Bella Citta® Antiqued & Oiled Hardwood Flooring Installation Guide

Please read the entire installation instructions and warranty information before proceeding with actual installation. Failure to follow the instructions will void the product warranty.

Installer / Owner Responsibility

- It is the Installer/Owner's responsibility to carefully inspect ALL materials carefully BEFORE installation as to the accuracy of the order and the conditions/quality of product such as milling, laminations, dimension, grade, color and finish.
- If the flooring is not acceptable for any reason or appears to be doubtful, do not install and contact your supplier. Once the flooring is installed, it is deemed to have been "accepted" by the owner even if the owner was absent at time of installation. Warranties & Claims DO NOT cover materials with visible defects once they are installed.
- He/she must use good judgment and reasonable selectivity and hold out or cut off pieces with visible defects or imperfections.
- Performance of the floor is highly depending upon proper installation. It is the responsibility of the installer to determine if the job site subfloor and job site conditions are environmentally and structurally acceptable for wood flooring installation.
- Bella Citta® declines any responsibility for the flooring failure resulted from or associated with the subfloor, subsurface, job site environment or installation deficiencies after the flooring has been installed.

Hardwood flooring is a product of nature which is characterized by natural variations in color and grain. No two boards are identical in grain and/or color. Bella Citta® Floors are manufactured in accordance with accepted industry standards which permit defects for up to 5%. Order 5% more than the actual square footage needed to allow waste factor.

Pre-Installation

- In new construction, wood flooring should be installed after all other trades have completed their work. Make sure all painting & plumbing work is complete and no pipe or faucet leaks are visible.
- Heating and air conditioning units must be operating at least 7 days prior to the delivery of the flooring and maintain a consistent room temperature between 65-75° F and a relative humidity of 45-55%. This environment should be kept at the time of installation and after the installation all year around.

After installation of your new Bella Citta® floor

- Metro UV Oiled floors: No maintenance oil required immediately after installation.
- Classic Oiled floors: First thoroughly clean your newly installed Bella Citta® floors with an *approved Bella Citta Cleaner and allow it to dry completely. Floor surface must be completely dry and clean, free of dirt and dust. Then apply Bella Citta® Maintenance Oil after the floor is installed. Apply a thin amount of Bella Citta® Maintenance Oil to the floor with a buffing machine with white pad. (See Maintenance Guide.) After maintenance oil application, allow newly coated floor to dry for at least 12 hours before exposing to light foot traffic. To protect the new floor against other construction trades, finished areas should be covered with a protective product (a minimum of) 48 hours after maintenance oil application to allow for proper cure time. Wait 48 hours after maintenance oil application to allow for proper cure time before moving furniture and appliances onto the flooring surface. Only dry-clean the newly oiled Bella Citta® floor during the first 10 days to allow the Bella Citta's Euro Maintenance Oil to completely cure.
- Bella Citta does not recommend the use of tape during installation. The use of tape (in any format) can remove the flooring finish from the surface which will void the consumer warranty coverage.

*Approved Bella Citta Cleaner :

- Bella Citta Euro Cleaner
- Bona Pro Series Natural Oil Floor Cleaner WM701151001
- Rubio Monocoat Surface Care Spray for Oiled Floors

Acclimation

Flooring should be at the job site at least 72 hours prior to installation to allow the wood to adapt to the temperature and moisture contents of the new environment. Cartons should be placed in the center of the installation site area. Keep away from the air vents, outside walls or windows. Do not store directly on the concrete. Flooring should be kept flat with the proper support at both ends and stack cartons to provide at least 4" space under and around the each carton to allow air to circulate evenly. Do not open cartons until ready to install.

Subfloors and jobsite condition

Bella Citta® Floors can be installed on, above or below grade (Floating only for below grade installations).

- Must be clean and free from debris, paint, wax, old adhesive residue and any other substances.
- Must be structurally sound. Nail or screw any areas that are loose or squeak.
- Must be flat and level at 3/16" in a 10' radius or 1/8" in a 6' radius.
- Concrete subfloor must be completely cured and at least 90-180 days old.
- A moisture vapor barrier such as minimum of 6 mil polyethylene film should be installed between concrete and ground. Make sure the basements and crawl spaces are well ventilated. (Size of the ventilation should equal to 1.5% of the total crawl space.)
- Concrete subfloor must be high compressive strength (minimum 3000 psi). Light weight concrete is not approved (unless it is a floating installation) as a subfloor.

Wood Subfloors

Test the moisture using a calibrated moisture meter approved for testing wood moisture according to the meter manufacturer. The moisture content should not exceed 12%

and the difference between the wood subfloor and flooring must not exceed 4%.

Preferred : 3/4" (23/32", 18.3 mm) CDX grade Plywood subfloor/ underlayment (Exposure 1), 4'x8' sheets or 3/4" (23/32", 18.3mm) OSB subfloor/ underlayment grade with joist spacing of 19.2" (475 mm) on center or less.

Minimum : 5/8" (19/32, 15.1mm) CDX Plywood subfloor/ underlayment (Exposure 1), 4'x8' sheets, maximum 16" on center joist construction. Follow panel manufacturer's recommendations for spacing and fastening. Typical panel spacing and fastening for joist systems, 1/8" (3.2mm) around perimeter and fastened every 6" (150mm) on bearing edges and every 12"(300mm)along intermediate supports.

Installation of flooring should not be made over joists spacing greater than 19.2" on center or parallel to the joists unless the subfloor has been properly strengthened, applying a second layer of underlayment may be necessary to bring the overall subfloor thickness to 1-1/8".

Concrete Subfloors

The moisture content of the concrete must be registered dry. Below are the methods of testing the moisture content. Document and keep the testing result. Testing kits are generally available through your distributor or call the NWFA at 800-422-4556 (or 800-848-8824 in Canada).

Concrete Moisture Testing

Test with Moisture Meter

Use moisture meters designed specifically for concrete moisture testing as a preliminary measurement for moisture. (Refer to your meter manual for instructions of determining the moisture readings. For example, on *Tramex*, reading should NOT exceed 4.5 on upper scale.) Check floor in several locations. (This testing method is not recognized by any standard and should not be used to determine to accept or reject the subfloor. The testing result should only be used for broadly evaluation of the moisture conditions of the concrete in the selected area.)

Polyfilm Test

Tape down 3' x 3' (1m x 1m) polyethylene film squares, in several places on the floor (one every 200 sf.). Make sure all edges are sealed with water resistant tape. Wait for 24-48 hours and remove the films. Check for the condensation under the film or a darkening of the concrete slab. These are the indications of the presence of excess moisture, requiring a mandatory Calcium Chloride Test or RH test.

Phenolphthalein Test

Chip the concrete dime size, 1/4" (6 mm) deep and apply several drops of 3% Phenolphthalein solution to the chipped area. The pH level of concrete subfloors should register between 6 and 9 on a 14 point pH scale. The phenolphthalein turns pink or dark red within five minutes and the pH is 9.0 or higher indicates the presence of excessive moisture and requiring a mandatory Calcium Chloride *Test or RH test.*

Calcium Chloride Test (ASTM F-1869)

Vapor pressure must not exceed 3lbs./1000 square feet in 24 Hours. (2 lbs. or less for Radiant heated floor installations).

Relative Humidity Test (ASTM F-2170)

Relative humidity inside of a concrete slab should not exceed 75%.

Calcium Carbide (CM) Testing (ASTM D-4944-04 and MilSpec CRD-C154-77)

Reading must be less than 2.5%.

Refer to NWFA for more detailed information about moisture testing.

A "DRY" SLAB, AS DEFINED BY THESE TESTS CAN BE WET AT OTHER TIME OF THE YEAR. THESE TESTS DO NOT GUARANTEE A DRY SLAB. ALL CONCRETE SLABS SHOULD HAVE A MINIMUM OF 6-MIL POLY FILM MOISTURE BARRIERS BETWEEN THE GROUND AND THE CONCRETE. If above testing result indicates the presence of excessive moisture, it is required the concrete slab is sealed with the moisture sealer.

Job preparation and Flooring Layout

- Undercut all door casing, jambs, etc. Remove any existing base, shoe molding or doorway thresholds which can be replaced after installation.
- Flooring should be installed perpendicular to the floor joist and parallel to the longest outside wall for best visual effect. Measure the widths of the room and make sure the last row (board) will not end up in less than 2" wide.
- Racking the floor is essential to obtain a random appearance and usage of different board lengths.
- Preselect and set aside the planks that will blend and best match with all transition moldings to assure a uniform final appearance. Install these planks adjoining the moldings.
- When installing, always work out from several different cartons to obtain the best distribution of color, grain and shade.
- Be attentive to ensure proper end joint stagger to achieve a random appearance and avoid patterned appearance.
- Don't waste your materials. The end cuts from previous rows should be used to start the next row.

Glue Down Installation

Recommended Glue : Bostik's Best, Bostik's Procure.

Moisture sealer - Bostik MVP (Moisture Vapor Protection), Bostik's Ultraset Single Step.

Wet Lay Method

- Select a starter wall. An outside wall is best: it's most likely to be straight and square with the room. Measure out from this wall a width of the plank including the tongue plus additional ½" space for expansion and mark each end of the room and snap a chalk line. This line will serve as a straight reference line for the first row of flooring.
- If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side of the row to present a true square base for the rest of the floor. When the first row is complete, you must have a straight, even base established.
- Spread sufficient amounts of the recommended adhesive with the properly notched trowel in an area (it is important to follow adhesive manufacture's instruction to get the proper spread of adhesive and bonding. Improper bonding can cause loose or hollow spots.)
- Place your longest boards as your first row directly on the chalk line with the edge of groove aligned on the chalk line

and secure into position. Be certain the starter row is aligned straight. Use straight edge (2x4's) along the chalk line to secure the alignment. Insert shims at both ends to allow 1/2" expansion gap around the perimeter of the room and all vertical obstructions.

- Never work on top of the flooring when installing with the wet lay method.
- Once the starting row is completely secure, spread enough adhesive to install 3-4 planks. Follow adhesive manufacturer's instructions on spread rate, curing time. Do not spread more adhesive than the installer can use during the manufacturer's "working time".
- After cutting a board to complete a row at the wall line, use the remaining plank as your starter board for the next row. Insert shims at both ends to allow 1/2" expansion gap.
- Check for a tight fit between all edges and ends of each plank. End joints of adjacent rows should be staggered correctly (at least 12" on long board) to achieve more favorable overall appearance.
- A tapping block/hammer, can be used to tap the boards until the seam is closed. Insert shims at both ends to allow 1/2" expansion gap around the perimeter of the room and lock the row in place using spacers against the wall in the expansion space. Be careful not to move the installed floor on the wet adhesive.
- Wipe off glue residue right away. Urethane adhesive is very difficult to remove once it is cured. It is essential to clean adhesive from the surface of the floor frequently using the Bostik's Ultimate Adhesive Remover.
- Roll floor with 100-150 lb roller to insure transfer of adhesive. Flooring that is not flat must be weighted (e.g. with unopened cartons) to ensure good contact. Installed floor will begin to hold tight in 8 hours, depending on humidity and temperature.
- Remove shims and install any transition pieces that maybe needed and reinstall your base and/or quarter round moldings. Be sure to nail molding into the wall, not the floor.
- Then apply Bella Citta® Maintenance Oil after the floor is installed (see maintenance guide).

Dry Lay Method

- Select a starter wall and measure out from the wall the widths of 4-5 planks plus additional ½" space for expansion and mark each end of the room and snap a chalk line. This will be your working space and the line will serve as a straight reference line for the first row of flooring.
- Spread enough adhesive to install 3-4 planks from the chalk line. Allow adhesive to flash as per the adhesive manufacturer's instructions on spread rate, curing time. Do not spread more adhesive than the installer can use during the manufacturer's "working time".

  Secure your starter rows with a straight edge (2x4's) and continue installing away from the starter area towards the main room. Use a kneeling board if you must work on top of the newly laid flooring.
- Once the main area is completed, go back to the beginning, remove the straight edges and finish the beginning area.
- If the starting wall is out of square, it will be necessary to scribe the first row to match the wall.
- Then apply Bella Citta® Maintenance Oil after the floor is installed (see maintenance guide).

NAIL/STAPLE DOWN INSTALLATION

Recommended Model Nails and Staples.

- Power Nailer Model 200 (pneumatic) E-Cleat Nail/1 ½"long
- Power Nailer Model 250 (manual) E-Cleat Nail/1 ½"long
- Stanley MIIIFS (pneumatic), adapter plate ½"Crown x1 ½"-2"staple
- Power Nailer #445 (pneumatic) use adapter plate 2"Cleat Nail.
- Power Nailer #45 (manual) use adapter plate 2"Cleat Nail

Set the compressor PSI at 70-80 PSI. to keep the staples from going through or breaking the tongues. Adjustments may be necessary to provide the proper penetration of the nail or staple into the nail bed. Use a scrap piece of flooring material to set tools properly before installation. Improper stapling techniques can cause squeaks in the floor.

Minor occasional noises within the flooring are inherent to all staple/nail-down installations and can change as environmental changes occur. Squeaking, popping, and crackling can be minimized by being sure that the subfloor is structurally sound, does not have any loose decking or joists, and is swept clean prior to installation as well as adjusting your stapler/nailer correctly.

- Once subfloor has been prepared, install a 15-lb. asphalt saturated felt paper over the subfloor. (15 lbs. asphalt felt is not considered a moisture barrier. Use of a moisture barrier (6 mil polyethylene film minimum) if necessary.
- Measure a board width plus additional 1/2" from the starting wall in two places and snap a chalk line on subfloor. This line will serve as a straight guide for the first row of flooring.
- If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side of the row to present a true square base for the rest of the floor. When the first row is complete, you must have a straight, even base established.
- Start with groove sides of board facing starting walls. Insert shims at both ends to allow 1/2" expansion gap. The first row should be faced nailed and stapled at 1"-2" from each end and 6"-8" intervals as close to wall as possible. The nail holes will be covered by molding and trim pieces or should be filled with matching putty stick.
- Continue installing with cut off end of last board (at least 12" long) from previous row. Insert shims at both ends to allow 1/2" expansion gap.
- Work out from several different cartons at the same time to ensure proper end joint stagger and usage of different board lengths and to obtain the best distribution of color, grain and shade.
- Check for a tight fit between all edges and ends of each plank. End joints of adjacent rows should be staggered correctly (at least 12" on long board) to achieve more favorable overall appearance.

- Last row will generally not fit perfectly, scribe row to allow minimum 1/2” expansion space. It may be necessary to top-nail in other areas of room where side-nailer cannot be used.
- Finished areas should be covered with a protective paper immediately after installation to prevent damage from installation process.
- Remove shims and install any transition pieces that maybe needed and reinstall your base and/or quarter round moldings. Be sure to nail molding into the wall, not the floor.
- Then apply Bella Citta® Maintenance Oil after the floor is installed (see maintenance guide).

FLOATING INSTALLATION (10 Series is not approved for floating installations)

Recommended T&G Glue : Titebond® Tongue & Groove Flooring Glue by Franklin International or equal.

Recommended Underlayment : DeciBLOK™ Acoustic Underlayment by Sponge Cushion, Inc., 3 in 1 Sound Blok Underlayment by Forest Accents, 6mm cork by AcoustiCork.

- Floating floors can be installed over any structurally sound surface that meets or exceeds local building codes.
- Allow a 1⁄2" expansion gap around the perimeter of the room and all vertical obstructions. For floors larger than 16' in any one direction, leave an additional expansion gap of 1⁄8" for each 48" of installed flooring. Maximum room dimensions for a floating floor are 40ft. across the boards or 120 ft. lengthwise. Floors exceeding either of these dimensions require use of T-Mold.
- Install a floating floor underlayment in the same direction the flooring is to be installed. Follow manufactures installation instruction. When using a basic foam underlayment over a concrete subfloor, you must also use a 6 or 8 mil. Polyethylene film under the foam pad, which acts as a vapor barrier. Extend the underlayment a few inches up the wall. (Trim the excess prior to installing trim or moldings.)
- Start in corner and lay first row with groove sides facing walls using the longest boards available.
- If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side of the row to present a true square base for the rest of the floor. When the first row is complete, you must have a straight, even base established.
- Align the first row with the wall using shims to maintain a 1/2”expansion space in place and to stabilize the product.
- Apply a continuous 1/8” (3 mm) glue bead to the upper inside of the groove on the end of the board. Connect that board to the first row and tap the boards together with a hammer and a tapping block. Use only a gentle tapping motion to tap the boards together. Excessive force will damage the board making it difficult to install additional boards.
- Continue installing with cut off end of last board (at least 12” long) from previous row. Insert shims at both ends to allow 1/2” expansion gap. End joints of adjacent rows should be staggered correctly (at least 12” on long board) to achieve more favorable overall appearance. Examine the floor carefully and remove any excessive with a damp cloth.
- Check all seams for tight fit before moving on to the next row. Use the pull bar to place the board into position if necessary. Leave all shims in the floor for a minimum of 8 hours so that the adhesive will properly set.
- Finished areas should be covered with a protective paper immediately after installation to prevent damage from installation process.
- Remove shims and install any transition pieces that maybe needed and Reinstall your base and/or quarter round moldings. Be sure to nail molding into the wall, not the floor.
- Then apply Bella Citta® Maintenance Oil after the floor is installed (see maintenance guide).

Bella Citta will not be responsible for any issues caused by the site conditions and/or installation deficiency. All records and measurements must be taken and kept in order to have the warranty to be effective. Failure to follow above instructions will void the warranty and will cause problems such as splitting, checking, cracks, cupping, and shrinkage of the boards or other damages to the floor.

Installation over the radiant heat floor requires a specific construction of the plywood subfloor and the installer who is familiar with the NWFA recommendations. Above Installation instruction is to offer a general guidance and is not intended to be a replacement for a professional certified installers. Contact NWFA (National Wood Flooring Association) at 800-422-4556 U.S or 800-848-8824 Canada for more information. We recommend using an installer who is a member of The Radiant Panel Association.

For more information visit www.radiantpanelassociation.org.