

## FINEO LVT INSTALLATION GUIDE – GLUE DOWN

### A. Pre-installation

#### A.1 Job Site Condition

Areas to receive LVT flooring should be adequately controlled. It is recommended that LVT installation shall not begin until all other trades are completed.

If there are any hazardous situations like asbestos containing materials, any unsafe circumstance or inappropriate subfloor condition, do not start installation and require assistance from proper authorities with contractor.

Maintain the site temperature to Min 65°F (18.5°C) ~ Max 85°F (29°C) for at least 48 hours before, during, and after installation. Site humidity should be between 35% ~ 65%.

Always wear the personnel protections and ventilate regularly. Light the job site for proper inspection of LVT designs and color patterns.

#### A.2 Subfloor condition

Subfloor must be checked and prepared prior to LVT installation. Finished appearance and performance of the LVT is determined by sub-floor condition.

All substrates to receive LVT covering should be dry, clean, smooth, flat and structurally rigid and sound. They shall be free of dust, moisture, oil, paint, wax, residual floor tile or sheet, adhesive, grease and other foreign materials. Floor temperature should be maintained over 50°F (10°C) to below Max 80°F (27°C).

##### A.2.1 Concrete

New and existing concrete subfloors should meet the guidelines of ACI 302 and ASTM F 710 “STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING” available from American Society for Testing and Materials. [Http:// www.astm.org](http://www.astm.org).

On or below grade slabs must have an effective vapor barrier and humidity level by Concrete hygrometer should be below 4.5%.

Concrete floor shall be flat and smooth within 1/8" in 6 feet (3.2mm in 1.83m) or 3/16" in 10 feet (4.7mm in 3m)

##### A.2.2 Wood

Wood subfloors must be structurally sound and strong enough to meet total load including LVT material weight. Particleboard, chipboard, flakeboard or similar weak wooden subfloors require additional reinforcement for total weight load.

Humidity level by wood hygrometer should not exceed 13%.

Plywood subfloors should be a minimum 1" (25.4mm) total thickness with at least 18" (457.2mm) ventilated air space beneath. Insulate and protect crawl spaces with a vapor retarder covering the ground.

Do not install LVT directly over sleeper or plank construction subfloors or wooden subfloors applied directly over concrete. Apply at least 1/4" (6.4 mm) thick or more additional plywood board over these plank type subfloors.

### **A.2.3 Existing resilient Floorcovering**

Sheet type floorcovering must be removed and any existing adhesive remains on subfloor should be removed completely.

If it is non-cushion backed homogeneous solid vinyl tile like VCT or SVT, overlapping installation on existing FLOOR TILES may be considered. Existing tile floor must be

- Homogeneous solid structure, (Not heterogeneous, cushion backed structure)
- Fully adhered and smooth
- Cracks, cuts, dents, and other irregularities must be fixed or replaced
- No moisture or PH troubles

Surface of existing floor tiles must be clean free of dust, paint, wax, adhesive, grease, moisture, oil, and other foreign materials.

NOTE : Though overlapping installation is possible under above conditions, FINEO still recommends removing any existing resilient floorcovering for better FINEO LVT performance. The responsibility of determination on overlapping installation rests solely with proper authorities with installer and contractor.

### **A.2.4 Raised Access Floors (RAF)**

#### **- Pre-installation during RAF panel production**

LVT topping as finishing tile on raised access floor panel during access floor panel manufacturing by RAF manufacturers, 3.0mm or 5.0mm thickness LVT can be applied with edge protection or without.

#### **- Installation on RAF at the job site**

Apply 5.0mm thick FINEO OA TILE only. LVT as finishing tile on RAF topping requires specific guidelines on antistatic function, weight, size stability, transparent wear layer thickness and others. FINEO OA TILE is specially designed to meet these requirements.

To minimize possible telegraphing, the panels need to be flat within 0.75mm limit and level with a maximum gap between panels of no more than 1.0mm and height difference shall not exceed 0.75mm.

### **A.2.5 Under Heated Floors**

Under heated floors may causes extreme expansion/contraction of LVT. Apply FINEO LVT HOUSE or FINEO LOOSELAY with glue down installation. It has additional glass fiber layer inside to minimize expansion / contraction from severe temperature change.

Under heated system needs to be operating at maximum temperature to reduce the inside moisture for minimum 72 hours.

Maintain the temperature to 70°F (21°C) for 48 hours before and after FINEO LVT HOUSE installation.

Make sure subfloor temperature does not exceed 85°F (29°C) and HOUSE ADHESIVE, designed for under heated floorcovering, must be applied.

### **A.2.6 Existing Terrazo, Ceramic, Quarry tile and poured floors**

It must be totally cured and securely adhered to the concrete.

Fill low spots, holes, seams, joints with proper approved materials or grind any irregular surface to prevent telegraphing to new LVT floorcovering.

Surface of these floors must be clean free of dust, paint, wax, adhesive, grease, moisture, oil, and other foreign materials. Cracks, cuts, dents, and other irregularities must be fixed or replaced.

Moisture, PH and VOC level should be checked.

## B. Material storage and inspection

### B.1 Acclimating and storage

FINEO LVT materials and adhesive must be acclimated to the installation area 48 hours prior to installation. Store the materials safe and secure away from direct sunlight or vents to maintain the proper temperature. Each carton should be separated from palletized packing during acclimating process. Do not stack cartons higher than 70cm high.

### B.2 Inspection

Inspect FINEO LVT and adhesive to be sure it meets the order specifications. Make sure that design, pattern, color, size, thickness, same production LOT number, quantity must be checked and it matches the specification for each area to receive the LVT.

Open and check all cartons to inspect for damaged or defective tiles. If there is any, do not start installation and contact to supplier or manufacturer.

If clearly identifiable wrong products are once installed, manufacture is not responsible for correcting the problem.

### B.3 Adhesive

Adhesive is the crucial material to ensure the successful LVT installation. Select the right and recommended glue for the subfloor condition.

Check open time and working time of the adhesive types, apply appropriate conditions following the glue manufacturer's guidelines for use.

Under heated subfloor, areas where temperature cannot be controlled, oil or alcohol based epoxy, urethane or rubber polymer type permanent adhesive should be applied.

## C. Installation

FINEO LVT follows conventional square or plank tile installation methods.

Determine and mark the center line of the floor and floor design before starting installation.

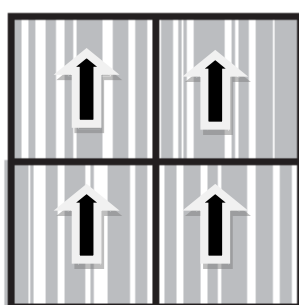
Check the direction on the backside of the FINEO LVT tiles.

Spread glue using trowel blade according to manufacturer's usage guideline. Too much or less quantity will affect floor quality. Carefully check the open time and working time of the selective adhesive.

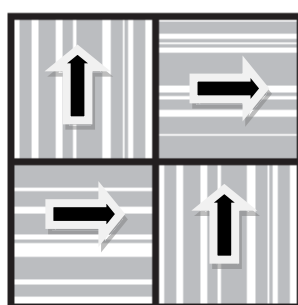
Perform the bond testing to determine compatibility of adhesive to substrate. A Primer can be used to promote better adhesion.

### C.1 Square tile

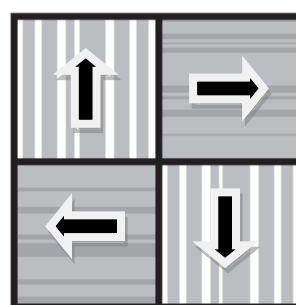
Approved installation methods vary by product designs and patterns. Check the total floor design and arrow direction printed on the back of each tiles.



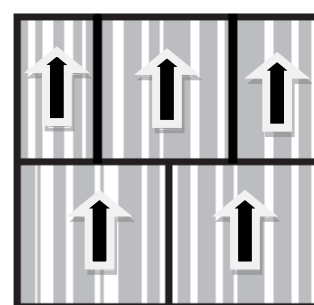
Same direction



Cross direction



Non direction

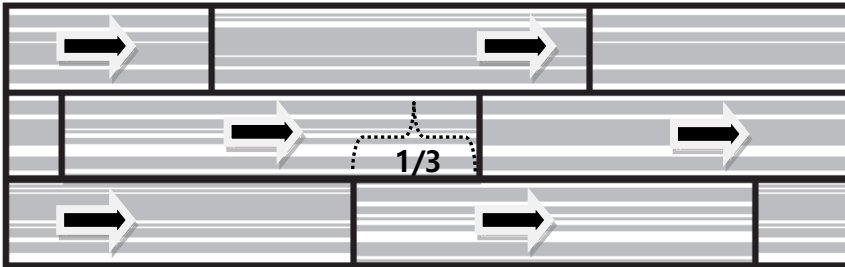


Brick installation

Start to attach the tile from the center point and each cross section areas. Attach the tiles from inside to walls and exist. Ensure minimum remaining cut size is around half size of a tile to fit at the perimeter.

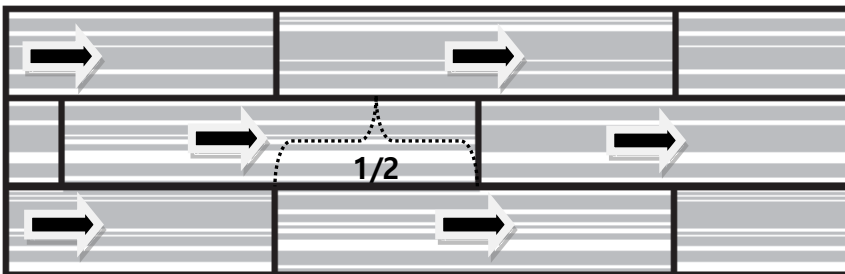
### C.2 Plank tile

Approved installation methods vary by product designs and patterns. Check the total floor design and arrow direction printed on the back of each tiles.



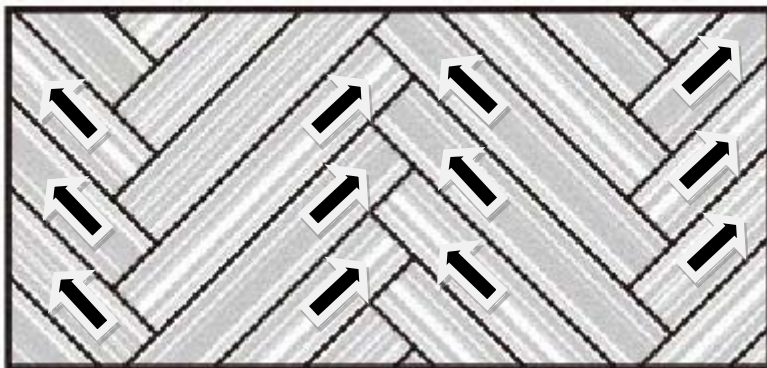
**Ashlar Installation at a third (1/3) point of tile length**

Offset the front and back tile joint 1/3 point of tile length. Attach the tiles side by side.



**Ashlar Installation at a second (1/2) point of tile length**

Offset the front and back tile joint 1/2 point of tile length. Attach the tiles side by side.



**Herringbone installation**

Attach the tiles in an L pattern.

### C.3 Weight rolling and initial construction clean

Apply the weight rolling for resilient floorcovering with minimum 50kg weight roller. Roller surface should be smooth to prevent LVT floor surface damage or scratches. Remove the glue out of the tile joints immediately.

Clean the box, cut tiles and remains properly according to local disposal regulations.

Sweep, mop sweep or dry vacuum the floor to remove dust, grit and debris.

For light soiling, damp mop the floor with a neutral cleanser with pure water and dry the floor thoroughly.



## D. After installation

Maintain site temperature to Min 65°F (18.5°C) ~ Max 85°F (29°C) for at least 48 hours.

Floor temperature should be maintained over 50°F (10°C) to below Max 80°F (27°C).

Light traffic is possible after 24 hours but heavy weight traffic shall be permitted after 48 hours, enough time for adhesive drying and hardened.

Apply proper surface protection for moving heavy load objects to prevent LVT floor surface damages and indentations. Expose to direct sunlight may cause the discoloration and damage to floor.

Floor finishes like wax coating or sealer can be applied to protect and maintain the LVT floor surface.

For more information you may contact below.



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