

INSTALLATION INSTRUCTIONS RIGID HARDWOOD PLANK + IXPE ATTACHED PAD

Regatta









Attention

Before starting installation, read all instructions thoroughly. Should any questions arise, please contact your local Hallmark Floors dealer. Instructions are available at hallmarkfloors.com. Instructions are also available via cell phone using QR code found on pre-installation check sheet found in the box. All installation instructions must be followed for warranties to be considered valid. Pre-inspect the job site prior to delivery of the floor to ensure the structure is suitable for Regatta flooring installation using the following guidelines. Product intended for indoor use only. Not suitable for outdoor application.

Owner/Installer Responsibility

<u>1. Inspect all materials carefully prior to</u> <u>installation.</u> Warranties do not cover materials with visible defects once they are installed. Installation constitutes acceptance.

2. Inspect the Regatta flooring in well lighted conditions to ensure proper identification of any potential problems. Carefully inspect the flooring for damage, color, finish, and quality. If the flooring is not acceptable, contact your Hallmark Floors' retailer and arrange shipment of replacement material. Defective product will be replaced. Material that is subjectively viewed as unacceptable but falls within Hallmark Floors' quality control norms will not be replaced.

3. Prior to installation of any flooring, the installer must ensure the job site and sub floor conditions meet the requirements specified in these instructions.

4. Regatta flooring installation should be one of the last items completed on the construction project. Limit foot traffic on the finished floor during installation and construction process.

IF THE FLOORING AS SUPPLIED WILL NOT SATISFY THE CUSTOMER IN FULL, DO NOT

PROCEED TO INSTALL. The decision not to proceed must be made within the first 10% or 100 square feet of flooring boxes opened, whichever is less. Open boxes exceeding this amount will not be eligible for return. Installation constitutes acceptance. Any product installed with visible defects will not be eligible for replacement.

General Guidelines



1. Weather Tight: Doors and Windows must be in place and the building sealed prior to installation

2. Moisture: While the core is water proof*, the building is not. Hallmark

Floors Regatta Collection is not a vapor barrier and will not prevent moisture from entering or damaging the structure or prevent mold. Care should be used to investigate, and eliminate all sources of moisture intrusion or vapor emission prior to installation. NOTE: Moisture under the floor can become trapped, and the evaporation/temperature variable process can distort the floor, as well as posing environmental hazards from mold and mildew. Hallmark Floors, does not warrant against damage, caused by hydrostatic pressure, from the subfloor, flooding, structural leaks, (such as roof, window, plumbing, etc.) or mechanical failures like appliance or heating and cooling system leaks.

3. Secondary Vapor Barrier: Use six to eight mil poly sheeting on concrete slabs. Overlap seams twelve inches and tape seams with water proof duct tape

4. Climate Control: Structure must have working climate control operating for 48 hours prior to installation.

5. Acclimation: Structure must be at 55 to 80° F and 30 to 55% RH. If storage and delivery conditions are at this range for 12 hours prior to delivery, no acclimation time is required. If outside of these conditions allow 24 hours acclimation time in the listed conditions.

6. Grade: Approved for installation above, on, and below grade.

Install Flooring Last

The flooring should be the last trade installed in the house (before base boards are installed). All concrete, masonry, plastering/drywall, texturing, and painting primer coats are completed. Do not install in direct sunlight.

Covering the floor while wet trades are in the house is not recommended. Moisture can pull into the paper or be trapped under the surface of materials used to cover the floor. Paper coverings also allow dents and scratching to occur. Coverings held in place for more than 24 hours by blue tape can damage the floor. The adhesive in tapes contain Phthalates / plasticizers that have the ability to penetrate floor finishes and bond with the finish at the molecular level presenting a risk of pulling/damaging the finish when the tape is removed.

Hallmark Floors requires that built-in cabinets and built-in furniture be installed before installation of the floor.

Exterior Checks

Does exterior slope away from foundation at a rate of 6" drop in 10' for soft landscaped areas and 3" drop in 10' for hard-paved areas?

NOTE: Proper drainage away from the structure is absolutely critical to ensure weather-tight conditions and crucial to proper flooring performance. If structure is near a hill, the lot should be graded with a swale to move moisture off the lot and prevent it from coming in contact with the foundation.

ON GRADE SLAB

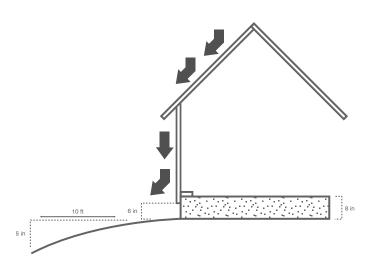
- Is exterior soil elevation 6" below edge of flashing?
- Is exterior hardscape 2" or more below interior surface of slab?

CRAWL SPACE

- Does the structure have roof guttering?
- Is exterior soil line the same as the interior soil level?

BASEMENT

- Does the structure have roof guttering?
- Are basement walls water tight?



1. Acceptable Substrate Types:

- Concrete Above, On, Below Grade.
- Gypcrete / Light Weight Concrete.
- Wood Over Crawlspace, Basement, and Above Grade.

- OSB.
- Sheet Vinyl (clean, one layer, well adhered) no cushioned or perimeter glued. Fill deep embossing with suitable feather fill.
- VCT (clean, one layer, well adhered).
- CDX Underlayment Grade Plywood (over existing wood subfloor).
- Existing Wood Floor (on wood subfloor glued or nailed).
- Ceramic Porcelain and Natural Stone tiles must be smooth, even and well bonded with a grout line depth of less than 1/16". If grout line exceeds allowable depth fill with Portland based patching material to manufacturers specifications.

2. Unacceptable Substrates:

- Solid or Engineered Wood Flooring on Concrete.
- Other floating floors (wood, vinyl, laminate).
- Existing resilient floors installed below grade.
- Existing resilient floors, perimeter glued
- Sleeper Substrate Systems Product thickness not compatible with this type of installation.
- Cushion Back Vinyl
- Rubber tiles
- Carpet / Carpet Pad
- Underlayment / Pads
- Lumber Subfloor

When the building contains a lumber subfloor, or subfloor sag or excessive travel require sheeting the following specifications must be followed.

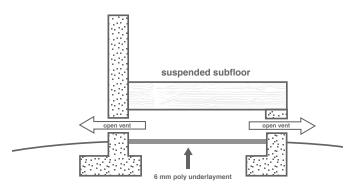
The minimum second layer should consist of nominal $\frac{1}{2}$ " (15/32", 11.9mm) CD exposure 1 plywood sub floor panels, 4' x 8' sheets, depending on how much correction of deflection between joists is necessary. A thicker layer may be required to offset joist spacing.

The top layer of plywood should be offset by 2' from joints in first layer of sub floor, and installed in the opposite direction to the bottom sub floor panels. Glue top and bottom layer together with construction adhesive (specified as suitable for this use) and screwing in to the truss/ joist system every twelve inches. Additionally, nail (ring shank) or staple layers together on a minimum 12" grid pattern.

3. Subfloor Preparation Wood:

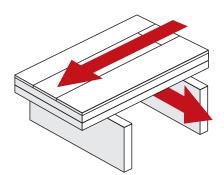
- Flat to a tolerance of 3/16" in a 10' radius, 1/8" in a 6' radius
- Sand high edges/rough spots sheet with min ¼" plywood
- Install planks lengthwise across subfloor joists
- Subfloor clearance of ground minimum 18"
- Sleeper systems not approved for use

- Subfloor firm, (max deflection between joists 1/16").
- Moisture content of wood subfloor should not exceed 12%
- CDX Underlayment Grade Plywood (over existing wood subfloor)
- Existing Wood Floor (on wood subfloor glued or nailed).Ceramic Tile to flat specifications / feather fill)Portland based)
- Underlayment grade particle board (sound, flat, well secured to wood subfloor) – NOTE: See Subfloor Guidelines #1)
- Any adhesive residue remaining on the surface should be removed.
- NOTE: Crawl space earth (or thin concrete slab in crawl space) should be covered 100% by a vapor retarder of black polyethylene (minimum 6 mil) or any recommended puncture resistant membrane, such as Class C meeting ASTM D1745. Check local codes for any additional requirements.



Size of available vents should equal to 1.5% of the square footage within the crawl space. Relative humidity should be consistent with interior of home. Moisture content of sub floor should not vary more than a 4% MC from the top of the sub floor to the bottom.

<u>Wood Subfloor Sag & Subfloor Deflection:</u> When sagging or subfloor deflection of 1/16" or more exists between joists, the floor should be sheeted with a 3/8" to $\frac{1}{2}$ " CD or better grade plywood to make the subfloor more firm. Use same process as sheeting lumber subfloor.



4. Subfloor Preparation Concrete:

- Flat to a tolerance of 3/16" in a 10' radius, 1/8" in a 6' radius.
- Smooth, Dry, free from dust, solvent, paint, debris
- Free of flaking, powder, drywall contamination, wax, grease Radiant Heat maximum surface temp 80° F All dips, holes, joints and depressions must be filled (Portland based material)
- Concrete must be a minimum of 6 weeks old, and fully cured
- Concrete moisture emissions should not exceed 5lbs. per 24hrs per 1,000 sq. ft. on a calcium chloride test.
- Any adhesive residue remaining on the surface should be removed.
- Glue Down installation <u>Hallmark Floors Rigid</u> Plank is not suitable/approved for glue down.
- Stair Treads <u>Hallmark Floors Regatta is approved</u> for glue down on stairs only, to create stair tread. Flush bull nose is avialable.

Lightweight Concrete/Gypcrete

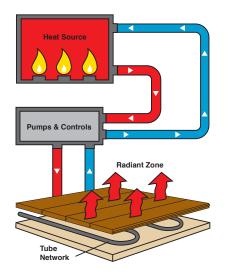
- The heating system tubes must be 1 ½" below the surface layer of the concrete slab/thermal mass.
- 2-3 weeks prior to the installation the thermostat must be set at 70° F, then at 85°F for 3 days. The home should be aired out briefly every day to allow the excess humidity from the thermal mass to exhaust out of the structure.
- The lightweight concrete moisture content must not exceed 1.5% as measured with a Tramax Moisture Encounter meter prior to installation. Follow adhesive manufacturers instruction when gluing vinyl or wood to gypcrete.

PurCore RIGID+ Radiant Heat

All Radiant Heat systems must have failsafe capability to ensure surface temperatures do not exceed 80°F.

Radiant Heat - Hydronic

Subfloor level tolerances listed previously, also apply to radiant heated subfloors.



Conceptual Drawing

NOTE: Hallmark Solid Hardwood Flooring **excluded** from Hydronic Radiant Heat Installation Method. (see Hallmark Floors Solid Hardwood Installation Guide)

CLASSIFICATIONS OF HYDRONIC SYSTEM

- Encased in Cement/Gypcrete.
- Encased in Aluminum Hangers, between flooring joists.
- Involve use of Aluminum Transfer sheets between subfloor and a wood deck on top of sleepers.

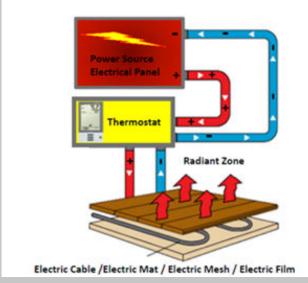
SURFACE CHANELED RADIANT HEAT SUBFLOOR: Surface-channeled radiant boards, are not acceptable for use under Hallmark Floors Regatta flooring. A minimum of ¾" must be maintained between the floor and the water



tubing. This is not possible with these types of systems. This applies to systems with or without an aluminum transfer sheet. Sub floor level tolerances listed previously, also apply to radiant heated subfloors.

Radiant Heat - Electric

Sub floor level tolerances listed previously, also apply to radiant heated subfloors.



Conceptual Drawing

NOTE: Hallmark Solid Hardwood Flooring acceptable for Electric Radiant Heat Installation Method, using FiberThermics Mat with thermal cut off. (see Hallmark Floors Solid Hardwood Installation Guide)

CLASSIFICATIONS OF ELECTRIC SYSTEMS

- Encased in Cement/Gypcrete/Mortar
- Low Voltage

Fabric Heating Mat with Thermal Cut Off NOTE: Other electric systems including, plastic mat, fabric mat., metal mesh mat, and are not recommended.

PERMITED APPLICATION METHODS

• Floating Installation

Due to performance, compatibility and safety considerations, only systems compliant with the NWFA Guideline classification of Fabric-Heating Underlayment or Mat with Thermal Cut Off are recommended for direct contact with Hallmark Flooring.

PERMITED APPLICATION METHODS

• Floating Installation

HYDRONIC RADIANT HEAT APPROVED PRODUCTS

Regatta Rigid Hardwood Flooring All (excluding hickory)

CAUTION: Surface temperature of the wood floor should never be set to exceed 85° F. as a function of the heating system.

Temperature sensors must be integrated into system as a fail safe to prevent excessive heat and damage to the Regatta Rigid Hardwood Flooring.

NOTE: Area rugs and closed bottom furniture placed over radiant heat system will create heat retention in the floor. This may result in that area exceeding optimum temperature and causing slightly larger gaps and minor cracks/splits in the floor under closed bottom furniture (bookcases, entertainment units, area rugs etc. Hydronic systems are difficult to regulate in that regard.

PASSIVE RADIANT HEAT SYSTEMS: Passive radiant heat systems are not suitable for use with Hallmark Floors Regatta flooring. Any approved radiant system must be combined with the ability to move the air in the room for proper heat distribution and to prevent excessive heat at floor level. Humidity controls must be in place to maintain relative humidity within a 20 to 60% RH range.

INSTALLATION METHODS-HYDRONIC

Floating Installation: Regatta has attached IXPE pad attached to bottom of plank. Do not use additional underlayment pad with Regatta.

All other system variants require installation of the heating components either between joists or embedded in a 1" thermal mass of cement with the flooring when installed according to the installation instructions. In-floor systems powered by FiberThermics® such as WarmStep® are classified as Fabric-Heating Underlayment or Mat with Thermal Cut Off and are approved for direct contact

ELECTRIC RADIANT HEAT APPROVED PRODUCTS CAUTION: Surface temperature of the wood floor should never be set to exceed 85° F. as a function of the heating system.

Temperature sensors must be integrated into system as a fail safe to prevent excessive heat and damage to the Regatta Rigid Hardwood Flooring .

NOTE: Area rugs and closed bottom furniture placed over radiant heat system will create heat retention in the floor. This may result in that area exceeding optimum temperature and causing slightly larger gaps and minor cracks/splits in the floor under closed bottom furniture (bookcases, entertainment units, area rugs etc. Mat heating systems can be spaced to eliminate overheating under heat traps.

PASSIVE RADIANT HEAT SYSTEMS: Passive radiant heat systems are not suitable for use with Hallmark Floors Regatta flooring. Any approved radiant system must be combined with the ability to move the air in the room for proper heat distribution and to prevent excessive heat at floor level. Humidity controls must be in place to maintain relative humidity within a 20 to 60% RH range Glue Down Installation: Not permitted

Thermal mass must be Portland based concrete product and rated at a compressive strength of 2500 psi or greater. Thermal mass with less than 2500 psi compressive strength is not approved with Hallmark Regatta Flooring.

Hydronic warm water systems installed in accordance with NWFA specifications for the systems approved in Hallmark Floors Radiant Heat Guide are acceptable. Tubing must be a minimum of 1 1/4" below the surface of the concrete thermal mass.

See Hallmark Radiant Heat Guide for additional details.

https://hallmarkfloors.com/pdfs/Radiant-Heat-Guide.pdf

RADIANT HEAT IN LIGHTWEIGHT CONCRETE- DRYING THERMAL MASS PRIOR TO INSTALL

Two to three weeks prior to the arrival of the hardwood floor and after completion of all wet work at the job site, the radiant heat system should be on at a temperature of 70° F for three weeks and then at 85° F for 2-3 days. During this time, the structure should be well ventilated to prevent moisture buildup (the increased heat is driving the moisture out of the concrete thermal mass during this time). If this is not possible due to weather/ outdoor climate conditions, dehumidifiers should be used to keep moisture from building up in the structure.

NOTE: Prior to installation, the lightweight concrete moisture content must not exceed 1.5% as measured with a Tramax Moisture

HYDRONIC RADIANT HEAT / WOOD SUBSTRUCTURE AND ALUMINUM THERMAL TRANSFER SHEET/HANGERS – PRIOR TO INSTALL

Two weeks prior to arrival of hardwood flooring at job site, the radiant heat system should be gradually brought up to 70° F. Moisture levels allowable in wood sub floor are not to exceed 12%. Once systems have reached optimum conditions, Hallmark Floors Regatta flooring should be brought to job site, not before.

INSTALLATION METHODS-ELECTRIC

Electric Fabric-Heating Underlayment or Mat with Thermal Cut Off: Can be installed using the prescribed method found in these installation instructions.

Floating Installation: Regatta has attached IXPE pad attached to bottom of plank. Do not use additional underlayment pad with Regatta.

Lower heating element temperatures are possible since the spacing of the heating element is 3" apart. System is designed to be in direct contact with the back of the wood floor.



Since the heating mat with thermal cut-off is being installed at the same time as the floor it eliminates pre-running the system. Preheat the room to 10° F below desired room heat. Set floor thermostat to 5° F above its current temperature, and increase 5° F daily, until desired thermal comfort is achieved.

NOTE: Air temp and floor temp are different numbers and the floor temp can be kept cooler than the desired air temperature as thermal warming is more efficient and comfortable.

Installation

- After conducting all pre-installation checks proceed with installation.
- Prior to installation of plank measure the width and length of the room. Divide size of room by the width of the plank to determine the number of rows. First row may have to be trimmed to avoid the row at the opposite side being significantly narrower than the starting row.
- Hallmark Floors Regatta Planks should be installed at the same time as carpet and after the following: finishing walls, cabinet installation, appliance installation, tile & counter top installation.
- Standard refrigerators and kitchen oven/range are acceptable for placement on top of the floor. Use caution when moving appliances by using a proper furniture dolly, air sled, 1/8" Masonite with glossy side down, or plastic glides designed for movement of heavy appliances. Failure to follow these precautions can damage the floor.

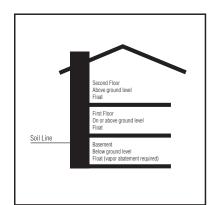
Acclimation

Acclimation is not always needed prior to installation of Hallmark Floors, Regatta. However, installation conditions need to be within 55° & 80° F.

These conditions should be in place 48 hours prior to, during the duration of the installation and 48 hours after the installation is completed. If the material comes from conditions outside of this temperature range the material should be conditioned on site until the temperature of the product matches the indoor temperature. This can take 12 to 24 hours.

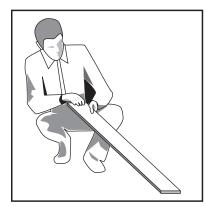
Radiant heat installations: Require a minimum subfloor temperature of 65° F. These conditions should be In place 24 hours prior to, during the duration of the installation and 48 hours after the installation is completed.

Three Seasons Rooms: Conditions should be 55° & 80° F 48 hours prior to, during the duration of the installation and 48 hours after the installation is completed.



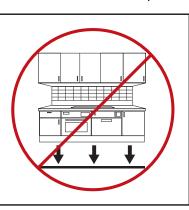
1. Select Installation Type

- Above Grade
- Wood Subfloor with crawl space/ basement
- On Grade Slab
- Below Grade basement



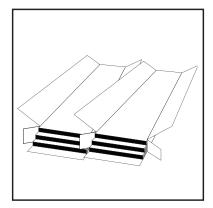
4. Visual Inspection of Planks

Inspect planks/tiles for any defects prior to installation. Verify that homeowner has seen product and approves proceeding with installation of the floor



2. Cabinets

Installation of built in cabinets inhibits the ability for the floor to expand and contract. Perimeter gluing is also not recommended for the same reason.

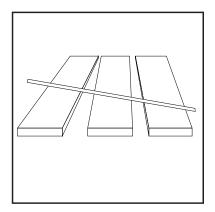


5. Open Multiple Boxes

Always work from multiple boxes simultaneously and blend the planks throughout the installation. This is especially important in the event of multiple production dates.

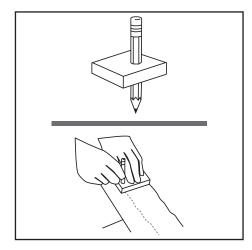
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2. Undercut All Door Jambs/Moldings Remove all shoe and base molding to ensure adequate expansion space. Use scrap piece of flooring to establish height of cut.



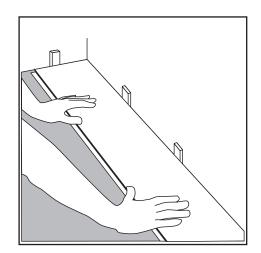
6. Blend Planks to Moldings Before you get started, open multiple boxes and check how the planks/tiles blend with the moldings. At beginning of installation, set aside those planks that best blend to the transition moldings on job.

Installation



7. Irregular & Out-of-Square Walls

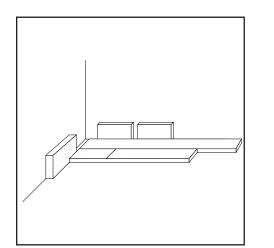
Scribe cut the first row to match variations in the wall. A scribe can be created by drilling a hole in a scrap piece of wood and inserting a pencil. The starting row can then be cut to compensate for an irregular wall or to help minimize the appearance of an out of square room. Before installing flooring Use six to eight mil poly sheeting on concrete slabs. Overlap seams twelve inches and tape seams with water proof duct tape.



8. Select a Starter Wall

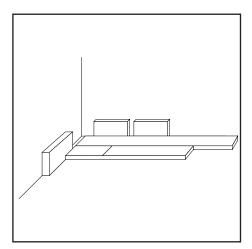
Select the longest wall in the room and install left to right , starting in the left-hand corner. For starting row, use adjustable spacers against side and end walls to maintain $\frac{1}{4}$ " minimum expansion space. Use spacers at both the side and the end of the rows.

NOTE: Start one inch from the wall until first three rows assembled and push in place against ¹/₄" to ¹/₂" spacers depending on size of span and width



9. Starting line

For starting row, cut blocks to use against side and end walls to maintain 1/4" minimum expansion space. Use spacers at both side the end of the rows. Use of adjustable spacers may be needed to help maintain a straight edge line, if not scribing the floor.



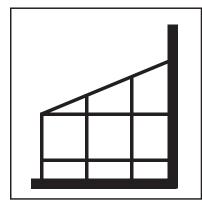
10. Expansion Space

Standard expansion space should be factored at 1/4" and this will suffice for a floor that does not exceed 50' in span or width.

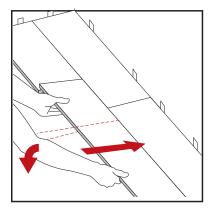
Larger floors can be accommodated with an additional expansion space of 1/16" for each additional 5' of span or width up to 80' and require $\frac{1}{2}$ " of expansion space.

Larger floors can be accommodated with the use of a transition molding, to break the span, or width into a smaller configuration at interior doors etc.

Installation

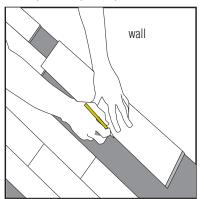


11. Three Season Room: Use minimum expansion space of ½". Climate conditions should be between 55° & 80° F and 30 to 55% relative humidity 48 hours prior to, during the duration of the installation and 48 hours after the installation is completed.



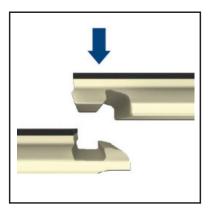
14. Placing Additional Planks

Install the second plank of the second row by angling the plank up slightly. Position the long side of the plank with the tongue side, full engage in to the receiver of the first row of product. Lower the plank to the floor insuring that the end joint is overalpping and perfectly aligned, with firm pressure; push the end joint downward till the end of the plank snaps into place.

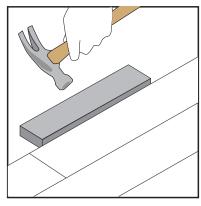


17. Trim Last Row

The last row of planks may need to be cut widthwise to achieve the correct width. The width of the last row must not be less than 2". This is accomplished by measuring the room prior to installation and factoring how many rows it will take to complete room.

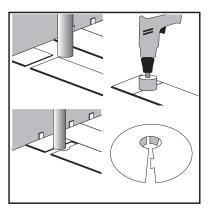


12. Lock in First Row End Joints It is recommended to start by installing the first 2 - 3 rows at the same time. This will help minimize any shifting. Start by using a full plank to start the first rowm riughly a half plank or cut pieceof the first row for the second row.

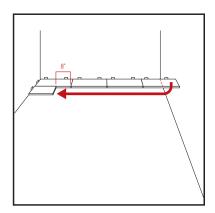


15. Fully Engage Side Lock

Use a tapping block and hammer, tap the block against the plank edge to fully engage the locking system. Failure to fully engage the locking system will cause the joints to open up later. CAUTION: Do not strike the edge of the plank or the locking system with the hammer.

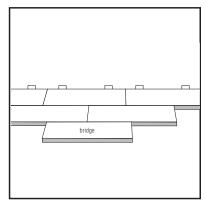


18. Installing Around Pipes If the room has pipes or radiators or pipes, drill a hole large enough to fit around them with space for expansion.



13. Starting New Row

Use end cut piece from first row to start the second row. End joint spacing must be no less than 8" apart from rows on either side. Repeat process throughout the floor. Watch carefully to avoid lining up too many of the end joints and setting an obvious pattern.



16. Bridge the End Joint

Using a cut piece of approximately 12" to 14" in length, form a temporary bridge next to the end of the plank just installed. After boards are cut & engaged, surface tap all joints (long AND short ends) with rubber mallet.

Installation tools & tips

- Tape Measure
- Pencil
- ¹/₄: Wedge Spacers
- Hammer
- Chop Saw or Vinyl CutterLip-Over Tapping Block
- Chalk Line
- Chalk LinPull Tool
- 3M Scotch Blue 2080 Tape[™] (for delicate surfaces)



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