

## ENGINEERED WATERPROOF FLOORING GENERAL INSTALLATION INSTRUCTIONS FOR VÄLINGE®2G LOCKING FLOORING

### SITE CONDITIONS

Always store the boxes of Engineered Waterproof Flooring (EWF) on a flat and level surface; never store the boxes on their sides. Heating and air conditioning should be operational and set between 65 °F - 85 °F (18.3 °C - 29.4 °C) for 48 hours prior, during and after installation.

### RECOMMENDED TOOLS AND MATERIALS

- Safety glasses
- Measuring tape
- Square
- Utility knife
- Straight edge
- Spacers
- Chalk line
- Power Saw (40-tooth blade)
- Adhesive when necessary (Beaulieu Premium Urethane Wood Adhesive - WDAD1)
- Embossing leveler/floor patch (if necessary)

**NOTE TO INSTALLERS: When using knee pads, insure that the cap is a soft material. Never use hard cap knee pads as these may scratch the flooring.**

### SUITABLE SUBSTRATES

Beaulieu® EWF can be installed over many floors. All carpeting and padding need to be removed. Make sure that the surface is clean, dry, structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m). Supporting floors should be rigid as too much deflection can result in a failed installation. Maximum deflection should not exceed 3/64" (1.1 mm).

Beaulieu EWF should not be installed over plank floors, cushioned-backed vinyl flooring, asphalt-based floors, carpet, self-adhering plank or tile, laminate or other floating flooring or structurally-damaged concrete.

### CONCRETE SUBSTRATES

All concrete (new and old) should be tested for moisture and pH levels. Concrete shall have a minimum compressive strength of 3500 psi. Moisture vapor emission rate should not exceed 8 lb/1000 sq. ft. (3.63 kg/92.9 sq. m)/24 hours per ASTM F1869. Moisture may also be tested according to the test method ASTM F2170; when tested according to this method, the internal relative humidity should not exceed 90%, and pH level should be between 7 and 9. **IF MOISTURE IS PRESENT, DO NOT INSTALL FLOOR, corrective measures should be taken. Do not install when hydrostatic pressure or alkaline conditions are evident.** New concrete should be properly cured. A moisture barrier is required to be installed in the crawl space and is recommended to be installed under the EWF floor over a concrete subfloor. EWF flooring plank integrity will not be affected by moisture. It is probable that when excessive moisture is present that mold or mildew growth can occur. Beaulieu EWF is not a moisture barrier. The Beaulieu EWF warranty excludes damage from mold and mildew growth due to prolonged exposure to moisture, damage to surrounding structures such as, but not limited to, subfloors, walls, fixtures, furniture, underlayment, moldings, trims or subfloor heating systems. The EWF limited warranty does not apply to damage caused by water or moisture in the subfloor or underneath the flooring including, but not limited to, damage from subfloor

hydrostatic pressure or other conditions that result in water or moisture under the floor.

### WOODEN SUBSTRATES

Wood floors should be a minimum of 3/4" (19 mm) thick, APA approved grade tongue and groove plywood or 23/32" (18.25 mm) OSB, with a smooth finish, free from spring and deflection. Make sure that the surface is clean, dry, structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m). Check for loose substrate flooring panels, squeaks, and loose fasteners or fasteners that are protruding above the substrate secure as needed before installation. Deflection should not exceed 3/64" (1.1 mm).

### EXISTING RESILIENT FLOORS

When installing Beaulieu EWF over existing resilient flooring, ensure that the existing sheet good or tile product is in good condition, and that it was installed in the full spread method and is properly secured. Beaulieu EWF can be installed over one layer of non-cushioned sheet good flooring.

*Note: It may be best to remove the present floor and prepare the structural floor for a fresh application of the Beaulieu EWF. If adhesive is used, existing tile or sheet resilient floor should be stripped using a product that is an appropriate stripper for vinyl to remove wax or other contamination and rinsed with clear water and allowed to dry. Very smooth or high-gloss floors need to be lightly abraded to rough up the surface to allow proper adhesive bonding.*

### GYPSUM FLOORS

Beaulieu EWF can be installed as a floating floor over flooring grade gypsum subfloors when properly installed over a subfloor that is structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m).

### MARBLE, QUARRY TILE, TERRAZZO, CERAMIC TILE

EWF can be installed over marble, quarry tile, terrazzo and ceramic tile as long as the flooring is structurally sound and flat within 3/16" per 10 foot radius (4.7mm per 3m).

### RADIANT-HEATED FLOORS

Beaulieu EWF can be installed over embedded radiant-heated floors provided the operating temperature never exceeds 85 °F (29.4 °C). The radiant system should be in operation for three (3) weeks prior to installation of the flooring. For 48 hours prior to and during installation, the system should be kept at 65 °F (18.3 °C). Once the installation is completed, the heat should be gradually increased by a maximum of 5 °F (2.8 °C) per day until the desired setting is reached.

### JOB SITE CONDITIONS/SUBSTRATE PREPARATION

- Verify the boxes to make sure that they are of the correct product. Inspect all planks for visible defects and damage before and during installation. Do not install damaged planks. Beaulieu will not accept responsibility for claims on flooring installed with obvious defects.
- Room temperature should be no less than 65 °F (18.3 °C) for 48 hours before, during and after installation. Maximum temperature should not exceed 85 °F (29.4 °C).
- Substrate should be free of dust, debris, from paint, varnish, wax, oils, curing sealers, solvents and other foreign matter. Any adhesive residue from prior installations should be completely removed.
- Any looseness of the substrate should be secured.
- High spots should be leveled and low spots should be filled with a proper material to ensure substrate is flat within 3/16" per 10 foot radius (4.7 mm per 3 m).
- All construction seams, expansion joints, gaps and holes greater than 3/16"(4.7 mm) should be filled

level with the surrounding surface to eliminate telegraphing of such irregularities using cement-based patching material.

- When installing, open several boxes at a time and mix planks from different boxes for best results and overall look.

**Caution:** If you plan to remove old resilient flooring material or any type of old adhesive, please be aware that it may contain asbestos fibers or crystalline silica; therefore, avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard and local regulations may require professional removal. Instructions for the removal of old flooring materials and adhesives may be found in the RFCI Recommended Work Practices for Removal of Resilient Floor Coverings. You may contact the Resilient Floor Covering Institute at 706-882-3833 or [www.rfci.com](http://www.rfci.com).

### PATCHING AND LEVELING

Use only cement-based patching and leveling compounds. Check with patching and leveling compound manufacturers for curing times. Check moisture levels before starting installation to ensure moisture levels are within guidelines outlined in the Concrete Slab section.

*Note: Priming the substrate or adding latex to levelers will normally make the floors NON-POROUS.*

The contractor or owner is responsible for cure time, moisture content testing, and the structural integrity of any leveling or patching compound used.

### PRIOR TO INSTALLATION

- Cartons should be stored horizontally at all times.
- Protect carton corners from damage.
- Do not install cabinets or kitchen island on your floating floors.
- Inspect all planks for visible defects and damage before and during installation. Do not install damaged planks. Beaulieu will not accept responsibility for claims on flooring installed with visible defects. During installation, inspect the groove area and remove any debris that may prevent proper assembly of planks.
- Beaulieu EWF is production-run sensitive. Ensure that all planks you are installing come from the same production run. Beaulieu cannot guarantee that any future replacement or additional installation will match the originally-installed product.
- Ensure that all boxes are of the same product and mix planks from different boxes for best results.
- Remove all existing moldings.
- Undercut doorway moldings to the thickness of the flooring.
- Beaulieu EWF is a floating floor and should never be nailed down to the substrate.
- Beaulieu EWF is intended for indoor use only.
- Determine in which direction the planks will be installed. It is recommended that the flooring be installed running perpendicular to the floor joist.
- Carefully measure the room to determine the width of the last row of planks. If the width is less than 2" (50 mm), excluding the tongue, the width of the first row of planks will have to be cut accordingly.
- A minimum of 1/4" (6.35 mm) expansion space is required around the perimeter of the room and all vertical objects.
- Establish a working line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank plus 1/4" (6.35 mm) for expansion space. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is out of square

## INSTALLATION

1. Begin laying planks from the left side of the starting wall and work to the right side. The tongue of the plank should face the starting wall.
2. Place 1/4" (6.35 mm) spacers between the short and long side of the planks and the wall. Always position one spacer between the wall and where the planks join.
3. The end joints of the planks in the first row are assembled by inserting the tongue side into the groove side of the previous plank at a low angle. Gradually lower the plank down flat until the end joint closes, insuring that the planks are perfectly aligned. Install remaining full planks in the first row.
4. The last plank in the first row will need to be cut. Measure the distance between the wall and the surface of the last full plank. Subtract 1/4" (6.35 mm) from this measurement to allow for the spacer. If this measurement is less than 8" (20 cm), the length of the first plank in the row should be cut. The first and last plank in each row should be at least 8" (20 cm) in length. Planks should be cut using a minimum 40-tooth blade on a power saw. The remaining piece cut off from the last plank in the first row may serve as the first plank in the second row provided it is at least 8" (20 cm) long. Always stagger end joints from row to row a minimum of 8" (20 cm) apart.
5. Install the long side of the first plank of the second row. Place a 1/4" (6.35 mm) spacer between the wall and the short side of the plank. Insert the tongue side into the groove side of the previous row at a low angle and lower flat to the substrate.
6. Install the second plank of the second row. Position the long side of the plank with the tongue side overlapping the groove of the planks in the previous row approximately 1/8" (3.2 mm). Then, angle the end joint into the previous plank. Angle the plank up and gently push forward until the plank locks into the previous row. Continue installing planks in the second row. It is important to make sure that the first two rows are straight and square as they can affect the entire installation.
7. Continue working from left to right, row by row. Be sure to maintain a 1/4" (6.35 mm) space around all walls and vertical objects and maintain a random appearance. Remember to offset end joints a minimum of 8" (20 cm).

## STAIRS

All stair applications must be installed using the full spread adhesive method with a premium urethane-based adhesive.

## FINISHING THE INSTALLATION

- After all planks have been installed, remove spacers from perimeter of room.
- Do not fasten any moldings through the flooring.
- Install quarter-round or baseboard molding. Molding should be of sufficient size to cover the 1/4" (6.35 mm) space and should be fastened to the wall, not to the flooring.

## COMMERCIAL INSTALLATION

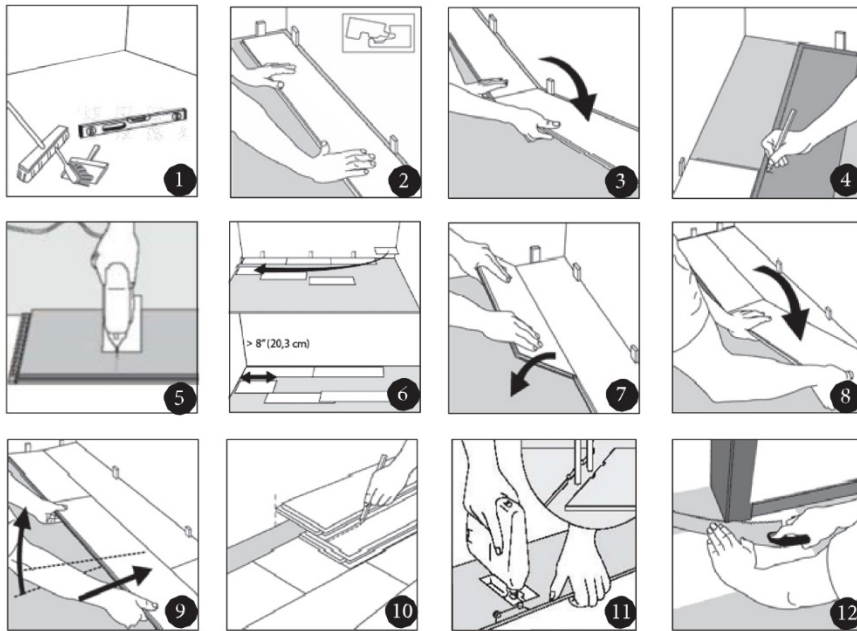
All commercial installations of locking EWF that will have rolling loads are required to be glued to the substrate. The use of approved adhesive is required; please contact Technical Services for more information.

**IMPORTANT**

- Use plywood to cover the top of the flooring when moving heavy furniture or appliances into position.
- Use proper floor protectors under the legs of furniture and chairs.
- Heavy furnishing loads placed on the locking EWF can pin a locking product down to the substrate which may prevent the product from expanding and contracting evenly, causing side or end separation, peaking or gapping. Beaulieu recommends that any locking EWF that has rolling loads or heavy furnishings be installed with adhesive.
- Do not nail down Beaulieu EWF.
- Beaulieu EWF is intended for indoor use only.
- Beaulieu EWF is warranted a floor covering only.
- Post-installation temperature should be maintained between 65 °F - 85 °F (18.3 °C - 29.4 °C). Relative humidity should be maintained between 40% and 70%.
- Avoid exposure to long periods of sunlight. **Beaulieu requires the use of UV protective film, blinds, curtains or shades to assure that EWF products are protected from sun and are not overheated due to this exposure.** This type of exposure can induce expansion which may cause buckling. **Flooring that cannot be protected from direct sunlight is required to be installed with adhesive.** Failure to install this EWF with Beaulieu approved adhesive when such flooring will be exposed to direct sunlight voids all warranties, express or implied; furthermore, the end user shall assume full responsibility for any failure of the flooring, and Beaulieu shall be released from any claims, damages, or liabilities whatsoever arising out of or related to the failure to install the flooring with approved adhesive when the flooring is exposed to direct sunlight.

Follow the Beaulieu Care and Maintenance Guidelines to properly care for your flooring. These can be found on our website at [beaulieuflooring.com](http://beaulieuflooring.com) or contact Beaulieu Technical Services.

**INSTALLATION ILLUSTRATIONS**



**Homeowner Obligations**

To maintain the coverage under the terms of these warranties and ensure fast and easy warranty service, the homeowner is responsible for the following:

- Keep five (5) planks of the EWF product after installation for testing purposes.
- Keep and be able to provide the original sales receipt or documentation illustrating proof of purchase and installation date of the product.
- Make sure the flooring is installed according to Beaulieu Installation Instructions.
- Keep a list of products used to clean the flooring.

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Please visit our website at [beaulieuflooring.com](http://beaulieuflooring.com) for the most up-to-date version of this document as it may have been revised and updated since this printed version or contact Beaulieu Technical Services.

Warranty Guide as well as Care and Maintenance instructions can also be found on our website at [beaulieuflooring.com](http://beaulieuflooring.com), or you may contact Technical Services at 800-944-2840 or [tek.services@beaulieugroup.com](mailto:tek.services@beaulieugroup.com).

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