

COMMERCIAL LINOLEUM SHEET FLOORING

Installation System

	SEAMING OPTIONS				May Flash Cove
	Highly Recommended Full-Spread/S-760 and Heat Weld Seams	Optional Full-Spread/ S-760 with S-761 at seams	Optional Full-Spread/ S-760 with no seam treatment	Required Full-Spread/ S-240 and Heat Weld Seams	
Product Marmorette Granette Decorette Colorette Linorette Uni Walton	X	X	X		X
Linodur	X		X		
Linodur in Industrial Areas				X	

Suitable Substrates:

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

- Concrete (on all grade levels)
- Approved Suspended Wood
- Existing Resilient Floors
- Steel, Stainless Steel, Aluminum, Lead, Copper, Brass
- 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.

Maintain room temperature at a minimum of 65°F (18°C) for 48 hours before installation, during installation and 48 hours after completion. We recommend a maximum room temperature of 100°F (38°C) when using S-760 and a maximum room temperature of 85°F (29°C) when using S-240. Maintain a minimum temperature of 55°F (13°C) thereafter.

Allow all flooring materials and adhesives to condition to the room temperature for at least 48 hours before starting the installation. Do not place in direct sunlight.

Conduct calcium chloride tests. Bond tests should also be conducted for compatibility with the substrate.

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

Fitting:

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

Keep all material 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" 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" away from the original seams. When installing over tile, seams should fall in the center of the tile.

Recommended fitting procedures include straight scribing, pattern scribing, and free-hand knifing. The lines on the back of the linoleum represent trademark edges.

Abutting to Existing 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	Porous	Nonporous
S-760	Open Time: Up to 10 minutes Regular notch: 1/16" deep, 1/16" wide, 3/32" apart	Open Time: 10-20 minutes Regular notch: 1/16" deep, 1/16" wide, 3/32" apart
S-580	Open Time: Minimum of 20-30 minutes Brush-On	Open Time: Minimum of 20-30 minutes Brush-On
S-240	Open Time: Approximately 40-50 minutes Fine notch: 1/32" deep, 1/16" wide, 5/64" apart	Open Time: Approximately 40-50 minutes Fine notch: 1/32" deep, 1/16" wide, 5/64" 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. **Initial blisters are caused by inadequate open time and will begin to show within one hour after rolling.**

Procedure:

See Section V., Adhesives, Trowel Notchings, and Seam Treatments.

Cut pieces to the proper length, allowing enough material at each end to flash 2-3" up the walls for fitting.

■ Full Spread S-760 and Heat Weld Seams

1. Fit piece #1 and position in the room. Trim the factory seam edge using a linoleum edge trimmer, strip cutter and/or S-33 Edge Trimmer.
2. Draw a pencil line on the subfloor at the trimmed factory edge. Carefully lap the material back halfway to expose the subfloor.
3. Starting at the lap point and working toward the end wall, apply the S-760 Adhesive using the proper notching of the S-891 Trowel. Allow the recommended open time before placing the material into the adhesive.
4. Starting at the center and working toward the edges, roll the material in two directions using a 100-lb. roller. Clean adhesive residue from the surface of the flooring using a clean, white cloth dampened with water.
5. Repeat steps #2 through #6 for the remaining half of piece #1.
6. **Do not reverse pieces. Install linoleum pieces in the same direction (TM edge to non-TM edge).**
7. Overlap piece #2 to piece #1 approximately 1/2" to 1". Prepare the seam edge on the opposite side of the sheet by trimming the factory edge.
8. Repeat steps #2 through #5.
9. Starting at the center and working toward the edges, roll the material in two directions (staying 2" from the seam) using a 100-lb. roller. Clean adhesive residue from the surface of the flooring using a clean, white cloth dampened with water.
10. Recess scribe the half of the seam that is adhered using an S-83 Recess Scribe. Seam should be recessed scribed slightly open (0.010") to compensate for the expansion that occurs in the width of the material when placed into the adhesive.
11. 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. Roll the seam into place before the adhesive dries using an S-77 Hand Roller and roll again with a 100-lb. roller.
12. Repeat steps #3 through #5 and #11 through #14 for the remaining half of piece #2.
13. Repeat the same procedures for the remaining pieces completing one piece at a time until the job is finished.
14. Flooring should not be exposed to rolling load traffic for at least 72 hours after installation to allow setting and drying of the adhesive.
15. Follow Initial Maintenance Procedures in Section XIII.

■ Full Spread S-760 with S-761 Linoleum Seam Adhesive

1. Before installing, plan the layout so seams fall at least 6" 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" up the walls for fitting.

3. Fit piece #1 by pattern scribing or straight scribing methods and position in the room.
4. Prepare the seam edge by trimming the factory seam edge using a linoleum edge trimmer, strip cutter and/or the S-33 Edge Trimmer.
5. Draw a pencil line on the subfloor at 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 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 edge to non-TM edge and non-TM edge to TM edge.**
13. Overlap piece #2 to piece #1 approximately 1/2" to 1". Prepare the seam edge on the opposite side of the sheet by trimming the factory seam edge using the S-33 Edge Trimmer.
14. Repeat steps #5 through #9.
15. Starting at the center and working toward the edges, roll the material in two directions using a 100 lb. roller (staying approximately 6' to 12" away from the seam area).
16. Clean adhesive residue from the surface of the flooring using a clean, white cloth dampened with water.
17. Using an S-83 Recess Scribe, recess scribe all seams net.
18. 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.
19. Apply a 1/8" bead of S-761 Linoleum Seam Adhesive along the seam edge of piece #1 using the applicator bottle.
20. Tuck the seam edge into place, forcing the S-761 Linoleum Seam Adhesive up through the seam.
21. Clean adhesive residue from the surface of the flooring using a clean, white cloth dampened with water.
22. Roll the seam into place using an S-77 Hand Roller and roll again with a 100-lb. roller.
23. Repeat steps #6 through #9 for adhering the remaining half of piece #2.
24. Repeat steps #16 through #21 for seaming the remaining half of piece #2.
25. Remove the burr at the seam by carefully skiving with the back of the S-92 Knife.
26. Follow the same procedures for the remaining pieces, completing one piece at a time until the job is finished.
27. Follow Initial Maintenance Procedures in Section XIII.

■ LINODUR in Industrial Areas with S-240 Full Spread

Follow the installation and seaming details for S-760.

1. Remove the bottom of S-240 cans Part A and Part B with a can opener. 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.**
2. **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.**
3. Maximum pot life of S-240 Adhesive is approximately 10 minutes depending on atmospheric conditions.
4. Apply S-240 Adhesive using the fine notching of the S-891 Trowel. Allow the recommended open time before placing the material into the adhesive. Working time of S-240 Adhesive is approximately one hour.
5. Heat weld all seams of LINODUR installed in industrial areas.
6. Do not allow traffic on the flooring for 24 hours after installation.

■ Decorative Borders and Insets

1. Accurately measure and mark the position of the border on the subfloor. Using a pencil, trace around the borders and/or insets.
2. Apply the S-760 Adhesive up to the pencil line. Allow the proper open time before placing the material into the adhesive. If necessary, weight down the border or inset.
3. Carefully roll using a S-77 Hand Roller and a 100 lb. roller.
4. Install the field material in the normal manner.
5. Carefully cut the field material so it overlaps the border and/or inset. Recess scribe the seam between the field and the border and/or inset using an S-83 Recess Scriber.
6. 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. Roll the seam into place before the adhesive dries using an S-77 Hand Roller and then roll again using a 100 lb. roller.
7. If heat welding the seams, follow the recommendations for heat welding linoleum seams.

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.
- Heat welding is optional, but required in areas exposed to direct sunlight, in areas exposed to topical moisture and/or temperature fluctuations and when installed over radiant heated subfloors.
- S-761 Linoleum Seam Adhesive is not for use with Linodur.
- Heat welding: See section VII.
- Flash coving: See section VIII.