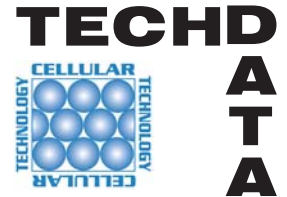




# SEISMIC COLORSEAL



## Product Description

SEISMIC COLORSEAL provides, watertightness, thermal insulation, 100% movement capability, UV stability, and color coordination with substrates. It performs these multiple functions while incorporating no metals and no invasive anchoring.

In contrast to liquid-applied sealants, SEISMIC COLORSEAL is free of tensile stresses at the bond line and virtually free of tensile stresses in its low-modulus silicone facing. It is capable of movements up to  $\pm 50\%$  (total 100%) of mean temperature joint size and provides a cost-effective, long-term, watertight seal.

SEISMIC COLORSEAL combines factory-applied, low-modulus silicone, with an open-cell polyurethane foam infused with a water-based, non-drying acrylic dispersion. The silicone external color facing is factory applied while the foam is partially precompressed to a width greater than maximum anticipated joint extension and is cured before final compression. When fully compressed, a bellows is created in the coating. The bellows folds and unfolds during movement virtually free of tensile stresses.

Supplied precompressed to slightly less than its nominal size for ease of installation, it is packaged in shrink-wrapped lengths (sticks) with a mounting adhesive on one side. The shrink-wrap and hardboard packaging are removed, as is the release liner covering the mounting adhesive. The product is inserted into the joint, adhered to one joint face. It then expands to seal the joint.

Sealing against the substrate is achieved through a combination of the pressure-sensitive adhesive acrylic in the foam, the back-pressure of the expanding foam and the field installation of a corner bead of silicone at the substrate-to-bellows interface.

## Product Features

Features the UV resistance, durability and impermeability of silicone.

Eliminates tensile stresses at bond line and adverse effects of movement occurring before liquid sealant cure.

Reduces installation labor and materials such as: priming, accurate positioning of backer-rod, site mixing and tooling etc, and is less reliant on meticulous substrate preparation.

Joint movement capability is  $\pm 50\%$  (100% total) of nominal material size.

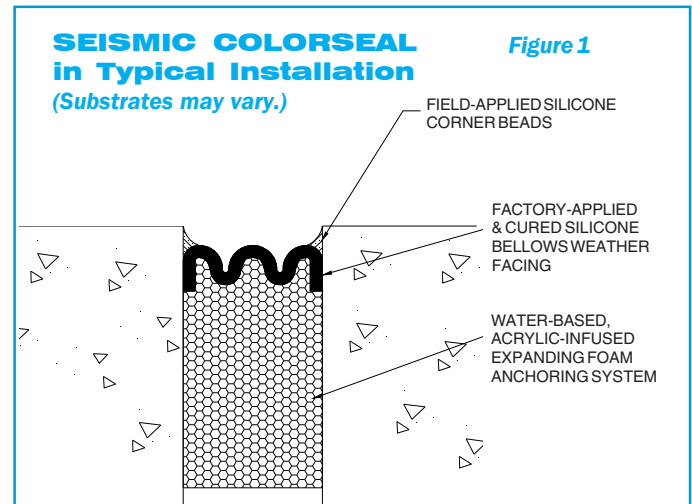
SEISMIC COLORSEAL is anchored by back-pressure inherent in the elastic open-cell foam backing. In addition, it is adhered to the substrate by the pressure-sensitive-adhesive acrylic in the foam and finally by the field-applied corner beads.

Unlike screwed-in "rubber-and-rail" products, SEISMIC COLORSEAL requires no drilling or invasion of the substrate for its anchoring. It is uniquely suited to curtainwall and applications at inside corners where access for installation is obstructed and where violation of the mullions or other substrates is not advisable.

26 industry-standard colors (*consult EMSEAL*)

Supplied precompressed to less than joint size—no field compression required.

Standard sizes from 1/2" (12mm) to 12" (300mm). Other sizes available subject to review of application—consult EMSEAL. Note: sizes 3/4" (20mm) and smaller will have convex single-bellows surface.



## Uses

- For all joints 1/2-inch (12mm) and to 12-inches (300mm).
- For small joint where a lasting alternative to liquid sealant and backer-rod is desired.
- **Facades**  
SEISMIC COLORSEAL can be used in joints in building facades of masonry, precast concrete, brick, natural stone, metal curtainwall, window mullions, GFRP and most other substrates.
- **Inside Corners and Additions**  
SEISMIC COLORSEAL is uniquely suited to filling expansion joints at additions and particularly at inside corners. "Rubber-and-rail" alternatives cannot be properly installed at inside corners due to lack of access for drilling equipment. SEISMIC COLORSEAL uses no invasive anchoring and can be readily installed without violation of the substrates.
- **Panelized Systems**  
SEISMIC COLORSEAL is ideally suited to sealing many panelized cladding systems that rely on "barrier-wall" sealing principles including metal cladding, window-wall systems, skylights, precast panels, etc.
- **Transitions from Wall to Deck Joints** Transitions from vertical to horizontal-plane joints in parapets, walls, split columns, etc. are critical to watertightness and can be properly addressed using SEISMIC COLORSEAL. Transitions into other products by EMSEAL for waterproofing joints in decks, as well as into roof-joints, etc. are readily possible—consult EMSEAL.
- **Masonry Cavity Walls**  
As the visible seal in a cavity wall facade, SEISMIC COLORSEAL can in addition be installed in the structural backup to ensure continuity of the wall's R-value and of the air/vapor barrier.
- **Varying Joint Sizes, Curves, & Plane Changes**  
Joints vary in size due to construction tolerance buildup and because of substrate changes. Supplied to field-measurements, SEISMIC COLORSEAL accommodates joint size variations. It is pliable and can be conformed in the field to radii, and changes in plane and direction at soffits, and other architectural features.

**SEISMIC COLORSEAL Sizing**

Nominal Material Size at Mean T°	Depth of Seal
1/2 in (13mm)	1 1/2 in (40mm)
5/8 (16)	1 1/2 (40)
3/4 (19)	1 1/2 (40)
1 (25)	1 1/2 (40)
1 1/4 (30)	2 1/4 (55)
1 1/2 (40)	2 1/4 (55)
1 3/4 (45)	2 1/2 (65)
2 (50)	2 1/2 (65)
2 1/4 (55)	2 1/2 (65)
2 1/2 (65)	2 3/4 (70)
2 3/4 (70)	3 (75)
3 (75)	3 1/2 (90)
3 1/4 (85)	3 3/4 (95)
3 1/2 (90)	3 3/4 (95)
3 3/4 (95)	4 1/4 (105)
4 (100)	4 1/2 (115)
4 1/4 (110)	4 1/2 (115)
4 1/2 (115)	5 (125)
4 3/4 (120)	5 1/4 (135)
5 (125)	5 1/2 (140)
5 1/4 (135)	5 3/4 (145)
5 1/2 (140)	5 3/4 (145)
5 3/4 (145)	5 3/4 (145)
6 (150)	6 (150)
6 1/2 (165)	6 1/2 (165)
7 (175)	7 (175)
7 1/2 (190)	7 1/2 (190)
8 (200)	8 (200)
8 1/2 (215)	8 1/2 (215)
9 (225)	9 (225)
9 1/2 (240)	9 1/2 (240)
10 (250)	10 (250)
10 1/2 (260)	10 1/2 (260)
11 (275)	11 (275)
11 1/2 (290)	11 1/2 (290)
12 (300)	12 (300)

**Installation Overview**

**IMPORTANT:** This instruction-summary is generic. Refer to Install Data and, if applicable, to job-specific instructions of an EMSEAL technician.

- Store at room temperature. Expansion is quicker when warm, slower when cold.
- Ensure material nominal size matches joint size adjusted from mean temperature.
- Remove shrink-wrap packaging, hardboard, and mounting-adhesive release paper.
- Wipe factory-applied release agent off silicone facing using damp, clean, lint-free rag
- 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 joint face. Allow material to expand against other joint face. (Wedge larger-sizes 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 fillet bead of the supplied liquid silicone at the substrate-to-bellows interface (see Fig. 1). (Note: unpainted metal surfaces and some natural stone surfaces may require priming--consult EMSEAL.)

**Warranty**

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

**CAD & Guide Specs**

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

**Availability & Price**

SEISMIC COLORSEAL is available for shipment internationally. Prices are available from local distributors and representatives or direct from the manufacturer.

Product range is continually being updated, and accordingly EMSEAL® reserves the right to modify or withdraw any product without prior notice.

**Typical Physical Properties**

Property	Value	Test Method
<b>Durometer Hardness</b> (As cured)	Silicone coating - not to exceed 25 pts (± 5), Shore A	ASTM C661
<b>Weatherometer</b>	Xenon Arc Weatherometer 2000 hrs - No visible deterioration	ASTM C510 ASTM G26-77
<b>Primary Surface Weathering</b>	Atlas Weatherometer 6000 hrs-minimal hardness change	ASTM G26-77
<b>Temperature Range</b> High Permanent Low Permanent	185°F (85°C) -40°F (40°C)	ASTM C711
<b>Composition</b>	Contains no wax or wax compounds	FTIR (Fourier Transform Infrared Spectroscopy) DSC (Differential Scanning Calorimetry)
<b>Bleeding/Staining</b>	Materials will not bleed or stain	ASTM C510
<b>R-Value</b>	2.15 per 1-inch (25mm) depth	ASTM C518-04
<b>STC Rating</b> (Sound Transmission Class)	STC 52 (in a STC 56 wall)	ASTM E90-09
<b>OITC Rating</b> (Outdoor Indoor Transmission Class)	OITC 38 (in a OITC 38 wall)	ASTM E90-09
<b>Air Permeability</b>	ABAA Compliant 0.0078 L/(s·m²) @ 75 ΔP(Pa) 0.0118 L/(s·m²) @ 250 ΔP(Pa)	ASTM E283-04
<b>Water Penetration</b>	No water penetration - 15 minute duration at 500 ΔP(Pa), 1000 ΔP(Pa) and 5000 ΔP(Pa)	ASTM E331-00
<b>Wind Loading</b> <i>Hurricane Standard Miami-Dade County, FL = 150 mph</i>	-0.1mm Net Deflection of Span @ +2730 ΔP(Pa), 150 mph +0.1mm Net Deflection of Span @ -2730 ΔP(Pa), 150 mph -0.6mm Net Deflection of Span @ +4854 ΔP(Pa), 200 mph +0.5mm Net Deflection of Span @ -4854 ΔP(Pa), 200 mph	ASTM E330