

# Xulon Luxury Vinyl Planks- Click

# Installation Guide

## Luxury Vinyl Planks

Xulon's Luxury Vinyl Click Planks can be installed on any grade level (On, Above or Below) that are temperature controlled using the floating method for installation. It is the ideal product for homes with concrete substrates and basements. Any changes from these instructions will be done at the installer's own risk and Xulon will not be responsible for any issues that rise with the flooring.

## Materials and Handling

- 1. All flooring material should have a minimum of 48 hours to acclimate to room temperature prior to the start of installation.
- 2. Cartons must be stored flat and squarely on top of one another while making certain that the cartons are not leaning or on the edge as this can result in bowing. It is recommended not to stack no more than 4 to 6 cartons high.
- 3. The job site where the materials will be stored need to be climate-controlled with temperatures between 65°F and 85°F (18°C and 29°C).
- 4. Materials should be stored away from direct sunlight, heat sources, and in-floor vents during acclimation.
- 5. Although an underlayment is not necessary for the floating LVP, should the individual decide to install an underlayment it is recommended that they install nothing thicker than 1.5mm.

## **Basic Tools Needed:**

- Tape Measure
- Square ruler
- Chalk line
- Utility knife
- Hand/Seam roller

## Jobsite Conditions

- All areas receiving Click Luxury Vinyl Planks must be clean, fully enclosed, be well lite and weather tight. Crawlspaces, basements and garages also need to be dry and well ventilated.
- Crawlspaces have to have a minimum of 18" between the ground and the bottom of the floor joist and has to have a minimum 6mil thick polyethylene film that covers the crawlspace ground completely.

- The yard grading should be sloped so that water runs away from the foundation of the home as well as all gutters being properly installed and functioning correctly.
- One week prior to the installation of the flooring, the building's heating and air conditioning system must be fully operational.
- Portable or temporary heaters will not be acceptable as a replacement for the building's heating and air conditioning system.
- The interior temperature of the areas receiving flooring must be maintained with a minimum temperature of 65°F (18°C) and a maximum of 85°F (29.4°C) for 48 hours before, during and 48 hours after completion.

## Subfloor Preparation

- The subfloor must be properly prepared in advance to guarantee the successful installation of this floating LVP.
- All substrates must be smooth, structurally sound, permanently dry, clean and free from all foreign materials that are not limited to dust, wax, solvents, paint, grease, oils, old adhesive residue, curing and hardening/curing compounds, sealers and other foreign materials.
- All subfloors must be flat and smooth within 1/8" in 6 feet or 3/16" in 10 feet and should any low spots need to be filled in than the subfloor cannot be greater than 3/6" in 10-foot span.
- If installing over ceramic tile or embossed flooring than a skim coating will be required to avoid any patterns telegraphing.
- The removal of existing floor molding is required, and the removal of wall baseboards is optional since quarter round can be installed to avoid this.
- Make sure that to undercut the doorjamb as to maintain the 1/4" expansion space which allow the LVP to slid under the doorjamb/case molding.
- Do NOT install cabinets on top of floating LVP.

## Substrates

## Concrete

- All concrete substrates should be tested for IRH (Internal Relative Humidity) in accordance to ASTM F 2170. Calcium Chloride tests may be conducted in addition to IRH and must be performed per the latest edition of ASTM F 1869. Calcium Chloride test results cannot exceed 5lbs per 1000 sq ft in 24 hours. The Internal Relative Humidity In-Situ probe test should not exceed 90%.
- New and Existing Concrete Subfloors should meet the Guidelines of the latest edition of ACI 302 and ASTM F 710, "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring" available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428; 610-832-9585; <u>http://www.astm.org</u>.
- All concrete substrates are required to be fully cured for a minimum of 60 days.
- Never install over concrete that has a history of high moisture or hydrostatic conditions.
- The installer is ultimately responsible for determining if the concrete is dry enough for the flooring to be installed.
- Xulon is not responsible for any failure of the subfloor or flooring as a result of the subfloor.

#### Wood

- All wood subfloors are required to follow local building codes as well as be structurally sound, smooth and clean.
- Local building codes may only establish minimum requirements of the flooring system and may not provide adequate rigidity and support for proper installation and performance.
- All other subfloors Plywood, OSB, particleboard, chipboard, wafer board, etc. must be structurally sound and must be installed per their manufacturer's recommendations.
- The joist spacing listed below determines the minimum subfloor thickness.
- Joist spacing 16" on center (OC) Plywood: Minimum of (5/8") Oriented Strand Board (OSB): Minimum (3/4", 23/32")
- Joist spacing 16" up to 19.2" (OC) Plywood: Minimum of (3/4", 23/32") Oriented Strand Board (OSB): Minimum of (3/4", 23/32")
- Joist spacing over 19.2" up to maximum 24" (OC) Plywood: Minimum of (7/8") Oriented Strand Board (OSB): Minimum of (1")
- Never install material on wood subfloors that sit directly on concrete, dimensional lumber or plywood that has been installed over concrete.
- Never apply sheet plastic over a wood subfloor.

## Radiant Heat

- The approval of radiant heated floors and their products with resilient vinyl flooring must come from Xulon.
- All radiant heated components must have a minimum of 1/2" separation from the flooring.
- The radiant heating system should be on and operational for at least 2 weeks prior to the installation of floating LVP as to reduce any residual moisture within the concrete.
- At least three days prior to installation the temperature should be lowered to 65°F and then turned off 24 hours prior to and after installation.
- The subfloor temperature should never exceed 85°F (29°C) and 24 hours after installation, a gradual increase in temperature should be in increments of 5° F per hour to avoid overheating.
- It is highly recommended that an in-floor temperature sensor is used to also avoid any overheating issues.

## <u>Testing</u>

## **Concrete Moisture Testing**

- The User is responsible for moisture testing all concrete substrates regardless of the grade level or age to verify that acceptable limits of moisture are acceptable to the adhesive being used. Concrete slabs need to have cured for a minimum of 90 days prior to any moisture tests being performed and should moisture levels not be within the acceptable limits shown than the flooring cannot be installed.
- Follow moisture testing and procedure guidelines established by the adhesive manufacturer.
- Only two moisture test methods are acceptable: The Relative Humidity (RH) test or the Calcium Chloride (CC) test

- The use of moisture meters, plastic sheet tests and/or bond tests are not acceptable quantitative test methods by industry standards
- For use of the Relative Humidity (RH) test-follow the ASTM F 2170, Standard and for use of the Calcium Chloride (CC) test-follow the ASTM F 1869 Standard (Moisture Vapor)
- It is strongly recommended that users document and save all acceptable testing results

## PH Paper Test- Surface Alkalinity on Concrete Substrate

Concrete is naturally high in alkalinity and under normal conditions would not affect vinyl planks and adhesives. It does become a factor when concrete surface alkali salts build up which normally results in excessive moisture vapor transmission through the concrete slab. The moisture carries alkali salts from the interior of the slab to the surface which remains behind after the moisture evaporates and has been known to degrade adhesives and vinyl planks which causes poor adhesive bonding, appearance, maintenance difficulties and the most extreme cases, total floor failure.

- The most common test performed is the pH Paper Test which measures the alkalinity to reveal any excessive surface alkali which is expressed in terms of a pH number.
- Tests for PH in concrete floors must be completed prior to installation of resilient flooring and read with a pH scale that ranges from 1 to 14 with 7 being neutral. If the readings are below 7.0 or in excess of 10.0 than it has been known to affect the resilient flooring or adhesives or both.
- Contact the adhesive company if the pH readings are questionable.

## Preparation of installation over existing resilient flooring

- The Click LVP can be installed floating over existing tile, vinyl and hardwood flooring so long as it is clean, flat, dry and structurally sound.
- To avoid diminishing the products inherent strength in resisting indentations, ensure that any sheet vinyl is not heavily cushioned and doesn't exceed more than one layer in thickness and that the substrate or underlayment is not soft.
- Never install this LVP over existing carpet, cushioned vinyl, floating wood or wood that is adhered to concrete.
- Solvents or citrus adhesive removers should NEVER be used to remove old adhesive residue due to the possibility of residue remaining in and on the subfloor which may affect the LVP.
- Warning- Do NOT sand, dry sweep, dry scrape, drill, saw, bead-blast or mechanically chip or pulverize existing resilient flooring, backing, lining felt or asphaltic "cut back" adhesives. These products may contain either asbestos fibers or crystalline silica and individuals should 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 individuals are positively certain that the product is a non-asbestos containing material, you must presume that it contains asbestos. Regulations may require that the material be tested to determine the asbestos content. Go to www.ffci.com for recommended work practices.
- Should mold and mildew be found on the jobsite, work should halt completely until it has been properly removed by the standards of the U.S. Environmental Protection Agency

(EPA) and the moisture has been corrected. Visit <u>www.epa.gov</u> for information on proper removal of mold and mildew.

## **Installation**

- Prior to installation, inspect the flooring materials for any noticeable defects while checking the tongue and groove to ensure that it is free of debris and damage. Should any be found, do NOT install the product.
- Inspect the subfloor to ensure that it is clean, smooth, flat and dry prior to installation.
- For maximum appearance, mix planks from two to three cartons.
- Do NOT secure the planks to the subfloor when using the floating installation method.
- Do NOT install fixed objects or cabinets on top of the flooring.
- Make sure to undercut all doorjambs and never fasten wall moldings and/or transition strips to the plank.
- LVP that is installed in front of direct sunlight will not be covered.

1. Floating LVP allows installers to start from any position and/or direction as well as work on plank at a time.

2. Since walls are not always straight, installers can snap a chalk line that they can use to follow their first row.

3. There should be a maintained 1/4" (1/2 cm) expansion space around all walls, cabinets, pipes, toilet flanges and any obstacle in the floor as the quarter round or baseboard molding will cover this expansion space.

4. Installers are required to stagger the end joints of each plank a minimum of 6" and must not install four corners together as this will not provide a stable installation.

5. Installers should have a transition break every 30 feet in either direction and in doorways should use a t-molding as it is less than 6 feet.

6. For clicking the end joints together- Click the short side of the plank vertically into the previous one and press it by hand and then roll it with a hand roller or seam roller to guarantee a fully compressed tight fit.

7. For clicking the length joints together- Place the long joint together and then lift slightly to engage the lock. Then rotate downward which will cause it to click together for a tight fit. The use of a small hand roller or seam roller will press/lock the compression fit end joint.

8. We recommend in the event of any gaps that installers use a small scrap piece of plank with the lock on the edge and lock the plank groove to tongue or tongue to groove and then lightly tap the edge of material.

9. To cut the planks, score through the top wear layer with a utility knife and then snap the plank across the score for the desired length.

10. Installers should continue to install adjoining rows the same way that the first row was done and one piece at a time until they reach the final row.

11. When installing the final row of planks, installers will need to cut each plank. It is recommended that they lay a panel on top of the last row installed, then lay another plank against the edge of the wall and then mark the plank underneath.

12. The installer can then cut through the wear layer and snap along the score and finish installing the final row while leaving ample expansion space.

## Moldings and Transitions

- Transition moldings should be installed directly to the subfloor.
- For transitions on wood subfloors, pre-drill and hand nail transitions to the wood subfloor using 6d finishing nails, pneumatic finish nailers or pneumatic brad nailers.
- For transitions on concrete subfloors, use a wood urethane tube adhesive to bond the wood transition to the concrete.
- Cut the moldings with an electric miter saw that uses a 60 tooth or 80 tooth fine finish carbide tipped blade which can hide the cuts better when joining moldings.
- The quarter round moldings should be attached to the wall and never to the flooring itself.
- Base boards are used for hiding any imperfections and adds a custom finish along the wall.
- Quarter round is used to cover the expansion space left at walls and other fixed surfaces.
- Reducers are a transition that is used to lower floors.
- Stair noses are installed to finish the look of any exposed edges of stairs and landings.
- T-moldings join two areas of flooring of similar height.
- End caps finish the expansion space at sliding glass doors, bath tubs or transitioning to carpet.
- Use a wood filler that blends with the installed click LVP flooring to in any gaps along the joints or areas where brad nails were used in the trim or the flooring.

## Preventative Maintenance

- Save any extra material in a climate controlled space and one box label in case a future repair is needed.
- Do not slide furniture back in place and use felt protectors on furniture legs to ensure the proper protection of the flooring.
- Make sure to close blinds and drapes during peak sunlight hours as to avoid long periods of sun exposure to the flooring which can result in excessive heat that can cause expansion and warping.
- The use of wide rubber casters on caster wheels and protective, non-staining mats are required under rolling chairs. Avoid the use of plastic mats.
- To avoid grit and dirt being tracked onto the floor, use walk off mats at any entrance doors.
- Do NOT use any polishes, waxes, harsh chemicals or abrasive cleaners.