

PRE-INSTALLATION

Following the instructions in this guide are required to ensure your floor is attractive, long-lasting and covered by the manhufacturer's warranty. These instructions apply to residential, light-commercial/multi-family, and commercial flooring installations. GlueDown floors are intended for interior use only and are suitable for above grade, on grade, and below-grade applications. Permanent cabinets, vanities, islands and similar items should be installed prior to installing glue down flooring. It is recommended to leave a 1/8" inch gap around the perimeter. GlueDown flooring can be installed under vanities with legs. DO NOT install in areas that are prone to flooding, or areas that are not climate controlled.

PROTECT

Protect your floor from exposure to direct sunlight via the use of window treatments or UV-tinting on windows. Discoloration to flooring may occur due to UV fading resulting from direct sunlight exposure. UV/radiant heating from direct sunlight can also cause the temperature of the flooring to rise well above the ambient room temperature leading to damage. Adhesive products for flooring may vary in temperature range requirements and may not match the same specifications of the flooring. Always follow the guidelines for all products used.

COVERAGE ALLOWANCES

Order 5-10% more flooring than 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.

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 prior to purchasing/installing.
- Avoid installing material from different batches across large areas.



SUBFLOOR REQUIREMENTS

- 1. The subfloor must be level.
- 2. Subfloors must be structurally sound without deflection.
- 3. Must be clean: 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 GlueDown Floor Coverings are waterproof, checking moisture levels is required to protect both the subfloor and surrounding structure, prevent pH damage, damage from hydrostatic pressure, and situations in which mold or mildew could grow. GlueDown Floor Coverings 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 should not exceed 85% RH.
 - 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, a suitable moisture vapor barrier must be in place before installing GlueDown Floor Coverings. (Such as a compatible roll-on moisture vapor barrier rated for 100% RH).

CRAWL SPACES

Concrete slab or ground must be dry. Ensure that crawl spaces have open vents year-round to ensure proper air circulation and prevent moisture build-up. 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 glue down flooring over many existing floor coverings. Any subfloor or underlayment must be installed in accordance with the manufacturer's instructions. All substrates (including existing flooring) to receive vinyl flooring shall 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, sealing, 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, non-staining, with a smooth sanded face. Recommended: Birch
 - 2.1. There are numerous plywoods out on the market that will 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 Catalina Products International to insure the plywood used is acceptable for installation.
 - 2.2. Chipboard, OSB, 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 of the subfloor construction.
- 4. DO NOT apply moisture barriers over wood subfloors.
- 5. Catalina Products International resilient flooring is not recommended directly over fire-retardant treated plywood, preservative treated plywood or Lauan. The materials used to treat these plywoods and inherent nature of the materials may cause problems with adhesive bonding.
 - 5.1. An additional layer of APA rated 1/4" thick underlayment should be installed.
- 6. All subfloors must be properly supported and anchored.

STRIP-PLANK WOOD FLOORING:

Due to expansion/contraction of individual boards during seasonal changes, Catalina Products International recommends 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 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 1000 sq.ft. Moisture readings should never exceed 14% for wood subfloors. If moisture readings exceed 14%, it should be corrected at the job site before installing Catalina Products International floors.



CONCRETE SUBSTRATES:

New or existing concrete subfloors must meet 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 to 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 for mulated for use in floor installation. Ensure to use cementitious floor patching compounds that are compatible with the substrate.
 - 4.3. Patching or underlayment compounds shall be moisture, mildew, and alkali-resistant and must provide a minimum of 3000 psi compressive strength.
- 5. pH must be between 5.0 and 9.0 pH when performing pH testing.
 - 5.1. pH readings below 5.0 and in excess of 9.0 can have negative effects on resilient flooring and adhesives.
- 6. All slabs to receive resilient flooring must meet local building code requirements including for compressive strength and density.
 - 6.1. It is not advised to install a glue down floor over slabs with less than 2500 psi compressive strength.
- 7. Must be hard, dense, and free from powder or flaking.
- 8. All concrete substrates must meet the adhesive 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 as well as 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 of the specifications listed under 'Concrete Substrates.' These substrates must also meet these additional requirements:

- Lightweight concrete and gypsum-based underlayment
 Slabs with exposure to heavy static and/or dynamic loads should be designed with higher strengths and densities adequate to support such loads.
- 2. Surface must be permanently dry, clean, and smooth, free of all dust, and structurally sound.

RADIANT HEATING SYSTEM: HYDRONIC ONLY

- 1. Ensuring stable job site conditions, subfloor suitability and proper acclimation are especially important when installing over a radiant heat system.
- 2. Refer to your radiant heat system manufacturer to determine its compatibility with vinyl flooring, and to learn the specific requirements for installation. It is recommended that the user consults with the radiant heating provider for best practices, installation methods, and proper subfloors.
- 3. In-floor radiant components must be a minimum of $\frac{1}{2}$ " (13mm) below flooring within the substrate.
- 4. The surface temperature of the slab should never exceed 85°F (29°C). The heating system should be operational for at least two weeks prior to installation to calibrate temperature settings.
- 5. Flooring cannot be laid directly over radiant heating mats.
- 6. 3-days prior to installation lower the temperature to 65°F (18°C).
- 7. After installation, gradually adjust the temperature in increments of 5°F 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.

RESILIENT FLOOR COVERING

- 1. Must be single-layered, non-cushion backed, full 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 and/or irregularities in the existing flooring must be appropriately repaired or replaced.
- 5. An embossing leveler is recommended to aid in proper bonding and to prevent telegraphing.



OLD ADHESIVE RESIDUAL

- 1. If any type of adhesive is present, it must be dealt with in one of two ways:
 - 1.1. It may be mechanically removed with a method such as bead blasting or scarifying if it is safe to do so.
 - 1.2. A self-leveling Portland based underlayment may be applied over it.
 - 1.2.1. Verify with the substrate manufacturer for application instructions, guidelines, suitability, and warranties.
- 2. Never use solvents or citrus adhesive removers to remove old adhesive residue. Solvents or other removers left in/on the subfloor may affect the new adhesive and floor covering. CAUTION Skim coating over old adhesive is not advised. The adhesive may break down and could lead to a failure. The old adhesive may not allow the resilient flooring to retain its dimensional stability, possibly leading to unnecessary indentations.

NON-APPROVED SUBSTRATES

- Carpeting/Carpet PAD Parquet
- Cork Cushioned Vinyl Flooring
- Engineered Hardwood Sleeper Substrates
- Floating Floors Rubber
- Laminate

UNDERLAYMENTS

Leggett & Platt's Whisper Step® or an underlayment meeting the same specifications of density, thickness and material type may be used with Catalina Products International resilient products if desired. Please follow the manufacturer's specifications and directions for the installation of a vinyl glue down floor. The installer/owner is responsible for making sure the underlayment is suitable.

ADHESIVE & PRIMER

Prior to application, determine if the substrate is porous or non-porous. Follow the instructions of the adhesive manufacturer for porous or non-porous substrates. Always ensure to roll and cross roll the flooring with a 75-100lb 3-section roller in accordance with the adhesive direction to ensure proper adhesive transfer and bond. Use a hand roller in areas that cannot be reached with a 75-100lb 3-section roller.

Recommended Adhesive:



INSTALLATION OF THE FLOOR COVERING

Whether you're a pro or DIY homeowner, installing Catalina Products International resilient flooring couldn't be easier. No power saws needed; resilient flooring scores and snaps with a simple utility knife.

ACCLIMATION

- Stack boxes no more than 3 cartons (3ft.) high and space out the stacks. Keep away from direct sunlight. Flooring does not need to be taken out of the boxes, just opened 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 prior to, 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 subfloor to be dry, smooth, level, clean and dust-free.
- See subfloor and substrate requirements prior to installation

INSTALL

- 1. Choose starting wall
- 2. Determine an installation pattern
- 3. Draw a 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.
 - 3.1. Choose two locations towards the ends of the starting wall, this will allow you to draw an accurate guideline across the room.
 - 3.2. From both locations measure an equal distance from the starting wall out towards the room and mark with a pencil or permanent marker.
 - 3.3. Snap a chalk line between the two points connecting them.
 - 3.4. Draw over chalk with pencil or permanent marker so the guideline is visible through the adhesive once it is spread.
- 4. Determine how many planks are needed length and widthwise from wall to wall.
 - 4.1. Measure your starting wall.
 - 4.2. Divide the length of the wall by the length of the plank. This will determine how many planks will be needed for each row.
 - 4.3. Cut the starting and ending plank so they are no shorter than 8".
 - 4.3.1. 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.
 - 4.4. Do the same for the short side of the planks on the opposite walls Cut the starting and ending plank lengthwise (Ripping) so the width is not less than 3" (if possible)
 - 4.4.1. To rip a plank, simply measure and mark the plank lengthwise with a pencil. Then, use a straight edge and utility knife to score and snap.



INSTALL CONTINUED

- 5. Spread adhesive
 - 5.1. Apply adhesive across the installation area in sections that are workable within the allowed open time per the adhesive manufacturer.
 - 5.2. Spread adhesive in such a way that you can reach the Guide Line to install the first row.
- 6. Install planks
 - 6.1. Install the first row along the Guide Line.
 - 6.2. Fit planks tightly together avoiding gaps. Keep your work square.
 - 6.3. 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.
 - 6.4. 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.
 - 6.5. Be mindful of pattern repeat and design.
 - 6.6. Work from multiple boxes selecting different patterns creating a more random effect. If you in stall the same repeat together the finished floor will look artificial.

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. Cutting the product into a fine point may lead to delamination which would not be considered a defect. Fuse the point utilizing an ethyl cyanoacrylate-based super glue. Be sure to clean all of the glue from the surface immediately.

7. Roll floor if using a pressure sensitive adhesive, roll the flooring with a 75-100lb 3-section hard surface floor roller to ensure proper adhesive transfer and bond. Use a hand roller in hard-to-reach areas.

CUTTING

- 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.
- To cut a plank lengthwise (Ripping), simply measure and mark the plank lengthwise with a pencil. Then, use a straight edge and utility knife to score and snap.

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. Ensure to leave a 1/8" expansion gap including around toilet bolts.
- 3. Re-install toilet.
- 4. Seal around the toilet using a premium waterproof 100% silicone 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 adhesive to the substrate and dry per the 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. *GlueDown stair nose is not provided by Catalina Products International.
- 6. Use colored silicone caulk to fill in the seam where the treads and risers meet if desired.