

# Fiberglass-Reinforced Sheet Flooring Installation System

## RESIDENTIAL USE ONLY

Product	Gauge	Adhesive	Comment
Bayside Bayside II FlexStep Value	0.055" (1.4mm)	Modified loose lay method: Acrylic double-faced tape at seams or 2"-3" (5.08 cm –7.62 cm) band of S-288 Flooring Adhesive or S-289 Releasable & Permanent Flooring Adhesive at the seams Full Spread Releasable Adhesive method: S-289 Releasable & Permanent Flooring Adhesive Conventional Full Spread method (not releasable): S-288 Flooring Adhesive S-289 Releasable & Permanent Flooring Adhesive S-580 Flash Cove Adhesive (when using the S-288 Flooring Adhesive only)	Seams: Double cut Seam treatment: Apply S-500 Seam Coating or S-761 Seam Adhesive
FlexStep Good	0.065" (1.65mm)		
CushionStep Value Sentinel	0.075" (1.905mm)		
Kempton	0.078" (1.98mm)		
CushionStep Good Duality Premium Forsyth Fresh Waters Great Manor Lumex Owasso River Bank Sentinel Taloga	0.080" (2.0mm)		
AVANTRA Premium 2	0.083" (2.1 mm)		
Duality Premium Plus European Travels Landmark Lumex Plus Study Abroad Summit	0.085" (2.16mm)		
AVANTRA	0.090" (2.28 mm)		
Caspian II Concerto II CushionStep Better International Laverta Palomar Sundial Worldly	0.100" (2.45mm)		
Chamblis	0.110" (2.79 mm)		
CushionStep Best	0.120" (3.05 mm)		
Autumn Ventures Carina Concerto I Demarest Harvest Time	0.125" (3.18 mm)		
Caspian II Caspian II Plus	0.130" (3.30 mm)		
Archer Point	0.145" (3.68 mm)		
Aquila CushionStep Premium	0.155" (3.94 mm)		

## LIGHT COMMERCIAL USE ONLY

Product	Gauge	Adhesive	Comment
Abode Duality Premium	0.080" (2.0 mm)	Conventional Full Spread method (not releasable): S-288 & S-289 Flooring Adhesives	Seams: Double cut Seam treatment: Apply S-500 Seam Coating or S-761 Seam Adhesive
AVANTRA Premium 2	0.083" (2.1 mm)	Full Spread Releasable Adhesive method: S-289 Releasable & Permanent Flooring Adhesive S-580 Flash Cove Adhesive (when using the S-288 Flooring Adhesive only)	
Duality Premium Plus	0.085" (2.16 mm)		
AVANTRA	0.090" (2.28 mm)		

### Installation:

Location:	All grade levels
Pattern Match:	Yes; do not reverse pieces
Seam Method:	Double-cut
Seam Treatment:	Apply S-500 Seam Coating or Armstrong Flooring S-761 Seam Adhesive
Fitting:	All methods

### General Information:

Fiberglass flooring in residential applications can be installed by three installation methods. The flooring can be installed by the modified loose lay installation method using acrylic double-faced tape under seams, or it can be installed by two full spread options using either S-288 Flooring Adhesive or 289 Releasable & Permanent Flooring Adhesive. Depending on the type of subfloor, size and complexity of the room, and the type of traffic expected in the room, one of the full spread options may be recommended. Fiberglass-reinforced flooring should not be installed by perimeter fastening methods.

In certain areas of the country, where seasonal moisture and humidity changes are severe, the movement in wood subfloors can cause a raised area or a buckle in the flooring near a perimeter pinch point. Typically, if this happens, it will occur during prolonged periods of cold weather when interior conditions become very dry and the wood subfloor/underlayment components dry out and shrink. Should this happen and a buckle occurs, the flooring should be gently lifted or pulled back from the pinch point and re-trimmed.

### Summary of Residential Fiberglass-Reinforced Installation Options

	Modified Loose Lay	S-289 Releasable & Permanent Flooring Adhesive	S-288 & S-289 Flooring Adhesives
Spacing (gap) at vertical surfaces (walls, pipes, etc.)	1/4" (6.35 mm)	1/8" (3.18 mm)	None
Base cabinets on top of flooring	No	No	Yes
Island cabinets on flooring	No	Yes	Yes
Bathrooms	Yes	Yes	Yes
Stairs, landings or rooms with floor drains	No	No	Yes
Seams on suspended wood underlayments	Only 1	Multiple OK	Multiple OK

### Suitable Substrates (for all installation options):

All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions for these substrates to be suitable for the flooring installation.

- Concrete (on all grade levels)
- Ceramic tile, terrazzo, marble
- Approved suspended wood underlayments
- Polymeric poured (seamless) floors
- Single-layer, fully adhered, existing resilient floors
- Existing resilient tile floors that are on grade or suspended

**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
- Carpet
- Hardwood flooring that has been installed
- Existing cushion-backed vinyl flooring 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.
- Substrates must be sound, dry, clean, smooth and free from excessive moisture or alkali.
- The surface shall be free of dust, solvents, varnish, paint, wax, oil, grease, sealers, curing compounds, residual adhesive, adhesive removers and other foreign materials that might affect the adhesion of resilient flooring to the substrate or cause a discoloration of the flooring from below. Spray paints, permanent markers and other indelible ink markers must not be used to write on the back of the flooring material or used to mark the substrate as they could bleed through, telegraphing up to the surface and permanently staining the flooring material. If these contaminants are present on the substrate, they must be mechanically removed prior to the installation of the flooring material.
- 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 100% of the overall area of the original substrate is exposed.
- When installing over an existing resilient floor, use S-194 Patch, Underlayment & Embossing Leveler/S-195 Underlayment Additive to fill and smooth any embossing in the old floor.
- 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]) and/or percent relative humidity (in-situ probe). Bond tests must also be conducted for compatibility with the substrate. Please refer Chapter 3, Subfloors and Underlayments.

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\* 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 [Recommended Work Practices for Removal of Resilient Floor Coverings](#).

## 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.

## 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, unroll flooring so it can acclimate to jobsite conditions. Allow the roll-up stresses to relax and the flooring material to flatten out.
- 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 as noted above.
- 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.

## Fitting:

- Recommended fitting procedures include pattern scribing, straight scribing or freehand knifing.
- Do not cut full or compression fit.

## Planning and Layout:

- Plan the layout so seams in the new flooring fall at least 6" (15.24 cm) away from seams and joints in existing flooring and underlayments.
- Remove wall base and quarter-round moldings.
- The decorative trim and jamb moldings at doorways should be under-cut to allow flooring to slip underneath as you can't hide perimeter gap with wall base in these areas.
- After preparation work is completed, be sure to sweep and vacuum entire work area, taking extra care to remove all dirt and debris.
- Do not install over expansion joints.

### **Use of Armstrong Flooring S-135 VapArrest Professional Moisture Retardant System:**

If the concrete slab does not meet the moisture vapor emission rate, fiberglass reinforced sheet flooring can be installed by the modified loose lay method over the S-135 VapArrest Professional Moisture Retardant System. The VapArrest must be allowed to cure for a minimum of 3 days until tack-free. Use double-faced acrylic tape for the modified installation method. See requirement for S-135.

For concrete subfloors, the percent relative humidity must be 80% or less as determined by test method ASTM F2170. If subfloor internal relative humidity levels exceed the recommended limit, the concrete must be allowed to dry prior to installing the floor.