



CRESCENT HARDWOOD COLLECTION

Product Description:

Crescent Hardwood Collection engineered flooring can be installed Above-Grade or On-Grade. They all may be glued down over a plywood or concrete sub-floor. They also may be simply nailed or stapled down over a plywood sub-floor, using specially designed floor guns.

Pre-Installation Warranty

It is the duty of the installer, whether professional or DIY (do-it-yourself), to inspect all flooring before installation. If the installer or buyer feels the flooring is the wrong color, improperly manufactured, has finish problems, is off grade or is the wrong color or is the wrong gloss level, do NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased. No claim will be accepted for flooring which is visibly wrong if such flooring is installed. Installed flooring is deemed to be visibly acceptable. Since wood is a product of nature, not plastic, standard industry practice allows for up to 5% of the flooring shipped to have milling, handling, finish and/or grade defects. This warranty applies only to material that is in excess of this 5%. Crescent Hardwood Collection will replace or refund the purchase price of material deemed to be defective in excess of this 5%. PLEASE NOTE: It is the duty of the installer/homeowner to judge the suitability of any piece for placement in an obvious area of the room. If you feel a piece is not suitable, either do not install it or install it in an inconspicuous place.

Jobsite Requirements:

All work involving water or moisture should be completed before installing hardwood flooring. For any new construction or remodeling project, hardwood flooring should be one of the last items installed. The jobsite should have properly functioning HVAC controlling temperature and relative humidity. Relative humidity should be regulated between 40% and 60%. Temperature should be in summer time should be regulated at 74° F or higher. Temperature below 74°F runs risk reaching a dew point. This can adversely affect your flooring system. Winter temperature should be kept between 64°F and 68°F. Engineered flooring should be kept in its packaging until immediately before installation. Do not acclimate this product like you would a solid hardwood product! This can make the flooring very difficult to install, as tolerances between the tongue and groove are so exact. Do not install in areas subject to moisture, such as bathrooms or laundry rooms. Although Crescent Hardwood Collection engineered plank flooring can be glued directly to concrete, do not use a concrete sealer nor install over one. The concrete must be high compressive strength as define by the adhesive manufacture. All concrete sub-floors should be tested for moisture content. Visual checks are not reliable. An acceptable test method for concrete sub-floor moisture content is:

• **Calcium Chloride Test:** The maximum moisture transfer must not exceed 3lbs. /1000 square feet within 72 hours after this test. Use 3 calcium chloride tests for every 1000 square foot of flooring installed.

A "DRY SLAB", AS DEFINED BY THIS TEST CAN BE WET AT OTHER TIMES OF THE YEAR. THIS ASTM F1869 TEST DOES NOT GUARANTEE A DRY SLAB. IT IS RECOMMENDED BOSTIK'S MVP4 ON ALL INSTALLATIONS. BOSTIK OFFERS A MOISTURE WARRANTY FOR MORE INFO, PLEASE CALL BOSTIK AT TECHNICAL SERVICES AT 1-800-523-6530. NOTE CRESCENT HARDWOOD COLLECTION NIETHER OFFERS ANY EXPRESSED OR IMPLIED WARRANTIES REGARDING MOISTURE CONDITIONS ARISING FROM THE SLAB. NOTE: BOSTIK DOES NOT WARRANTY AGAINST HYDROSTATIC HEAD PRESSURE.

Installation Instructions

All sub-floors must be level and clean.

The maximum tolerance is 3/16" per 10'. If necessary, level down any irregularities using #20 grit sandpaper and fill any uneven spots with Bostik's leveling compound. Remove all paint, was, oil, plaster, "sheetrock mud", and previous or existing glues and adhesives. Grind concrete with #20 grit sandpaper if needed then sweep or vacuum thoroughly.

Wood sub-floor must be:

- Dry and well secured plywood with moisture content under 15% in joist and 12% on the surface of the plywood.
- Nailed down or screwed down every 6" along the joist to avoid squeaking.
- Leave 1/8" gap around perimeter.
- Leveled by sanding down high spots and filling low spots with an underlayment patch as necessary.

Concrete sub-floor must be:

- Fully cured for at least 60 days. Weather conditions affect the cure rate. 60 days is an industry average. Doing proper slab moisture testing is imperative.
- Installed properly with minimum 6mil preferably 10 mil visqueen between concrete and ground.
- Dry all year round. Do not install over concrete of you are not sure it will remain dry. Review Jobsite Conditions section for further information.
- Tested for moisture by using Calcium Chloride Test. "CCT" is an ASTM F1869 rated moisture test is for the slab on that day in time.
- Concrete substrate must be flattened or edges will create cracks on the product.
- Bostik MVP4 offers moisture vapor protection. For more information call Bostik's technical services at 1-800-523-6530 or visit <http://www.bostik.com>

Sheet vinyl:

- Installation over sheet vinyl is not recommended due to the fact that installation is only as good the sheet vinyl installation. Remove sheet vinyl follow the adhesive manufacturer's recommendation for proper slab preparation to ensure the adhesive's maximum bond.

Preparing for installation

Undercut or notch-out door casings to fit flooring underneath by placing a piece of flooring on the sub-floor as a height guide for sawing. Remove door thresholds and base moldings and replace after flooring installation. Always leave at least 1/2" expansion space between flooring and all walls and vertical objects.

Use a hammer and tapping block and tap against the tongue to pull planks together. Never tap against the groove of the plank. When near a wall, use a crow or pull bar to close end joints. Be careful not to damage flooring edge. All Crescent Hardwood Collection engineered plank flooring is milled to very exacting standards, so pieces that do not go together easily usually have debris in a groove, the tongue and/or groove has been damaged, or the board is a little bowed and you just need to flatten it out, rather than forcing pieces together.

Starting installation:

For aesthetical purposes, wood flooring is often laid to the longest wall. However, owner upon the advice of the professional installer should make the final decision which direction the planks will run. **Before installation, match the closest board in color and grain to the adjoining profile, color and grain. Save the board(s) and use next to the molding pieces.** Most professional installers will begin installation next to an outside wall, which is usually the straightest wall and used as a reference point in establishing a straight working line. A good way to establish a working line is to measure an equal distance from the wall at both ends and snap a chalk line. Measure distance from the wall at the width of the plank plus another 1/2" for expansion space for establishing your working line. It is advisable to dry lay a few rows before actually using glue to confirm your directional layout decision and working line.

Adjustments of the working line may be necessary if the outside wall or other working line reference is out of square. This can be done by scribe cutting the first row of planks to match the wall and creating a straight working line.

GLUE DOWN INSTALLATION:

For glue down installations we recommend following the Bostik systems for slab patch, vapor barrier, and adhesive for compatibility any concerns contact Bostik Technical Services at 1-800-523-6530 or your local Bostik distributor:

- ✓ Moisture Vapor Protection: Bostik's MVP4 using Bostik #9 trowel.
- ✓ Adhesives: Bostik's Best, Greenforce or BST adhesives using heavy duty trowel



Use the trowel recommended by the adhesive manufacturer, since tooth size is important for the best adherence to the sub-floor. Usually this is 1/4" x 1/4" V-notch trowel. **Remove any adhesive that gets on the finished floor surface immediately failure to do so can result can alter the finished floor appearance.** Always allow for adequate cross ventilation when working with flooring adhesive. Follow adhesive instruction regarding proper set time before affixing wood floor planks. With a trowel at a 45° angle, spread as much adhesive as can be covered by flooring in one hour or as recommended by the adhesive manufacturer's instructions. Start at the outside wall. Once adhesive has set per instructions, lay the first row of flooring with the groove facing the wall. Continue laying flooring until adhesive is covered with flooring. Remember to always check the alignment with the working line, being careful not to move the installed floor on the wet adhesive. Use a tapping block to fit the planks together. When the first section is completed, continue by repeating process section by section until installation is complete. Immediately remove any adhesive that gets on the flooring surface by using a damp cloth or manufacturer's adhesive remover. Don't forget to stagger joints. When required use weights to hold the flooring planks on the perimeter until adhesive cures enough.

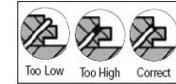
Finishing the job:

Remove any expansion spacers. Reinstall base and/or quarter round moldings to cover the expansion space. Install transition pieces such as reducer strips and T-moldings as needed. Do not allow any foot traffic or heavy furniture for at least 24 hours. **Clean any adhesive residue on the finish floors surface immediately** and remove all dirt and debris on floor by dust mopping or vacuuming. Bona Kemi or Woodwise cleaning kits can be used to clean the finished floor on regular basis not harming the finish surface. Follow floor care and maintenance guide to ensure longevity and lasting beauty of your new Crescent Hardwood Collection Engineered Plank Floor.

STAPLE OR NAIL DOWN INSTALLATION:

Tools & Materials: Power saw, hammer, chalk line and tool listed below:

- Powernail: Series Red Nailer * Nails 1 1/2"



Acceptable sub-floors are the following:

- a. 5/8" minimum thickness, preferred 3/4" or thicker exterior plywood installed with long edges at right angle to floor joist and staggered so that end joints in adjacent panels break over different joist.
- b. 3/4" minimum O.S.B. on 19.2" center floor joist system properly nailed.

New wood type sub-floors should be checked for moisture using a moisture meter. In general wood or plywood sub-floors should not exceed 14% moisture content, or 4% moisture content difference between hardwood flooring and sub-floor. Adequate and proper nailing as well as soundness of the sub-floor should be ascertained. Foreign material shall be removed from the sub-floor surface and swept clean. The clean sub-floor should be covered, wall-to-wall, with 15-lb asphalt saturated felt. Lap edges of this felt 4" when positioning it. Double the felt around heat ducts in the floor. Basement and crawl spaces must be dry and well ventilated. Crawl spaces must have a vapor barrier below sub-floor on ground (6 or 8 mil Poly).

General Installation Instructions (see NWFA for more details):

Flooring should be laid at right angles to the floor joists and, if possible, in the direction of the longest dimension of the room.

1. All Crescent Hardwood Collection products have a UV-cured factory finish. It is important to make sure that the nail gun face plate will not damage the surface finish. 3M #2080 Delicate Blue tape can be placed on the faceplate to prevent damage. Starting to lay flooring: begin laying plank flooring in a room corner with the long groove of the plank facing the wall. Provide expansion space of 1/2" between the floor planks and the adjacent wall.
2. End joints of plank: these should be staggered to achieve the best appearance in the finished floor (minimum 4" - 6").
3. **When installing stained oak floors it is important to work out of multiple boxes at the same time so the floor has a more natural color variation! Wood is a product of nature and it has natural character.**
4. Nailing schedule for flooring: the first run should be face-nailed then counter sunk. All other runs to be nailed at an angle of 50° on 8" centers at the tongue, also nail within 2" of each end joint.

Important Notes:

- Baseboards should be installed so that their lower edge is slightly above the level of the finished floor, but not nailed into the floor.
- Before installing over radiant heat floors, contact Crescent Hardwood to discuss suitability.
- Do not install any product with visible defects.
- To avoid movement in hardwood floor, relative humidity should be maintained year round at 40%-60% relative humidity.
- The use of color coordinated wood floor putty to cover small cracks and gaps is considered normal in hardwood flooring installations.
- See Crescent Hardwood Maintenance Guide for more information regarding helpful tips on keeping your floor new for years to come.
- Molding Tip: Before installation, match the closest board in color and grain to the adjoining profile, color and grain. Save the board(s) and use next to the molding piece.
- Secure molding using Bostik's 1100FS.