require the use of T Moldings in all doorways and anywhere the flooring continues from one room into another room.

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.



RADIANT HEATED FLOORS:

This EWC LVT floor can be installed over certain types of radiant heated floors either as a floating floor or glued down. Follow the manufacturer's installation instructions when full spreading our EWC with an approved glue.

When installing over a radiant heated floor:

1. A newly installed radiant heated floor must be operational for at least four (4) weeks prior to EWC LVT installation with the temperature set between 55 to 85 degrees F to insure that the subfloor has been dried.
2. Existing radiant heated floors should be set to a minimum temperature of 65°F (18.3°C) degrees F for a minimum of 4 days before, during and 48 hours after the completion of the installation. This will insure that the EWC LVT will acclimate properly before the installation begins. Upon completion of the installation, gradually increase temperature in increments of 5° F per hour until desired temperature is achieved. Never exceed 85 degrees.
3. Wood subfloors should never exceed 10% moisture content as measured by a calibrated wood moisture meter.

4. Concrete subfloors must be “dry” using the mat test, a calibrated concrete moisture meter, Calcium Chloride Test or a RH Probe.
5. Ground floors using the radiant heating system should have a proper moisture barrier beneath it.
6. The recommended range of relative humidity is 35%-55% and the room temperature should be between 55-85 degrees F for the delivery of the flooring, acclimation, and installation.
7. The EWC LVT must acclimate at the stated temperature range for at least 48 hours prior to installation in the room to be installed.
8. Keeping the temperature of the room constant will keep a stable environment for the flooring as well as the home.
9. The floor surface temperature must always stay below 85 degrees F.
10. At no time should the relative humidity in the room with the installed flooring fall below 30% during the life of the product.

NOTE: Electrically heated radiant mats not embedded in the subfloor and installed directly under this EWC LVT are not recommended for use beneath this product. The installation of electrically heated radiant floor heating mats could void the warranty of the installed floor in case of a heating system failure.

STEAM CLEANERS

Palmetto Road does not recommend the use of any type of steam cleaner on our floors. These types of cleaners generate too much moisture and heat during their use. The resulting moisture and heat can be enough to break down any adhesives used in the manufacturing of this product. Also, in instances where no glue is used, both peaked and swelled plank or tile edges can occur. Therefore, all complaints that are determined to be from a consumer using a steamer will be denied by Palmetto Road.

PET WARRANTY

Palmetto Road Extruded Waterproof Core (EWC) planks and tiles are warranted to resist stains caused by pet soiling from domestic dogs and cats during the specific warranty time frame. The pet stains include urine, feces, and vomit. Resisting stains means that your floor has the ability to minimize or hold out permanent stains under the conditions stated. Pet accidents should be cleaned up immediately, as the longer they sit, the more difficult they will be to remove. Any damage to the subfloor and/or surrounding structure caused by pet soiling is not covered by

this warranty. Please follow our maintenance procedures for cleaning the affected areas. This warranty does not cover soiling and staining caused by any other pet type besides those stated above.

WARRANTY INFORMATION FOR EWC LVT FLOORS

Exclusive Limited Warranty

Palmetto Road warrants that its EWC planks and tiles are free from any visual or manufacturing defects. If the Products are found to be defective, Palmetto Road will supply new Product of the same or similar style, size, color, grade, and gauge to repair or replace the defective area and will pay reasonable labor costs provided the flooring is professionally installed and maintained according to the installation instructions provided. Products that are non-defective but are damaged during an improper installation by not following the Elite Flooring installation guidelines do not constitute a valid claim as defined by this limited warranty. Palmetto Road reserves the right to inspect any claim and/or request photographs and/or samples associated with the specific claim prior to approving any claim. All limited warranties are valid for the original purchaser of the flooring only and are not transferrable.

Pre-Installation Visual Limited Warranty

Palmetto Road warrants that its EWC plank and tiles products are free from visual defects. All Product purchased for an installation should be inspected by you and/or your installer. Pieces that appear to be visually defective should not be installed. Palmetto Road will not be responsible for reimbursing labor charges on any claim for visually defective product installed. It is the responsibility of the installer to determine the suitability of the product for installation before it is installed.

If a problem occurs during the installation of the planks and tiles, the job should be stopped immediately. The proper action is to immediately report the problem to your dealer and distributor who, in turn, will contact Palmetto Road immediately. Any costs caused by continued installation after the problem is reported will not be covered by Palmetto Road.

Wear Limited Warranty

Palmetto Road EWC LVT planks and tiles are protected with a wear layer. Palmetto Road warrants that there will be no wear-through of the wear layer for the number of years indicated for the specific product. "Wear-through" means complete loss of the wear layer so that the printed color layer is changed or affected. The term for your specific product wear Limited Warranty will appear on the insert of the product you purchased. This Limited Warranty applies

only to first quality merchandise provided the recommended installation and maintenance procedures are followed as outlined in the Installation Instructions and Owner's manual.

Waterproof Limited Warranty

Palmetto Road EWC LVT planks and tiles are warranted to be 100% waterproof. The structural performance of the planks or tiles, when properly installed and under normal use conditions, will be resistant to damage caused by exposure to water for the life of the product.

Mold and/or mildew can sometimes occur in a building if moisture issues are not addressed. This moisture warranty excludes damage resulting from the growth of both mold and/or mildew due to extended moisture exposure.

While EWC LVT planks and tiles are waterproof, the floor is not a waterproof barrier for the subfloor and surrounding structure. The Moisture warranty does not cover damage caused by hydrostatic pressure from the subfloor, flooding, household leaks (such as pipes), or mechanical failures like appliance and heating equipment leaks.

If the EWC LVT planks and tiles are structurally damaged and the cause is determined to be by exposure to water, Elite will arrange a credit subject to the terms as described below in the "Terms of Lifetime Limited Warranty" section. The term for your specific residential product Limited Warranty will appear in the carton insert of the product you purchased. For commercial installations, EWC LVT planks and tiles damaged caused by exposure to water will be subject to a pro-rated credit as described below in the "Terms of Lifetime Limited Warranty" section.

Waterproof Limited Warranty does not cover:

1. Any damage to structures that are not part of the installed EWC LVT flooring such as damage to surrounding walls, subfloor, structures, fixtures, furniture, underlayment, moldings, trims, and subfloor heating systems, or anything that is not the tile or plank.
2. Any damage from mold and/or mildew growth due to extended water exposure.
3. Flooring that is installed outdoors.

EWC Silencio Solutions Pad

Palmetto Road EWC LVT flooring is warranted to be free of manufacturing defects and to be structurally sound with or without underlayment pad. If underlayment pad is installed, Palmetto Road EWC LVT is structurally warranted only when using specially designed Silencio Solutions Underlayment RY1010. The use of any other pad will void the structural Integrity warranty and retain the manufacturing defects warranty.

Terms of Limited Lifetime Warranties:

Claims reported on material defects of this EWC LVT flooring will be prorated over the life of the product. Reasonable labor costs will be paid with the following exceptions:

- Claims reported after 1 year of use will pay labor charges at the rate of 50% reasonable labor charges.
- Claims reported after 5 years of use will not pay labor charges.

This warranty shall not include loss of time, inconvenience, incidental expenses (such as telephone calls) included in the removal or reinstallation of the affected flooring materials, and any other incidental or consequential damages.

This warranty is in lieu of any other warranties expressed or implied.

This warranty service is available only by notice to your distributor through the dealer from whom the purchase was made. Notification must be accompanied by a copy of the original invoice and can only be authorized by your distributor.

Limited Warranty Exclusions and Conditions

- Warranty coverage for any replacement flooring planks will be limited to the remaining time of the original warranty
- Warranty coverage does not apply to seconds, off-quality, or “as-is” goods.
- Warranty coverage applies only to the original purchaser of the flooring and the original installation site, is non-transferrable, and prorated by time of use.
- Warranty coverage does not apply to conditions or defects caused by improper installation, the use of improper materials during installation, or inadequate sub-flooring preparation as described in the Owner’s Manual.
- Warranty does not apply to floors with alkalis in the sub-floor or conditions arising from hydrostatic pressure or flooding.
- Warranty does not apply to damages or failure of the floor to adhere to the subfloor resulting from excessive moisture, alkali and/or hydrostatic pressure.
- Warranty coverage does not apply to construction-related damage.
- Warranty coverage does not apply to color variations between samples or printed illustrations and the actual production runs.
- Warranty coverage does not apply to reduction of gloss from use or improper maintenance.
- Warranty coverage does not apply to product sold through unauthorized dealers.
- Warranty coverage does not apply to conditions caused by the use of steam cleaners
- Warranty does not apply to damage that results from not following floor maintenance instructions
- Warranty does not apply to damages resulting in scuffs, scratches, cuts, staining from rubber-backed mats, or damages or discoloration from carpet dyes, fertilizer, asphalt from driveways or chemicals.

- Warranty does not apply to damages caused by burns, flooding, fires and other accidents.
- Warranty does not apply to damage caused by abuse (such as dragging heavy or sharp objects across the floor without proper protection for the floor or with heavy wheeled vehicle traffic that can permanently indent or damage the flooring).
- Warranty does not apply to damage caused by caster wheels or vacuum cleaner beater bars.
- Warranty does not apply to failure to support furniture with floor protectors made of non-staining felt or non-pigmented hard plastic.
- Warranty does not apply to discoloration from heat or sunlight.
- “Wear-Through” means complete loss of the wear layer so that the printed pattern or design of the floor is altered.
- “Commercial use” means daily activities commonly associated with a commercial environment. Hill Rom Beds are not recommended.
- “Residential use” means daily activities commonly associated with residential use.

If you have any questions regarding the above information, please contact your local flooring dealer or distributor.

CARE AND MAINTENANCE OF EWC LVT FLOORS

Once the floor has been installed, vacuum or use a dust mop to clear the floor of any loose dirt or residual dust or debris. The floor can be wiped with neutral pH cleaners or water.

Furniture should have felt pads attached to the feet to avoid scratching the floor. Heavy appliances or furniture should sit on non-staining large surface flooring protectors. When furniture has castors or wheels on the feet, they must be suitable for resilient floors, large surface non-staining, and swivel easily. Do not use ball-type castors because they can damage the floor.

Office chairs with castor wheels should be equipped with wide, rubber castors and protective mats under the chairs.

Protective mats should be non-staining as rubber mats may discolor the floor. All furniture pieces should have floor protectors under them.

Walk-off mats should be used in entrances to help prevent dirt from being carried onto the floor.

The product should never be exposed to temperatures exceeding 140 degrees F. Avoid exposure to long periods of direct sunlight. Blinds or drapes should be closed during peak daylight. Exposure to excessive heat and light can thermally degrade the floor.

Regularly sweep or vacuum the floor to remove dirt and dust. Do not use a vacuum with a beater

bar to vacuum the floor as this can cause floor scratches.

Do not use hard bottomed electric brooms without padding as they can scratch the floor. Palmetto Road does not recommend the use of any type of steam cleaner on our floors. The concern with these types of cleaners is that they generate too much moisture and heat. If adhesive was used the resulting moisture and heat can be enough to break down the adhesive. Also, in instances where no glue is used, we have seen both peaked and swelled edges occur. Therefore, all complaints that are determined to be from a consumer using a steamer will be denied by Palmetto Road.

If pet urine contacts the floor, it should be cleaned in a timely manner. If the floor is not cleaned and the urine removed, it may dull the finish.

Liquid spills and any wet areas should also be cleaned in a timely manner. The floor can be damp mopped with clean warm water and a dilute floor cleaner as needed. Do not use harsh cleaners or chemicals, abrasive scrubbing pads, abrasive tools, or abrasive cleaners as they can scratch the floor. Do not use detergents and do not use floor shining products like "mop and shine" types on the floor.

Petroleum-based products can stain the surface of your vinyl floor. These include materials like asphalt driveway sealer and engine motor oil, among others.