



BUILDING TRUST



INSTALL DATA SHEET

Horizontal Colorseal

Do not install this material until all members of your crew have read and understand these instructions. If you do not understand any part of these instructions CALL EMSEAL at 1-800-526-8365

1. Equipment & Material Storage

In addition to general specialty-concrete-preparation tools such as diamond saws, grinders, wire brushes, utility knives, etc., the following are required:

- Tape measure
- High torque / low-speed power drill (1/2-inch / 13mm chuck)
- Jiffy mixer paddles (1 1/2-inch / 40mm)
- Serrated edge knives (8-inch / 200mm or longer)
- Caulking gun and caulk knives (10.3-oz cartridge & 20-oz sausage guns)
- Duct tape
- Chemical-resistant gloves
- Margin trowels (2-inch / 50mm wide)
- Spray bottle filled with water
- Acetone, lint-free rags, & clean paint buckets

Cold Days – Store sealant, off the floor, inside at above 68°F (20°C). It will recover slower when cold and faster when warm.

Very Hot Days – Keep sealant out of direct sun when temperatures greater than 60°F (15°C).

2. Prepare and Solvent-Wipe Joint Faces

Concrete:

- Remove loose particles and weak concrete to ensure sound substrate. Spalls, chipped edges and uneven surfaces must be repaired using suitable patching materials and proper patching geometry and techniques. Joint faces must be parallel.
- Joints must have unobstructed depth greater than or equal to the full depth of the largest material supplied plus 1/4-inch (6mm)
- Remove all contaminants by sandblasting or grinding to ensure a thoroughly clean and sound substrate the full sealant depth.

NOTE - DO NOT use a wire wheel - this will polish the substrate and cause bond-failure

- Dry all wet surfaces

NOTE - DO NOT use a flame to dry substrate - this will leave carbon on the substrate and cause bond-failure.

- Wipe joint faces with solvent-dampened, lint-free rags to remove all concrete and dust contaminants.

Metal:

- Sandblast or grind to rough, white metal and solvent-wipe immediately prior to applying epoxy.

IMPORTANT: Ensure that no oxidation (rusting) occurs before the epoxy is applied.

Other Substrates - [Contact Sika Emseal](#)

DO NOT remove outer plastic packing until you read and understand the rest of these instructions.

- Proper performance of expansion seals necessitate proper installation from beginning through completion.
- Improper handling will cause product to expand prematurely.

3. Mask Deck and Mix Epoxy Adhesive

- Using duct tape, tape off the deck on both sides of the joint.

Mix Epoxy:

Epoxy adhesive may be used in the 40°F (5°C) to 95°F (35°C) temperature range.

- Using a trowel, transfer the entire contents of Part B (hardener) into the contents of Part A (base) .
- Mix the material thoroughly (3 minutes) with a drill and mixing paddle. Scrape the walls and bottom of the container to ensure uniform and complete mixing.
- Always mix component B (hardener) into component A (base). Ensure that a uniform gray color with no black or white streaks is obtained.

IMPORTANT: DO NOT thin the epoxy.

Precaution: Wear chemical-resistant gloves and/or barrier hand cream when handling liquid sealant or epoxy. Remove promptly from skin with a commercial hand cleaner before eating or smoking. Avoid inhaling vapors.

4. Apply Epoxy to Substrate Walls

- Ensure that the mixed epoxy adhesive is applied to both substrate walls before the pot life has expired (10 – 30 minutes depending on the ambient temperature).

WARNING – Epoxy will harden more quickly when left in the pot. Apply it onto the joint faces as soon as possible.

IMPORTANT: The epoxy must still be uncured when installing foam into the joint-gap.

- If the epoxy cures before installing the Horizontal Colorseal foam then reapply new epoxy. If work is interrupted for more than 2 hours after initial cure then grind the old epoxy and apply new wet epoxy.

5. Open Plastic Packaging

- 1 1/2-inch (40mm) and wider material is manufactured as sticks. Widths under 1 1/2-inch (40mm) are manufactured as reels.
- Sticks are held under compression by hardboard and plastic wrapping. When ready to install, slit the plastic wrapping by cutting on the hardboard, discard hardboard and inner release liner.
- In either stick or reel: DO NOT CUT ALONG SEALANT COATING FACE AS THIS MAY COMPROMISE THE WATERTIGHT SEAL

6. Wipe Release Agent Off Sealant Facing

- For packaging and production reasons, the sealant facing is coated in the factory with a release agent.
- Prior to installation, this agent must be wiped off using a solvent in order for the injected sealants bands described in Step 10 to adhere to the sealant facing and to avoid contamination of the substrate at this point.
- Lightly, quickly and thoroughly wipe the cured sealant facing with a lint-free rag made damp with water.

7. Install First Horizontal Colorseal Foam Length into Joint and Apply Silicone to Bellows Face

- When installing the foam into the joint, ensure that the epoxy on the joint face has not cured.
- When installed, the Horizontal Colorseal must be recessed so that the top of the bellows is flush or slightly below the deck surface.
Note – When material is correctly expanded for a snug fit it will support its own weight in the joint.
- Feed material into joint, starting from one end. The material should fit snugly and must be eased into the joint with steady, firm pressure.

8. Install Next Length. Repeat.

- Work in one direction towards the previously installed length or end of joint. Do not stretch material.
- Leave the end to be joined to the previous length sticking proud of the joint--push the joining faces together.
- Push Hard on the length to compress joins firmly together. Ensure there are no voids at joins.
- Once the full length is installed, push the protruding join into the joint and tool off the excess silicone.
- During low temperature installation, provide as much ambient heat as possible around installed Horizontal Colorseal foam to accelerate recovery.

10. Inject Silicone Sealant Bands at Substrates and Tool Excess Silicone

- Wipe any excess epoxy from top of material using a clean rag.
- Before the epoxy cures, force the tip of the silicone nozzle between the substrate and the foam. Inject a 3/4-inch (20mm) deep silicone sealant band between the foam, cured silicone facing and the joint-face.
- Tool the applied silicone firmly to blend with the substrates and cured bellows facing, and to ensure a proper bond and seamless appearance.

- Where the foam meets at butt joins, tool the excess silicone that squeezes out from the top and between the bellows.

IMPORTANT: Silicone left between the wrinkles of the bellows could constrain movement — using a caulk knife, remove excess sealant and blend what remains into the bellows.

11. Transitions, Ends, and Special Conditions

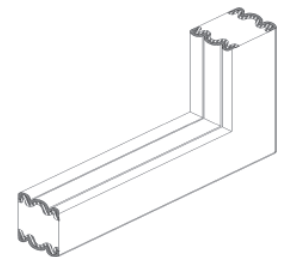
Sequencing – Install factory-fabricated transition and/or termination pieces first. Connect straight run material to in-place terminations and transitions. Apply the joining silicone (at the bellows ends only) on the straight length before inserting it into the joint (see step 8). Bring the join firmly against the butt end of the already installed [Universal-90](#) and push the straight run stick towards this join throughout the process of installing it.

Note – If installing very long runs of material, to avoid having to work at distant ends of a joint run and in order to prevent epoxy from fully curing, the final factory-fabricated Universal-90 termination can be installed as the second-to-last piece.

Cut closing pieces 3/8-inch (10mm) longer than the opening to be joined. Compress material longitudinally to fit.

Universal-90 Transitions

Universal-90's are designed to continue the Horizontal Colorseal through changes in plane such as at floor-to-walls, curbs, treads and risers, or other such changes in slab thickness. Unlike straight-run lengths, BOTH sides of Universal-90's are silicone coated with bellows so there is no top or bottom. They can be turned over to be used either as an upturn or a downturn. Install factory-fabricated transition and/or termination pieces first. Universal-90's may also be used to transition to another EMSEAL foam product. Connect straight run material to in-place terminations and transitions (see step #8). Cut closing pieces 3/8-inch (10mm) longer than the opening to be joined. Compress material longitudinally to fit.

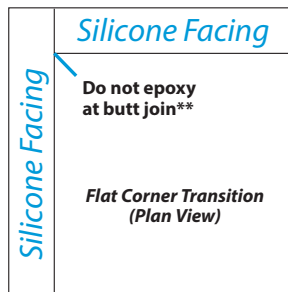


Flat Corners:

- Work towards the corner so that the last two pieces to install will join at the corner.
- Cut each piece to be joined 3/8-inch (10 mm) longer than needed.
- Install one piece so that it runs through the intersecting joint-gap. Firmly push and compress the extra length so that a tight fit in the corner is achieved.
- Firmly butt intersecting pieces into sides of already placed material.

****IMPORTANT:** Be sure that there is no epoxy on the sides or faces of foam at a butt join.

- Using a caulk knife, remove any excess sealant and blend the liquid silicone into the bellows to preserve the bellow shape.
NOTE – The extra length will make it a tight fit — this results in a compression fit.
- Inject a bead of liquid silicone where the silicone faces join and where the silicone faces meet the substrate.

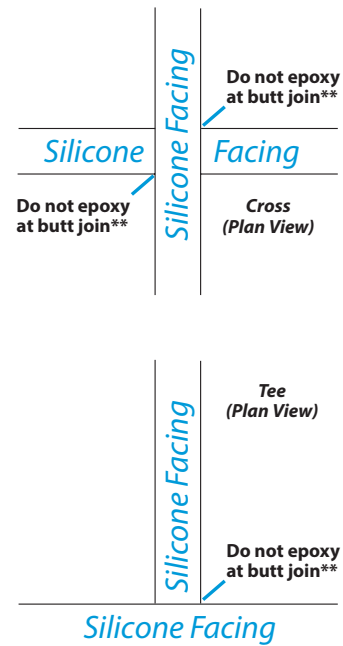


Crosses And Tees:

- Run one piece of material across the intersection. Coat silicone bellows end (only) of the intersecting material with silicone. Firmly butt intersecting pieces into sides of already placed material.
- Using a caulk knife, remove any excess sealant and blend the liquid silicone into the bellows to preserve the bellows shape.

Silicone-Coat Any Exposed Foam Ends:

IMPORTANT: If the Horizontal Colorseal runs are not part of a closed loop system, and Universal-90 terminations are not used (run does not terminate in an upturn or downturn), lightly coat any exposed foam ends using the liquid silicone sealant provided. This is critical in ensuring that the watertightness of the foam is sealed.



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