



Cascade WATERPROOF FLOORING

INSTALLATION GUIDELINES AND MAINTENANCE INSTRUCTIONS

Congratulations on your new flooring!

When properly installed and maintained, your new flooring will look beautiful for many years. Please read all information provided in this documentation prior to installation. Failure to follow installation instructions will void product warranty.

PLEASE READ THESE INSTRUCTIONS THOROUGHLY PRIOR TO STARTING INSTALLATION.

INSTALLER'S AND OWNER'S RESPONSIBILITY:

Homecrest Flooring is manufactured to the highest standards of product quality, on occasion manufacturing defects may occur and not be caught at quality control. It is the joint responsibility of the installer and owner to properly inspect the flooring for defects prior to installation. If defects are found notify the seller immediately prior to proceeding. In addition, it is imperative that all item numbers/color names are verified as the intended product purchased and reflects the correct color, level of variation, finish texture, and gloss level as anticipated.

Product with visual defects or intended pattern characteristics that are deemed undesirable should not be installed. Flooring with visual defects that have been installed are not covered by warranty.

GENERAL PREPARATIONS:

- Flooring can be damaged when proper precautionary transportation and handling methods are not exercised prior to installation. Use care when storing, transporting, and handling flooring. Cartons should be stored flat on bottom of box, never on edge.
- Flooring material is heavy and can be challenging to move. Always use proper lifting techniques when manually moving. Never lift more than you can safely handle. We recommend the use of material-handling equipment whenever possible.
- Ensure you have the appropriate amount of material present to complete job (including an additional 5%-10% for waste, trimming and for potential future plank replacement needs).
- Verify subfloor/site conditions meet standards provided within these instructions. If they are not compliant, do not install until they have been corrected.
- This product is not recommended for residential or light commercial applications where rolling loads, including but not limited to power or manual wheelchairs, are present. We recommend using a direct glue down product like Homecrest Mission Point in these situations.



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- Special consideration should be given when installing near heat sources such as fireplaces and wood stoves to avoid overheating the surface of the floor in the immediate area. Failure to do so can result in warped planks causing the floor to lift up from the subfloor and/or buckle.

SUBFLOOR PREPARATION:

- Ensure subfloor is smooth, flat, level, solid, and structurally sound. Must be flat within tolerance of 3/16" over a 10' radius or 1/8" over a 6' radius. Scrape, plane, or fill uneven boards, holes or cracks using patch and/or a floor leveling compound to ensure the subfloor is even.
- Subfloor surface must be dry and clean. Make sure it is free of debris, wax, solvents, paint, grease, oil, dust, adhesive residue, foreign matter, and/or contaminants.

CONCRETE SUBFLOORS

- New and existing concrete floors need to be well-cured and dry for a minimum of 90 days prior to installation.
- We do not recommend installing flooring over concrete floors with high moisture or in places where hydrostatic pressure could become present. Moisture vapor emissions should not exceed 5 lbs./24 hours per 1,000 SF when tested with the Anhydrous Calcium Chloride Test in accordance with ASTM F 1869 or 80% RH in accordance with ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Slabs using situ Probes.
- Moisture emission that exceed the standards listed above should be remedied to meet or exceed these standards for the duration for the floor coverings installed lifespan for warranty to remain intact.
- A roller applied vapor barrier is recommended to mitigate moisture when installed over a concrete substrate.
- Please note it is the installer or homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installation.

WOOD SUBFLOORS

- Existing wood flooring must be properly fastened, and we recommend repairing any loose boards or squeaky areas and installing plywood on top prior to installation of this product.
 - We recommend laying perpendicular to existing flooring boards.
- Plywood, OSB, Particleboard, etc... must be structurally sound, properly fastened, and installed per the manufacturer's instructions.
- Wood subfloors must be suspended 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of the crawl space should be covered with vapor barrier.
- All nail heads must be driven below the surface. Securely nail all loose boards.

Caution: Some types of nails, such as common steel nails, cement or resin coated nails, may cause discoloration of flooring. Use only non-staining fasteners with underlayment panels. The procedure of gluing and screwing underlayment panels is not recommended. Solvent based construction adhesives are known to stain vinyl floor coverings. The installer and/or consumer is responsible for any discoloration problems caused by fastener staining or use of construction adhesives.



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EXISTING FLOOR COVERINGS

- Ceramic or porcelain tiles with grout lines must be filled with floor leveler.
- Existing sheet vinyl flooring should not exceed one layer and should not be heavily cushioned.
- The surface must be in good condition and show no signs of excessive moisture conditions.

WARNING: DO NOT REMOVE OLD RESILIENT TILE FLOORING. THESE PRODUCT MAY CONTAIN EITHER ASBESTOS FIBERS OR CRYSTALLINE SILICA, WHICH CAN BE HARMFUL TO YOUR HEALTH.

DO NOT INSTALL over rough, uneven, or soft surfaces including carpet, carpet pad and/or with additional cushioned underlay products.

This product is not suitable for outdoor use, sunrooms, or solariums. Do not install in areas that are at risk of flooding or in spaces with saunas.

RADIANT HEAT

Consult with the manufacturer of the radiant heating system to ensure that it is compatible with this flooring. The selection and use of any radiant heating system is the choice and sole responsibility of the owner/purchaser/installer. In-floor heat must be embedded at least ¼" below the base of the flooring. Hydronic radiant heat system should be activated and run at its maximum temperature for several weeks prior to eliminate residual moisture prior to installation of any flooring. During installation, reduce radiant heat floor to 65°F. This temperature should be maintained for at least 24 hours before and during the installation, and for at least 48 hours after completion of the installation. For other imbedded radiant heat systems, they should be activated 1 week prior to installation. Temperature in heat system must never exceed 80°F and changes in temperature settings must be gradual (5° increments). Surface temperature of flooring should never exceed 82°F.

ACCLIMATION:

Acclimate flooring horizontally at room temperature (approx. 68°F) for 48 hours prior to installation and maintain temperatures between 55°F and 85°F during installation. Do not remove flooring from boxes during the acclimation period.

EXPANSION SPACE:

- This flooring is designed to be installed as a floating floor and must be able to expand and contract in all directions. **Do not install** fixed objects, such as cabinets, islands, wall units etc... on top of the flooring or fasten trim/molding/transition pieces directly to and/or through the floor.
- A 3/8" expansion space should be maintained between the floor and all other vertical surfaces, including cabinets, posts, partitions, door jambs, door tracks, pipes, etc...



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- Do not install lengthwise across distances that exceed 60' or widthwise across distances that exceed 40'. If the distances exceed these limitations, separate the area(s) using transition moldings. Separate adjoining hallways and other areas by using a t-molding.

TRANSITION MOLDINGS:

When using coordinating transition moldings, it is recommended that you select the flooring planks that coordinate best with the trim prior to beginning the installation and set aside. Use selected planks during installation in the areas where trims will be installed later to ensure most desirable finished project. Install transition moldings, glue the moldings to the track or subfloor but never directly to the flooring to provide proper expansion space.

TOOLS AND SUPPLIES:

Utility knife, straight edge saw, power saw, tape measure, 3/8" spacers, pencil, straight edge/ruler, and safety goggles

INSTALLATION:

- Remove baseboards, quarter-rounds, wall bases, appliances, and furniture from space.
- Remove existing flooring, if applicable.
- Undercut door casings, using a piece of this flooring to gauge proper height/depth, if applicable. See diagram 10 as reference.
- Remove all debris and dust from subfloor surface using broom and vacuum.
- Determine the direction of how the planks will be installed. Typically, the flooring runs the length of the room. There may be exceptions since it is a matter of preference.
- Work from 2-3 boxes during installation, mixing plank visuals to minimize shade variation and provide best result. Check all planks in daylight during installation from various angles.

MEASURE INSTALLATION AREA

The board width of the first and last rows should not be less than 3". Measure length of the room in inches. Divide it by the width of the planks that are to be installed. If the resulting number is less than 3", you will need to cut down the width of the planks on your first row accordingly.



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DIAGRAM 1

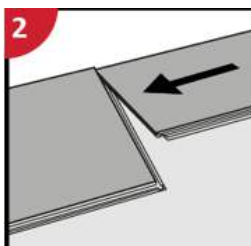
Begin at the left corner of the starting wall. Wall may not be straight. If it is not straight, you may need to trim the edge of the first row of flooring boards to match the shape of the wall. Remove tongues with saw on length side of planks on the boards being used for the first row. Slide the first board into the corner with the planks tongue side facing the wall. Set spacers between the wall and the board at the end and along the length of the board. A 3/8" gap around perimeter is necessary to allow for proper expansion space. Do not remove spacers until the installation is complete.



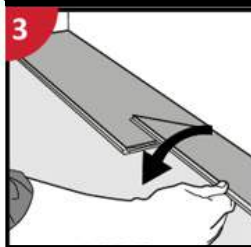
Note: This spacing must also be maintained between the floor and all vertical surfaces, including cabinets, posts, partitions, door jambs, door tracks, fireplaces, etc...

DIAGRAM 2, 3, and 4

To attach your second plank, overlap and lower the tongue end of the second plank into the groove end of the first plank and align side edges to ensure proper engagement of the locking mechanism. To secure joint, press down with thumbs or palm of hand on surface of each side of plank 2. Continue pressing until the two planks are flush along the end joint. The planks should lay flat to the floor.



Repeat the above procedure for each subsequent plank in the first row. Continue connecting the first row until you reach the last full plank.



FAILURE TO PROPERLY LINE UP END JOINT AND ATTEMPTING TO FORCE IT IN WHILE OUT OF ALIGNMENT COULD RESULT IN PERMANENT DAMAGE TO THE END JOINT AND EVENTUAL BOARD SEPERATION.



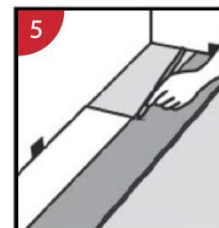
IMPORTANT

If both plank ends are not perfectly aligned, smooth, and level, they are not engaged properly. You will need to disassemble and check if there is debris obstructing the locking mechanism. Instructions to separate/disassemble planks can be found on page 7.

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DIAGRAM 5

At the end of row one, cut a plank to fit. Place a spacer to the wall and fit the last plank by rotating plank 180° with pattern side upward and place it beside the first row with its end against the far wall, leaving proper expansion space. Line up ruler across the end of the last full plank and draw a line across new plank with pencil. Use saw to cut.



Rotate the plank 180° so it is back to its original orientation. Lower and lock its tongue into the end of the groove of the last full plank. Ensure the plank is aligned to ensure proper engagement. Press end joints with thumbs or palm of hand to engage until secure and planks lay flat to the floor and are smooth and level.

DIAGRAM 6

Start the second row with the leftover cut of the last plank from the previous row. This piece should be a minimum of 15" long and joint offset should be at least 15". Whenever possible, use the piece cut from previous row to start next row. Adjust layout for a balanced staggered look.

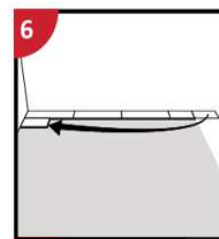


DIAGRAM 7

To begin the second row, place a spacer against the left wall. Tilt plank at an angle and insert the tongue of the long side into the groove of the first row and then rotate lowering into place. Planks should be same height and lay flat to floor. Position the second board in row 2 in the same manner with its left end aligned with the right end of the previous board. Overlap the tongue of this board with the groove of the previously installed board, pushing plank into place, making sure edges are aligned properly. Press firmly with thumbs or palm of hand on short end joint to engage. Ensure there are no gaps, and the end joints are properly aligned and secure. Planks will lay flat to floor and will be smooth and level with one another. Continue laying planks in this manner.

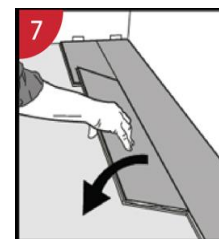


DIAGRAM 8

To fit the last row, lay a plank on the top of the previous row with its tongue to the wall.

Lay a ruler across the plank so that it is lined up with the side of the planks of the previous row and draw a line across the new plank with a pencil. Don't forget to allow room for spacers. Cut the plank with a utility knife/saw and attach into position. The last row should be no less than 3" in width.

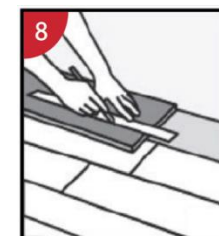
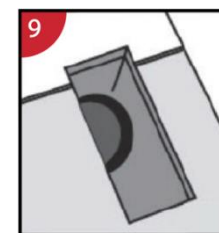


DIAGRAM 9

Door frames and heating vents also require expansion space. First, cut the plank to the correct length. Then place the cut plank next to its actual position and use a ruler to measure the areas to be cut out and mark them. Cut out the marked point allowing the necessary expansion area on all sides.



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DIAGRAM 10

Trim door frames by turning plank upside down and using a handsaw to cut away the necessary height so planks slide easily under frames. Complete installation by installing your baseboard moldings covering the expansion gaps allowing slight clearance between the molding and the flooring planks. Do not install moldings tight to flooring. Nail moldings to the wall surface, not through the flooring. *Failure to provide proper clearance between moldings and flooring or nailing moldings through flooring will cause the floor to become pinned and could result in future plank separation or buckling.*



PLANK DISASSEMBLY INSTRUCTIONS

Separate entire row by gently lifting at an angle (no more than 5°) then to separate planks, lay them flat on the ground and slide them apart in opposite directions.

DO NOT FOLD UPWARD! This could damage the end joint and locking mechanism.



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MAINTENANCE INSTRUCTIONS and GUIDELINES

IMMEDIATE CARE AFTER INSTALLATION

- Save a few planks in case of accidental damage. Planks can be replaced or repaired by a flooring professional, if necessary.
- If other trades are in the work area, a floor protector is highly recommended to help protect the finish of the floor.
- Never slide appliances or other heavy items across the floor. Use plywood and a hand dolly or an approved air ride appliance moving device.
- Flooring can become slippery when wet. Allow time for the floor to dry after washing.
- Keep the room temperature between 65° – 85° F for at least 48 hours after installation.

ROUTINE MAINTENANCE

- Maintain room temperature between 55° - 85° F.
- During peak sunlight hours, the use of blinds or curtains is recommended. Prolonged direct sunlight can result in discoloration and thermal degradation. Surface of floor should not exceed 82° F.
- Sweep or vacuum regularly, to remove loose dirt which can scratch your floor.
We do not recommend vacuums that have a beater bar since it can visibly damage your floorings surface. We also do not recommend electric brooms with hard plastic bottoms with no padding as use may result in discoloration, scratching, and loss of gloss.
- General cleaning can be carried out by sweeping, vacuuming, or by using a damp cloth. For heavy soiling, use a polyurethane cleaner.
- Do not allow solvents or cleaning agents to sit on the seams as this may cause damage or weaken the locking mechanism. Avoid one-step “mop and polish” products, wax, polish, dishwashing liquids and oil-based cleaners. These may leave a residue which can attract dirt and dull your floor’s finish. Avoid cleaners that contain abrasive solvents which may permanently damage floor. Remove excess water after cleaning.
- All stain forming and aggressive substances must be immediately removed from the surface.
- Flooring can withstand topical water and water penetration without damage. Water leakage over or around the outer edges of flooring can damage subfloor, so clean up topical spills as soon as possible. CAUTION: Floor may be slippery when wet.
- Place walk off mat at outside entrances to reduce the amount of grit brought into home. We do not recommend mats with a latex or rubber backing since these backings can cause permanent discoloration.
- Use appropriate furniture glides and protectors to prevent scratching and indentations.
- Furniture with castors require the use of a floor protection pad/mat.
- High heels and pets with unclipped nails can scratch or damage flooring.



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LIMITED WARRANTY

Homecrest Cascade products are covered by a warranty period from the date of purchase by the Installer or end user against defects in materials and manufacturing to product specifications, provided installation, maintenance and use falls within recommend guidelines.

Pre-Installation

Manufacturer warrants that its flooring is free of visual defects. The end user or installer should carefully inspect each piece before installation. Products that appear to have defects should not be installed. Manufacturer will not be responsible for any claim for products installed with visual defects.

Installation

This Limited Warranty covers material costs provided that such flooring is professionally installed complying with the Homecrest Cascade Installation & Maintenance guidelines.

Residential Installations: Limited Lifetime

Our Residential Limited Lifetime Warranty means that for the life of the floor, from the date of purchase, your floor will be free from manufacturing defects when professionally installed and maintained according to instructions supplied.

Light Commercial Installations: 10 years

Our 10-year Light Commercial Limited Warranty means that for 10 years, from the date of purchase, your floor will be free from manufacturing defects when professionally installed and maintained according to instructions supplied with each carton.

Within One Year If a defect covered by this warranty is reported in writing within one year of purchase, Manufacturer will supply new material of the same or similar quality to replace the defective material. Reasonable labor costs will also be covered.* Manufacturer will not pay to repair or replace material with defects that were apparent before or during installation.

Within Two Years If a defect covered by this warranty is reported in writing after one year but within two years of purchase, Manufacturer will supply new material of the same or similar quality to replace the defective material. 50% of reasonable labor costs will also be covered.* Manufacturer will not pay to repair or replace material with defects that were apparent before or during installation.

After Two Years If a defect covered by this warranty is reported in writing after two years, Manufacturer will supply new material of the same or similar quality to replace the defective material. Labor costs will not be covered.

*NOTE: reasonable labor costs shall be determined solely by the manufacturer.



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Terms for Warranty

If a defect covered by this Limited Warranty is found within the warranty period, Manufacturer will supply new flooring material of similar color, pattern and quality to replace the defective area. Material cost to be reimbursed shall not exceed the purchase price of the goods. Claim of defect must be presented in writing and the piece of defective item shall be presented to Homecrest for evaluation.

Warranty Exclusions

- Problems due to improper installation, non-recommended subflooring or improper subfloor preparation, improper floor care and installation products, or failure to follow maintenance recommendations.
- Change of gloss level, dulling, scratching, cutting, chipping, or breakage.
- Problems due to accidents, abuse, or improper usage. Some examples are: damage from moving appliances or sliding of furniture without adequate protection, rolling casters on furniture, appliance and plumbing leaks, rotating beater bars on vacuum cleaners, damage caused by heat from steam cleaning devices, dropping of heavy or sharp objects, and damage or discoloration from burns or fire.
- Problems due to extreme temperatures or fading from sunlight.
- Problems due to installation in unheated rooms.
- Color or design variations from samples or printed color photographs.
- Problems due to excessive moisture or water leaks and floods.
- Damage occurring during renovation or construction.
- Permanent scuffs.
- Stains or discoloration.
- Rips, tears, gouges, or indentations.
- Loss due to loss of time, inconvenience, incidental expenses (such as telephone calls, labor and/or materials) incurred in the removal or reinstallation of the affected material, and any other incidental or consequential damages.

Warranty Owner

This Limited Warranty applies only to the original purchaser and the original installation site.