Luxury Vinyl Tile

Product	Gauge	Size	Adhesive	Comments
American Personality 12	0.080" (2.0 mm)	Various	S-295, S-299, Flip, S-1000,	Roll with a 100-lb. roller
Residential And			or S-319 Roll	
Light Commercial			Strong	

Product Acclimation

No product acclimation is required if stored between 40°F (5°C) and 100°F (38°C) for 48 hours prior to installation.

Environmental Conditions

Outlined in this table are the environmental temperature conditions and time frames required.

	48-Hours Before Installation	During Installation	48-Hours After Installation	Thereafter-Normal Use
Room		65°F (18°C) - 100°F (38°C)		55°F (13°C) - 100°F (38°C); Completed installations may occasionally be heated up to 140°F (60°C)
				for a maximum of 24-hours***

Store product on a flat surface to make sure not to distort the visual.

***We recommend using floor protectors. As a general rule of thumb, the heavier the item, the wider the floor protectors should be. Temperatures above 100°F may accelerate indent – indentations at higher temperatures are not covered by warranty.

Product	Adhesive	Open Time (All Substrates)	
American Personality 12	S-295, S-299	Dry to Touch -	
	Use Trowel	Approximately 30 minutes	
Residential	(1/32″	(tacky to touch with no transfer to	
Light Commercial	(0.8mm deep,	fingers).	
	1/16″ (1.6mm)		
	wide		
	and 1/32"		
	(0.8mm		
	apart.)		
	Flip Spray		
	Adhesive		

WARNING: EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING

RESILIENT FLOORING, BACKING, LINING FELT OR ASPHALTIC "CUT-BACK" ADHESIVES.

These existing in-place products may contain asbestos fibers and/or crystalline silica refer to the caution section below. Avoid creating dust, inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the existing inplace product is a non asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern removal and disposal of material. See current edition of the Resilient Floor Covering Institute publications recommended work practices for removal of resilient floor coverings for instructions on removing all resilient floor covering structures. Contact Armstrong Flooring, Inc. 1 866 444 1122 for questions.

THE FLOOR COVERING IN THIS PACKAGE DOES NOT CONTAIN ASBESTOS.

Suitable Substrates

All substrates listed below must be properly prepared and meet the requirements discussed in Subfloors & Underlayments Section. There may be other exceptions and special conditions for these substrates to be suitable for Residential LVT Planks Installation Systems.

- Concrete (on all grade levels)
- Approved Suspended Wood Underlayments
- Single-layer, Fully Adhered, Existing Resilient Floors
- Ceramic tile, terrazzo, marble
- Polymeric Poured (seamless) Floors

DO NOT INSTALL OVER

- Particleboard, waferboard, OSB or single-layer Sturd-I-Floor panels
- Existing resilient tile floors that are below grade
- · Existing cushioned vinyl flooring
- Existing Hardwood flooring below grade

Job Conditions /Preparation

• Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.

Substrates must be sound, dry, clean, smooth, and free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents and other foreign matter that would interfere with a good bond such as curing agents and sealers.
In renovation or remodel work, remove any existing adhesive residue* so that no ridges or puddles are evident and what remains is a thin, smooth film.

• The area to receive resilient flooring and the flooring materials and adhesives should be maintained at a minimum of 65 degrees F (18 degrees C) and a maximum of 85 degrees F (29 degrees C) for 48 hours before installation, during installation and 48 hours after completion.

• This product can be installed into a room then the temperature can be raised to 140°F for a maximum of 24 hours.

• For concrete substrates, conduct moisture testing (moisture vapor emission rate (MVER) and/or percent relative humidity (in-situ probe). Bond tests must be conducted for compatibility with the substrate. Please refer to Subfloors and Underlayments section.e.

• Radiant heated substrates must not exceed a maximum surface temperature of 85 degrees F (29°C).

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

Precautions:

Proper conditioning of jobsite and product is extremely important for the appearance and performance of LVT planks
Do not wash or scrub the new flooring for at least 5 days after the installation. This will allow the tile to become "seated" in the adhesive and prevent excess moisture and cleaning agents from interfering with the adhesive bond.

Layout

Whenever possible, plan the layout so that the joints in the planks do not fall on top of joints or seams in the existing substrate. The end joints of the planks should be staggered a minimum of 6" apart. Do not install over expansion joints. To minimize repeats always work out of three cartons at time. Determine which direction the planks will run. Find the center of each of the end walls (the walls perpendicular to the long dimension of the planks) and place a pencil mark on the floor. Connect these points by striking a chalk line down the center of the room. Do a dry layout of planks from the center line to the wall running parallel to the long direction of the planks to determine the width of the last row of planks.

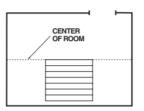


Fig. 1: Dry layout to determine width of border plank.

Avoid having border pieces less than 2" (5.1cm) wide for the 4" (10.2cm) wide planks and less than 3" (7.6cm) wide for the 6" (15.2cm) wide planks. If you find the border planks will be less than $\frac{1}{2}$ the width of the plank, the center starting line should be shifted a distance equal to $\frac{1}{2}$ the plank width. This will "balance" the room and provide for a larger cut piece at the wall.

Full-Spread Adhesive Instructions

General Information/Tools needed:

- We recommend using utility blades for cutting planks, these can be found in most hardware stores.
- When using a straight edge and utility knife, score the face of the plank several times and snap it.
- Planks are also easily cut with a tile cutter or a Magnum Shear.
- Recommended adhesives S-295, 299 Flip Spray
- Use Trowel (1/32" (0.8mm) deep, 1/16" (1.6mm) wide and 1/32" (0.8mm.)

• Please view installation instructions for detailed adhesive instructions. This information can be found on floorexpert.com or the adhesive label.

Procedure American Personality 12 with S-295, S-299 Flooring Adhesive

- Apply S-295 or S-299 adhesive to ½ of the area at a time so that you can start the installation along the center starting line. Allow the adhesive to set until dry to the touch. The working time of S-295 is 2 hours. The working time of S-299 is 4 hours.
- Begin laying planks along the center starting line and install row by row including the cut pieces at the perimeter until ½ of the installation is complete. Stagger the end joints by at least 6 inches (15.2 cm). Apply adhesive to the remaining portion of the room, allow the adhesive to dry-to-touch and complete the installation of planks in similar fashion. After the planks are installed, immediately roll the entire floor with a 100 lb. roller. Use a hand roller in confined areas where the large floor roller will not reach, such as under toe kicks.
- The planks may be walked on immediately; however, the floor should not be exposed to heavy rolling load traffic for 72 hours after the installation. Use pieces of hardboard or underlayment panels to protect the floor when moving heavy furniture and appliances back into the room.

American Personality 12 with Flip Adhesive

Spray Flip adhesive to ½ the room area at a time so that you can start the installation along the starting center line.

- A clean substrate is extremely important with the use of Flip Spray Adhesive! Thoroughly sweep and vacuum the substrate first. Damp mop to remove any remaining dust or debris. Extra attention to substrate preparation is essential for a successful installation. Failure to properly clean the substrate may result in telegraphing of debris.
- Shake the can well before each use. Point can downwards, press the side of the nozzle tip as you slowly walk back and forth overlapping the spray pattern for an even spray coverage. Do not use a sweeping motion as this may cause uneven coverage. Clean up any larger drops that may occur. Refer to the provided spray patterns for proper application. Over application may cause adhesive telegraphing.
- Bond testing prior to the installation will help identify the appropriate application rate, open and working time, and any potential bonding
 problems to the substrate or flooring. To determine the accurate coverage rate, measure and chalk line the substrate into grids (using the
 appropriate square feet of area for the adhesive application) and spray the entire can of adhesive onto each measured grid area.
- Allow the adhesive to dry completely with no transfer to fingers when lightly touched. Open time will vary depending on the adhesive coverage, substrate porosity and the ambient conditions.
- · Working time for the adhesive should not exceed 4 hours.
- Install the flooring as per the Armstrong Flooring recommendations for that particular material.
- Roll the floor immediately after the installation is complete with a 100-lb. roller. Normal traffic may be allowed as soon as the installation, finishing and clean-up are complete. Wait 24-hours for heavy traffic or rolling loads.

Safety and Clean Up:

- Wet adhesive overspray or drips should be cleaned up immediately with soap and water on a clean cloth. Dried adhesive may require the use of a solvent adhesive cleaner. Between uses, clean the spray tip immediately with a clean wet cloth to prevent accumulation of dried adhesive.
- Empty aluminum spray cans should be relieved of excess pressure and recycled or disposed of in accordance with local requirements. Do not expose to temperatures exceeding 115° F. Prolonged exposure to heat or direct sun may cause container to burst.

Coverage:

• Rate of application depends on porosity of the substrate: 140–150 square feet per can (approximate)

NOTE: Products with directional arrows on the back should be installed with the arrows all pointing in the same direction unless you are installing custom layouts.

Finishing The Installation

Replace molding or wall base, allowing slight clearance between the molding and the planks. Nail the molding to the wall surface, not through the flooring. At doorways and at other areas where American Personality 12 flooring may meet other flooring surfaces, it is preferable to use a "T" molding or similar to cover the exposed edge but not pinch the planks. Leave a small gap between the planks and the adjoining surface.

Proactive Protection for Your Floor

- When moving appliances or heavy furniture it is always wise to lay a plywood panel on your floor and "walk" the item across it. This protects your floor from scuffing and tears.
- Use floor protectors under furniture to reduce indentation. As a general rule of thumb, the heavier the item, the wider the floor protector needed.
- Place a walk-off mat at outside entrances to reduce the amount of dirt brought into your home. We strongly recommend mats without a latex or rubber backing since these backings can cause permanent discoloration.
- All Armstrong floor care products have been specifically developed to care for Armstrong floors.

Caring for Your Floor

• Sweep or vacuum regularly, to remove loose dirt which can scratch your floor.

NOTE: We do not recommend vacuums that have a beater bar since it can visibly damage your flooring surface. Additionally, we do not recommend electric brooms with hard plastic bottoms with no padding as use may result in discoloration and deglossing.

- Wipe up spills as soon as possible. Never use highly abrasive scrubbing tools on any resilient floor.
- Wash your floor regularly with a vinyl floor cleaner such as Armstrong Once 'n Done® Floor Cleaner.
- Do NOT use detergents, abrasive cleaners, or "mop and shine" products. These products may leave a dull film on your floor.
- Do NOT use paste wax or solvent based polishes.
- Vinyl flooring, like other types of smooth floors, can become slippery when wet. Allow time for floor to dry after washing. Immediately wipe up wet areas from spills, foreign substance, or wet feet.

Repair Procedure

• For detailed repairs, please log on to Armstrong's floorexpert.com.

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