



## INTRODUCTION

These instructions are written as a guide to be used by professional installers when installing Protect-All products. These instructions, combined with our adhesives and flooring products, create a stair system. Utilizing this system will help ease the installation process and provide the customer with a completed product. Always visit [protect-allflooring.com](http://protect-allflooring.com) for the most current installation and maintenance instructions.

## HANDLING AND STORAGE

Protect-All cannot accept responsibility for any loss or damage that may result due to processing or working conditions and/or workmanship outside our control. Users are advised to confirm the suitability of this product by their own tests.

STORING ALL PRODUCTS & ADHESIVES	PREINSTALLATION
Ensure sheets are laid flat and stack squarely on top of one another when stored.	Room temperature must be maintained between 50 F (10 C) and 95 F (29.4 C) with ambient relative humidity between 40% and 60% for 48 hours prior to, during and 48 hours after installation. <b>NOTE: Permanent, operational HVAC systems are highly recommended. If an alternate system is utilized, it must provide proper control of both temperature and humidity for the above stated time durations.</b>
	Site-condition flooring and adhesives 48 to 72 hours prior to installation.
Maintain temperature between 50 F (10 C) and 95 F (29.4 C).	In areas exposed to intense or direct sunlight, protect the product by covering the light source during site-conditioning, installation, and adhesive curing periods
Maintain relative humidity between 40% and 60%.	Inspect all flooring material to verify accuracy of order as well as for any damage, visual defects and satisfactory color match. Notify an authorized Protect-All Distributor or Representative prior to installation if any defects are found. <b>NOTE: Protect-All will not pay labor costs claimed on installed materials with visual defects.</b>

## GENERAL SUBFLOOR PREPARATION

**An adhesive bond test** must be performed using the actual flooring materials and adhesive to be installed. The test areas must be a minimum of a 36" piece and remain in place for at least 72 hours and evaluated for bond strength to the substrate.

**A porosity test** must be performed on the substrate to determine which installation method (porous or nonporous) will be required. Refer to **ASTM F3191** *Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring*

Substrate Construction	Requirements
All Staircases	Permanently dry, clean, smooth and structurally sound
Substrates	<p>Free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing and parting compounds, old adhesive, and any other foreign material, which could affect the installation and adhesive bond to the substrate. All substrate contaminants must be mechanically removed prior to the installation of the flooring</p> <p><b>DO NOT use liquid solvents or adhesive removers, or oil-based sweeping compounds.</b></p> <p>Minimum substrate temperature must be 40 F (15.6 C) and must be within 5 F (2.8 C) of ambient temperature</p> <p><b>AT THE TIME OF INSTALLATION: Testing the substrate with a Tramex moisture encounter meter (refer to ASTM F2659) is recommended because of possible issues related to topical moisture from dew point conditions. Substrate surface readings must not exceed 4%. If above 4%, contact Protect-All Technical Services prior to beginning installation. If these conditions are not properly addressed, the open and working times, bond strength and setting of the adhesive may be affected.</b></p> <p>Fill all depressions, dormant cracks, dormant saw cuts (control joints) and other surface irregularities with a good quality, cement-based underlayment patching compound appropriate for this purpose.</p>
Existing Flooring	<p>Remove all existing flooring materials and adhesives mechanically prior to installation of Protect-All Flooring</p> <p><b>NOTE: Refer to the Resilient Floor Covering Institute's (RFCI) <i>Recommended Work Practices for Removal of Existing Resilient Flooring</i> for best work practices.</b></p> <p><b>CAUTION: Some resilient flooring products and adhesives contain "asbestos fibers" and special handling of this material is required.</b></p>
Concrete	<p>Constructed as recommended by the American Concrete Institute's (ACI) 302.2 <i>Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials</i> <b>NOTE: Refer to ACI 302.2 for recommended drying times for newly poured concrete.</b></p> <p>Prepared in accordance with <b>ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring</b></p> <p><b>NOTE: The use of a high moisture and alkali resistant cementitious underlayment may be required. Contact a cementitious underlayment manufacturer for best recommendations.</b></p> <p>Test for RH in accordance with <b>ASTM F3441 Standard Guide for Measurement of RH Below Resilient Flooring.</b></p> <p>RH limits should not exceed 95% RH. With more detailed PH information on the adhesive label and in the adhesive specifications found online at <a href="http://protect-allflooring.com">protect-allflooring.com</a>. Test results must not exceed the limits of the adhesive; if they do, the installation must not proceed until the problem has been corrected.</p>
Wood	<p>Underlayment grade plywood that is smooth, free of knots or voids and a fully sanded face. <b>DO NOT</b> use preservative treated, fire-retardant plywood as these may be manufactured with resins or adhesives that can discolor the flooring</p> <p><b>NOTE: Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayment's.</b></p> <p>Meet local and national building codes. Refer to <b>ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayment's to receive Resilient Flooring</b> for additional information.</p> <p>Countersink nail heads and fill depressions, joints, cracks, gouges and chipped edges with a good quality, cement-based patching compound designed for this purpose</p>
Terrazzo & Ceramic	<p>Thoroughly sand to remove all glaze and wax</p> <p>Remove or replace all loose tiles and clean the grout lines</p> <p>Use a good quality, cement-based leveling compound to fill all grout lines and other depressions</p>
Steel	<p><b>NOTE: Follow all <u>nonporous</u> installation instructions</b></p> <p>Mechanically abrade to assist with adhesive bond</p>

## GENERAL INSTALLATION

1. Protect-All recommends the installation of new stairwell materials not be performed until all the other trades have completed their work. Or proper precautions must be taken during and after the installation process to avoid damage to the newly installed stairwell materials.
2. If the shape of the step does not conform to the shape of the stair tread or nosing and cannot be altered to conform, then the installation of Protect-All products is not recommended.
3. Trimming on both sides of the tread may be required to obtain proper fit and pattern match to adjacent steps.
4. **Wide staircases**, which require butting multiple lengths of product, will require additional planning and dry fitting prior to adhesive installation to ensure proper pattern alignment.

### Protect-All Stair Tread and Riser Installation

#### 1. Fitting One Piece Tread Riser Combination 1/4" Material:

- a. Since each step on a staircase can vary slightly in width, depth and squareness, Protect-All recommends scribing each tread and riser to ensure proper fit on the step.
- b. Measure the width of the step and place a pencil mark on the step's riser indicating the center of the step. Next, measure the length of the stair tread and mark the center point at the back of the tread where the tread meets the riser.
- c. Where the tread meets the riser, draw a line across the entire length of the tread.
- d. Using either a 3/4" Flat bit or a 3/4" Round Nose router bit, route out the center of the line no more than halfway through the material to create a relief cut to all the material to cove up the riser.
- e. If using a power groover, make a cut 1/8" on both sides of the center line. Groove depth will be no deeper than 1/8".
- f. Set the trimmed stair tread and riser in place.
- g. **With 1/4" material, no filling/cove stick is required behind the relief cut.**

#### 2. Fitting One Piece Tread Riser Combination 1/8" Material:

- a. Following the same installation instructions as required for 1/4" material, however, no relief cut is required.
- b. 1/8" material requires a cove stick or filler between the tread and riser.

#### 3. Adhesive Application: One-Piece Tread and Riser Combination using PA-295 Two-Part Urethane Flooring and Tread Adhesive

- a. Prior to applying adhesive, ensure the back of the tread and riser are clean and clear of any dirt or other contaminants that might affect the adhesive bond.
- b. **Important:** Step surface porosity must be checked to determine if the substrate is porous or non-porous prior to applying Protect-All Flooring and Tread Adhesive.
  - i. **For Porous Step & Riser Surfaces:** Trowel PA-295 Adhesive onto the back portion of the step surface using a 1/16" square-notched trowel. Follow adhesive pail label instructions. The stair tread or nosing **MUST** be placed into **WET** adhesive to obtain a transfer of adhesive to the back of the tread which is critical for a successful installation.
  - ii. **Open and working times are dependent on the ambient temperature, humidity, substrate porosity and temperature, and air movement. It is the installer's responsibility to adjust the open and working time based on jobsite conditions. Normal site conditions with an ambient temperature of 70 degrees to 80 degrees typically has an open time of 45 minutes.**
  - iii. **For Nonporous Step & Riser Surfaces:** Trowel Protect-All adhesive onto the tread portion of the step using a 1/16" Square-notch trowel. Follow adhesive pail label instructions. The stair tread or nosing **MUST** be placed into **wet** adhesive to obtain a transfer of adhesive to the back of the tread which is critical for a successful installation.

#### 4. Stair nose installation

Protect-All Flooring does not provide stair nosing as part of the tread and riser program.

- a. Follow all stair nosing manufactures installation requirements.
- b. If adhering Protect-All is being laid over the top of the stair nosing, ensure the stair nose is secured properly to the stair tread.
- c. Ensure any overlapping nosing does not create a trip hazard.

## ADHESIVE CLEAN UP

Excess adhesive should be removed during the installation process.

### PA-195 & PA-295 Two-Part Urethane

1. Before the adhesive sets, remove excess from flooring and clean tools with denatured alcohol (methyl hydrate) or 70% isopropyl alcohol applied to a clean white cloth (follow manufacturer's precautions when using these chemicals).
2. Do not allow adhesive to dry on the flooring surface.
3. Removing dried adhesive may cause irreparable damage to the flooring surface.

## MAINTENANCE

1. Wait 12 hours after installation before performing initial cleaning.
2. A regular maintenance program must be started after the initial cleaning.
3. Refer to Protect-All's Maintenance Instructions for complete details.

## ADHESIVE INFORMATION

Only Protect-All adhesives are recommended for use with Protect-All products.

**This product should be installed by a qualified professional in accordance with local building codes and safety regulations. Protect-All, and Amrize Building Envelope LLC, is not responsible for any damage to property, injury, or product failure resulting from improper installation, misuse, or failure to follow the provided instructions.**

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