

INSTALLATION MANUAL FOR AVS SURROUNDS, SILLS, TRIM & CORNICES

Materials:

Adhesives:

Exterior Applications - Merlex "Polyprep or Omega "Dry Bond", mixed with an latex/acrylic cement modifier.

Interior Applications - Sikaflex-1a or other Premium Grade Polyurethane Adhesives

**note: Do not use common brown non-polyurethane sub floor adhesive. Solvents found in these products break down foam backing.*

Other Installation Materials:

- Ledger Board Materials and short screws (short enough to not penetrate water barrier).
- 10"-12" Compound Slide Miter Saw fitted with a diamond blade
- Liquid Bonding Add Mix (latex/acrylic cement modifier. REQUIRED for all installations)
- 3/8" Notched Trowel
- Rubber Gloves
- Drill Mixer
- Safety Glasses
- Vacuum
- Cordless Drill
- Sponge
- Sand Paper
- Square
- Broom
- Chalk Line
- Masonry Grinder
- Wood Hand Saw – minimum 18" blade
- Angle Grinder w/ 4" Diamond Blade
- Level
- Dust Mask
- Potable Water
- Pressure Washer

Site Preparation:

1. Layout material placement plan
 2. Due to limitations of standard adhesive and grout, do not install when rain is expected within 24 hours, or temperature will fall is below 50 degrees. Under such conditions, contact AVS for alternatives.
 3. Check measurements of area to be installed
 4. Calculate the best method to optimize material, utilizing uniform lengths and minimal waste.
 5. Using painter's tape, tape off any painted windows, doors or other finished products in proximity to installation area.
 6. Using a straight rod, ensure that surface to be adhered to be very flat to ensure proper adhesion. (Tolerances are +/- 1/8" inch). Repair depressions with cementitious adhesive; use a masonry grinder to lower any high spots.
 7. Clean and cover areas around installation. Wall areas must be free of dust, dirt and other contaminants. In order to ensure that the wall is properly prepared and cleaned, pressure washing is **mandatory**.
 8. Substrates require dampening prior to installation.
- * *(note: Site preparation is the responsibility of the installer, and all instructions must be followed in order to ensure a properly installed, and safe product.)*

Smaller Shape Installation - (Properly mixed cementitious material has adequate initial set characteristics, enabling small shapes and vertically stacked pieces to adhere without the use of additional support.)

1. Using a 3/8" notched trowel, liberally apply adhesive to the back and ends of the piece, ensuring total coverage on all surfaces. Apply adhesive to the substrate using the same method. It is very important that the adhesive cover the entire surface and substrate.
2. Firmly press shape onto installation surface, slide shape back and forth (following the length of the shape, but no more than 2" in either direction) across installation surface. This allows for uniform distribution of adhesive both to shape and installation surface. In addition, the back and forth motion creates a secure suction.
3. Remember to allow for 1/4" grout joint thickness between pieces. A spacer shim may assist in obtaining uniform grout joints.
4. Do not move shape after initial back and forth motion, allow shape to set for a moment before releasing pressure.
5. Using a margin trowel, clean any excess adhesive from the substrate and the AVS material.
6. Tool back any adhesive in the grout joints, leaving a minimum depth of 1/4".

Larger Shape Installation -- (Larger shapes require more stability than is afforded solely through the use of adhesives. To obtain greater support ledger boards are used.)

(Two installation methods are possible when using ledger board, and both are discussed on the following page.)

Exterior Mounted Ledger – Temporarily installed supports attached to mounting substrate, removed after adhesive sets. This method should not be used on a finished subsurface.

1. Using screws short enough not to penetrate vapor barrier, horizontally attach ledger board to line up with final position of lower edge of installation shape.
2. Ledger board must be level and straight.
3. Using a 3/8" notched trowel, liberally apply adhesive to the back and ends of the piece, ensuring total coverage on all surfaces. Apply adhesive to the substrate using the same method. It is very important that the adhesive cover the entire surface and substrate.
4. Firmly press shape onto installation surface, slide shape back and forth (following the length of the ledger board, but no more than 2" in either direction) across installation surface. This allows for uniform distribution of adhesive both to shape and installation surface. In addition, the back and forth motion creates a secure suction.
5. Remember to allow for 1/4" grout joint thickness between pieces. A spacer shim may assist in obtaining uniform grout joints.
6. Do not move shape after initial back and forth motion, allow shape to set for a moment before releasing pressure.
7. Using a margin trowel, clean any excess adhesive from the substrate and the AVS material.
8. Tool back any adhesive in the grout joints, leaving a minimum depth of 1/4".
9. Ledger can be removed and reset as work progresses.

Interior mounted ledger – cut out in back of shape allows for permanent support to be installed prior to shape installation. Cut outs come from factory ready for installation.

1. Measure back of shape from top finished edge to bottom edge of factory ledger cut out. This height then is transcribed onto installation surface to determine proper placement of ledger board.
2. Using chalk line or laser-scribe a level line at predetermined height of ledger board base.
3. Using adhesive and a notched trowel apply adhesive to foam ledger board backing and secure to installation surface along predetermined level line.
4. Using a margin trowel, clean excess material from all sides of ledger board.
5. No additional attachment is necessary.
6. Allow foam ledgers to set up for a minimum of 10 hours prior to shape installation.
7. Using a 3/8" notched trowel, liberally apply adhesive to the back and ends of the piece. Only apply a **conservative amount** of adhesive to the ledger board and inside the cutout in the piece. (This is to ensure that the size of the adhesive bead does not interfere with the piece's proper fit.) Apply adhesive to the substrate using the same method. It is very important that the adhesive cover the entire foam surface and substrate.
8. Firmly press shape onto ledger board, slide shape back and forth (following the length of the ledger board, but no more than 2" in either direction) across installation surface. This allows for uniform distribution of adhesive both to shape and installation surface. In addition, the back and forth motion creates a secure suction.
9. Remember to allow for 1/4" grout joint thickness between pieces. A spacer shim may assist in obtaining uniform grout joints.
10. Do not move shape after initial back and forth motion, allow shape to set for a moment before releasing pressure.
11. Using a margin trowel, clean any excess adhesive from the substrate and the AVS material.
12. Tool back any adhesive in the grout joints, leaving a minimum depth of 1/4".

Proper Adhesive Curing - To ensure that the AVS product is installed properly, and maintains as strong a bond to the substrate as possible, adhesives must cure completely. To ensure proper adhesion, use the following guidelines:

1. After application, do not disturb product for a minimum of 12 hours.
2. Do not allow product application area to come into contact with extreme temperatures
3. Area must be kept dry while adhesive cures.