



Installation Instructions for Luxury Vinyl Plank Flooring (WPC/SPC)

Pre-Installation:

Prepare Job Site, Acclimation, Control Subfloor Moisture, Environmental Conditions.

Note: Flooring not used for its intended purpose will not be covered under warranty.

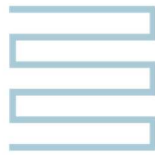
- Upon ordering of Vinyl floor materials consider adding an additional 5% to allow for cutting waste.
- Echelon Surfaces flooring is manufactured in accordance with accepted industry standards, which permit manufacturing deficiencies not to exceed 5%. If more than 5% of the material is unusable, do not install the flooring. Immediately contact the distributor/retailer from which the flooring was purchased. No claim will be accepted for materials with visible defects once they are installed. Installation of any material serves as acceptance of the material delivered.
- Installer/Owner assumes all responsibility to inspect all flooring before installation. Planks deemed unacceptable in appearance can be placed in closets, near walls or simply not be used. Pieces with glaring defects that can be seen from a standing position should be cut off or not be used as use constitutes acceptance.
- It is the responsibility of the installer/homeowner to determine if the job site conditions, environmental conditions and sub-floor are acceptable for the installation of Echelon LVP flooring. Echelon Flooring does NOT warrant against failure resulting from or connected with subfloor, job site damage, or environmental deficiencies after installation.
Echelon Flooring makes no warranty or guarantee of the quality of the chosen installer's work or of a particular installation performed by him or her. Echelon Flooring disclaims all liability for any errors or improprieties in the installation of its products by an installer.
- Floor noise is normal and will vary from one installation type to the next. Occasional noise is due to structural movement and may relate to sub-floor type, flatness, deflection, and/or related to the fasteners, changes in environmental conditions, relative humidity and the amount of topside pressure applied to the flooring. For these reasons floor noise is not considered a product or manufacturer defect.
- During installation, it is the installer's responsibility to document all jobsite conditions and measurements including the installation date, site relative humidity, temperature, and subfloor moisture content. For a complete list of points to address prior to installation, refer to ASTM F1482 – 21.
- Do not install flooring under permanent or fixed cabinetry.
- Never nail or screw anything through a FLOATED floor.

Transport, Storage, Acclimation

- Transport and store cartons in lay down, flat position.
- Stack boxes no more than 8 cartons (4ft.) high. Keep away from direct sunlight
- Room temperature and relative humidity must be consistent with year-round living conditions for at least 5 days prior to installation.
- Allow flooring to acclimate, unopened, in original packaging as close to the installation area as possible for at least 24 hours prior to installation.

Pre-Installation Preparation

Prior to installation, inspect planks for visible faults/damage. Check if subfloor/site conditions comply with the specifications described in these instructions. **If you are not satisfied, do not install**, and contact your supplier. Echelon Flooring is not responsible for flooring installed with visible defects.



ECHELON

FLOORS & SURFACES

Recommended Tools

- Tape measure
- Chalk line
- Utility knife
- Rubber mallet
- Miter saw
- Hammer
- Pencil
- 3/8" spacers
- Table saw
- Pullbar
- Tapping block

Subfloor Requirements

General

- Floating floors can be laid on top of most hard surfaces (e.g. concrete, ceramics, wood)
- Soft subfloors (e.g. carpets) must be removed
- The subfloor must be level – Flat to 3/16" per 10-foot radius
- The subfloor must be clean = Thoroughly swept and free of all debris
- The subfloor must be dry

Even though vinyl flooring is waterproof it is NOT considered a moisture barrier. Echelon Surfaces requires the use of a plastic visqueen moisture barrier at least 6mil thick on concrete for above, at, and below grade installations.

Acceptable Subfloor Types

- CD Exposure 1 plywood (grade stamped US PS1-95)
- OSB Exposure 1 subfloor panels
- Underlayment grade particleboard
- Concrete slab
- Existing wood
- Ceramic tile (must fill in grout lines with a compatible patch compound)
- Resilient tile and sheet vinyl

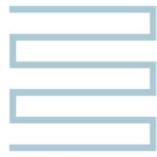
Acceptable Subfloor thickness Requirements:

Joist System Spacing (inches on center)	Minimum Thickness
12"	5/8"
12" to 16"	3/4"
16" to 19.2"	7/8"
19.3" to 24"	1-1/8"

Wood subfloors must be securely fastened. A best practice is to nail or screw every 6" along joists to avoid squeaking. If leveling is needed, sand down high spots and fill in low spots with a Portland based leveling compound.

Quick Tip! If your plywood, OSB or particle board subfloor is reading higher than 13% MC it is advised to find and correct the source of moisture intrusion before continuing installation. Echelon is not responsible for any damage caused by moisture intrusion.

Concrete subfloors must be fully cured and at least 60 days old, preferably 90 days old. If leveling is needed, grind down high spots and level low spots with a portland based leveling compound.



ECHELON

FLOORS & SURFACES

Quick Tip! When laying 6 mil plastic it is always advised to overlap the seams at least 6" and cover all seams with duct tape.

Slabs on or below grade must be free of hydrostatic pressure.

Important: Echelon Surfaces flooring is waterproof, however moisture intrusions from concrete hydrostatic pressure, flooding, or plumbing leaks, along with high levels of alkalinity, can affect the floor over time. Moisture can also be trapped below the flooring and create mold or mildew. The installer, not Echelon Surfaces, is responsible for making sure the concrete moisture and alkalinity are suitable prior to installing this floor.

Ceramic Tile, resilient tile and sheet vinyl must be well-bonded to subfloor, in good condition, clean and level. We do not recommend disturbing existing vinyl floors, as they may contain asbestos. We do recommend filling any grout lines or embossing with a compatible patch compound. Any damage caused by skipping this step will not be covered by Echelon Flooring.

Crawlspaces must have a minimum of a 6-mil polyethylene sheeting covering any exposed earth. Crawl spaces must have adequate ventilation and a minimum of 18" of air space between the ground and the floor joist.

Moisture Barriers and Underlayment

Even though luxury vinyl flooring is waterproof it is NOT considered a moisture barrier. Echelon Flooring always require the use of a moisture barrier such as 6 mil plastic or Titebond 531 over concrete subfloors. Test the subfloor moisture prior to installation and apply an appropriate moisture barrier based on the subfloor moisture content.

Note: Moisture barriers are not required on subfloors above habitable spaces (2nd, 3rd stories, etc).

While moisture won't damage vinyl flooring, moisture intrusions from concrete hydrostatic pressure, flooding, or plumbing leaks, along with high levels of alkalinity, can affect the floor over time. Moisture can also be trapped below the flooring and create mold or mildew resulting in an unhealthy indoor environment. The installer, not Echelon, is responsible for making sure the concrete moisture and alkalinity are suitable prior to installing this floor. If using a moisture barrier or underlayment not sold by Echelon, check with the manufacturer to ensure it is approved for use with the specified floor type. Underlayment over 1.5mm thick should not be used.

Note: Damage caused by using a moisture barrier not provided by Echelon is not covered under warranty.

Radiant Heat Systems

Echelon Surfaces flooring is only recommended for use over radiant heat systems if the special requirements specified by the National Wood Flooring Association are met (please refer to the NWFA's Radiant Heat Guidelines). Ensuring stable job site conditions, subfloor suitability, and proper acclimation are especially important when installing over a radiant heat system. It is the responsibility of the installer to ensure that the recommended environmental conditions are met for installation. Refer to your radiant heat system manufacturer to determine its compatibility with vinyl flooring, and to learn the specific requirements for installation.

- Because of the wide variety of systems on the market (Hydronic, embedded in concrete, electrical wire/coil, heating film/mat) each with its own features and applications it is recommended that the user consult with the radiant heating provider for best practices, installation methods and proper subfloors.
- With U the floating installation method is the only method recommended for use with radiant heat systems.
- Radiant heat system must be turned on and in operation for at least one week before installation.



ECHELON

FLOORS & SURFACES

- The system must be turned down to 65°F and maintained 24 hours prior to installation.
- Once installation is complete, turn system back on and slowly bring back up to normal operating temperature over a period 4-5 days. Increase the temperature in 5 degree increments to avoid overheating.
- Floor should never be heated over 85°F. Consult with your radiant heating system manufacturer to successfully limit the maximum temperature.
- Always remember that rugs placed over radiant heated flooring can increase the surface temperature in that area by 3°- 5°F degrees.
- Relative Humidity must be maintained between 20-80%.
- When turning off the radiant heat system it must be turned down slowly at a rate of 1.5° degrees per day. You should never just turn the system off.
- For additional information on radiant heating systems please refer to <http://www.radiantpanelassociation.org/> <http://www.radiantpanelassociation.org>

Luxury Vinyl Plank (LVP) Floating Installation

Before laying: Measure the room at right angle to the direction of the planks. Planks in the final row should be at least 3 inches wide. Due to this rule, planks in the first row may need to be cut to smaller size. Shuffle planks in order to obtain a pleasant blend of shades. We recommend laying the planks along the longest, straight, exterior facing wall. You should never nail or screw planks to the subfloor.

- Floor should be installed from several cartons at the same time to ensure good color, shade and appearance.

Expansion gaps: Even though LVP will have very minimal expansion and contraction it is still required to leave 3/8" expansion space around the perimeter as well as all fixed objects (tile, fireplace, cabinets).

- If the installation area exceeds 80 feet in either direction transition pieces are needed.
- Do not install flooring under permanent or fixed cabinetry and never nail or screw anything through a floated floor.
- To cover your expansion space, Echelon carries coordinating vinyl flooring moldings that include reducers, t-moldings, quarter rounds, and thresholds. Coordinating stair parts are also available; including stair-nosing and treads. Please visit Echelon Floors website for more details.

Quick Tip! When installing around pipes, drill the hole 3/4" larger than the diameter of the pipes.

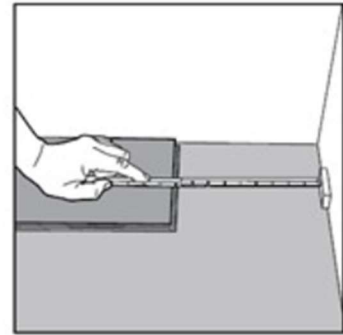
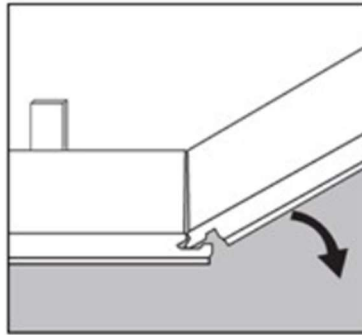
Installing the First Row:

1. Starting from the left with the tongue-side facing the wall, carefully place the first board in place, using spacers to leave a 3/8" expansion gap between wall and edges of the plank.
2. Install the second piece by aligning the butt end with the end of the first piece at a 45 degree angle. Softly push the second piece down until the tongue and groove lock together to secure the joint on the ends. The planks should lay flat. Continue in this manner until reaching the final board in the first row. (see picture below)



ECHELON

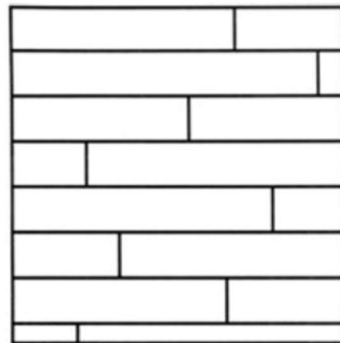
FLOORS & SURFACES



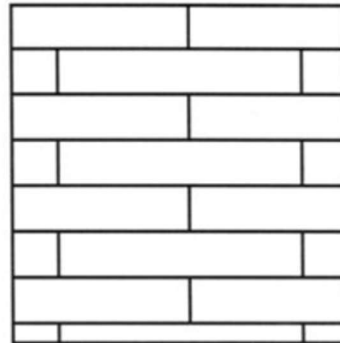
Note: The first row serves as the building blocks for your installation. Ensure the seams are perfectly aligned to prevent any gapping on the following rows.

3. Cut the final board piece to length and install it in the same manner as the previous piece. Use the extra cut piece to start your next row if it is longer than 8”.

4. Confirm the first row is straight. If the cut plank is at least 8” in length, it can be used as a starter piece in your next row. When laying the next row and future rows, make sure that there is at least 8” between the plank end joints on adjacent rows. Avoid an “H” pattern by varying the size of your starter piece. For a natural look, rows and patterns should be staggered.



Stagger End Joints



Avoid “H” Joints

5. Install the first board in the next row by angling it up slightly, pushing forward and interlocking the long side. The long side of the plank should fit snug with no gapping.

6. Insert the butt end of the second plank into the butt end of the first plank. Offset the planks by about 1/2.”

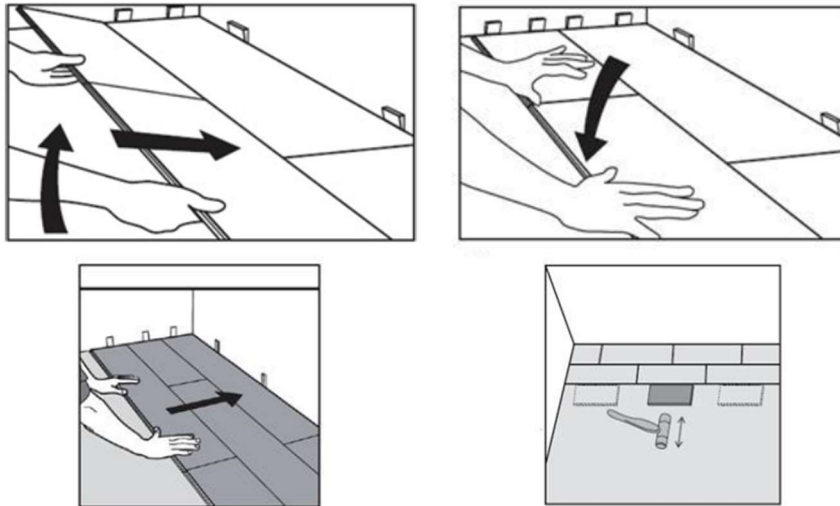
7. Slightly lift the second plank and push in slightly along the length of the butt seam until the long side is fully engaged. The adjacent plank will also lift. The butt end seam should stay engaged during this action.

8. Make sure both planks lay flat afterwards and that all seams are tight. Use of a tapping block along the long side of the planks may help to ensure secure engagement. Continue installing the rest of the planks of this row. (see picture below)



ECHELON

FLOORS & SURFACES



Quick Tip! Carefully inspect the long edge and short ends of the planks for any gapping before moving on to the next row. If you notice any gaps, STOP, and reinstall the boards to ensure a snug fit.

Installing the Final Row:

The last row may need to be cut lengthwise (ripped). Make sure ripped piece is at least 3 inches. Cut the last board to size. Use pull bar and hammer to engage the length of the last plank.

After Install/Floor Care Maintenance:

General Care:

- For general cleaning, Echelon Floors recommends a pH neutral cleaner intended for use on vinyl floors.
- Never use a steam mop or wet-mop as standing water may cause permanent damage and the heat from the steam mop may dull the finish. The moisture from the dampened mop should evaporate off the floor quickly.
- Although Echelon LVP flooring is waterproof, it is still a best practice to avoid excess moisture on the floor. Therefore, we recommend removing spills immediately using a dry towel or dry mop.
- To clean up dried glue use either Bostik Ultimate Adhesive Remover or Titebond Adhesive Remover cleaning wipes.

Preventative Care:

- Vacuum or sweep the floor with a broom or dust mop on a regular basis or as needed to remove dirt, sand, or grit to protect the floor from scratches. Be careful of other debris such as small rocks and pebbles being dragged across the floor.
- Do not use vacuums that use a beater bar or turn beater bar off; brush or felt vacuum heads are recommended as opposed to hard heads.
- Keep pet nails trimmed to avoid excessive scratching.

- To prevent indentations and scratches, remove small diameter buttons/ends from furniture legs and



ECHELON

FLOORS & SURFACES

replace with felt tipped non-staining floor protectors with a surface no less than 1" in diameter. Heavier objects may require wider floor protectors. Periodically check the felt tips for wear or buildup of grit/debris and replace as needed.

- Fit rolling furniture with soft rubber casters with a diameter of at least 2".
- When moving large appliances or furniture, use proper dollies, glides, or 1/8" Masonite with the shiny side down – do not slide or drag across the floor. Rolling appliances across the floor or using heavy load bearing carts with small wheels may damage the vinyl floor.
- Use interior and exterior doormats at entrances to prevent dirt and moisture from being tracked onto the floor. Area rugs are also recommended in front of kitchen sinks and in high traffic areas. Rugs must be made of a breathable material to prevent moisture entrapment. We recommend using a breathable rug underlay; mesh or grid patterns are best. Do not use rugs with solid rubber or vinyl backings as this may damage the finish.
- Limit direct sunlight on the floor by using curtains and blinds in areas that are exposed to high UV rays.
- Abrasive or harsh chemicals should not be used to clean the floor. Never use any of the following products on the floor: mineral spirits, paint thinner, acetone, ammonia-based cleaners, acrylic finishes, wax-based products, detergents, bleach, polishes, oil soap, abrasive cleaning soaps, or acidic materials such as vinegar. Never apply wax treatments to the floor.
- Heating units or non-insulated ductwork close to the flooring or subfloor may cause "hot spots" which must be eliminated prior to installation.
- Heavy furniture (500+ lbs.) may obstruct the free, natural movement of a floated floor.
- Do not install flooring under permanent or fixed cabinetry and never nail or screw anything through a floated floor.
- Lighter colors and darker colors naturally show more dirt, flaws, and marks and are considered higher maintenance