



# **Installation Systems**

## V. Installation Systems

### RECOMMENDED SHEET FLOORING ADHESIVES AND INSTALLATION SYSTEMS

Sheet Flooring	Installation System	Adhesive	Comments
Natural Fusion Highland Park Rhythms Urban Setting Starstep Candide II Memories Destinations Station Square Frontgate Progressions	Residential Felt-Backed  Full Spread or Perimeter Bond (Armafelt Options)	S-235, S-254 or S-224	Seams—Double cut  Seam Treatment—Prepare with S-585 and apply S-570 <b>DO NOT</b> use S-585 seam cleaner on Natural Fusion
Initiator Canyon Creek	Residential Felt-Backed  Full Spread	S-235, S-254 or S-224	Seams—Double cut  Seam Treatment—Prepare with S-585 and apply S-570
COMMISSION Plus	Residential Felt-Backed  Full Spread	S-235 or S-254; optional S-580 in flash cove areas only	Seams—Double cut  Seam Treatment—Prepare with S-585 and apply S-570 using S-564 Seam Coating Kit
Traditions Successor	Interflex	S-665—Existing resilient floors and embossing levelers, other nonporous substrates and concrete  S-670—Wood underlayment and concrete  Staples—Wood underlayment	Seams—Straightedge and butt  Seam Treatment—Prepare with S-585 and apply S-570
StrataMax Better Best	StrataMax (Modified Loose Lay and Full Spread methods)	S-288 for Full Spread or Acrylic Double-faced Tape for Modified Loose Lay	Seams—Double cut  Seam Treatment—Prepare with S-585 and apply S-570 using S-564 Seam Coating Kit
CushionStep Good Better Best	CushionStep (Modified Loose Lay and Full Spread methods)	S-288 for Full Spread or Acrylic Double-faced Tape for Modified Loose Lay	Seams—Double cut  Seam Treatment— <b>DO NOT</b> use S-585 Seam Cleaner; apply S-570 using S-564 Seam Coating Kit
MARMORETTE	Residential Linoleum Sheet  Full Spread	S-760	Seams—Recess scribe  Seam Treatment—S-761 Seam Adhesive

## RECOMMENDED SHEET FLOORING ADHESIVES AND INSTALLATION SYSTEMS

Sheet Flooring	Installation System	Adhesive	Comments
Linoleum: MARMORETTE GRANETTE COLORETTE UNI WALTON LINORETTE LINODUR	Commercial Linoleum Sheet	S-760; optional S-580 in flash cove areas; S-240 for LINODUR in industrial areas; S-240 for Linoleum in concentrated static and dynamic load areas	Seams—Recess scribe Seam Treatment—Heat welding is optional but highly recommended or seal with S-761 Seam Adhesive; Heat weld when S-240 is used
TRANSLATIONS TIMBERLINE PERSPECTIVES	Commercial Vinyl-Backed	S-599; S-580 in flash cove areas S-240 in concentrated static and dynamic load areas Back-roll with supplied 3/16 (4.8 mm) nap paint roller	Seams—Double cut or recess scribe Seam Treatment—Heat weld or seal and wipe with S-553 or seal with S-761 Seam Adhesive; Heat weld when S-240 is used
MEDINTECH ROYAL SOLID*	Commercial Vinyl-Backed	S-599; for MEDINTECH installations only, back roll S-599 adhesive ridges with a 3/16 (4.8 mm) nap paint roller; S-580 in flash cove areas S-240 in concentrated static and dynamic load areas Back-roll with supplied 3/16 (4.8 mm) nap paint roller	Seams—Recess scribe Seam Treatment—Heat weld or seal with S-761 Seam Adhesive; Heat weld when S-240 is used
SAFEGUARD	Commercial Vinyl-Backed	S-599, S-230 Full Spread or S-599/S-230 Perimeter Plus; S-580 in flash cove areas only	Seams—Recess scribe Seam Treatment—Heat weld
SAFEGUARD Spa	Commercial Vinyl-Backed	S-599/S-230 Perimeter Plus; S-580 in flash cove areas only	Seams—Recess scribe Seam Treatment—Heat weld
MEDINTECH Tandem	Commercial Felt-Backed	S-235 or S-599; optional S-580 in flash cove areas only	Seams—Recess scribe Seam Treatment—Heat weld or seal with S-761 Seam Adhesive
POSSIBILITIES Petit Point Connection CORLON	Commercial Inlaid	S-599; S-580 in flash cove areas S-240 in concentrated static and dynamic load areas Back-roll with supplied 3/16 (4.8 mm) nap paint roller	Seams—Recess scribe Seam Treatment—Heat weld or seal with S-761 Seam Adhesive (POSSIBILITIES Petit only); Heat weld when S-240 is used

\* SOLID is a Canadian exclusive

# Residential Linoleum Sheet Installation System

Product	Adhesive	Comment
MARMORETTE	Full Spread method— S-760 with S-761 at the seam	Flash Cove

## Suitable Substrates:

All substrates listed below must be properly prepared and meet requirements discussed in Chapter IV, Subfloors and Underlayments. There may be other exceptions and special conditions for these substrates to be suitable for the Residential Linoleum Sheet Flooring Installation System.

- Concrete (on all grade levels)
- Existing Resilient Floors
- Approved suspended wood
- Ceramic Tile, Terrazzo, Marble
- Radiant heated with surface temperature not to exceed 85°F (29°C)

**NOTE: NOT** recommended for full bathroom installations.

## Job Conditions/Preparation:

- Substrates must be dry, clean, smooth and free from paint, varnish, wax, oils, solvents and other foreign matter.
- In renovation or remodeling work, remove any existing adhesives 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. Do not place in direct sunlight.
- 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 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.
- 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.
- 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 or percent relative humidity tests. Bond tests should also be conducted for compatibility with the substrate. Please refer to Chapter IV, Subfloors and Underlayments.

\*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.

- 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.

### Fitting:

When installing several rolls in one area, make certain the batch numbers are the same. Also read the sequence numbers and only install rolls that are within 20 numbers of each other. Install the rolls in sequential order.

The lines on the back of the linoleum represent trademark edges.

Keep all materials rolled face out until ready to begin the installation.

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.

Before installing the material, plan the layout so seams fall at least 6 (15.2 cm) away from subfloor/underlayment joints. Do not install over expansion joints.

When installing over an existing resilient floor, plan the layout so the new seams are a minimum of 6 (15.2 cm) away from the original seams. When going over tile, seams should fall in the center of the tile.

Recommended fitting procedures include freehand knifing, pattern scribing, and straight scribing.

**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 (30.5 cm) 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 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 Time and Trowel Notching

Adhesive	Porous	Nonporous
S-760	<p><b>Open Time:</b> Up to 10 minutes</p> <p><b>Regular Notch:</b> 1/16 (1.6 mm) deep, 1/16 (1.6 mm) wide, 3/32 (2.4 mm) apart</p>	<p><b>Open Time:</b> 10-20 minutes</p> <p><b>Regular Notch:</b> 1/16 (1.6 mm) deep, 1/16 (1.6 mm) wide, 3/32 (2.4 mm) apart</p>

### Procedure:

#### ■ Full Spread S-760 with S-761 Seam Adhesive:

1. Before installing, plan the layout so seams fall at least 6 (15.2 cm) away from subfloor/underlayment joints. Do not install over expansion joints.
2. Cut pieces to the proper length, allowing enough material at each end to flash 1-1/2 (31.8 mm) up the walls for fitting.

3. Fit piece #1 by pattern scribing or straight scribing methods.
4. Prepare the seam edge by trimming the factory seam edge using the S-33 Edge Trimmer or a Linoleum Edge Trimmer.
5. Draw a pencil line on the subfloor along the trimmed factory edge.
6. Carefully lap the material back halfway to expose the subfloor.
7. Starting at the lap point and working toward the end wall, apply the S-760 Linoleum Adhesive up to the pencil line using the regular notching of the S-891 trowel.
8. Allow the recommended open time before placing the material into the adhesive.
9. Starting at the center and working toward the edges, roll the material in two directions using a 100-lb. roller. Clean any excess adhesive residue from the surface of the flooring using a clean white cloth dampened with water.
10. Repeat steps #6 through #9 for the remaining half of piece #1.
11. Cut piece #2 to the proper length.
12. Do not reverse pieces. Install pieces TM edges to non-TM edge.
13. Overlap piece #2 to piece #1 approximately 1/2 (12.7 mm) to 1 (30.5 cm). Prepare the seam edge on the opposite side of the sheet by trimming the factory seam edge using the S-33 Edge Trimmer or a Linoleum Edge Trimmer.
14. Repeat steps #6 through #8.
15. Starting at the center and working toward the edges, roll the material in two directions using a 100-lb. roller (staying approximately 6 (15.2 cm) to 12 (30.5 cm) away from the seam area).
16. Clean adhesive residue from the surface of the flooring using a clean white cloth dampened with water.
17. Repeat steps #6 through #9 for adhering the remaining half of piece #2.
18. Using an S-83 Recess Scriber, recess scribe all seams net (no fullness).
19. Insert a piece of scrap material beneath the scribe mark. With the scrap on the same side as the cutting hand, cut the seam holding a straight blade knife straight up and down.
20. Apply a 1/8 (3.2 mm) bead of S-761 Seam Adhesive along the seam edge of piece #1 using an applicator bottle.
21. Tuck the seam edge into place, forcing the S-761 Seam Adhesive up through the seam.
22. Clean adhesive residue from the surface of the flooring using a clean white cloth dampened with water.
23. Roll the seam into place using a S-77 Hand Roller and roll again with a 100-lb. roller.
24. Remove the burr at the seam by carefully skiving with the back of the S-92 Knife.
25. Follow the same procedures for the remaining pieces, completing one piece at a time until the job is finished.

**Precautions:**

- Linoleum will grow slightly in the width and shrink slightly in the length of the material when placed into the wet adhesive. Following the recommended installation procedures will help compensate for this movement.
- Do not install Linoleum sheet over existing on-grade or below-grade tile.
- Seams: For recess scribing seams, see Chapter VIII.
- Flash Coving: See Chapter IX.

**Linoleum Color Change:**

“Drying room yellowing” sometimes referred to as “seasoning bloom,” “drying room film” or “stove yellowing” is a natural phenomenon that occurs during the manufacturing process of all linoleum. As linoleum cures in the drying room, a yellowish cast may develop on the surface due to the oxidation of the linseed oil. This is not a product defect. Any change in the product’s appearance because of this yellow cast is temporary and disappears after exposure to either natural or artificial light. The time required for the yellow cast to disappear ranges from a few hours to several weeks depending on the type and intensity of the light source. Typically, the yellow cast disappears more quickly with exposure to natural light. The application of floor finishes will not interfere with the dissipation of the yellow cast. Disappearance of the yellow cast will not occur on areas not exposed to light.