



## DIRECT GLUE PLANK INSTALLATION GUIDELINES

### GENERAL INFORMATION

All instructions and recommendations are based on the most recent information available. If you receive a paper copy of these instructions, please refer to [www.engineeredfloors.com](http://www.engineeredfloors.com) to ensure you have the most up to date version of our installation instructions. This product is intended to be glued directly to the subfloor.

Engineered Floors requires the use of one of our approved adhesives for LVT. Please contact [hstechservice@engineeredfloors.com](mailto:hstechservice@engineeredfloors.com) or 1-866-706-9745 Ext. 7105 to obtain a list.

Failure to follow these guidelines may result in an installation failure (i.e. flooring may expand or contract, resulting in gapping). Engineered Floors LVP is an interior product and must be installed in an acclimatized (temperature controlled) environment, maintained between 65 - 85 °F (18° - 29°C). Please keep in mind a concrete floor can be up to ten degrees colder than the actual room temperature.

**Acclimate material a minimum of 48 hours prior to installation in the room/location where the installation will take place.** Do not store directly on concrete, allow for air circulation. Do not open the cartons but spread them out and protect corners from damage.

Regardless of new construction or remodeling projects, keep flooring stored in rooms that are not being worked in and only install product after all other trades have completed work that could damage the flooring.

Avoid exposure to direct sunlight for prolonged periods; such exposure may result in discoloration, and excessive temperatures can cause the flooring to expand and lift off of the subfloor. During peak sunlight hours, the use of the drapes or blinds is recommended.

To minimize shade variation, mix and install planks from several cartons.

Inspect all planks for damage before installing. If you have any concerns about the product fit or finish, please call Engineered Floors at 1-866-706-9745. Claims will not be accepted for flooring that has been cut to size and/or installed.

This product can be installed on, above, or below grade. However, excessive moisture in the subfloor could promote mold, mildew growth and other moisture related issues like the trapping of moisture emissions under the flooring, which may contribute to an unhealthy indoor environment. Engineered Floors does not warrant nor is responsible for damage to floor covering due to moisture related issues.

### SUBFLOOR PREPARATION

Proper preparation of the subfloor is a major part of a successful installation.

Roughness or unevenness of the subfloor may telegraph through the new flooring.

All subfloors should be smooth and dust free with a flatness tolerance not exceeding more than 1/8" in a 10' span.

All subfloor patching must be done with a non-shrinking, water resistant Portland based compound and allowed to dry completely prior to installing flooring. All floor patch would be considered a porous substrate.

Prime patching compounds and porous substrates with an approved floor primer when using adhesives.

Do not use solvent based adhesive removers. The use of such adhesive removers can leave a residue in the subfloor and cause bond issues with the adhesive. Follow adhesive manufacturer's guidelines.

### CONCRETE SUBSTATES

New concrete slabs must be completely cured.

Concrete subfloors must be dry, flat, smooth and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard and dense, and free from powder or spackling.

Holes, grooves, expansion joints and other depressions must be filled with a patching compound and troweled smooth and feathered even with the surrounding surface. The concrete should have a moisture reading no greater than 90% RH or a MVER no greater than 8lbs. The personal responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer. It is recommended to follow adhesive manufacturer's requirements.

### LIGHTWEIGHT CONCRETE

All recommendations and guarantees as to the suitability and performance of lightweight concrete under resilient flooring are the responsibility of the lightweight concrete manufacturer. The installer of the lightweight product may be required to be authorized or certified by the manufacturer. Correct on-site mixing ratios and properly functioning pumping equipment are critical. To ensure proper mixture, slump testing is recommended. Lightweight aggregate concretes having densities greater than 90 lbs. per cubic foot may be acceptable under resilient flooring. Concrete slabs with heavy static and/or dynamic loads should be designed with higher strengths and densities to support such loads.

Surface must be permanently dry, clean, and smooth, free of all dust, and structurally sound. Perform a bond test to determine compatibility of adhesive to the substrate. All Lightweight concrete should be primed with a premium floor primer.

### WOOD SUBSTRATES

Wood subfloors must be structurally sound and in compliance with local building codes.

**NOTE:** Particle board cannot be used with a glue down product.

Double-Layered APA rated plywood subfloors should be a minimum 1" total thickness, with at least 18" well ventilated air space beneath. Insulate and protect crawl spaces with a vapor barrier covering the ground. DO NOT install over sleeper construction subfloors or wood subfloors applied directly over concrete.

Underlayment panels can only correct minor deficiencies in the sub-floor while providing a smooth, sound surface on which to adhere the luxury vinyl plank. Any failures in the performance of the underlayment panel rest with the panel manufacturer and not with Engineered Floors®. It is recommended that your chosen APA underlayment grade panels be designed for installation under resilient flooring, and carry a written warranty covering replacement of the entire flooring system. ENGINEERED FLOORS luxury vinyl plank flooring is not recommended directly over fire- retardant treated plywood or preservative treated plywood. The materials used to treat the plywood may cause problems with the bonding of the adhesive. An additional layer of APA rated 1/4" thick underlayment should be installed. Always follow the underlayment manufacturer's installation instructions.

### STRIP PLANK WOOD FLOORING

Due to expansion /contraction of individual boards during seasonal changes a 1/4" or thicker APA underlayment panels must be installed over these types of subfloors.

### RADIANT HEAT

Subfloors with an embedded radiant heating system are acceptable, provided the temperature of the subfloor does not exceed 85° Fahrenheit at any point. The heat source should be separated from the flooring system by at least 1/2". The system should be operational seven days prior to installation to reduce residual moisture in the subfloor. Three days prior to install the lower the temperature to 65°. 24 hours after install the temperature can be raised in 5° increments to avoid overheating. The temperature should not exceed 85°. We recommend using an in-floor temperature sensor to avoid overheating.

### EXISTING RESILIENT FLOORING

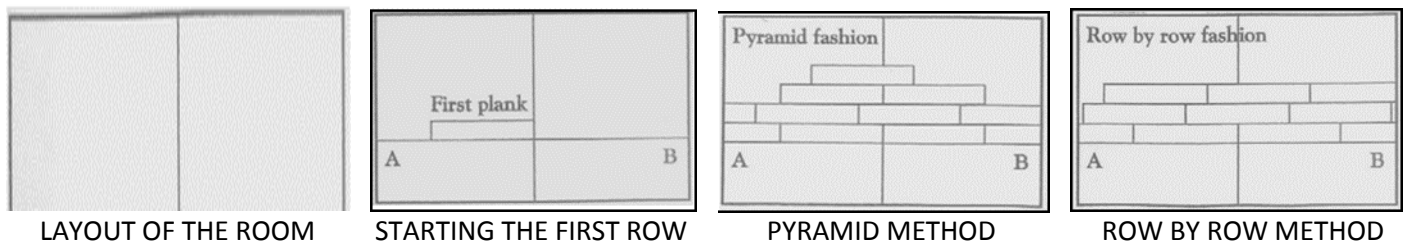
Existing resilient must be single layered, non-cushioned, fully adhered, and smooth. The floor should show no signs of moisture or alkalinity. Any waxes, polishes, grease, grime, and oil must be removed with an appropriate stripper and/or cleaner. Any cuts, cracks, gouges, or other irregularities must be repaired or replaced. Grout joints in existing tile flooring should be leveled with a patching compound to prevent telegraphing. It may be necessary to grind or sand any highly polished or smooth surfaces to promote adhesive bonding to the existing floor.

**CAUTION:** If you plan on removing 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 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).

### INSTALLATION FOR VINYL PLANKS

1. Find the center point of the room. Mark the center line with a chalk line. Obtain a true 90° angle by using a laser square or a carpenter's square. Mark a second line which will divide the room into four equal parts.
2. Measure the distance from the center to the wall, parallel to the direction of the plank.
3. 1/4" proper expansion is required around the perimeter of the installation to allow for expansion and contraction.
4. Divide the measurement by the width of the plank. If the measurement is less than half a plank remains plus the 1/4" expansion space, the center point will need to be adjusted accommodate a larger piece. This will allow for a larger piece along the wall and will prevent small pieces or slivers.
5. Carefully place the first piece of plank at the junction of the chalk lines.
6. Continue to lay the plank, making sure each plank flush against the chalk line and tight against the adjoining plank.
7. Make sure the plank is well seated into the adhesive paying special attention, to the edges. Lay in a pyramid fashion or row by row, as shown below.
8. Measure the distance from the last plank in the row to the wall. Mark the plank and cut it against the mark.
9. Lay the plank in place, making sure that the cut edge is against the wall.
10. Make a pattern out of cardboard or heavy paper to fit around pipes and other irregularities. Place the pattern on the plank, trace cutting along the trace lines.
11. **IMPORTANT:** All flooring must be rolled with a minimum **100-lb roller after installation**. Use a hand roller in areas not reached with a 100-lb. roller.

### ILLUSTRATION



### REPAIR DAMAGED PLANK:

If a plank becomes damaged to the extent that it needs to be replaced, use the following procedure.

- Place painter's tape on the edges of the planks surrounding the damaged plank. This will keep the adhesive from getting on the face of the surrounding planks.
- Use a sharp utility knife (razor knife) to score down through the joints on all four sides of the damaged material.
- Then cut completely through the plank and remove the damaged plank.
- Reapply a light coat of adhesive to the floor allowing sufficient tack
- Install the new material into the area and roll in the length and width directions.

For additional questions and warranty information, please contact Engineered Floors Technical Services:  
[hstechservice@engineeredfloors.com](mailto:hstechservice@engineeredfloors.com) or 1 866.706.9745. Ext. 7105.