**Product Description**

- **Horizontal Colorseal** is an evolution of EMSEAL's Colorseal product with reduced compression in the expanding foam backing, field-applied epoxy adhesive on the joint faces, and a field-applied silicone corner-bead between the silicone "bellows" sealing element and the substrates.

- Horizontal Colorseal is produced by coating an acrylic-impregnated open-cell poly-urethane foam with silicone.

- The expanding foam is an acrylic adhesive infused into the cellular foam base material. This new chemistry incorporates a hydrophobic microsphere component never before available in a sealant formulation.

- The silicone external facing is factory applied at a width greater than maximum joint extension and is cured before final compression.

- When compressed, a bellows is created in the coating. As the joint moves, the bellows fold and unfold; the silicone primary seal is thus virtually never in tension.

- Horizontal Colorseal is supplied in shrink-wrapped lengths (sticks). It is precompressed to less than the joint size. After insertion, it expands against the joint faces.

- Non-invasive anchoring and sealing against the substrate is achieved through a combination of the back-pressure caused by the stored strain energy of compression in the foam backing, the field-applied epoxy adhesive, and the field installation of a corner bead of silicone at the substrate-to-bellows interface.

**Uses and Applications**

As a watertight seal in joints including:

- Decks: structural joints, perimeter joints, isolation joints at stair-towers/elevators
- Parapets, roofs
- Concrete covers on above-grade tunnels, wastewater tanks etc.
- Back-up seal beneath expan-sion joint-cover assemblies
- For aesthetically compatible transitions to joints in the vertical plane see tech data sheets for Seismic Colorseal

**Advantages**

- Features the UV resistance, durability and impermeability of silicone.
- Virtually eliminates tensile stresses at sealant bond line and adverse effects of movement occurring before curing in typical sealant-and-backer-rod applications.
- Both mechanically and chemically anchored through back-pressure inherent in the permanently elastic open-cell foam and the adhesion of the epoxy adhesive and through the field-applied silicone corner bead.
- Reduces installation labor and materials, such as need for accurate positioning of a backer-rod, site mixing, tooling, etc.
- Complete line of industry standard colors.
- Supplied precompressed to less than joint size — no field compression required.

**Limitations**

- Metal coverplates (by others) must be installed above Horizontal Colorseal where vehicular or pedestrian foot traffic or other high-point-load/small-contact-surface area loads are anticipated.
- If movement exceeds ±50% (100%total) of joint-gap size at mean temperature, integrity of seal will be affected.
- Capable of lateral ("shear") movements up to ±50% (total 100%) of joint size at mean temperature.
- Standard sizes from 1/2" (12mm) to 8" (200mm). Other sizes available subject to review of application: consult EMSEAL Technical Services.
Installation

IMPORTANT: The following instruction-summary is generic. Refer to "Install Data: Horizontal Colorseal" and job-specific instruction of EMSEAL technician for complete procedures.

- Store indoors at room temperature. Expansion is quicker when warm, slower when cold.
- Ensure material nominal size matches joint size.
- Mix epoxy now and trowel onto joint faces.
- On smaller-width reels unroll to the desired length. For 2M sticks remove shrink-wrap packaging, hardboard.
- Wipe factory-applied release agent off silicone facing using clean, lint-free rag made damp with toluene.
- Apply thin bead of silicone sealant along edge of bellows at end where the material will join with next length.
- Insert material into joint with at least a 1/4” (6mm) recess and adhere to one side. Material expands to seal joint. (Wedge larger-sized material in place while it expands.)
- Blend silicone at joins into the silicone bellows to create a consistent finished appearance being sure not to restrict the folds of the bellows.
- Once material has equalized its expansion across the joint, gun and tool a 1/4” x 1/4” (4mm x 4mm) corner bead at the substrate-to-bellows interface (see Fig. 1). (Note: unpainted metal surfaces and some natural stone surfaces may require priming — consult EMSEAL.)

CAD & Guide Specs

Guide specifications and CAD details are available online at emseal.com or by contacting EMSEAL.

Warranty

Standard or project-specific warranties are available from EMSEAL on request.

Availability & Price

Horizontal Colorseal is available for shipment internationally. Prices are available from local representatives or direct from the manufacturer. The product range is continually being updated, and accordingly EMSEAL® reserves the right to modify or withdraw any product without prior notice.

<table>
<thead>
<tr>
<th>Property / Test</th>
<th>Value</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Available in many industry standard colors</td>
<td></td>
</tr>
<tr>
<td>Durometer Hardness</td>
<td>Silicone Coating: Shore A, 15 pts.</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Staining</td>
<td>None</td>
<td>ASTM C510</td>
</tr>
<tr>
<td>Weatherometer</td>
<td>Xenon Arc Weatherometer</td>
<td>2000 hrs — No visible deterioration</td>
</tr>
<tr>
<td>Primary Surface Weathering</td>
<td>Atlas Weatherometer</td>
<td>6000 hrs–Minimal hardness change</td>
</tr>
<tr>
<td>Temperature Range High Permanent</td>
<td>-40°F (-40°C)</td>
<td>ASTM C711</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>21 psi min; 145 kPa</td>
<td>ASTM D3574</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>0.34 Btu. in/hr. ft2 °F (0.05 W/m.°C)</td>
<td>ASTM C518</td>
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Table 2: Typical Physical Properties & Testing

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Horizontal Colorseal is available in 1/4” sizes in addition to the sizing seen above. Sizes above 8” are also available. Consult EMSEAL Technical Services.

- Select nominal material size to correspond to joint-gap size at mean temperature.
- Sizes of 1/2” (12mm) to 1 1/4” (30mm) are supplied on a reel. Larger sizes are supplied as sticks of 6.56 ft (2M)