

Luxury Solid Vinyl Flooring

Installation System

Product	Adhesive	Comment
NATURAL OPTIONS: All patterns except Rustico	S-599 or S-240	Roll with 100-lb. roller; Install tile in same direction
NATURAL CREATIONS	S-599 or S-240	Roll with 100-lb. roller; Install tile in same direction
Rustico	S-240	Roll with 100-lb. roller; Install tile in same direction

Suitable Substrates:

All substrates listed below must be properly prepared and meet the requirements discussed in Section IV, Subfloors and Underlayments. There may be certain exceptions and special conditions for these substrates to be suitable for the Luxury Solid Vinyl Flooring Installation System.

- Concrete (all grade levels)
- Steel, Stainless Steel, Aluminum
- Approved Suspended Wood
- Ceramic Tile, Terrazzo, Marble
- Polymeric Poured (seamless) Floors

Job Conditions/Preparation:

- Substrates must be dry, clean, smooth, and free from paint, varnish, wax, oils, solvents and other foreign matter.
- In renovation or remodel work, remove any existing adhesive residue* so that 100% of the overall area of the original substrate is exposed.
- Allow all flooring materials and adhesives to condition to the room temperature a minimum of 48 hours before starting the installation.
- The area to receive resilient flooring should be maintained at a minimum of 65°F (18°C) and a maximum of 100°F (38°C) for 48 hours before, during and for 48 hours after completion. **When using S-240 Epoxy Adhesive the maximum room temperature should not exceed 85°F (29°C).**
- During the service life of the floor the temperature should never fall below 55°F (13°C). The performance of the flooring material and adhesives can be adversely affected below this minimum temperature.
- Conduct calcium chloride tests. Bond tests should also be conducted for compatibility with the substrate. Please refer to Section IV, Subfloors and Underlayments.
- Radiant-heated substrates must not exceed a maximum surface temperature of 85°F (29°C).
- Concrete floors should be tested for alkalinity. The allowable readings for the installation of Armstrong flooring are 5 to 9 on the pH scale.

** Some previously manufactured asphaltic "cutback" adhesives contained asbestos (see warning statement on page xi). For removal instructions, refer to the Resilient Floor Covering Institute's publication Recommended Work Practices for Removal of Resilient Floor Coverings.*

Fitting:

Before installing the material, plan the layout so tile joints fall at least 6" away from subfloor/underlayment joints. Do not install over expansion joints.

When installing NATURAL OPTIONS Wood Collection and NATURAL CREATIONS planks, the end joints should be staggered a minimum of 6" apart.

When installing NATURAL OPTIONS Stone Collection rectangles, the tile can be installed in block/tile fashion or offset tile joints by one-half tile.

Recommended fitting procedures include straight scribing, pattern scribing, or cut with a tile cutter.

Abutting Different Gauges of Resilient Flooring: When installing thinner gauge material next to thicker gauge materials, install thicker material first and then butt a 12"-wide piece of S-153 Scribing Felt against the thicker material. Adhere the Scribing Felt to the subfloor with S-235 Adhesive. Use the fine notching of the Armstrong S-891 Trowel over nonporous substrates such as existing resilient flooring, and use the regular notching of the Armstrong S-891 Trowel over porous subfloors such as wood and concrete. Use Armstrong S-184 Fast-Setting Cement-Based Patch and Skim Coat or S-194 Patch, Underlayment and Embossing Leveler to feather the edge of the S-153 Scribing Felt to the level of the substrate. Allow the patch to dry completely before installing the flooring. Scribing Felt is not recommended to be used under the entire installation.

Adhesive Open Times and Trowel Notchings

Adhesive	Set-in-Wet for Porous Subfloors	Nonporous Subfloors
S-599	Open Time: Approximately 10 minutes Fine notch: 1/32" deep, 1/16" wide, 5/64" apart	Not recommended
S-240	Open Time: Approximately 10-20 minutes Fine notch: 1/32" deep, 1/16" wide, 5/64" apart	Same as porous

Note: Allowing the proper open time will help to minimize tile shifting. The amount of open time will vary according to job conditions, temperature, humidity, air flow and type of substrate.

Procedure:

See Adhesive Open Times and Trowel Notching above.

■ **Armstrong S-599 – Porous Substrates:**

Move the chalk lines to the corner or end of the room farthest from the doorway. These lines should be two or three feet from the wall depending on your reach. (Fig. 1)

1. Apply the S-599 Adhesive in two- or three-foot bands (Fig. 2). Do not apply more adhesive than you can cover within 20 minutes. Allowing a 10 minute open time and fitting the border tile tightly will reduce tile shifting and adhesive oozing. Do **not** allow the adhesive to dry completely.
2. Install tile pointing in the same direction.
3. Roll the tile in both directions within 30 minutes after spreading using a 100-lb. roller. Immediately remove the adhesive from the surface of the flooring using a clean white cloth dampened with detergent and water.

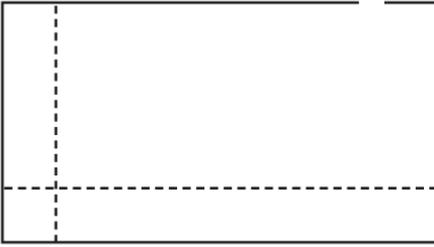


Fig. 1

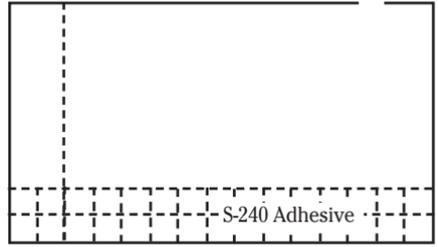


Fig. 2

4. Do not work on newly installed tile except to roll tile. Use a kneeling board if necessary.
5. Repeat Steps 1 through 4 until the installation is completed.
6. Newly installed flooring should not be exposed to rolling load traffic for at least 72 hours after installation to allow setting and drying of the adhesive.

■ **Concentrated Static and Dynamic Loads with NATURAL CREATIONS and NATURAL OPTIONS Luxury Solid Vinyl Flooring using Armstrong S-240 Epoxy Adhesive:**

Product Performance under Concentrated Static and Dynamic Loads

Armstrong Luxury Solid Vinyl Flooring is used in many application where it is subjected to heavy static and dynamic loads. Some furnishings, **appliances** and equipment in certain environments may be equipped with wheels, casters, rests or other floor contact devices, which concentrate rather than distribute the load over the surface of the flooring. **Hospital patient beds** are one such example. With respect to portable furnishings and equipment, while concentrated wheel/caster loadings provide for easier mobility they can be particularly damaging to resilient flooring installations. Armstrong recommends that any furnishings or equipment be fitted with floor contact devices, which avoid concentrating weight loads.

Our experience has shown that the use of hard setting reactive adhesives like our S-240 Epoxy Adhesive, offer advantages and may help protect against damage, such as delamination, when used to install flooring underneath such furnishings and equipment. Depending on the application, the epoxy may only be necessary in limited areas of any particular installation such as an area immediately underneath and adjacent to the primary areas of contact with the flooring. In the case of certain heavy hospital beds, the application of the epoxy adhesive in an area that extends a minimum of one foot beyond the wheel base or footprint of the four casters (approximately 4 feet by 8 feet) may be sufficient.

Note: Rustico must be installed using S-240 Full-Spread

Move the chalk lines to the corner or end of the room farthest from the doorway. These lines should be two or three feet from the wall depending on your reach. (Fig. 1)

1. Apply the S-240 Adhesive in two- or three- foot bands (Fig. 2). Do not apply more adhesive than you can cover within 20 minutes. Allowing a ten minute open time and fitting the border tile tightly will reduce

tile shifting and adhesive oozing. Do not allow the adhesive to dry completely.

2. Mix entire contents of Part A and Part B together with a stirring motion while at the same time lifting from the bottom. Mix thoroughly for 3 to 5 minutes to a uniform color. **Do not over mix.** Never mix S-240 Adhesive on the subfloor surface.
3. **Immediately pour the entire unit of mixed adhesive onto the substrate. Do not leave mixed adhesive in cans as it shortens pot life and working time, and may generate excessive heat.** Maximum pot life of S-240 is approximately 15 minutes depending on temperature and humidity.
4. Apply S-240 Epoxy Adhesive with the recommended fine notching of the S-891 Trowel (1/32" deep, 1/16" wide, 5/64" apart).
5. After troweling the S-240 Adhesive, allow 10–20 minutes open time before placing the flooring into the adhesive. **Do not allow the S-240 to dry completely.**
6. When using S-240 Epoxy Adhesive in conjunction with the recommended Armstrong full-spread adhesive, plan out the open times so that the flooring may be placed into both adhesives at the same time. Working time of S-240 Epoxy Adhesive is 60 minutes.
7. After allowing the proper open time, carefully place the tile flooring into the S-240 Adhesive to ensure that air is not trapped beneath the flooring.
8. Within 30 minutes of the S-240 application roll the material using a 100-lb. roller. Starting at the center and working toward the edges, roll the material in the direction of the trowel notches and then again in the opposite direction (staying 2" away from any seams). Do not work on newly adhered flooring except to roll. Use a kneeling board if necessary.
9. Clean any adhesive residue from the surface of the flooring using a clean white cloth dampened with a neutral detergent and water. **Dried S-240 Epoxy Adhesive cannot be removed.**
10. Repeat rolling procedure at 1 hour and 2 hours after the initial application of S-240 Epoxy Adhesive.
11. Do not allow traffic on the flooring for 24 hours after installation.
12. Newly installed flooring should not be exposed to rolling load traffic for at least 72 hours after installation to allow setting and drying of the adhesive.

Precautions:

- Do not install NATURAL CREATIONS or NATURAL OPTIONS over existing resilient sheet or tile flooring.