



- TECHNICAL SERVICES DEPARTMENT -



# WPC Flooring Installation Guide



## Introduction

This guide will take you through the necessary steps to install your Bel-Air WPC Flooring. Make sure to carefully read through this guide so that you may know the best way to prepare for the installation. Before reading this guide please make sure to read the **Bel-Air Flooring Pre-Installation Guide, Bel-Air WPC Floor Maintenance & Care Instructions and Bel-Air WPC Floor Warranty** available at [www.belairwoodfloor.com](http://www.belairwoodfloor.com). Failure to comply with the instructions given in these guides, as well as improper installation, will void the warranty given by Bel-Air Wood Flooring. If you have any questions regarding this guide, or have any questions not covered in these documents; please contact Bel-Air Wood Floors at: (888) 800-9206 Monday – Friday, 8am – 5pm PST.

### **! WARNING !**

#### **CAUTION: SAW DUST**

**WARNING:** Sawing, sanding, and/or machining of WPC products can produce dust particles that can cause respiratory, eye, and skin irritations. Machining power tools should be equipped with a dust collector to reduce airborne dust. Wear an appropriate NIOSH designated dust mask to reduce exposure to airborne dust particles. Avoid contact with eyes and skin by using proper safety glasses and protective clothing. In case of irritation, flush eyes or skin with water for at least 15 minutes.

#### **CALIFORNIA PROPOSITION 65**

**WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State Of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to [www.p65Warnings.ca.gov](http://www.p65Warnings.ca.gov)

**WARNING:** This product can expose you to chemicals, including Titanium Dioxide, which is known to the State Of California to cause cancer, and Methanol, which is known to the State Of California to cause birth defects or other reproductive harm. For more information go to [www.p65Warnings.ca.gov](http://www.p65Warnings.ca.gov).

#### **Work Practices for Removal of Existent Resilient Floor Coverings!**

Do not sand, dry sweep, dry scrape, drill, saw, bead-blast or mechanically chip or pulverize existing resilient flooring, backing, lining felt or asphaltic “cutback” adhesive. These products may contain asbestos Fibers or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos Fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.

## **Pre-Installation**

It is the responsibility of the homeowner and/or installer to ensure that the correct type, model, collection, and color were delivered to the job site prior to installation. The homeowner/installer can do so by comparing it with the “sample” that the floor was selected from, ensuring the floor received is the desired floor and is acceptable for installation.

## **Defects & Irregular Tolerance**

It is the homeowners/installers responsibility to inspect the product for any visible defects, damages, grade, finish and quality prior to installation. If the floor does not meet the homeowners/installers expectations and/or is not acceptable for installation, please contact Bel-Air Wood Floor before beginning installation! The Bel-Air Wood Flooring Warranty will not cover any claims related to incorrect type, model, collection, color, visible defects, damages finish and quality once the flooring planks have been installed, No replacement or refunds will be offered or issued once floor is installed! Bel-Air WPC flooring products are manufactured in accordance with accepted industry standards, which permit manufacturing, grading and natural deficiencies to not exceed 5%. If more than 5% of the material is unusable, do not install the flooring. Stop and immediately contact the retailer from which the flooring was purchased. No claim will be honored for materials with visible defects or damages once the floor was installed. Installation of any Bel-Air Wood Floor product warrants the acceptance by the installer and/or homeowner of the material's condition as well as the conditions in which the material is being installed!

## **Calculating & Ordering**

WPC flooring like any other flooring must be cut to fit around obstacles such as but not limited to: Staircases, wall contours, pipes, door stoppers and other household items. Therefore, when calculating the required square-footage and ordering WPC flooring please consider adding at least 10%-15% for cutting and waste.

## **Shipping, Handling & Storage**

Flooring should be one of the last jobs completed on a construction project. It is the installer's responsibility to evaluate the job-site conditions and ensure it meet or exceeds the requirements before the flooring is delivered to the job-site. Do not deliver or install wood flooring until all “wet” work has been completed, such as: concrete, masonry, plastering, drywall, texturing and painting primer coats are completed. Do not deliver flooring to the jobsite or install any flooring planks until appropriate temperature and humidity conditions has been achieved. Appropriate temperature and humidity conditions are defined as those to be experienced in the building after occupancy. Make sure to store WPC flooring boxes in an enclosed building. When storing WPC flooring boxes make sure to leave adequate room around the stacked boxes to allow air circulation. Do not store WPC flooring cartons near heating/cooling ducts or direct sunlight. Boxes must be stored horizontally at all times (never on edge) to prevent warping and protect the flooring click systems. Please refrain from dropping flooring boxes on edge to prevent damage to the click system.

## **Documentation**

It is the homeowners/installers responsibility to document the product's collection, color, item Number (SKU), and LOT for the material currently installed at the job-site.

## **Acclimation**

Although Bel-Air WPC Flooring products does not contain any wood particles, they are still required to be acclimated so the newly manufactured flooring planks can adjust to the new environment and slowly reach the same setting as normal living conditions, which directly coincides with a relative humidity

range of 30%-50%, and within a temperature ranging from 60° to 80° Fahrenheit. These conditions are usually the normal living conditions of any normal household. Therefore, it is recommended to acclimate Bel-Air WPC flooring for at least 2-4 days.

**For a more detailed and extensive information regarding flooring acclimation in your area, please refer to the Bel-Air Pre-installation guide!**

## **Job-Site & Installation Surface**

### **Job-Site Conditions**

It is the sole responsibility of the homeowner and/or installer to determine if the job site conditions, environment, and installation surface (Sub-Floor) are up to local building codes and are acceptable for hardwood flooring installation as well as, meet or exceed the NWEA (National Wood Flooring Association) industry standards and regulations. Please make sure to evaluate the job site for potential problems before the flooring is delivered and installation begins.

- **Structural Integrity** - Homeowner/Installer must ensure that the building is structurally complete and sound. Meets or exceeds applicable local building codes and is ready to accept hardwood flooring.
- **Proper Drainage** - Ensure Job-Site has sufficient and proper drainage. Gutters and downspouts should be in place and the exterior grade complete to allow for proper drainage of water away from the building's exterior perimeter.
- **Job Site Temperature** - Please maintain installation space temperature between 60°F-80°F with a relative humidity range of 30%-50% for a minimum of 48 hours before, during, and after installation. If an HVAC system is in place it should be operating before, and while the installation process takes place. If an HVAC system is not installed a temporary heating and/or dehumidification system that mimics the normal temperature and humidity conditions to be experienced indoors can enable the installation to proceed until the permanent heating and/or air-conditioning system is operating.
- **Moisture Content Testing** - Although WPC flooring are 100% waterproof, Moisture can still accumulate under the flooring and in time can promote the growth of mold and mildew. Therefore, is it REQUIRED to test the installation surface/sub-floor for moisture content before the installation process begins, the installer and/or homeowner can do so by using a properly calibrated and reliable moisture meter designed specifically for concrete. The maximum allowed moisture content percentage for concrete is 4%. If the moisture meter readings are above 4%, have a qualified floor-covering contractor perform a calcium chloride moisture emissions test. If moisture reading exceeds the limits stated here, DO NOT install the flooring and take the necessary steps to correct the issue before proceeding with the installation process!
- **Document Test Readings** – Installer and/or homeowner must document installation date, sub-floor moisture content, job site relative humidity and temperature before installing any flooring planks. The installer must document this information and provide a copy of the report to the property owner to ensure product warranty coverage in the future.

**PLEASE NOTE: Bel-Air Wood Floor warranty does not cover any failures resulting from, or related to, job-site environment/condition or sub flooring deficiencies.**

### **Installation Surface & Sub-Floors**

Bel-Air WPC flooring is equipped with a locking click system that allows flooring planks to be clicked to

each other and is installed as a “floating” floor. This allows Bel-Air WPC floor to be installed over most hard surfaces such as:

- CD Exposure 1 plywood.
- OSB Exposure 1 subfloor panels.
- Existing wood or laminate floor.
- Resilient tile & sheet vinyl.
- Concrete slab.
- Ceramic tile.
- Cork Ceramic
- Terrazzo.
- Slate.
- Marble.

The homeowner and/or installer must make sure that the sub-floor/installation surface meet or exceeds the following:

- **Safe & Sound** - The homeowner and/or installer must make sure that the sub-floor is properly fastened, structurally supported, and no boards are loose or raising above. The sub-floor meets or exceeds all applicable local building codes & regulations as well as the NWEA (National Wood Flooring Association) guidelines.
- **Clean & Dry** - The homeowner and/or installer must make sure that the installation surface (sub-Floor) is clean, dry and free of any debris such as nails, wax, oil or any adhesive residue.
- **Flat & Leveled** - Installation Surface / Sub-Floor Must be flat to a tolerance of 3/16” per 10’ radius (4.76mm, In a 3.05m.) and the surface slope must not exceed 1” in 6’ (2.54 cm in 1.83 m). If installation surface (Sub-Floor) condition does not meet or exceed the requirements stated below, take the necessary steps to correct the problem.
- **Soft Installation Surfaces / Sub-Floors** - Soft Sub-Floors such as carpet or padding must be removed prior to installation
- **Nail Or Glue** - Do not nail or glue flooring to the subfloor at any point, unless a glue-down and or nail-down application is desired, However gluing or nailing WPC floors is NOT recommended by Bel-Air Wood Floors!

### **Wood Sub-Floors**

Wood subfloors must be smooth, free of debris, FLAT, LEVELED and secured to sub-joints free of movement and deflection. If joist spacing is more than 19.2" on center, a minimum of 3/4" total thickness of subfloor is required.

**For a more detailed and extensive information regarding wood sub-floors, please refer to the Bel-Air Pre-installation guide!**

### **Concrete Sub-Floors**

Concrete sub-floors must meet or exceed the American Concrete Institute (ACI) 302.1 Guide for Concrete Floor and Slab Construction. New concrete slabs must cure for at least 90 days prior to installation of flooring materials. Slabs must be of high compressive strength with minimum 3,000 psi. In addition, concrete sub-floors must be dry, FLAT, LEVELED, and smooth, free of wax, paint, oil, grease, dirt, non-compatible sealers, drywall compounds, etc.

**For a more detailed and extensive information regarding concrete sub-floors, please refer to the Bel-Air Pre-installation guide!**

**Please Note: Bel-Air WPC flooring installation over concrete mandate the use of a moisture/vapor barrier of minimum 6mil. Placed over concrete sub-floors, overlapped and sealed with a moisture resistant tape at the seams prior to flooring installation!**

## Existing Sub-Floors

Bel-Air WPC Floors may be installed over most existing surfaces. Surfaces must be flat, level, smooth, single layer hard surface or dense resilient flooring. Please make sure to inspect any pre-existing surfaces for any damaged areas around the perimeter or at seams and repair if necessary. Do not install over carpet, cushioned backed resilient floor, or any floating or loose-laid flooring.

## Getting Started - Installation Process

### Prerequisites

- Saw
- Pull Bar
- Tapping Block
- Spacers
- Rubber Mallet
- Tape Measure
- Utility Knife
- Painters Tape
- Touch-Up Kit/Filler Kit
- Safety Glasses
- NIOSH-Designated Dust Mask
- Carpenter's Square

### Underlayment (Important!)

**Attached Underlayment** - Some of Bel-Air WPC flooring have premium underlayment attached to the back of each plank and therefore DOES NOT require the use of additional underlayment. If additional underlayment is used it MAY NOT exceed 1.8mm in total thickness (including the thickness of the included pad attached)!

**No Attached Underlayment** - If the specific flooring being installed does not have attached pad, the recommended underlayment to use will be:

- **Bel-Air High Density Foam (LVT Underlayment) – 1.5mm. (200 Ft 2. /Roll)**

### Preparing For Installation

**Trim Pieces & Door Casings** - Prep the installation by removing any existing baseboards, trims pieces and transitions moldings. Undercut all door casings at the height of the new floor so it will fit underneath (Remember to allow a gap for expansion).

**Plank Direction** - Determine in which direction the planks will be installed. As a general rule, the floor should be laid parallel to the longest wall. This will make the room appear larger and create an aesthetically pleasing look when installed in small rooms and hallways.

**Layout** - Measure the area of the room to get an idea for a “balanced” layout. Calculate and determine the width of the last row of planks. If the width of the last row of planks is less than 2" (50mm), excluding the tongue, the width of first row of planks will have to be cut and adjusted accordingly.

**Inspect Planks** - Inspect each plank for imperfections, defects and damages as well as remove any manufacturing residues from the clicking channel before installing or cutting. Do Not install Damaged Planks! Bel-Air Wood Floors will not accept responsibility for claims on flooring installed with defects.

**Expansion Gap** - A gap of 5/16" to 1/2" must be maintained around the perimeter of the room, at all walls and fixed vertical surfaces to allow for expansion.

**Variation Blend** – Bel-Air WPC flooring boxes contain a standard pattern variation. Please pull planks from multiple open boxes to ensure planks are blended throughout the installation area and the desired color variation can be achieved.

**Trim Pieces Color Variation** - Moldings are designed to color coordinate with the overall look of the floor. Due to the many color and texture variations designed into each plank, ‘exact matches’ are not possible. Color and texture variations between planks and moldings are not considered defective.

## Installing Cabinets

DO NOT Install cabinets over WPC Floors. Install cabinets and ONLY then the WPC Floor around the cabinets, leaving the 5/16" (7.9 mm) to 1/2" (12.7 mm) expansion space between the cabinets and the flooring. In cases where cabinets are being installed after the WPC flooring has been installed, ensure that most, or all of the cabinet weight is supported by the wall mountings. In order to secure the cabinets to the sub-floor with screws or nails, drill holes through the Floor 1/2" (12.7 mm) diameter larger than the screw or nail to allow for expansion.

## Installing Kitchen Islands

The Kitchen Island must be freestanding and weigh less than 250 pounds if it is to be installed over the WPC Floor. If the island weighs more than 250 pounds, the WPC floor is to be installed around the island, allowing the normal 5/16" (7.9 mm) to 1/2" (12.7 mm) expansion area around the base of the island. If the island weighs more than 250 pound and the WPC Floor has previously been installed, drill holes through the WPC Floor, Holes must be at least 1/2" (12.7 mm) in diameter larger than the bolts (to allow for expansion) and bolt the island to the subfloor.

## Installation Process

- 1. Moisture Barrier Sheet** – When installing WPC floors over concrete the use of a 6mil. moisture barrier plastic sheeting is REQUIRED before installing the floors. Ensure that the plastic sheeting covers the sub-floor completely and if more than one roll is applied, butt and seal the edges together with moisture barrier tape.
- 2. Underlayment (Applicable only if flooring planks have NO padding attached)** - Lay out the underlayment in the area you plan to lay down floor planks. Unroll only one sheet at a time during panel installation to prevent damaging the underlayment. Once the first sheet of underlayment is covered with WPC floor planks, repeat the process. Butt the two edges of the sheet together and seal with sealing tape. Do not overlap sheets.
- 3. Getting Started With The First Row** - Begin the installation in the top left corner of the room, against the wall and work your way to the right. Place the tongue side of the plank facing the wall, groove side should face out.
- 4. Expansion Space/Spacers** - Place the plank within a minimum of 5/16" – 1/2" from wall on the left (Short side of the plank) and at the top (Long side of the plank). It is recommended to use the installation spacers throughout all edge areas around the perimeter to insure the correct expansion space is maintained throughout the process.
- 5. Installing The First Row** - In order to assemble the planks in the first row. Insert the next plank to the right of the first one by slightly angling the short side of the plank's tongue into the previous plank's groove until planks locks into position. Press the plank forward and fold down into place. Make sure that the planks are perfectly aligned, smooth, and level. If necessary, use a mallet and tapping block to GENTLY tap down on the ends to firmly lock in the planks in place. DO NOT hit flooring planks directly on the surface as this can cause damage to the clicking system. Use the tapping block and a rubber mallet only! Continue working right until the first row is assembled.
- 6. Last Plank Of The Row** - The last plank in the first row will need to be cut. Measure the distance between the wall and the edge of the last full plank, Subtract the expansion space that was maintained throughout the installation (5/16" – 1/2"), if this measurement result is less than 8", the length of first plank in the row must be cut. This will allow for a longer plank at the end of the row.

The first and last plank in each row must be at least 8" in length.

7. **Getting Started With The Second Row** – Installers can use the remainder of the piece that was used as the last plank of the first row to initiate the second row installation as long it is at least 8" long. Make sure to stagger the planks and refrain from leaving less than 8" between the above plank edge. In order to maintain random appearance, Offset end joints a minimum of 8" from row to row.
  8. **Installing The First Plank In The Second Row** – First, place a spacer between the wall and the short side of the plank in order to maintain the required expansion space. Install the long side of the first plank of the second row by slightly angling the plank's tongue into the upper (Previous row) plank's groove until planks locks into position and gently lower it until its flat and leveled with the adjacent planks. Make sure the long sides are connected tightly showing no visible gaps.
  9. **Installing The Second Plank In The Second Row** - Install the long side of the second plank of the second row by slightly angling the plank's tongue into the upper (Previous row) plank's groove until planks locks into position, While inserted into the previous row at an angle, slide the plank to the left so the short tongue side is hovering over the previously laid plank's short groove side and gently lower it until its locks into position and is now flat and leveled with the adjacent planks.
- Please make sure that the first two rows are straight and lay in paralleled with the walls as they can affect the rest of the installation.**
10. **Last Plank Of The Row** – As previously explained, the last plank in each row should be cut to fit the end of the row by measuring the distance between the end of the last plank and the wall subtracting the maintained expansion gap (5/16" – 1/2"). An easy and effective way to do so is by flipping the last plank over (placing the groove to your left) Measure the plank to the size of the space left in the row (Remember to calculate the expansion gap), Mark and cut the board using a table saw or a utility knife and score and snap. Flip the board over and it will be ready to be inserted and be tapped into place.
  11. **Installing and Securing Remaining Rows** - Continue installing the following rows in the same method explained so far. After installing each row, use a rubber mallet and tapping block to gently tap the plank edges into the edge of the previous row to ensure a tight fit and perfect alignment between end and side joints. Any gapping or misalignment can affect the quality of the installation.
  12. **Lastly** - Use a pull bar to lock in the last plank of a row and in the last row of flooring being installed in the room.

## **Finishing The Installation**

- **Remove Spacers** - Once all flooring planks have been installed remove the installation spacers from between the walls and the flooring planks.
- **Install Trim/Transition Moldings** – Install applicable transition or trim moldings in required areas.  
Available Transition Moldings:
  - T-Molding
  - End-Cap
  - Quarter-Round
  - Flush Stair Nose
  - Reducer
- **Cover Expansion Space** - Install baseboard molding, quarter round or base shoe to cover the expansion gap left around the perimeter. Molding must be sufficient size to cover the 5/16" – 1/2" space.
- **Protect Installed Floor** – Once the installation process had been completed, Protect the newly installed floors by covering it with a designated protective film. This can help prevent any damage to



the floor while moving or installing household appliances or furniture and prevent staining if paint or plaster repairs conducted in the jobsite after the flooring was installed.

- **Scratch Prevention** - Use proper floor pad protectors under the legs of furniture and appliances to prevent scratching or chipping on the newly installed floors.

## **Repairs**

Always inspect panels before installation to ensure no damaged planks are installed. However, if damage occurs during installation, the following repair procedures may be used:

If a panel is slightly damaged or chipped, fill the void with a color matched filler. Bel Air carries an array of colors to match your floor.

If a panel is severely damaged and must be replaced the flooring will need to be disassembled back to the damaged planks. Determine the shortest distance from a sidewall and remove the molding. Lift the planks a few inches and tap along the joint. Remove the entire row back to the damaged area. Replace the damaged plank and reassemble the flooring.

Bel-Air Wood Flooring  
5505 S Alameda St. Los Angeles, CA 90058  
(888) 800-9206  
[www.BelairWoodFloor.com](http://www.BelairWoodFloor.com)



*You will be Floored!*

*Updated On: 07/01/2022*