



Felt-Backed Sheet Flooring Installation System

RESIDENTIAL USE ONLY			
Product	Gauge	Adhesive	Comments
ROYELLE	0.046" (1.17 mm)	Full Spread S-235 or S-254	Seams - Double cut Seam treatment:
STRATAMAX VP	0.060" (1.52 mm)	Full Spread S-235 or S-254	Apply S-570 using S-564 Low Gloss Seam Coating Kit, S-595 High Gloss Seam Coating Kit or S-761 Seam Adhesive

Installation:

Location: All grade levels

Pattern Match: Yes; do not reverse pieces of patterned material (TM edge to non-TM edge); pieces of non-patterned material should be reversed (TM edge to TM edge)

Seam Method: Double-cut

Seam Treatment: Apply S-570 Seam Coating using the S-595 High Gloss Seam Coating Kit, S-564 Low Gloss Seam Coating Kit or S-761 Seam Adhesive

Fitting: All methods

Suitable Substrates: All substrates listed below must be properly prepared. There may be certain exceptions and special conditions for these substrates to be suitable for the Residential Felt-Backed Installation System. For more information, please call Armstrong Customer Care at 1-800-233-3823 or visit www.floorexpert.com.

- Concrete
- Existing Resilient Floors
- Approved Suspended Wood
- Ceramic Tile, Terrazzo, Marble
- Polymeric Poured (seamless) Floors Steel, Stainless Steel, Aluminum, Lead, Copper, Brass, Bronze

NOTE: For wood subfloors and underlayments, the moisture content must be 13%, or less.

Do not install over:

- Particleboard, waferboard, OSB or single-layer Sturd-I-Floor panels
- Existing cushion-backed vinyl flooring
- Carpet
- Hardwood flooring that has been installed directly over concrete

Job Conditions/Preparation (for all installation options):

- 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.

- All substrates must be sound, dry, clean, smooth, and free from excessive moisture or alkali. Remove dirt, paint, varnish, wax, oils, solvents, other foreign matter and contaminants that could cause staining or interfere with a good bond.
- Do not use products containing petroleum solvents or citrus oils to prepare substrates as they can cause staining and expansion of the new flooring.
- In renovation or remodel work, remove any existing adhesive residue so that 80% of the overall area of the original substrate is exposed.
- The area to receive resilient flooring and the flooring materials and adhesives should be maintained at a minimum of 65°F (18°C) and a maximum of 100°F (38°C) for 48 hours before installation, during installation, and 48 hours after completion. Maintain a minimum temperature of 55°F (13°C) thereafter.
- For concrete substrates, conduct moisture testing (moisture vapor emission rate **{MVER}**) **maximum of 5 lbs and/or percent relative humidity (in-situ probe) maximum 80%**. Bond tests must also be conducted for compatibility with the substrate.

Keys to Successful Installation:

- Proper conditioning of both the jobsite and the flooring is necessary. Do not expose the installation to wide ranges in temperature and moisture/humidity levels in the home.
- Store, transport and handle the flooring so as to prevent creases or other distortions in the sheet. Always roll face-out on a cardboard tube. Distortions will generally not disappear or shrink on their own. Sheet must be lying flat at time of installation.
- Just prior to installation, lay flooring out flat to acclimate to conditions and allow the roll-up stresses to relax.
- Undercut door trim to allow for free movement of the flooring there as well.
- Island cabinets are permissible on top of the flooring but perimeter base cabinets should be cut around.
- Seams must be double cut, net, with no fullness. Do not straight edge and butt seams. Do not stretch or compress at seams as this will lead to small buckles.
- Do not compress the edges of the sheet in any way when installing adjacent flooring materials. Installation of carpet, metal strips and other transition moldings should not push fullness into the flooring.
- Always protect flooring from rolling loads from other trades and replacement and/or movement of appliances.
- Radiant heated substrates must not exceed a maximum surface temperature of 85°F (29°C).
- As with many flooring products, the full spread adhesive methods generally require somewhat more attention to the condition of the substrate so that it will not telegraph irregularities through the finished floor.

1. Preinstallation Care & Materials Estimating

- When transporting or storing floor prior to installation, do not kink or distort.
- **Always roll flooring face out until ready to install.**
- Just prior to installation, lay flooring out flat to acclimate to conditions.
- Flooring and room temperature should be a minimum of 65° F (18° C) for 48 hours preinstallation, during installation, and 48 hours after installation. Minimum 55° F (13° C) thereafter.
- Plan layout for minimum number of seams.
- Accurately measure length and width of room. Include recessed areas/doorways.
- Allow an extra 1-1/2" of flooring on each end for trimming.
- If more than one piece of flooring is needed, allow for correct pattern match at seam.

2. Prepare Subfloor

Inspect and prepare subfloor. Subfloor must be clean, dry, and smooth. A subfloor is the surface over which your new Armstrong sheet flooring is installed.

IF INSTALLING OVER ...	PREPARE
VINYL FLOORING Must be noncushioned-backed and firmly bonded. Check for loose vinyl, gapped seams, cuts, tears, rips, or other damage.	• Utility knife to remove loose vinyl • Use New Beginning® Floor Stripper & Cleaner to remove dirt and wax buildup • S-194 Patch, Underlayment and Embossing Leveler mixed with the S-195 Underlayment Additive • Use smooth edge trowel for applying S-194 and S-195 mixture • Use medium grit sandpaper or sanding block for smoothing rough areas of the Embossing Leveler
PLYWOOD If installing a new plywood subfloor, use APA Underlayment Grade. For new or existing plywood subfloors, check for loose panels, gapped joints, knots, nail holes, or other damage.	• S-194 Patch, Underlayment and Embossing Leveler mixed with the S-195 Underlayment Additive • Use smooth edge trowel for applying S-194 and S-195 mixture • Use medium grit sandpaper or sanding block for smoothing rough areas of the Embossing Leveler
CONCRETE/CERAMIC Must be clean, dry, and dust-free. Check for cracks, scaling, levelness, and other damage. If installing over ceramic tile, terrazzo, or marble, ensure that the tiles are firmly bonded.	• S-194 Patch, Underlayment and Embossing Leveler mixed with the S-195 Underlayment Additive • Use New Beginning® Floor Stripper & Cleaner to remove dirt and wax buildup • Use smooth edge trowel for applying S-194 and S-195 mixture • Use medium grit sandpaper or sanding block for smoothing rough areas of the underlayment

3. Room Preparation and Procedure

- The flooring must be cut 3/16" to 1/4" away from all vertical surfaces such as walls, cabinets, pipes, etc. to allow an expansion zone for seasonal movement. (This gap will be covered with moldings or wall base.)
- Door trim, where the expansion zone cannot be covered with wall base, must be undercut to allow for free movement of the flooring underneath.
- Moldings and wall base covering the expansion zone must be raised slightly to allow for free movement of the flooring. The wall base should be nailed into the wall surface, not the floor surface.
- Plan the layout for a minimum number of seams.
- Do not install over particleboard subfloors, single layer STURD-I floor panels, existing residential tile that is below grade, any cushioned vinyl, wafer board, carpet, strip or wood or plank flooring.
- Always keep the flooring rolled face-out until ready to install.

4. Fitting

- Your vinyl sheet flooring should be unrolled and allowed to lay flat in a separate room or area with similar conditions as the installation area.
- Do not lay it out over carpet or other soft surface. The subfloor should be solid to prevent distorting the flooring while working or walking on top of it.
- Pre-cut the pieces accurately. It is much easier to cut pieces close to size in an area where you can lay them out flat. Generally, allow 1-1/2" (31.8 mm) for each end wall. (With two or more pieces, make sure you have cut them long enough for pattern matching purposes.)

- Cut seams net. Pieces that are cut and fit in the morning should be adhered that morning. Pieces that are cut and fit in the afternoon should be adhered that afternoon.
- When installing over an existing resilient floor, lay out the installation so the new seams are a minimum of 6" (15.2 cm) away from the original seams. When going over tile floors, seams should fall in the center of the tile.
- Recommended fitting procedures include straight scribing, pattern scribing and freehand knifing.
- Make a final check to be sure your prepared subfloor is clean, dry, flat and dust-free.
- Carefully reroll the new flooring with design side out and take into the room.
- Unroll it and position in the room taking care not to distort it by creating or putting sharp folds into it.
- Inspect around walls, cabinets, etc. to be sure that an adequate expansion zone of 3/16" to 1/4" exists at all vertical surfaces and that the flooring can freely slide beneath doorway trim.
- Make safety cuts so it will lay flat on the floor. This will make final fitting easier and prevent the material from tearing.
- Cut material slightly loose and away from walls wherever molding or wall base will be used to cover the edge of the vinyl.
- Flooring should be laying flat and "balanced" in the room.

5. Full Spread Installation

Adhesive Open Times and Trowel Notchings

Adhesive	Porous	Nonporous
S-235 S-254	Open Time: 0–20 minutes over wood or concrete Regular Notch: 1/16" (1.6 mm) deep, 1/16" (1.6 mm) wide, 3/32" (2.4 mm) apart	Open Time: 10–20 minutes over existing resilient flooring or other nonporous substrates Fine Notch: 1/32" (0.8 mm) deep, 1/16" (1.6 mm) wide, 5/64" (2 mm) apart

NOTE: Allowing the proper open time will help to minimize knee marks, roller marks and trapped air blisters. The amount of open time will vary according to job conditions, temperature, humidity, air flow and type of substrate.

- All fitting should be complete before spreading adhesive.
- Use S-235 or S-254 Adhesive as specified for the particular product being installed and use the proper trowel notching.
- Apply the adhesive to the subfloor one half of the sheet at a time. Lap or tube back one half of the sheet to expose the subfloor.
- Allow the recommended open time before placing the material into the adhesive. **Do not roll the product face in while spreading adhesive.**
- Starting at the center and working toward the edges, roll in two directions using a 100-lb. roller.
- Clean excess adhesive from the surface of the flooring using a clean, white cloth dampened with detergent and water.

S-761 Seam Adhesive Application

- When using the S-761 Seam Adhesive at the seams, lap first piece of material into the adhesive.
- Using the S-761 applicator bottle, apply a 1/8" bead of S-761 Seam Adhesive along the seam edge.
- Tuck the seam edge into place, forcing the S-761 Seam Adhesive up through the seam.
- Clean adhesive residue from the surface of the flooring using a clean, white cloth dampened with neutral detergent and water.
- Roll the seam using a hand roller.
- Roll entire floor with the 100 lb roller.

S-564 Low Gloss Seam Coater/S-595 Gloss Seam Coater Application

- When using the S-564 or the S-595 Seam Coater Kit make sure flooring is installed, seam area has been hand rolled and the entire floor rolled with a 100 lb roller. Then apply the seam coater as directed on package.

6. Finish the Job

- Replace or install baseboard moldings or coved wall base to cover expansion zone (gap) around perimeter of room. Fasten molding to vertical surface; **do not nail through new floor or into expansion zone.**
- Leave a slight clearance between molding and flooring so any effects of seasonal movements in your home due to temperature or humidity changes will be minimized. Should a small bubble or buckle occur, the flooring should be gently lifted or pulled back from the pinch point and retrimmed.
- At doorways where new flooring meets another floor surface, use a trim molding that covers the edge of the floor. This is the preferred method of installation.

Precautions for All Installation Options:

- Do not wash or scrub the new flooring for at least 5 days after the installation. This will help prevent excess moisture and cleaning agents from interfering with the bond of the fresh adhesive or vinyl flooring tape.
- When moving appliances or heavy furniture, lay a plywood panel on the floor and “walk” the item across it. This protects the floor from scuffing and tears.
- Use floor protectors, such as Armstrong Floor Protectors, on furniture to reduce indentation. The heavier the item, the wider the floor protector needed.