

PREMIUM VINYL FLOORING INSTALLATION REQUIREMENTS

1. GENERAL INFORMATION

- 1.1 | **IMPORTANT:** To keep your warranty valid, use Prosol recommended installation products, follow the installation requirements and maintenance instructions. All projects must have a pre-installation checklist, see point 8.
- 1.2 | Axis 2.5 is a solid vinyl floor covering, suitable for interior floor surfaces above, on, or below grade.
- 1.3 | Axis 2.5 is FloorScore[®] and Greenguard Gold certified meeting all indoor air quality requirements, and manufactured in compliance with standard ASTM F1700: Class III, Type B.
- 1.4 | Axis 2.5 has a PUR/UV cured Diamond finish reinforced wear layer and is suited for residential and commercial environments.
- 1.5 | Exposure to direct sunlight can create excessive heat and can damage flooring and other interior finishes. During peak sunlight exposure, window coverings are required.

2. DELIVERY, STORAGE & ACCLIMATION

- 2.1 | Material shall not be delivered until the site is climate controlled and within required tolerances (listed below), unless an appropriate climate-controlled storage area is provided.
- 2.2 | All flooring and related materials shall be conditioned or acclimated within the area of installation and be adequately protected from soil, dust, moisture and other contaminants during this time. The conditioning shall be for 96 hours before installation or until the materials reach the required temperature of the installation area.
- 2.3 | The flooring should be acclimated to service conditions per NFCA guidelines. Maintain a consistent room temperature and ambient relative humidity before, during and after installation, between 18°C - 25°C (65°F - 77°F) and 30% - 50% ambient RH relative humidity.
- 2.4 | Cartons should be stored on a smooth, flat, sturdy horizontal surface. Do not store cartons on end. It is recommended that cartons not be stacked more than 4 high during acclimation. Do not store cartons outside.

3. SITE CONDITIONS

- 3.1 | Substrate surfaces must be structurally sound, clean, dry, flat and smooth. The substrate temperature must be maintained between 15°C - 22°C (60°F - 72°F) before, during and after installation.
- 3.2 | Substrates must be free of excessive moisture, dust, existing adhesive, paint, varnish, oil, waxes, sealers, curing compounds, fillers and adhesives that may cause bond failure.
- 3.3 | All surfaces shall be vacuumed prior to installation.
- 3.4 | The General Contractor / Construction Manager / Installer must provide a finished concrete substrate in accordance with ASTM F710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring"
- 3.5 | Substrates must be smooth and flat within a tolerance of 4.7 mm (3/16") in 3 m (10'). Flatness tolerances can be determined by placing a 3 m (10') straightedge on the substrate surface in any direction and measuring the deviation of the substrate surface from the straightedge.
- 3.6 | All substrate defects likely to impair finished work shall be reported to the General Contractor/ Consultant / Owner in writing. The installation shall not proceed until all deficiencies and unsatisfactory site conditions have been corrected.

3. SITE CONDITIONS

- 3.7 | All concrete and wood substrates must be tested and documented for moisture content and temperature before the installation of **Axis 2.5**, refer to 4.7.
- 3.8 | Flooring installation shall not commence until the building is enclosed.
- 3.9 | The HVAC must be operational to ensure and maintain a consistent room temperature and ambient relative humidity before, during and after installation, between 18°C - 25°C (65°F - 77°F) and 30% - 50% ambient RH relative humidity.

4. SUBFLOOR PREPARATION

NON-POROUS & EXISTING SUBFLOOR

- 4.1 | Existing non-porous cement, terrazzo, ceramic tile should be free of dust, wax, grease, detergent residue or any deleterious substance that may reduce or prevent adhesion. All surfaces must be flat, level and prepared with patching compounds suitable for the use application, cement-based and polymer-modified, and applied according to the manufacturer's instructions.
- 4.2 | **Axis 2.5** can be installed over a single layer of non-cushioned resilient flooring, provided the existing flooring is fully-adhered and securely bonded to an approved substrate as outlined above.
- 4.3 | Any cuts, gouges, dents, grout joints, textured embossing or other irregularities in the existing floor must be prepared with a cementitious embossing leveler.
- 4.4 | Subfloors must be thoroughly vacuumed before installation.

CONCRETE SUBFLOOR

- 4.5 | Concrete substrates below grade or on grade must have an effective moisture barrier present under concrete.
- 4.6 | All defects likely to impair finished work shall be reported to the General Contractor / Owner in writing. The installation shall not proceed until all deficiencies and unsatisfactory site and environmental conditions have been corrected.
- 4.7 | All concrete slabs shall be tested for Porosity, Moisture and Alkalinity, regardless of age or grade level, and tests results should be recorded prior to installation.

Testing should comply with the following standards:

- A | **ASTM F2170:** "Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes". Allowable moisture readings shall be in accordance with the recommended adhesive. Follow adhesive manufacturers requirements for RH tolerances.
- B | **ASTM F1869:** "Standard Test Method for Measuring Moisture Evaporation Rate of Concrete Subfloor Using Anhydrous Calcium Chloride". Allowable moisture readings shall be in accordance with the recommended adhesive. Follow adhesive manufacturers requirements for moisture tolerances.
- C | **ALKALINITY TEST:** A pH range between 7 - 9 is considered acceptable, unless stated otherwise by adhesive manufacturer. pH readings outside of the acceptable range will require corrective measures before beginning installation.
- D | **POROSITY TEST per ASTM F3191:** "Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring." Follow manufacturer's installation requirements.

4. SUBFLOOR PREPARATION

CONCRETE SUBFLOOR

- 4.8** | Substrates must be free of excessive moisture, dust, existing adhesive, paint, varnish, oil, waxes, sealers, curing compounds and any other substances detrimental to fillers and adhesives that may cause installation failure.
- 4.9** | Repair all cracks and surface imperfections with a cementitious patching compound. Follow patch manufacturers recommendations.
- 4.10** | Substrate surface temperatures must be confirmed acceptable to Hydraulic Cement Underlayment, adhesives, and **Axis 2.5** requirements. Infrared laser thermometers are an acceptable method of testing surface temperatures.
- 4.11** | Subfloors must be thoroughly vacuumed before installation.

WOOD SUBFLOOR

- 4.12** | Plywood, hardwood, or other wooden subfloors must conform to and be installed in accordance with ASTM F1482 "Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring" and Building Code requirements regarding acceptable materials, thickness, support, span and fastening. All wood substrates must be tested for moisture, structurally sound, flat, smooth and free from movement.
- 4.13** | Single layer floors and strip-wood floors must be covered with 6 mm (1/4") or heavier underlayment to achieve a total subfloor thickness of 24 mm (1"). Underlayment panels must be a minimum 6 mm (1/4") 'underlayment grade' plywood panel, purpose-built for resilient flooring.
- 4.14** | Particle board, strand board, lauan, mahogany and sheathing grade plywood are not recommended as underlayment for **Axis 2.5**.
- 4.15** | Underlayment panels shall be free of internal voids, knot holes, splits or cracks and be complete with an upper surface that is sufficiently dense and smooth so that surface grain or texture will not be telegraphed to the surface of the finished flooring.
- 4.16** | Underlayment panels shall be resistant to common static or dynamic loads.
- 4.17** | Underlayment panels shall not contain materials that will cause staining of installed flooring.
- 4.18** | New wood underlayment shall be acclimated to service conditions prior to installation.
- 4.19** | Plywood underlayment panels shall be installed in accordance with panel manufacturers written requirements regarding type and spacing of fasteners.
- 4.20** | The adjoining edges of underlayment panels shall be butted to a light contact, fastened, and free of vertical movement.
- 4.21** | Minor imperfections shall be sanded smooth. If recommended by panel manufacturer, imperfections can be filled with a cementitious patching compound.
- 4.22** | Subfloors must be thoroughly vacuumed before installation.

HEATED FLOOR SYSTEMS

- 4.23** | **Axis 2.5** can be installed over heated floor systems.
- 4.24** | Ensure the flooring adhesive is recommended for installation over heated floor systems before proceeding.

4. SUBFLOOR PREPARATION

HEATED FLOOR SYSTEMS

- 4.25 | Concrete subfloors must be cured for a minimum of 90 days before beginning the installation.
- 4.26 | Finished in-floor heated systems must be covered with a minimum, uniform and flat of 24 mm (1") compatible cementitious underlayment.
- 4.27 | Heated floor systems must not exceed the maximum temperature of 25°C (77°F) before, during and after installation.

5. CONDITIONING

- 5.1 | All flooring, adhesive, and related materials shall be conditioned or acclimatized within the area of installation and be adequately protected from soil, dust, moisture, and other contaminants during this time. The conditioning period shall be for at least 96 hours before installation, or until the materials reach the service temperature and humidity levels of the installation area.
- 5.2 | It is the responsibility of the installer / owner to inspect all materials carefully before installation and to determine if the substrate and jobsite conditions are environmentally and structurally acceptable for floor installation. The manufacturer is not responsible for a floor failure resulting from any improper installation or substrate deficiencies, jobsite damage, or any visible defects after the flooring has been installed.
- 5.3 | **NOTE:** If the temperature and humidity levels are outside the recommended parameters, the installation must not begin until the heating, ventilation and air conditioning system is operational. The temperature and humidity level must reach the minimum requirements and be maintained before, during and after the installation.

6. GLUE DOWN INSTALLATION

- 6.1 | Ensure that you have the correct material and that all cartons are from the same production lot. Planks should be taken from several boxes to ensure a blend of colours and design. Carefully check all planks for any defects. **DO NOT INSTALL ANY PLANKS FROM DIFFERENT PRODUCTION LOTS.** No claim will be accepted for material that has been installed with visual defects.
- 6.2 | **PRIOR TO INSTALLATION:** Ensure all subfloor surfaces conform to requirements for flatness, temperature, moisture, and contaminant removal.
- 6.3 | Determine the direction that the flooring will run. Typically for rectangular plank products, the flooring runs the length of the room, however, personal preference may determine flooring direction.
- 6.4 |
 - A | **POROUS SUBSTRATE:** Use the full spread semi-wet-set installation method using recommended adhesive FUSION PRO973. Use the notched trowel recommended by the adhesive manufacturer to achieve full transfer of the adhesive to the backing of the floor covering. Work in small enough area to ensure that the planks are laid into the semi-wet-set adhesive according to the adhesive manufacturer installation method.
 - B | **NON-POROUS SUBSTRATE:** Existing non-porous cement, terrazzo, ceramic tile should be free of dust, wax, grease, detergent residue or any deleterious substance that may reduce or prevent adhesion. All surfaces must be flat, level, smooth and prepared with patching compounds suitable for the use application, cement-based and polymer-modified, and applied according to the manufacturer's instructions. When substrate preparation is completed, refer to 6.4-A.

6. GLUE DOWN INSTALLATION

- 6.5** | Position the planks in the semi-wet-set adhesive without sliding and pressing firmly down, paying special attention to the edges and corners.
- 6.6** | Ensure that each planks fit “tightly” together, the planks should not be forced into place.
- 6.7** | Lay a complete row of planks and cut the last planks with the cut edge to fit against the opposite wall, the planks should not be forced into place.
- 6.8** | For the best visual effect, always stagger the planks from row to row with a minimum 200 mm (8”) offset, installing the planks in a random pattern.
- 6.9** | Periodically check by lifting a plank to ensure full transfer of the semi-wet-set adhesive to the backing of the floor covering.
- 6.10** | Immediately after installing the flooring, roll each section in both directions with a minimum 100-pound roller, following the adhesive manufacturer installation recommendations; re-roll the entire area after one hour. Promptly remove adhesive smudges with a clean cloth dampened with water while adhesive is still fresh and mineral spirits when dried.
- 6.11** | Ensure that the flooring is free from general traffic for 24 hours after installation.

7. CARE & MAINTENANCE

- 7.1** | **Axis 2.5** has a UV-cured polyurethane Diamond finish and does not require additional coatings or waxes.
- 7.2** | Exposure to direct sunlight can create excessive heat and can damage flooring and other interior finishes. During peak sunlight exposure, window coverings are required.
- 7.3** | Support furniture with wide-bearing, non-staining floor protectors. Ideally, the protectors should be at least 25 mm (1”) wide, made of non-pigmented plastic or felt, and rest flat on the floor. Urethane or neoprene casters, felt pads, or floor protectors are recommended for all movable furniture. Use protection mats under chairs with casters.
- 7.4** | Use plywood or other protective material to cover flooring when moving heavy furniture or appliances into position.
- 7.5** | Use walk-off mats at all room entrances to prevent dirt, sand, grit and other damaging substances from being tracked onto the floor. Use non-staining mats. Do not use rubber or latex backed mats.
- 7.6** | For regular cleaning, sweep, or vacuum using a hardwood attachment. Do not use a vacuum with a beater bar. Damp mop floors using a PH neutral cleaning solution. Follow the manufacturers directions for using PH neutral cleaners.
- 7.7** | Wipe up spills quickly. Do not allow standing water to permeate through to the subfloor.
- 7.8** | For heavily soiled floors, use a neutral cleaner and scrub with a red pad or microfiber cloth. Rinse the pad / cloth frequently.
- 7.9** | For additional maintenance information, please contact your distributor.

8. LVT-LVP PRE-INSTALLATION CHECKLIST

Confirming correct site conditions are in place prior to material delivery / installation is required for warranty purposes. A photographic and written record of site conditions should be kept by the dealer and installer for future reference. Any conditions that are not in compliance with manufacturer installation requirements should be noted and made known to the General Contractor / End User. Do not install any flooring until site conditions are brought to industry standard / manufacturer minimum requirements.

Installation Requirements – received and read Date: _____
 Dye lot / production number _____
 Product Name _____
 Colour Name _____

ENVIRONMENTAL CONDITIONS

Product Delivery Date: _____
 Installation Start Date: _____
 Substrate Type _____
 Substrate Moisture Test Reading: _____
 Substrate Temperature Reading: _____
 Ambient Room Temperature Reading: _____
 Flooring Temperature Reading: _____
 Ambient Relative Humidity Reading: _____
 Is the HVAC system operational? _____

CONCRETE SUBSTRATE

Is the substrate original concrete? _____
 Are there patching compounds present? _____
 If so, are they secure and well bonded? _____
 Is the subfloor flat within tolerance? _____
 Is the subfloor surface free of dust? _____
 Does the compressive strength meet requirements(3500psi)? _____
 Have all surface contaminants been removed? _____
 Is the CSP approved? (CSP 2 unless stated otherwise) _____
 Is the surface porous or non-porous? (ASTM 3191 test) _____
 Is the substrate moisture content approved? _____
 Does the subfloor have an approved PH level? _____
 Have you performed a bond / pull test? _____

8. LVT-LVP PRE-INSTALLATION CHECKLIST

WOOD SUBFLOOR

Type _____

Moisture content _____

Has the plywood underlay been approved for use with resilient flooring? _____

RADIANT HEAT

Are all products approved for radiant by manufacturer? _____

Has the thermostat and system been tested? _____

Subfloor surface temperature? _____

Have all parties been notified of installation requirements for radiant? _____

Is the system on at time of installation? _____

INSTALLATION REQUIREMENTS

Is the adhesive approved for use with this floor? _____

Do the trowel notches comply with manufacturer requirements? _____

Print Name: _____ Date: _____

This checklist is intended to supplement the manufacturer instructions requirements. Carefully read and follow the installation instructions provided by your distributor.