



## ENGINEERED LUXURY VINYL GENERAL INSTALLATION INSTRUCTIONS FOR ANGLE-TO-ANGLE FLOORING

### WARNING

Prior to installation, please ensure that the product received is the correct style and color as well as to the customer's satisfaction. If there are any doubts, do not install the flooring and contact the retailer. Beaulieu® will not be held responsible for any costs relating to the installation of unsatisfactory or incorrect product.

### ACCLIMATION

Acclimation is required prior to the installation of Engineered Luxury Vinyl Flooring (ELVF). Store the UNOPENED BOXES in the room where the flooring is to be installed for at least 48 hours prior to installation. Always store the boxes 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 the acclimation and installation period.

### RECOMMENDED TOOLS AND MATERIALS

- Safety glasses
  - Measuring tape
  - Square
  - Utility knife
  - Straight edge
  - Spacers
  - Chalk line
  - Embossing leveler/floor patch (if necessary)
- Underlayment is optional - Underlayment that is used should be no thicker than 0.06" (1.5 mm) and the density should be a minimum of 25 lb per cubic foot (11.34 kg per 0.028 m<sup>3</sup>).

### SUITABLE SUBSTRATES

Beaulieu ELVF 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 ELVF 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

**Concrete subfloors must be inspected prior to installation and if they do not meet the following requirements, do not install flooring.** 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 5 lb/1000 sq. ft. (2.27 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 80%, and pH level should be between 7 and 9. New concrete must be properly cured.

### **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).

All fastener indentations and joints should be level and smooth using appropriate patching compounds. Deflection should not exceed 3/64" (1.1 mm).

### **EXISTING RESILIENT FLOORS**

When installing Beaulieu ELVF 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 ELVF can be installed over one layer of non-cushioned sheet good flooring. It may be best to remove the present flooring and prepare the structural floor for a fresh application of the Beaulieu ELVF. Existing tile or sheet resilient flooring 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 ELVF can be installed as 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**

Properly cleanse substrate using a commercial degreasing/dewaxing solution. Grind or abrade any highly polished or irregular surfaces. Fill any low areas, chips and grout joints that may telegraph through the new flooring.

### **RADIANT-HEATED FLOORS**

Beaulieu ELVF 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/tiles for visible defects and damage before and during installation. Do not install damaged planks/tiles. 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 levelled 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, and holes should be filled level with the surrounding surface to eliminate telegraphing of such irregularities.

- When installing over an existing resilient flooring material, an embossing leveller may be required to prevent the existing material pattern from telegraphing through the new material.
- When installing, open several boxes at a time and mix planks/tiles 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.

### **EMBOSSING LEVELER**

When installing over an existing resilient flooring material, an embossing leveler may be required to prevent the existing material pattern from telegraphing through the new material. Embossing levelers are for sheet goods with textures that could telegraph through the ELVF and be visible on the surface.

*Note: Existing resilient flooring should be in good condition, non-cushioned, thoroughly bonded to the substrate, and all waxes or finishes should be removed before applying embossing levelers or adhesives.*

### **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/tiles for visible defects and damage before and during installation. Do not install damaged planks/tiles. 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/tiles.
- Beaulieu ELVF is production-run sensitive. Ensure that all planks/tiles 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/tiles from different boxes for best results.
- Room temperature should be no less than 65 °F (18.3 °C) for 48 hours before, during and after installation.
- Remove all existing moldings.
- Undercut doorway moldings to the thickness of the flooring.
- Beaulieu ELVF is a floating floor and should never be nailed down to the substrate.
- Beaulieu ELVF is intended for indoor use only.

- Determine in which direction the planks/tiles will be installed. It is recommended that the flooring be installed running parallel to the longest wall.
- Carefully measure the room to determine the width of the last row of planks/tiles. If the width is less than 2" (50 mm), excluding the tongue, the width of the first row of planks/tiles 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.

## INSTALLATION

1. Begin laying planks/tiles 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/tiles and the wall. Always position one spacer between the wall and where the planks/tiles join.
3. The end joints of the planks/tiles in the first row are assembled by inserting the tongue side into the groove side of the previous plank/tile at a low angle. Gradually lower the plank/tile down flat until the end joint closes, insuring that the planks/tiles are perfectly aligned. Install remaining full planks/tiles in the first row.
4. The last plank/tile in the first row will need to be cut. Measure the distance between the wall and the surface of the last full plank/tile. 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/tile in the row should be cut. The first and last plank in each row should be at least 8" (20 cm) in length. Planks/tiles are cut using a sharp utility knife and a square. Score the surface of the plank/tile with the knife and snap the plank/tile at the score line.
5. The remaining piece cut off from the last plank/tile in the first row may serve as the first plank/tile 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.
6. Install the long side of the first plank/tile of the second row. Place a 1/4" (6.35 mm) spacer between the wall and the short side of the plank/tile. Insert the tongue side into the groove side of the previous row at a low angle and lower flat to the substrate.
7. Install the second plank/tile of the second row. Position the long side of the plank/tile with the tongue side overlapping the groove of the planks/tiles in the previous row approximately 1/8" (3.2 mm). Then, angle the end joint into the previous plank/tile. Angle the plank/tile up and gently push forward until the plank/tile locks into the previous row. Continue installing planks/tiles 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.
8. 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).
9. Transition moldings are required every 60 feet (18.29 m) in any direction and at all doorways.

## FINISHING THE INSTALLATION

- After all planks/tiles 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

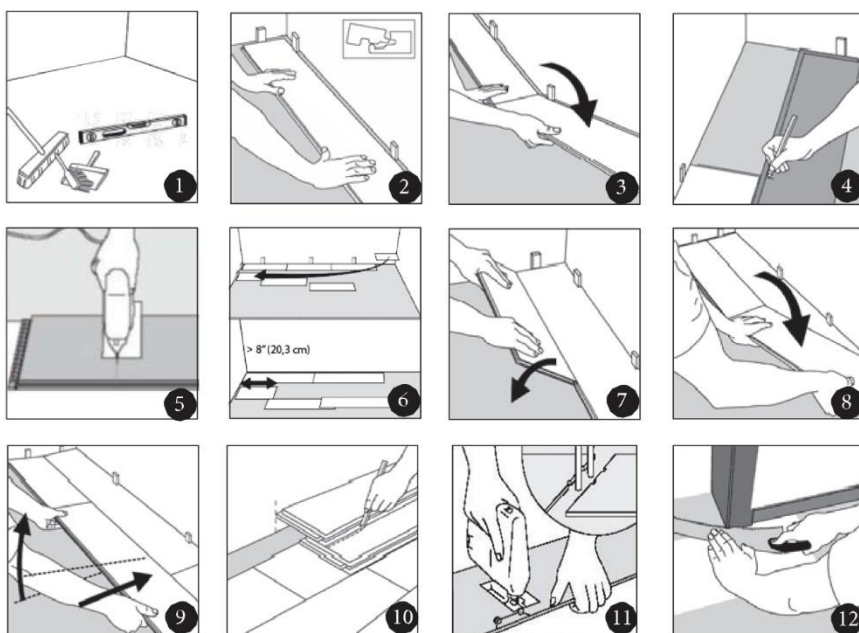
All commercial installations of locking ELVF require approval by a Beaulieu representative. Contact your Beaulieu retailer for further details.

### 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 ELVF 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 ELVF that has rolling loads or heavy furnishings be installed with adhesive.
- Do not nail down Beaulieu ELVF.
- Beaulieu ELVF is intended for indoor use only.
- Beaulieu ELVF 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%.
- **Engineered luxury vinyl flooring must be protected from direct sunlight exposure. Beaulieu recommends using UV protective film, blinds or curtains in all windows that provide direct sunlight to ensure that the products are not overheated.** Engineered luxury vinyl floor coverings exposed to excessive heat are subject to thermal expansion which may lead to buckling or peaking of the floor. Beaulieu will not be held liable for any claims or damages arising out of or related to the failure of the installation when the flooring is exposed to direct sunlight.

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

### INSTALLATION ILLUSTRATIONS



**Homeowner Obligations**

To maintain warranty coverage and ensure fast and easy warranty service, the homeowner is responsible for the following:

- Keep five (5) planks/tiles of the ELVF 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 cleaners used to maintain 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.

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 your retailer.

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