

**HETEROGENEOUS SHEET INSTALLATION TIP SHEET**

**DecorArt® Rejuvenations™ with Diamond 10® Technology Coating**

**TYPES OF SUBFLOORS**

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

**INSTALLATION SYSTEM**

Commercial Vinyl-Backed

**PATTERN MATCH**

None. Do Not Reverse pieces, TM edge to non-TM edge and non-TM edge to TM edge.

**SEAMS**

Recess scribe

**SEAM TREATMENT**

- Heat Weld. Heat-welded seams require the use of heat-welding equipment.  
Some experience is required to achieve a satisfactory seam.
- Use of the Armstrong® S-65 Heat Welding Nozzle will reduce scorching and the shiny appearance at the seam.

**FITTING**

Free-hand knifing, pattern scribing and straight scribing methods.

**FLASH COVING**

Use Armstrong® S-580 Flash Cove Adhesive. Apply two coats with a 4" brush on the floor as well as up the entire cove area. Allow adhesive to dry to a pressure-sensitive state between applications. Armstrong S-580 Adhesive has unlimited working time.

**ADHESIVES**

- Armstrong® S-599 ChoiceStrong™ Adhesive

**▲ WARNING EYE IRRITANT**

- Armstrong® S-543 Adhesive
- Armstrong® Flip® Spray Adhesive
- Armstrong® S-240 Epoxy Adhesive

**▲ WARNING EYE AND SKIN IRRITANT. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION; VAPOR HARMFUL. MIXING OF PART A AND PART B MAY GENERATE HEAT BUILD-UP.**

- Armstrong® S-580 Flash Cove Adhesive

## SPECIAL PRECAUTIONS AND RECOMMENDATIONS

- Calcium Chloride Tests must be conducted. Armstrong offers a guideline of a maximum of acceptable moisture emission level of 3 lbs./1000 ft.<sup>2</sup>/24 hours. Bond Tests should also be conducted for compatibility with the substrate.
- Allow all flooring materials and adhesives to condition to the room temperature 48 hours before starting the installation.
- Temperature of the room shall be maintained at a minimum of 65°F (18°C) and a maximum of 100°F (38°C) for 48 hours prior to installation, during installation and for 48 hours after completion when using Armstrong S-599 ChoiceStrong™ Adhesive.
- Temperature of the room shall be maintained at a minimum of 65°F (18°C) and a maximum of 85°F (29°C) for 48 hours prior to installation, during installation and for 48 hours after completion when using Armstrong S-240 Epoxy Adhesive.
- Maintain a minimum temperature of 55° F (13 °C) thereafter.
- Do not install Armstrong® DecorArt® Rejuvenations™ with Diamond 10® Technology coating sheet flooring over existing on or below grade tile.
- Do not install Armstrong DecorArt® Rejuvenations™ with Diamond 10® Technology coating over asphalt tile or any adhesive residue.
- Use only Portland cement-based patching and leveling compounds such as Armstrong S-183 Fast-Setting Cement-Based Underlayment, Armstrong S-184 Fast-Setting Cement-Based Patch and Skim Coat and Armstrong S-194 Patch, Underlayment and Embossing Leveler.
- Do not use gypsum-based floor patches or leveling compounds.
- Do not place flooring into the wet adhesive too soon as it may cause the material to bubble.
- In areas subject to concentrated static and dynamic loads, use Armstrong S-240 Epoxy Adhesive. See CONCENTRATED STATIC AND DYNAMIC LOAD AREAS instructions under Installation Details.
- When heat-welding, seams may be recessed scribed slightly open (1/64") to make guiding the router easier.
- If the Dry-to-Touch method is used, seams may be heat-welded immediately. Otherwise, wait a minimum of 10 hours after installation.
- When heat-welding, router depth should be approximately 1/2 to 2/3 the thickness of the wear layer. **Do not rout or groove completely through the material.**
- When heat-welding, allow the welding rod to cool completely before skiving in two passes.
- Do not allow traffic on the flooring for 24 hours after installation.
- 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.

## ADHESIVE OPEN TIMES AND TROWEL NOTCHINGS

PRODUCT & ADHESIVE	OPEN TIME POROUS SUBFLOORS	OPEN TIME NONPOROUS SUBFLOORS
S-599 ChoiceStrong™ Adhesive	<b>Set in Wet:</b> Approximately 10-20 minutes (paste-like consistency) Fine Notch: 1/32" deep, 1/16" wide, 5/64" apart	<b>Dry to Touch:</b> Approximately 30 minutes (no transfer of adhesive to finger) Fine Notch: 1/32" deep, 1/16" wide, 5/64" apart
S-543 Adhesive	<b>Set in Wet:</b> Approximately 10-20 minutes (paste-like consistency) Fine Notch: 1/32" deep, 1/16" wide, 5/64" apart Must be back rolled with 3/8" nap paint roller	<b>Dry to Touch:</b> Approximately 30 minutes (no transfer of adhesive to finger) Fine Notch: 1/32" deep, 1/16" wide, 5/64" apart Must be back rolled with 3/8" nap paint roller
Flip® Spray Adhesive	<b>Dry to Touch:</b> Approximately 30 minutes (no transfer of adhesive to finger) Apply per spray pattern on can.	<b>Dry to Touch:</b> Approximately 30 minutes (no transfer of adhesive to finger) Apply per spray pattern on can.
S-240 Epoxy Adhesive	<b>Set in Wet:</b> Approximately 10-20 minutes (do <b>not</b> allow to dry to the touch) Fine Notch: 1/32" deep, 1/16" wide, 5/64" apart <b>Back-roll with supplied 3/16" nap paint roller</b>	<b>Set in Wet:</b> Approximately 10-20 minutes (do <b>not</b> allow to dry to the touch) Fine Notch: 1/32" deep, 1/16" wide, 5/64" apart <b>Back-roll with supplied 3/16" nap paint roller</b>
S-580 Flash Cove Adhesive (Flash cove areas only)	<b>Dry to Touch:</b> Approximately 30 minutes (no transfer of adhesive to finger) <b>Trowel Notching: Brush-on</b>	<b>Dry to Touch:</b> Approximately 30 minutes (no transfer of adhesive to finger) <b>Trowel Notching: Brush-on</b>

**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, airflow and type of substrate).

**When installing over nonporous substrates** such as existing resilient flooring, allow enough open time for the Armstrong S-599 ChoiceStrong™ Adhesive or Flip® Spray Adhesive to dry until tacky with no transfer to the finger (Dry-to-Touch) before placing the material into it. **When installing over porous subfloors** such as concrete and wood, allow the Armstrong S-599 ChoiceStrong™ Adhesive to thicken to a paste-like consistency (Set-in-Wet) before placing the material into the adhesive. The adhesive should show good transfer to the backing of the flooring when placed into the adhesive. When using Flip® Spray Adhesive, allow for the adhesive to dry until tacky with no transfer to the finger (Dry-to-Touch) before placing the material into it. **Note: If you cover wet areas or cover the adhesive too soon, blisters will form soon after rolling.**

## INSTALLING DECORART® REJUVENATIONS™ WITH DIAMOND 10® TECHNOLOGY COATING SHEET FLOORING FULL SPREAD with ARMSTRONG® S-599 CHOICESTRONG™ ADHESIVE, FLIP® SPRAY ADHESIVE and ARMSTRONG® S-761 SEAM ADHESIVE

1. Before installing, plan the layout so seams fall at least 6" away from subfloor/underlayment joint and seams in existing resilient flooring. Do not install over active concrete joints.
2. Cut pieces to the proper length, allowing enough material at each end to flash 1½" 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.

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 Armstrong S-599 ChoiceStrong™ Adhesive or Armstrong S-543 Adhesive up to the pencil line using the standard notching of the Armstrong S-891 trowel. When using Flip® Spray adhesive, apply according to the spray pattern shown on the can.
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. **Install pieces TM edge to non-TM edge and non-TM edge to TM edge.**
13. Overlap piece #2 to piece #1 approximately ½" to 1". Prepare the seam edge on the opposite side of the sheet by trimming the factory seam edge using the Armstrong S-33 Edge Trimmer.
14. Repeat steps #5 through #9 for the first half of piece #2.
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 a neutral detergent and water.
17. Repeat steps # 6 through #9 for adhering the remaining half of piece #2.
18. Using an Armstrong S-83 Recess Scriber, recess scribe all seams net (no fullness).
19. Insert a piece of scrap material beneath the scribe mark. With the excess material on the same side as your cutting hand, cut the seam holding a straight blade knife straight up and down.
20. Cut the tip of the Armstrong S-761 Seam Adhesive applicator bottle and apply a continuous 1/8" bead of S-761 Seam Adhesive along the seam edge of piece #1.
21. Tuck the seam edge into place, forcing the Armstrong 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 a neutral detergent and water.
23. Roll the seam into place using an Armstrong 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 Armstrong S-92 Knife.
25. Follow the same procedures for the remaining pieces, completing one piece at a time until the job is finished.

## HEAT-WELDING INSTRUCTIONS

- **If the Dry-to-Touch method is used, seams may be heat-welded immediately. Otherwise, wait a minimum of 10 hours after installation.**
1. For heat-welded seams, recess scribe seams to allow for a 1/64" gap.
  2. Rout or groove the seams to a depth 1/2 to 2/3 the thickness of the material. Do not route or groove completely through the product.
  3. Use an automatic router equipped with a 3.5 mm thick blade.
  4. In areas where an automatic router cannot be used, use a hand groover.
  5. Use of a narrow preheated welding nozzle will reduce scorching and the shiny appearance at the seam.
  6. Make sure the routed seam is free of dirt, adhesive and particles produced by routing.
  7. Cut the welding rod long enough to weld about 3/4 of the seam.
  8. Set welding temperature to 650°- 850°F (340°- 450°C) and allow welding gun to preheat for several minutes.
  9. Attach the welding nozzle to the gun.
  10. When the correct welding temperature and speed are set, a ridge forms at both sides of the welding rod. Be careful not to burn or char the surface of the floor.
  11. Feed the welding rod through the welding nozzle and apply the welding rod into the routed seam.
  12. The heat gun is at the proper angle when the bottom of the speed nozzle is parallel to the floor.
  13. Proper welding is accomplished by pulling the heat gun slowly towards you.

14. To stop welding and change directions, first make a ramp. Skive the welding rod 1" - 2" from the end of the welded seam. Using a hand groover, groove the skived section of the welding rod.
15. Start welding from the opposite direction, continue up the ramp and overlap the initial weld for several inches creating a splice.
16. Skiving of the welding rod should be done in two passes to minimize concave seams.
17. On the first pass use a spatula knife and a trim plate, skiving away the top part of the welding rod while it is still warm.
18. After the welding rod has cooled to room temperature, remove the remaining excess welding rod on the second pass by holding the spatula knife flush with the flooring. Smooth, continuous passes result in smooth seams. Repeated stop/start action results in rough seams.

## **INSTALLING DECORART® REJUVENATIONS™ WITH DIAMOND 10® TECHNOLOGY COATING IN CONCENTRATED STATIC AND DYNAMIC LOAD AREAS**

Armstrong® DecorArt® Rejuvenations™ with Diamond 10® Technology coating commercial sheet flooring is used in many applications 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 Armstrong 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.**

1. Plan layout of the Armstrong S-240 Epoxy Adhesive so it extends approximately one foot beyond the load area. Use the recommended Armstrong full-spread Adhesive in all other areas.
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 three to five minutes to a uniform color.  
**Do not over mix.** Never mix Armstrong S-240 Epoxy Adhesive on the subfloor surface. **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 Armstrong S-240 Epoxy Adhesive is approximately 15 minutes depending on temperature and humidity.
3. Apply Armstrong S-240 Epoxy Adhesive with the recommended trowel notching.
4. **Using the supplied 3/16" nap paint roller, wet out the 3/16" paint roller by rolling it in on a piece of scrap material that contains the Armstrong S-240 Epoxy Adhesive. This will prevent removal of already applied Armstrong S-240 Epoxy Adhesive when rolling.**
5. **Carefully roll out the Armstrong S-240 Epoxy Adhesive trowel ridges using the supplied 3/16" nap paint roller, creating a uniform application of the Armstrong S-240 Epoxy Adhesive.**
6. After troweling and rolling of the Armstrong S-240 Epoxy Adhesive, allow 10-20 minutes open time before placing the flooring into the adhesive. **Do not allow the Armstrong S-240 Epoxy Adhesive to dry completely.**
7. When using Armstrong S-240 Epoxy Adhesive in conjunction with the recommended Armstrong full-spread Adhesive, plan the open times so that the flooring may be placed into both adhesives at the same time. Working time of Armstrong S-240 Epoxy Adhesive is 60 minutes.
8. After allowing the proper open time, carefully place the flooring into the Armstrong S-240 Epoxy Adhesive to ensure that air bubbles are not trapped beneath the flooring.

9. Within 30 minutes of the Armstrong 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; if necessary use a kneeling board.
10. Clean any adhesive residue from the surface of the flooring using a clean, white cloth dampened with a neutral detergent and water. **Dried Armstrong® S-240 Epoxy Adhesive cannot be removed.**
11. Repeat rolling procedure at one hour, and two hours after the initial application of Armstrong S-240 Epoxy Adhesive.
12. **Seams must be heat-welded. Wait a minimum of 10 hours before heat-welding.**
13. Do not allow traffic on the flooring for 24 hours after installation. 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.