

ROYAL COURT



BY
URBANFLOOR®

CASTLE SERIES

Birch 3", 5", 6 1/2" Random Width

KINGDOM SERIES

Oak / 6 1/2" Width 3/8" Engineered Tongue & Groove

ROYAL COURT INSTALLATION GUIDELINES

GLUE DOWN / NAIL OR STAPLE / FLOAT

**PLEASE READ ALL INSTALLATION GUIDELINES BEFORE
PROCEEDING WITH INSTALLATION**

A. INSTALLER/OWNER RESPONSIBILITY - IMPORTANT

Inspect all flooring material carefully for correct product and visible defects BEFORE INSTALLATION. Warranties do not cover visible defects once they are installed. (Based on industry standards a defect/irregular tolerance of up to 5% is allowed).

As all wood is unique, with no two pieces alike, review and compare the new flooring with the "sample board" from which the floor was selected to ensure it meets the homeowners expectations prior to the installation. If flooring is not acceptable, contact your distributor immediately and arrange for replacement.

It is the responsibility of the installer/owner to ensure subfloor and jobsite conditions are environmentally and structurally acceptable for wood floor installation. Problems or failures related to deficiencies in subfloor or job site damage after installation are not covered by our warranty.

- Receive the floor and make sure it meets owner's expectations.
- Grade out and separate any pieces with visible defects/irregularities.
- Test the subfloor and jobsite itself, including ambient temperature/relative humidity and all other variables that may adversely affect a wood floor.
- Record the flooring moisture content upon delivery and at time of installation - **RETAIN THESE RECORDS**
- Acclimate flooring to appropriate site conditions. Follow *NWFA Installation Guidelines for Acclimation on Jobsite (Section I, Chapter 2)*
- Record and retain a permanent job record.

IMPORTANT: Urbanfloor's Royal Court Collection is designed to perform within a typical residential environment. Wood installed in areas where relative humidity is below 30% may cup and shrink. (A humidifier may be necessary to keep the relative humidity within recommended levels of 30% to 50% year round.) Flooring installed on wet subfloors may crown and buckle.

**CORRECT ANY OVERLY DRY OR WET CONDITIONS BEFORE
INSTALLATION**

B. PRE INSTALLATION/JOB SITE REQUIREMENTS

ACCLIMATION IS CRITICAL

Allow floors to acclimate to the appropriate jobsite conditions. Proper acclimation is particularly important in extremely dry climates (e.g. Utah, Arizona, Nevada, Idaho, Colorado). See *NWFA Installation Guidelines, Section I, Chapter 2* for more acclimation details.

Upon delivery, check wood flooring moisture content (MC) with a moisture meter to establish a baseline for required acclimation. Record MC at time of delivery AND at time of installation. **RETAIN THESE RECORDS.**

For the Royal Court Collection out of the box acclimation is the most effective and recommended by Urbanfloor. If out-of-box acclimation is not possible, open boxes at both ends to allow air to circulate through planks. If planks are covered with plastic wrap, cut plastic at both ends to allow for proper air circulation. Allow planks to lay flat for a minimum of 3-5 days, or as long as necessary for the planks to meet the job site moisture conditions. Use a moisture meter to monitor the flooring and job-site conditions as they acclimate.

Room temperature and humidity of installation areas should be consistent with normal, year-round living conditions for at least ONE WEEK before installation of wood flooring. Room temperatures of 60°F to 80°F and a humidity range of 30% to 50% should be maintained year-round.

The moisture content (MC) of hardwood should generally be between 6% to 9%. If wood is used for subfloor, the MC should be no more than 2% difference between Royal Court wood flooring and wood subfloor.

HANDLING AND STORAGE

Hardwood flooring should be one of the last items installed on any new construction or remodel project. All work involving water or moisture should be completed before installation of flooring.

Do not deliver wood flooring to the job site until the building is entirely closed and until appropriate temperature and humidity conditions have been achieved. Appropriate temperature and humidity conditions are defined as those conditions to be experienced in the building after occupancy.

HVAC should be in operation before, and during installation (refer to *NWFA Installation Guidelines Section I, Chapter 1, Part 1* for further information). Room temperature and humidity of installation areas should be consistent with normal, year-round living conditions for at least ONE WEEK before installation of wood flooring. Room temperatures of 60-80°F and a humidity range of 30%-50% is recommended year-round.

KEEP FLOORING DRY: Protect flooring from moisture during storage and transportation. Store material in a flat, dry and totally enclosed area. Garages, exterior patios, for example are not acceptable areas to store wood flooring. The moisture content (MC) of hardwood should generally be between 6% to 9%. For wide width flooring (3 1/4" or wider), there should be no more than 2% difference in moisture content between properly acclimated wood flooring and wood subfloor.

C. SUBFLOOR TYPES AND CONDITIONS

Types: (Refer to *NWFA Installation Guidelines, Section II for Subfloor Information*)

- CD: Exposure 1 plywood, minimum 3/4" thick.
- Solid board: 1" x 6" wide, square edge, kiln dried.
- OSB: Exposure 1 (minimum 3/4" thick).
- Concrete (refer to *NWFA Installation Guidelines, Section II, Chapter 5 & 6*).

The subfloor must be clean, dry, and flat to within 3/16" per 10' radius or 1/8" in 6' radius. If necessary, sand or plane high spots, and fill low areas using a cement based patching/leveling compound. Secure any loose boards or panels to prevent squeaking. The surface temperature of the subfloor, at time of installation should be at least 59°F but never exceed 80°F.

Asbestos Warning

Do not sand existing resilient tile, sheet flooring, backing, or felt linings as these products may contain asbestos fibers that are not easily identified. The inhalation of asbestos dust can cause asbestosis or other serious bodily harm. Check with local, state, and federal laws for handling hazardous material prior to attempting the removal of these floor.

Damage due to moisture issues is not a product failure and is not covered by our warranty.

BASEMENT AND CRAWL SPACES: Keep dry and ventilated. Crawl spaces must be a minimum of 18" from ground to underside of joists. Exposed earth should be fully covered by a minimum 6 mil black polyethylene vapor barrier with joints overlapped and sealed with a moisture resistant tape.

CONCRETE SUBFLOOR: New concrete should be completely cured for at least 50-60 days. Test for excessive moisture. A reading of over 3 lbs. / 1000 sq. ft. per 24 hours, by Calcium Chloride test requires the application of a vapor retarder.

Insitu Test: Relative Humidity Probes should read 75% relative humidity or less in all areas.

Ensure concrete has a minimum of 3000 PSI Compression. Over a lightweight concrete (less than 3000 PSI) use a floating installation. To check for lightweight concrete, draw a nail across the top. If it scratches or indents, it is probably a lightweight concrete.

WOOD SUBFLOOR: When floating over a wood subfloor, cover wall to wall with an underlayment overlapped 8" at seams (follow underlayment manufacturing instructions.) It is recommended to tape overlapped edges with a cellophane tape. To prepare wood subfloor for installation, re-nail any loose areas to prevent squeaking. Sand or plane high spots and fill low areas.

It is very important to nail or screw any areas of loose or moving sub floor that will cause squeaks. Manufacturer recommends the use of nails or screws, with panels fastened every 12" along the joists or intermediate supports to ensure soundness of floor when complete.

The moisture content (MC) of a wood subfloor should not exceed 12%. In general the moisture content of hardwood flooring is between 6% and 9% and the MC difference between the subfloor and flooring should not exceed 2% on a 3/4" or wider flooring.

OVER RADIANT HEATED FLOOR: Prior to installation over radiant heat systems it is important to refer to the *NWFA Installation Guidelines Section IV. Appendix H*. Failure to follow these guidelines can void your warranty and may produce unsatisfactory results. Use only over water-heated systems, not recommended over electrically heated systems.

**NWFA - National Wood Flooring Association:
800-422-4556 (USA) / 800-848-8824 (Canada)**

Radiant Heat Subfloors can be concrete, wood or a combination of both.

The type of subfloor determines the subfloor preparation.

If the Radiant Heat subfloor is concrete the system should be fully operating at a normal temperature for a minimum of 21 days prior to floor installation, to dry out residual moisture.

The system must then be turned off 24 hours prior to installation and must remain off for 24 hours after installation so that the adhesive does not cure excessively fast. After the 24 hours, the system temperature can be gradually raised again (over a 7 day period) up to the desired level.

The maximum allowable subfloor surface temperature over radiant heat is 85°F.

Radiant heat is a dry heat. A humidification system is recommended to maintain wood flooring in its comfort zone. Surface checking, excessive gapping, etc. can be expected if the proper humidity level is not maintained between 30-50% year round, or the surface temperature exceeds 85°F.

To minimize the effect that rapid change in temperature will have on the moisture content of the wood floor, an outside thermostat is recommended.

INSTALLATION METHODS OVER RADIANT HEAT FLOORS:

The following installation methods can be used over radiant heated floors:

FLOATING – See *Floating Method on page 3*

Note: A floating method is not recommended for the Royal Court Castle Series (Birch / Random Width).

GLUE DOWN - See *Glue Down Method on page 2*

Use over a approved subfloor. Use only approved adhesives - Urbanfloor recommends Simple Spread Urban-Four or Urban EcoSmart adhesives.

STAPLE / NAIL DOWN: See *Staple/Nail Down Method on page 4*

Install over approved subfloor. Be sure fasteners are not so long as to penetrate the heat source.

D. GENERAL INSTALLATION

REFER TO *NWFA INSTALLATION GUIDELINES, SECTION III, CHAPTER 9*

A floating installation is not recommended for the Royal Court – Castle Series (Birch / Random Width).

The product can be installed above or on-grade. Installation methods can be either: Direct Glue, Nail/Staple or floating method on the 6 1/2" Kingdom series only.

If you have purchased the Birch Random Width Version of the Royal Court, the typical laying order for each sperate row is 6 1/2", 5", 3" and then repeated. (See *diagram on page 5*). It is recommended that before permanent installation begins, the floor is partially "dry laid" to find the most appealing blend.

Plan the layout: "Rack" out (dry-lay) the flooring before installing to avoid close end joints and to blend color and grain patterns. To blend the visual differences from board to board it is recommended to work from several cartons alternatively. Leave 3/8" gap at all vertical objects, undercut all door jams.

GLUE DOWN METHOD

Urbanfloor recommends Simple Spread urethane adhesive, Urban-FOUR or Urban Eco-Smart for the installation of our products. Carefully read and follow the instructions provided by the adhesive manufacturers for the use and application of their product. Check with your flooring retailer for other adhesives and sealers that are compatible with engineered floors.

⚠ CAUTION

Adhesive that is allowed to dry on the plank surface can be difficult to remove and may leave a haze. Be sure to clean surplus adhesive off surface of plank as you go. Use a Urethane Adhesive remover for this purpose.

1. Determine starting wall and direction to lay boards. An outside wall is normally best as it is most likely straight and square with the room. With a raised foundation wood should be installed perpendicular to the joists. In cases of existing wooden floor, boards should be laid crosswise or at a 45 degree angle.

2. Begin the installation by DRY FITTING the first row as follows. Begin installing the first row in the right corner of the base wall. Install the first board so the short grooved side is against the expansion shims to your right and the long grooved length of the board is against the expansion shims in front of you.

3. Maintain expansion gap of 3/8" between first board and the wall by using shims regularly along the length of the wall. Determine straightness of wall by snapping a chalk line. If starting wall is not straight, make notation on first row and saw to shape.

4. Connect the end of the second board to the end of the first board, making sure the boards are tightly connected and firmly positioned against the shims. Use the hammer/rubber mallet and tapping block to tap the tongue end of the second board to ensure a tight fit. **Never use the hammer or rubber mallet directly on the flooring as this will cause damage to the board.**

5. Continue placing additional boards moving right to left using the same procedure until the first row is complete.

6. You will need to cut off the end of the final board, save the remaining piece for the next row as long as it is at least 8" long. Use the last board Puller to ensure the last board is tight against the preceding board. Place shims between the end of the last board and the wall. Use the shims to wedge the row in tight rendering it immobile.

7. Once the first row has been cut and fit, remove the flooring and set it aside. Snap a chalk line the face width of the wood flooring plus $\frac{3}{8}$ " for expansion space out from the starting wall. Starting from the edge of the chalk line, apply an even layer of adhesive as instructed by the adhesive manufacturer. Only spread adhesive the width and length of the one row that was dry fit.

A NOTE ON ADHESIVE:

Follow the adhesive manufacturer's instructions for use in this application. Wear rubber gloves and proceed carefully during adhesive application. Cured mastic is very hard and sometimes impossible to remove from the flooring as well as the tools. DO NOT allow any spilled or excess adhesive to remain anywhere but between the boards and the subfloor at any time during the installation. Clean up spills immediately as recommended by the adhesive manufacturer. The flooring manufacturer will not be responsible in any way for adhesive that is not removed from the hardwood flooring immediately. Any damage to the flooring caused by the adhesive allowing to cure on the surface will be the sole responsibility of the installation mechanic.

Stay off glued floor for a minimum of 12 hours after installations.

8. Re-install the pre-cut boards from the dry fit as follows. Connect the end of the second board to the end of the first board, making sure the boards are tightly connected and firmly positioned. Use the hammer/rubber mallet and tapping block to tap the tongue end of the second board to ensure a tight fit. Never use the hammer or rubber mallet directly on the flooring as this will cause damage to the board. If necessary, use a low adhesive, *blue installers tape to maintain a tight joint (Remove tape within 3 hours and remove any tape adhesive residue. * - use 3M 2080 EL Painters Tape)

9. Continue placing additional boards moving right to left using the same procedure until the first row is complete.

10. Place shims between the end of the last board and the wall. Use the shims to wedge the row in tight rendering it immobile. For best results, allow the adhesive to dry before continuing with the rest of the installation.

11. Start each new row on the right side with remaining portion of the previous row as long as it is at least 8" long; otherwise cut a new starter board. Stagger end joints (at least 8" to 10") and randomly install different lengths to ensure natural appearance. Do not create discernible patterns such as "H" or "steps". Select boards to create a uniform appearance without clusters of short lengths or sections of light or dark planks. Do not install any objectionable boards that have visual defects or are not consistent with the grade being installed.

12. The end joint must be at least 8" to 10" from the end joint in the row before it. A minimum of one end joint is required in every row, regardless of width (e.g. hallways.)

13. Trowel adhesive onto the subfloor as recommended by the adhesive manufacturer, place the next board in position, match the tongue and groove at the end only, then, beginning at the opposite end of the board, tap the board onto the previous row with the tapping block. Move the tapping block back toward the right side of the board until you get near the connections with the previous board. Before you finish tapping the board onto the previous row, you must be sure the end joint is tight. If the end joint is not completely tight you will not be able to do so once the long seam is tight.

14. Continue process across the room. The last board should be sawn to appropriate width allowing for $\frac{3}{8}$ " expansion space against walls and all vertical obstructions. The last board puller will be used to install the last row.

FLOATING METHOD

A floating installation is not recommended for the Royal Court – Castle Series (Birch / Random Width).

When choosing the floating method for engineered wood, it is critical that the subfloor is flat to within $\frac{3}{16}$ " per 10' radius or $\frac{1}{8}$ " within 6' radius. Urban floor will not honor warranty claims for products damaged due to plank movement or flexing due to an uneven floor. (See Section C: Subfloor Types and Condition on page 1).

▲ IMPORTANT

Tongue & Groove adhesive must be used FULL LENGTH on ALL joints when utilizing the floating installation method. Use Dri-Tac 8100 or Titebond T&G Glue for grooves.

1. Determine starting wall and direction to lay boards. An outside wall is normally best as it is most likely straight and square with the room. For floating installation, a 6 mil., age-resistant polyethylene plastic sheet is required as a moisture barrier. Lap up wall 4". It is also required that a 15 lb. asphalt saturated felt (rag paper) be used as an underlayment above the moisture barrier to reduce sound. You can also use a 2 in 1 product that incorporates both a moisture barrier and sound barrier in ONE sheet, e.g. Volara foam $\frac{1}{4}$ " or Floor Muffler products. Follow underlayment manufacturer's instructions.

2. Lay underlayment in same direction as boards using a combination of polyethylene and foam underlayment or a 2 in 1 combined product making sure to tape the seams and overlap the poly edges by 4" (do not overlap the actual foam pad). The vapor barrier must be continuous without cuts or punctures. Tape any tears, cuts and seams.

3. Begin installing the first row in the right corner of the base wall. Install the first board so the short grooved side is against the expansion shims to your right and the long grooved length of the board is against the expansion shims in front of you.

4. Maintain expansion gap of $\frac{3}{8}$ " between first board and the wall by using spacers regularly along the length of the wall. Determine straightness of wall by snapping a chalk line. If starting wall is not straight, make notation on first row and saw to shape.

5. Holding the board finished side down, apply $\frac{1}{8}$ " bead of tongue and groove adhesive to bottom of the groove on the end of the second board. Connect the end of the second board to the end of the first board, making sure the boards are tightly connected and firmly positioned against the shims. Use the hammer/rubber mallet and tapping block to tap the tongue end of the second board to ensure a tight fit. **Never use the hammer or rubber mallet directly on the flooring as this will cause damage to the board.**

6. Continue placing additional boards moving right to left using the same procedure until the first row is complete.

7. **Remember to clean surplus adhesive as you work!** You will need to cut off the end of the final board, save the remaining piece for the next row as long as it is at least 8" long. Use the last board Puller to ensure the last board is tight against the preceding board. Place shims between the end of the last board and the wall. Use the shims to wedge the row in tight rendering it immobile.

8. Start each new row on the right side with the remaining portion of the previous row as long as it is at least 8" long; otherwise cut a new starter board. Stagger end joints (at least 16") and randomly install different lengths to ensure natural appearance. Do not create discernible patterns such as "H" or "steps". Select boards to create a uniform appearance without clusters of short lengths or sections of light or dark planks. Do not install any objectionable boards that have visual defects or are not consistent with the grade being installed.

9. The end joint must be at least 16" from the end joint in the row before it. A minimum of one end joint is required in every row, regardless of width (e.g.hallways).

10. Holding the board finished side down, apply ½" bead of tongue and groove adhesive to bottom of the short end and long side grooves and position the next board, match the tongue and groove at the end only, then, beginning at the opposite end of the board, tap the board onto the previous row with the tapping block. Move the tapping block back toward the right side of the board until you get near the connections with the previous board. Before you finish tapping the board onto the previous row, you must be sure the end joint is tight. If the end joint is not completely tight you may not be able to do so once the long seam is tight.

11. Continue process across the room. The last board should be sawn to appropriate width allowing for ⅜" expansion space against walls and all vertical obstructions.

12. Do not install floating floors in excess of 30 feet in length or width without the use of transitions.

13. Use transitions at doorways and other adjacent floors.

Do not affix the floor to the subfloor at any point.

COMPLETING THE JOB: Allow finished floor to be free of traffic for a minimum of 12 hours and before spacing wedges are removed. Be sure all expansion spaces are covered with appropriate moldings. Always nail moldings to the adjacent wall, not the flooring. Never attach any molding to a floating floor. Clean, sweep, and vacuum installed flooring before use.

STAPLE/NAIL-DOWN INSTALLATION

Note: Installer must verify fastener strength before proceeding. The quality/grade of the subfloor can negatively affect the fasteners hold strength. Issues with hold strength are not covered by flooring product warranty.

1. Determine starting wall and direction to lay boards. An outside wall is normally best as it most likely straight and square with the room. With a raised foundation wood should be installed perpendicular to the joists. In cases of existing wooden floor, boards should be laid crosswise or at a 45 degree angle.

2. Carefully remove any baseboard trim around perimeter of room. Save for replacement after the floor is installed.

3. Lay 30-30 Kraft or 15 lb. asphalt saturated felt (roofing felt that meets ASTM Standard D-4869) in same direction as boards making sure to tape the seams and overlap edges by 4". The vapor barrier must be continuous without cuts or punctures. Tape any tears, cuts, or seams.

4. Determine straightness of starting wall by snapping a chalk line allowing ⅜" expansion space. If wall is not straight, make notations on first row and saw to shape.

5. Lay one row of planks along the entire length of starting wall with groove facing the wall. Use spacing shims to maintain expansion space. To blend the visual differences from board to board, it is recommended to work from several cartons alternatively.

6. Make sure the boards are tightly connected and firmly positioned against the shims. Use a rubber hammer/mallet tapping block to gently tap the tongue ends to ensure a tight fit. NEVER USE THE RUBBER HAMMER/MALLETT DIRECTLY ON THE FLOORING AS THIS CAN CAUSE DAMAGE TO THE BOARD.

7. Top nail the first row, placing the nails perpendicular to the surface and as close as possible to the wall so that after completion the head of the nail will be covered by the base molding.

8. With an engineered flooring-stapler/nailer, fasten through the tongues of the first row. Staples should be placed 3" to 4" apart, and cleats every 4" to 6" apart, and all fastened within 1" to 2" of end joints. If stapler/nailer cannot be used due to interference with the wall, hand nail the first row.

9. Use galvanized, 18 gauge, narrow crowned (under ⅜") 1" to 1 ½" staples or 1" to 1 ¼" cleats designed for engineered flooring.

NOTE: Proper setup of your nailer/stapler is crucial to proper nail/staple placement in tongue. Improper set up can result in damaged edges, dimpled top veneer, shallow penetration, crushed tongues, loose and squeaking floors. Check your set up before beginning install and from time to time during install.

10. Start the second row in the same manner. If necessary cut the first board to stagger the end joints of boards a minimum of 8" to 10" from row to row. From second row onward fastening is done on the tongue side only.

11. During the installation push or gently tap boards flush to the previous row, by tapping against the tongue side only. The last row usually requires cutting the plank lengthwise to fit the space (remember to maintain the ⅜" expansion gap.) Top nail the last row in same manner as first.

COMPLETING THE JOB: Once the nailing is complete, remove any spacing wedges and install the base molding. Always nail moldings to the adjacent wall, not the flooring! Clean, sweep and vacuum installed flooring before use. Inspect the completed floor for any scratches, nicks and minor gaps. Use touch-up kit, filler or wood putty as needed.

▲ IMPORTANT

THE FLOORING INSTALLER IS RESPONSIBLE FOR DETERMINING IF THE NAILER/STAPLER TO BE USED IS SPECIFIED FOR THE PARTICULAR PRODUCT BEING INSTALLED AND IS ADJUSTED PROPERLY TO AVOID DAMAGE TO THE FLOORING. CONTACT POWERNAIL (1-800-323-1653) OR WWW.POWERNAIL.COM FOR TECHNICAL QUESTIONS AND DEALER LOCATOR. CONTACT SPOTNAIL (1-800-973-2239) OR WWW.SPOTNAIL.COM FOR TECHNICAL QUESTIONS AND DEALER LOCATOR.

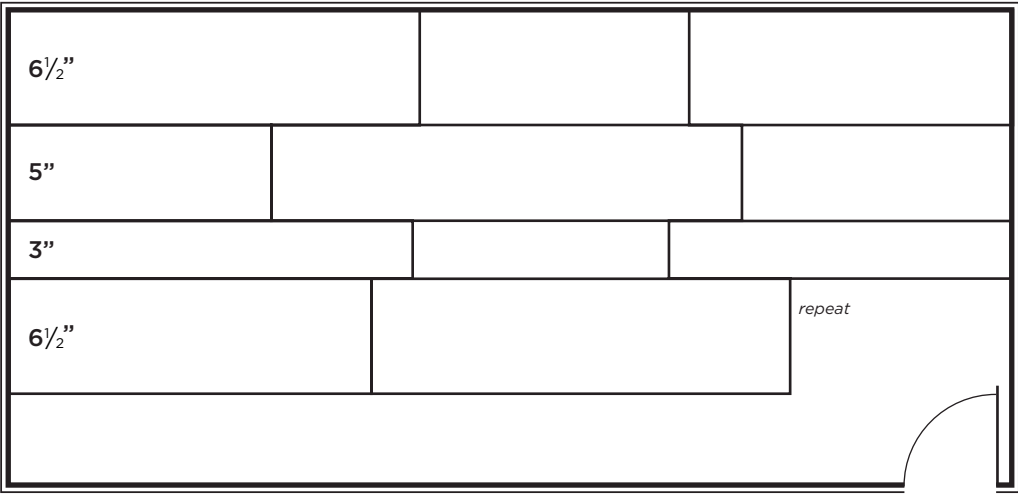
We recommend, if possible the use of a NWEA (National Wood Flooring Association) certified professional when installing Urbanfloor.

After installation it is important to maintain the environmental conditions in the home within the ranges outlined in these instructions (see *PRE-INSTALLATION/JOBSITE REQUIREMENT, Section B on page 1*). Failure to keep the humidity and temperature within the recommended ranges can result in damage to the floor.

NOTE: For areas larger than 20' x 20', more spacing between rows may be needed depending on geographical area, site environment and time of year. (Refer to *NWEA Installation Guidelines, Section III, Chapter 9*).

TOOLS: Some standard tools you may need include: Tape Measure, Wooden Tapping Block, Rubber Mallet, Power Saw, Blue Painters Tape, Wood or Plastic Spacers, Pry Bar, and Chalk Line.

Suggested Layout Pattern for Castle Series - Random Widths



VISIT OUR WEBSITE: WWW.URBANFLOOR.COM
FOR ANY RECENT UPDATES OF INSTALLATION GUIDELINES

Questions or Concerns?



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