



## NOX ORCHID<sup>+</sup> Tile Installation

### 1. Product Description:

- NOX Corporation tracing its roots to chemical engineering with expertise in core components of LVT flooring for more than 50 years possesses a deep understanding of material, machinery, and process.
- On a mission to offer Orchid Style, the most stylish and eco-friendly flooring, we present new ORCHID<sup>+</sup> design LVT flooring, 50 of our latest and finest designs featuring Wood, Stone and Design lines.

### 2. Prior to Installation

#### 1) Check Installation Material

- Before installing ORCHID<sup>+</sup>, check all material for correct color, design, size and that the correct quantity is available to finish the job.
- Checking all material before installation can assure that the job won't be delayed.
- Complaints with regard to clearly identifiable defects can't be accepted once the flooring has been laid.
- Boxes of tiles should be removed from pallets and separated from one another as part of the acclimatisation process.

#### 2) Job Site Condition

- Maintain all flooring material and adhesive between 65°F (19°C) and 85°F (30°C) for at least 48 hours before installation, during installation, and after installation to ensure proper product and adhesive functionality.
- The minimum temperature of the subfloor should not be under 10°C .
- The recommended relative humidity inside the room should be between 35% and 65%
- Heat should be maintained in areas to receive flooring with the building's permanent heating system.
- Fully functional HVAC systems are the best way to ensure temperature and humidity control.
- All flooring material must be stored flat and kept away from direct sunlight, heaters or air vents for proper conditioning.
- The work must be completed with an inspection. Ensure that the newly laid floor is free from adhesive residues.
- The installation should not begin until the works of all other trades have been completed.

#### 3) Sub-Floors

- Proper preparation of the subfloor is an important part of a successful installation.
- No floor covering installation is better than the sub-floor over which it is installed. The finished appearance and performance of the floor covering will be determined and affected, in part, by the condition of the sub-floor.
- The installer should take care to ensure that the subfloor and substrate are properly prepared to receive the new flooring. Adequate and careful attention to this will help prevent ridging and tunneling, bumps caused from dirt or other textures, discoloration from residual adhesives, nails or other fastening devices and improperly used underlayment panels, alkali deposits, mold and mildew.
- It should be rigid, finished smoothly, flat, level, clean and dust free.

#### **a. Concrete sub-floors**

- Concrete sub-floors must be dry, smooth and free from dust, solvent, paint, wax oil, asphalt sealing compounds and other extraneous materials. The surface must be hard, dense and free from powder of flaking.

#### **b. Wood sub-floors**

- Moisture test should be performed using a pin-type moisture meter. The moisture content should be 13% or less.
- Wood sub-floors must be structurally sound and in compliance with local building codes.
- Wood sub-floors should be suspended with a minimum of 18 inches of well ventilated air space below.
- Crawl spaces must have a vapor barrier covering the ground.
- Wood subfloors directly fastened to concrete, or sleeper construction are not recommended.

#### **4) Adhesive**

- Select the appropriate adhesive for your installation, substrate and use.
- The adhesives contain a health-hazardous organic solvent, which may cause the intoxication and hallucination when inhaling an excess amount. Those who work in the confined area shall wear the personal protective equipment. In addition, the working area shall frequently be ventilated for the circulation of a fresh air.
- Since the adhesives may have a peculiar smell, fully ventilate the room for 2~3 days after the installation.

Item	Oil base Adhesives	Water base Adhesives
Main Component	Polyurethane ( Oil )	Acryl ( Water )
Application	Winter	Summer
	New building ( Winter, Summer )	Remodeling building with
	Underground	sufficiently cured floor
	Floor Heating	No floor heating
	Use water to clean	No water is used to clean
	More than 4.5% of the moisture	Less than 4.5% of the moisture
	content	content
Standard Quantity for Application	0.4 ~ 0.5kg / sqm	0.3 ~ 0.4kg / sqm

### **3. Installation**

#### **1) Laying Direction**

- Before starting to install tiles/planks, determine the type of laying taking into account the shape of the room and the design to be laid.
- Always try not to end with less than 6 inches from wall on tile and 6 to 12 inches on plank for the best appearance.

#### **a. Tile**

- Tiles are marked on the reverse with arrows. Tiles should be laid in a checkerboard pattern.
- Installation should start from the center of the room and finish on the sides ( walls )
- When installing tiles, the center line must be determined and checked to ensure good size cuts will be fitted at the perimeter.
- The positioning of the center line must determine a start point from which to start the installation and will minimize small cuts or perimeter tiles.

#### **b. Plank**

- Planks should be installed by offsetting end joints of each tile at least 6 inches as you place them side by side. This will help avoid the end joints from lining up.
- Stagger each row of planks to ensure that the end joints do not coincide with the previous row installed. If the last plank is longer than needed, mark and cut the plank installing the cut end next to the wall. The remainder of the plank which has been cut off can be used to start the next row as long as it is 6 inches or longer.

#### **4. Post Installation**

- Concrete sub-floors must be dry, smooth and free from dust, solvent, paint, wax oil, asphalt sealing
  - Never slide appliances or other heavy items across the floor. Use plywood and a hand dolly or an approved air ride appliance moving device.
  - Use walk-off mats without rubber backing to control grit.
  - Use furniture glides and protectors to prevent scratching and indentations.
  - Recommend all rolling chairs have castors designed for resilient flooring that are not damaged.
  - Do not wet-wash, scrub or strip the floor for a minimum of 7 days following installation.
  - NOX LVT can be used with under-floor heating providing it is switched off for 48 hours before and after laying ( the maximum permitted surface temperature is 27 °C (80°F)).
- Once the floor has been installed and allowed to acclimatize for 24 hours, the underfloor heating must be gradually increased by increments of 5 °C until it reaches the maximum operating temperature of 27 °C (80°F) over a period of at least 24 hours.

#### **5. Cleaning and Maintenance**

- The installed floor should be maintained temperature of 13 °C and 30 °C throughout its service life.

##### **1) Prevention**

- Always protect floors when moving heavy objects to prevent permanent scratches and tears.
- Use appropriate wide floor protectors under tables, chairs, and any heavy furnishing to avoid permanent damage.
- Place walk-off mats at all entrances, it helps protect the floor from water, grease, sand and dust
- During peak sunlight hours, the use of blinds or curtains is recommended. Prolonged direct sunlight can result in discoloration and volatile temperature variations causing damage to the floor.
- Do not allow solvent to the seams, this may cause it damaged or become moldy.

##### **2) Routine Maintenance**

- Routine cleaning is important to prevent particles from abrading the surface of resilient floors.
- Clean the floor surface regularly.
- General cleaning can be carried out by sweeping, vacuuming, wet wiping. For heavy soiling use a polyurethane cleaner.
- Use a dry cloth or vacuum cleaner for cleaning. When water or any cleaning liquid is used, please squeeze out all water for cleaning.
- All stain-forming and aggressive substances must be immediately removed from the surface.
- Periodically wax the floor surface to keep it always better.