

AXON™ PERFORMANCE WOVEN FLOORING INSTALLATION GUIDE

AXON Performance Woven Flooring is a premium woven vinyl surface backed with PVC and fiberglass reinforcement. Waterproof, anti-bacterial, and colorfast to light, AXON offers unique woven textures and designs that are easy to maintain and extremely resistant to foot traffic. Suitable for residential and commercial applications, both indoor and outdoor, AXON delivers lasting performance across a wide range of environments.

REQUIREMENTS FOR INSTALLATION

Pre-Installation

Following the instructions in this guide is required to ensure your floor is attractive, long-lasting, and covered by the company's warranty. These instructions apply to residential and commercial flooring installations. AXON Performance Woven Flooring is suitable for interior and exterior applications, including above-grade, on-grade, and below-grade installations. Permanent cabinets, vanities, islands, and similar items should be installed before installing flooring. It is recommended to leave a 1/8" gap around the perimeter.

DO NOT install in areas that are prone to flooding or areas that are not climate-controlled.

Overage Allowances

Order 5-10% more flooring than the square footage needed to account for cuttings and waste. Failing to purchase enough materials for the job, or not keeping materials for repairs, may result in different dye lots on a future order or products being discontinued. Dye lots (batch numbers) are not recommended to be mixed.

Product Inspection

Check to ensure your flooring is in its original packaging and free from any visible damage or defects. Inspect all material for correct color, design, batch number, size, and quantity to finish the job, before beginning the installation.

NOTE:

Some patterns are intended to have high shade variation. Single sample chips may be part of a set from a variegated pattern. It is the responsibility of the dealer and buyer to seek out pattern info before purchasing/installing. Avoid installing material from different batches, especially across large areas. It is possible for there to be slight shade and milling variations across products from different batches/dye lots. This is due to slight variations within industry tolerances that occur during different dates of manufacturing. Generally, this will not be noticeable unless batches are mixed, or side-matching is attempted such as during repairs or later installations. Batches that are close in production runs may be able to be mixed. This should be verified by the contractor/installer prior to installation to verify product batch compatibility. Intermixed batches that are not compatible or do not match is the responsibility of the contractor/installer. Additionally, slight color variation may occur within AXON Performance Woven Flooring due to the specialized nature of woven vinyl manufacturing. This is a characteristic of the product and contributes to its unique appearance. Inspect all material for color consistency before installation, as claims for color variation will not be accepted after flooring has been adhered to the subfloor.

Recommended Products



FLOOR SILENCER Pro



Provides noise reduction, moisture protection, antimicrobial defense, and thermal insulation. The ideal underlayment for projects that use very thin flooring or a variety of flooring types.



PRISM 3010 | FIRM SET ADHESIVE



Bonds subfloor to GlueDown LVT for light-traffic conditions. Make sure to use the proper trowel based on porosity and primer usage.



EVERLAST 3020 | HARD SET ADHESIVE



Bonds subfloor to GlueDown LVT for light-traffic and heavy commercial applications. Make sure to use the proper trowel based on porosity and primer usage.



OMNI 3050 | ADHESIVE & MOISTURE BARRIER



Does it all in one step. Commercial-grade adhesive for GlueDown LVT, primer, and unlimited moisture protection. No moisture testing required.



ADVANTAGE 3505 | SUBFLOOR PRIMER



Primes for an effective adhesive bond to subfloor. Protects against alkali attack. Apply after appropriate moisture protection.



TRILOGY 3525 | MULTIPURPOSE PRIMER



Primes for an effective adhesive bond and protects against alkali attack. Provides encapsulation or up to 95% moisture protection (not simultaneously).

Recommended Products



INFINITI
3535 | MOISTURE PROTECTION



Provides 100% moisture protection, no RH, pH, or MVER testing required. Before applying adhesive, use Infuse™ Encapsulator & Primer.



INFUSE
3515 | ENCAPSULATOR & PRIMER



Encapsulates adhesive residue, including cutback, and primes for an effective bond to subfloor. Protects against alkali attack. Apply after any needed moisture protection.



TROWELS
FOR SPREADING FLOORING ADHESIVE



Make sure your flooring installation is done with quality tools, such as our Square- and U-notch trowels featuring durable steel-blade construction and rubber handles.



FLOOR ROLLER
HEAVY DUTY 75LB STEEL FLOORING ROLLER



Ideal for pressing flooring evenly to activate pressure-sensitive glue, ensuring flat and even installation. The removable wheels make for easy rolling around corners and along edges.

Subfloor Requirements

1. The subfloor must be level to within $\frac{3}{16}$ " in a 10ft. (4.76mm in a 3m) span or $\frac{1}{8}$ " in a 6ft. (3.175mm per 1.8m) span or otherwise appropriate ratios of this requirement; no high or low spots.
2. Subfloors should not slope more than $\frac{1}{2}$ " per 6ft. (25mm per 1.8m) and must be structurally sound without deflection.
3. The subfloor must be clean with no construction debris, dust, soil, mud, or any other objects on or adhering to the floor. If necessary, scrape and sweep away before the installation; no protrusions of nails, debris, or metals should remain.
4. Even though AXON Performance Woven is waterproof, checking moisture levels is required to protect both the subfloor and surrounding structure. Testing helps prevent pH damage, hydrostatic pressure damage, and situations in which mold or mildew could grow. AXON Performance Woven Flooring will not act as a waterproofing barrier for

the subfloor or any surrounding structure and should not be used to seal an existing floor from moisture.

- 4.1. Moisture requirements vary from one subfloor material to another. The subfloor must be free from moisture-related conditions that can damage the installed flooring. All subfloors must fall within the parameters of ASTM F710.
- 4.2. Moisture Testing (RH): Test all subfloors for moisture content and document the results. Visual checks are not reliable. The relative humidity (RH) must not exceed 85%.
- 4.3. pH Testing: The subfloor should have a pH level between 5.0 and 9.0. Readings below 5.0 and above 9.0 can affect resilient flooring and adhesives negatively.
- 4.4. In the absence of such testing, Urban Surfaces' Infiniti Moisture Protection must be applied, or a suitable moisture vapor barrier must be in place before installing GlueDown LVP floor coverings (such as a compatible roll-on moisture vapor barrier rated for 100% RH).

Crawl Spaces

The concrete slab or ground must be dry. Ensure that crawl spaces have open ventilation year-round to ensure proper air circulation and prevent moisture buildup. Crawl-space clearance between the earth and underside of joists should be no less than 18" (45.7cm), and the perimeter vent area should be equal to 1.5% of the total square footage of the crawl space or as mandated by code. Crawl spaces should be insulated and have a vapor barrier covering exposed earth.

Substrates

It is possible to install AXON Performance Woven Flooring over many existing floor coverings. Any subfloor or underlayment must be installed per the manufacturer's instructions. All substrates (including existing flooring) to receive vinyl flooring must be free of residual adhesive (including cutback adhesive), adhesive removers, alkaline salts, excessive carbonation/laitance, mold, mildew, dust, wax, oil, grease, solvent, paint, or curing compounds, sealing compounds, hardening/parting compounds, or any other foreign materials. It is the responsibility of the contractor/installer to determine the suitability of the substrate for receiving vinyl flooring.

Wood Substrates

Wood subfloors must be structurally sound and in compliance with local building codes.

1. Double-layered, APA-rated plywood subfloors should be a minimum 1" total thickness with at least 18" of well-ventilated air space beneath. (See crawl space requirements.)
2. Add a layer of APA underlayment-grade plywood that is dimensionally stable and non-staining, with a smooth-sanded face. Birch is recommended.
 - 2.1 Numerous plywoods out on the market will negatively impact the adhesive bond. Plywoods that are treated chemically to prevent fire or water can act as a bond inhibitor and must be treated

with a primer. Contact Urban Surfaces to ensure the plywood used is acceptable for installation.

- 2.2 Chipboard, OSB, and particleboard should be primed to prevent adhesive absorption.
3. DO NOT install over sleeper-construction subfloors or wood subfloors applied directly over concrete. Sleeper floors and other wood structures on top of concrete that do not meet the crawl space requirements can create moisture issues beneath the subfloor. This can lead to mold, mildew, or even wood rot in the subfloor construction.
4. DO NOT apply moisture barriers over wood subfloors.
5. Urban Surfaces AXON Performance Woven Flooring is not recommended directly over fire-retardant-treated plywood, preservative-treated plywood, or luan plywood. These types of plywood and materials used to treat them may cause problems with adhesive bonding.
 - 5.1 An additional layer of APA-rated, ¼" thick underlayment should be installed.
6. All subfloors must be properly supported and anchored.

Strip-Plank Wood Flooring

Due to the expansion/contraction of individual boards during seasonal changes, Urban Surfaces recommends that ¼" or thicker APA-rated underlayment panels be installed over these types of subfloors.

Moisture In A Wood Substrate

Perform moisture tests using a reliable and calibrated pin-type moisture meter in multiple locations with a calibration setting specified for that subfloor material type. Take a minimum of 20 spread-out readings per 1,000 sqft. Moisture readings should never exceed 14% for wood subfloors. If moisture readings exceed 14%, they should be corrected at the job site before installing Urban Surfaces floors.

Concrete Substrates

New or existing concrete subfloors must be tested and in accordance with the requirements of the latest edition of ACI 302 and ASTM F710, "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring."

1. Concrete must be dry and fully cured.
2. Slabs on or below grade must be free of hydrostatic pressure and have an effective vapor barrier directly beneath the slab.
3. DO NOT use curing compounds. If present, they can interfere with the bond of the adhesive to the concrete. Contact the substrate manufacturer for assistance if curing agents are present.
4. Concrete floors shall be flat, smooth, and level within the floor flatness requirements.
 - 4.1 Number System: Overall values of FF 36/FL 20 may be appropriate for resilient floor coverings.

- 4.2 High spots can be removed by grinding; depressions can be filled with patching compound formulated for use in floor installation. Make sure to use cementitious floor-patching compounds that are compatible with the substrate type.
- 4.3 Patching or underlayment compounds shall be moisture, mildew, and alkali-resistant and must provide a minimum of 3,000 psi compressive strength.
- 4.4 Chipboard, OSB, Particleboard should be primed to prevent adhesive absorption.
5. pH must be between 5.0 and 9.0 pH when performing pH testing.
 - 5.1 pH readings below 5.0 and above of 9.0 negatively affect resilient flooring and adhesives.
6. To receive resilient flooring, all slabs must meet local building code requirements including compressive strength and density.
 - 6.1 It is not advised to install AXON Performance Woven Flooring over slabs with less than 2,500 psi compressive strength.
7. Substrates must be hard, dense, and free from powder or flaking.
8. All concrete substrates must meet the adhesive's requirements—including any priming.

Moisture In Concrete Substrates

Maximum moisture levels should be determined by the allowable tolerances stated in ASTM F710, ASTM F2170, ASTM F1869, and the adhesive and primer manufacturer's instructions. The lowest allowable tolerance must be used when installing resilient flooring.

Lightweight Concrete & Gypsum Concrete Subfloors

Lightweight concrete and gypsum concrete subfloors must meet all specifications listed under "Concrete Substrates". These substrates must also meet these additional requirements:

1. Lightweight concrete and gypsum-based underlayment
 - 1.1 Slabs exposed to heavy static and/or dynamic loads should be designed with higher strengths and densities adequate to support such loads.
2. The subfloor surface must be permanently dry, clean, smooth, free from all dust/debris, and structurally sound.

Radiant Heating System

Ensuring stable job site conditions, subfloor suitability, and proper acclimation is especially important when installing over a radiant heat system. It is the responsibility of the installer/owner 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 the specific requirements for installation. It is recommended that the user consult with the radiant heating provider for best practices, installation methods, and proper subfloors. In-floor radiant components must be a minimum of 1/2" (13mm) below the flooring within the substrate. The surface temperature of the slab should never exceed 85°F (29°C). The heating system should be operational for at least two weeks before installation to calibrate temperature settings. Flooring cannot be laid directly over radiant heating mats. Lower the temperature to 65°F (18°C) three days before installation. After installation, gradually adjust the temperature in increments of 5°F (2.78°C) per day to avoid rapidly heating and cooling the flooring, which could lead to damage. The use of an in-floor temperature sensor is recommended to avoid overheating.

Installing Over Resilient Floor Covering

1. Must be single-layered, non-cushion backed, fully adhered, and smooth.
2. Show no signs of moisture or alkalinity.
3. Waxes, polishes, grease, grime, oil, or other contaminants must be removed.
4. Cuts, cracks, gouges, dents, and other damage/irregularities in the existing flooring must be appropriately repaired or replaced.
5. An embossing leveler is recommended to aid in proper bonding and prevent telegraphing.

Installing Over Quarry Tile, Terrazzo, Ceramic Tile, Poured Floors (Epoxy, Polymeric, Seamless)

1. Must be cured completely and well-bonded to the concrete.
2. Must be free of any residual solvents and petroleum derivatives.
3. Waxes, polishes, grease, grime, and oil must be removed.
4. Must show no signs of moisture or alkalinity.
5. Cuts, cracks, gouges, dents, and other irregularities in the existing floor covering must be repaired or replaced.
6. Fill any low spots, holes, chips, and seams that may telegraph through the new flooring. The substrate must also meet the floor flatness requirements.
7. Grind any highly polished or irregular/smooth surfaces. Quarry and ceramic tile grout joints (as well as textured surfaces) must be filled with an embossing leveler or substrate manufacturer-approved material.

Old Adhesive Residual

1. If any type of adhesive is present, it must be dealt with in one of three ways:

- 1.1 It may be mechanically removed with a method such as bead blasting or scarifying if it is safe to do so. Do not grind cutback.
 - 1.2 A self-leveling, Portland-based underlayment may be applied over it. Verify with the substrate manufacturer for application instructions, guidelines, suitability, and warranties.
 - 1.3 Use an encapsulating product such as Urban Surfaces' Trilogy™ Multipurpose Primer or Infuse™ Encapsulator and Primer.
2. Never use solvents or citrus-based removers to remove old adhesive residue. Solvents or other removers left in/on the subfloor may affect the new adhesive and floor covering.

Non-Approved Subfloors

- Carpeting
- Used Carpet Pad
- Parquet
- Cork
- Cushioned Vinyl Flooring
- Engineered Hardwood
- Sleeper Substrates
- Floating Floors
- Rubber
- Laminate
- Floating LVP
- Solid Hardwood

Underlayments

Urban Surfaces' FloorSilencer Pro™ underlayment (or an underlayment meeting the same specifications of density, thickness, and material type) may be used with AXON Performance Woven Flooring if desired. Please follow the manufacturer's specifications and directions for the installation of a GlueDown floor. The installer/owner is responsible for making sure the underlayment is suitable and installed correctly.

Adhesive & Primer

For exterior installations, 3050 Omni™ Adhesive & Moisture Barrier is required. For interior installations, use 3010 Prism™ Firm Set Adhesive, 3020 Everlast™ Hard Set Adhesive, or 3050 Omni™ Adhesive & Moisture Barrier. See the 'Recommended Products' section for details. Follow the instructions of the adhesive manufacturer for porous or non-porous substrates. Always roll and cross-roll the flooring with a 75-100 lb, 3-section roller according to the adhesive's instructions to ensure proper adhesive transfer and bond. Use a hand roller in areas that cannot be reached with a 75-100 lbs, 3-section roller.

BEFORE INSTALLING

Acclimation

- Always acclimate flooring and adhesives in the area to be installed. Stack boxes no more than 3 cartons high, and space out the stacks in the area to be installed. Keep away from direct sunlight. Flooring does not need to be taken out of the boxes. Simply open the boxes at the ends.

- It is important that flooring products maintain a constant temperature between 65°F (18°C) and 85°F (29°C) for 48 hours before, during, and 72 hours after installation.
- Thereafter, maintain a room and floor temperature between 60°F (15.5°C) and 95°F (35°C). An HVAC system must be on and functional.

Prep

Prepare the subfloor to be dry, smooth, level, clean, and free of impediments. See subfloor and substrate requirements before installation.

BASIC INSTALLATION PROCEDURE

Follow these critical steps for a successful installation.

Starting Wall

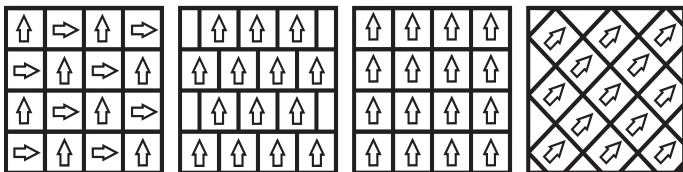
Choose a starting wall to begin the installation. It is recommended to install along the length of the room.

Pattern Separation

Before installation, unbox the planks and set them in stacks of similar plank patterns. Pull from the stacks purposefully to ensure an evenly distributed installation. If the pattern has a high variation in color, then this process becomes even more important. To ensure the most natural look, avoid installing the same plank patterns next to each other in groupings.

Installation Pattern

Determine the desired pattern of installation prior to beginning installation (see figures below).



Plank Count And Placement

To know the quantity of product needed and to prevent cutting and placing edge planks smaller in size than what is approved (as any plank cut smaller than 8" long or 3" wide will compromise the integrity of the installation and void the warranty), determine how many planks are needed length-wise and width-wise from wall to wall, then calculate how far to offset the first row so all edge rows and planks maintain adequate size.

Guide Line

For an even, consistent look, the flooring should be installed square to the room. Creating a guideline will make sure your installation looks professionally finished and square.

1. Choose two locations towards the ends of the starting wall. This will allow you to draw an accurate guideline across the room.
2. From both locations, measure an equal distance from the starting wall out towards the room and mark with a pencil or permanent marker.
3. Snap a chalk line between the two points, connecting them.
4. Draw over the chalk with a pencil or permanent marker so the guideline is visible through the adhesive once it is spread.

Adhesive Application

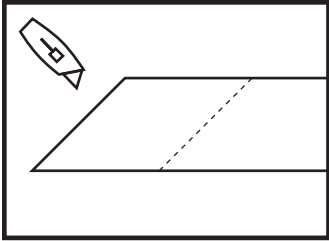
Apply adhesive across the installation area in sections that are workable within the allowed open time per the adhesive manufacturer. Spread adhesive in such a way that you can reach the guideline to install the first row.

Plank Installation

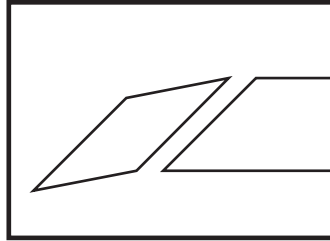
1. Install the first row along the Guide Line. Cut the starting and ending plank so they are no shorter in length than 8".
2. Fit planks tightly together, avoiding gaps. Keep your work square.
3. Lay subsequent rows into the adhesive. Maintain proper spacing (at least 8") when staggering end joints. It is recommended to leave a 1/8" inch gap around the perimeter.
4. To cut a plank, simply measure and mark the plank with a pencil, then use a straight edge and utility knife to score and snap.
5. Be mindful of pattern repetition and design.
6. Work from multiple boxes selecting different patterns creating a more random effect. If you install the same repeat together the finished floor will look artificial.

Cutting

AXON Performance Woven Flooring cuts cleanly with the right tools. For straight cuts, mark the tile with a pencil and score along a straight edge with a utility knife. A guiding cutter gets you the cleanest line in one pass. A guillotine cutter works fine for cross-cuts on the width.



Score



Snap

TIP: For cutting around irregular objects, use the original packaging of the flooring box to cut out a rectangle equal to the size of the plank. Use the cardboard as a template to trace on, and cut it to fit around pipes and other irregularities. Place the cardboard pattern on a plank, trace the outline, and cut along the traced lines.

Roll and Cross-Roll Floor

If using a pressure-sensitive adhesive, roll the flooring in both directions with a 75-100 lbs, 3-section, hard-surface floor roller to ensure proper adhesive transfer and bond. Use a hand roller in hard-to-reach areas.

Toilets

1. When installing in restrooms, toilets will need to be removed.
2. Once the toilet has been removed, use the same method of cutting around irregular objects to cut around the toilet flange and bolts. Make sure to leave a 1/8" expansion gap, including around the toilet bolts.
3. Re-install the toilet.
4. Seal around the toilet using a premium, 100% silicone, waterproof sealant.

Installing On Stairs

To install flooring on stair treads and risers:

1. Determine if the planks will be installed on the treads alone or both the tread and riser.
2. Apply an appropriate amount of Urban Surfaces adhesive (recommended Stronghold™) or equivalent to the substrate and dry per the adhesive's installation instructions.
3. Press the planks into the adhesive starting with the treads first, followed by the riser.
4. Use a hand roller to apply pressure to planks to ensure they are firmly embedded into the adhesive.
5. Use a stair nose molding at the leading edge of the stair treads. As of the making of this document, Urban Surfaces does not provide a GlueDown stair nose.
6. If desired, use colored silicone caulk to fill in the seam where the treads and risers meet.

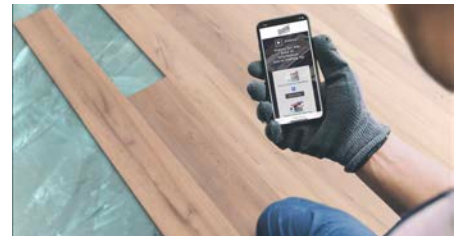
AFTER INSTALLATION

Floor Care

DO NOT drag furniture across the floor. Use appropriate protection, such as plywood, before moving furniture as outlined by the care and maintenance guide as well as the warranty. See the care and maintenance guide for proper care instructions.

Visit www.urbansurfaces.com for the maintenance guide and cleaning instructions.

Check Out Our Video Installation Series!





THANK YOU FOR CHOOSING URBAN SURFACES

Proudly serving the multi-unit and builder markets with beautiful, innovative, and high-quality flooring products since 2001. For additional information, consult your representative, visit UrbanSurfaces.com, or call our office toll-free (800) 492-8722.

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