



COLORSEAL-PR

Vandalism / Water / Movement / Sound

TECH DATA



COLORSEAL-PR displayed with Limestone bellows in typical substrate.

Product Description

COLORSEAL-PR is a pick-resistant, watertight, sound attenuating, expansion joint for locations requiring a hardened tamper-resistant surface. Institutional walls such as those found in prisons, detention centers, medical and psychiatric hospitals, defense facilities, secure locations, school facilities and day-care centers are some of the many venues where **COLORSEAL-PR** is the perfect choice.

The system is comprised of an open-cell polyurethane foam impregnated with a water-based, stabilized, polymer-modified acrylic. The foam contains no waxes or asphalt. It is manufactured with a top coat of waterproof, tamper-resistant polyurethane. The system is supplied compressed smaller than the width of the joint gap. A field-injected polyurethane sealant band seals the bellows to the substrate at the installation surface. Joints between each stick are executed using a field-applied polyurethane sealant at the bellows' edge of the joint.

COLORSEAL-PR functions as a watertight primary seal with movement capabilities of +/- 25% (50% total) available in widths for gaps ranging from 1/2-inch to 8-inches (12mm - 200mm). It is designed to be used in both retrofit and new structural expansion joints and in all other openings in vertical-plane applications.

Pick-Resistant, Watertight, Sound Attenuating, Wall Expansion Joint

COLORSEAL-PR is watertight, sound-attenuating, and energy-efficient. It is manufactured with a pick-resistant outer polyurethane seal for use in both retrofit and new structural expansion gaps in vertical-plane applications.

This pick-resistant expansion joint, in a single installation, provides a watertight, clean-handling, UV-stable, non-staining, low-temperature-flexible, high-temperature-stable, watertight, sound-attenuating, energy-efficient tamper-resistant, structural expansion joint seal.

COLORSEAL-PR builds on EMSEAL's track record of over 30 years of innovation in sealing structural expansion joints with impregnated foam sealants.

Twice the Movement of Pick-Resistant Liquid Sealants

Liquid sealants offered for security applications achieved their tamper resistance in part from their hardness. Hardness restricts movement. In general, pick-resistant liquid sealants have movement capability of +/- 12.5% or 25% total. Because of the bellows configuration of **COLORSEAL-PR**, the tamper-resistant polyurethane sealant is not stretched or compressed as in typical field-applied "caulk and backer rod" installations. Instead, the bellows folds and unfolds with joint movement. This results in the ability to offer a full 50% total movement capability thereby extending the use of tamper-resistant sealant technology to structural movement joints.

Product Features

Secure Pick-Resistant Seal

The outer watertight layer is made of a hardened flexible polyurethane which resists deterioration and destruction from picking. This deters vandalism, dislodging of debris harmful to patients or inmates, and the ingestion of picked materials by young children.

Watertight

All EMSEAL preformed-sealant expansion joint systems are manufactured to be "watertight by design". The acrylic-impregnated open-cell foam is factory pre-coated with water-resistant polyurethane which acts as the primary waterproof seal.

Sound Suppression

A single-sided installation of standard 4-inch **COLORSEAL-PR** yields a tested Sound Transmission Class rating of STC 56 in a STC 72 wall. It also receives an Outdoor-Indoor Transmission Class rating of OITC 53 in an OITC 61 wall.

Non-Invasive Anchoring

There are no hard metal-to-substrate connections with **COLORSEAL-PR** such as embedded pins, anchors, screws, bolts or tracks, trays or rails, flanges or coverplates. The system is locked to the joint faces by means of the backpressure of the foam and the injected sealant bands at the joint face. This single-unit installation accommodates installation at later construction stages where access, positioning, or the existing infrastructure may interfere.

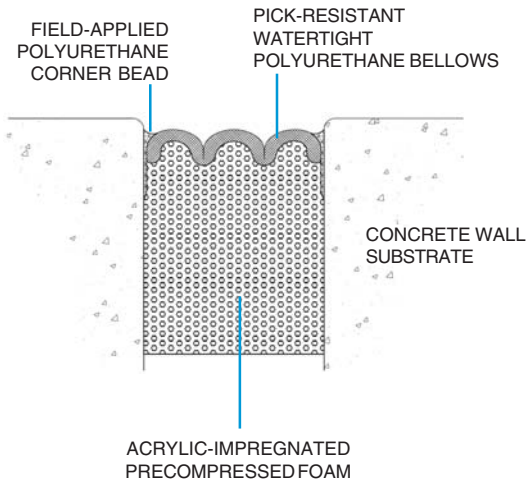
Energy Efficiency

EMSEAL's foam technology also acts as an efficient thermal barrier. This means that indoor air quality and HVAC balance can be controlled while insulating the interior space from hot and cold exterior conditions. The non-metallic, non-invasive anchoring means that with **COLORSEAL-PR** there are no thermal breaks introduced at structural or other joint openings.

Joint-Size Variation

Uniform bellows appearance, and the ability to handle variations in joint size through size-switching.

COLORSEAL-PR



Uses

- Prisons
- Detention Centers
- Schools
- Psychiatric Facilities
- Defense Locations
- Daycare Facilities
- Anywhere vandalism is a concern

For expansion joints in exterior and interior walls where a combination of pick-resistance, watertightness, sound attenuation and thermal efficiency are required. It can be used alone or under any other expansion joint cover, plate or filler where depth of substrate allows. Its pick-resistant surface composition makes it an excellent choice where the integrity of the seal and tamper prevention is necessary.

Colors

The polyurethane face of **COLORSEAL-PR** can be manufactured in either Tru White or Limestone to blend with the two wall surfaces.

Bellows Configuration

Widths from 1/2" (12mm) to 1 1/2" (40mm) are sealed with single bellow seals. Widths from 1 3/4" (45mm) to 8" (200mm) are sealed with a multiple bellows seals.

Performance

Capable of movements of +25%, -25% (50% total) of nominal material size.

Standard sizes from 1/2" (12mm) to 8" (200mm).

Depth of Seal range = 1 1/2" (40mm) to 8" (200mm) .

Testing and Standards

The **COLORSEAL** product line is designed to withstand water and wind penetration in severe conditions. Testing includes independent laboratory certification of testing and passage of ASTM E-330 (Structural Performance of Curtain Walls by Uniform Static Air Pressure Difference—Gust Loads), E-331 (Water Penetration of Curtain Walls by Uniform Static Air Pressure Difference), and E-283 (Rate of Air Leakage Through Curtain Walls).

COLORSEAL-PR Sizing

Product Code	Nominal Material Size (Joint Size @ Mean Temp.)	Depth of Seal
CPR-45-40-02	1/2" (12mm)	1 1/2" (40mm)
CPR-60-40-02	5/8" (15mm)	1 1/2" (40mm)
CPR-80-40-02	3/4" (20mm)	1 1/2" (40mm)
CPR-100-45-02	" (25mm)	2 1/4" (55mm)
CPR-120-55-02	1 1/4" (30mm)	2 1/2" (65mm)
CPR-160-65-02	1 1/2" (40mm)	2 1/2" (65mm)
CPR-180-65-02	1 3/4" (45mm)	2 1/2" (65mm)
CPR-200-65-02	2" (50mm)	2 1/2" (65mm)
CPR-220-65-02	2 1/4" (55mm)	2 1/2" (65mm)
CPR-260-70-02	2 1/2" (65mm)	2 3/4" (65mm)
CPR-275-75-02	2 3/4" (70mm)	3" (75mm)
CPR-300-90-02	3" (75mm)	3 1/2" (90mm)
CPR-340-95-02	3 1/4" (80mm)	3 3/4" (95mm)
CPR-360-95-02	3 1/2" (85mm)	3 3/4" (95mm)
CPR-380-105-02	3 3/4" (95mm)	4 1/4" (105mm)
CPR-400-120-02	4" (100mm)	4 3/4" (120mm)
CPR-420-120-02	4 1/4" (105mm)	4 3/4" (120mm)
CPR-460-125-02	4 1/2" (115mm)	5" (125mm)
CPR-480-135-02	4 3/4" (120mm)	5 1/4" (135mm)
CPR-500-140-02	5" (125mm)	5 1/2" (140mm)
CPR-540-145-02	5 1/4" (130mm)	5 3/4" (145mm)
CPR-560-145-02	5 1/2" (140mm)	5 3/4" (145mm)
CPR-580-145-02	5 3/4" (145mm)	5 3/4" (145mm)
CPR-600-150-02	6" (150mm)	6" (150mm)
CPR-660-165-02	6 1/2" (165mm)	6 1/2" (165mm)
CPR-700-175-02	7" (175mm)	7" (175mm)
CPR-760-190-02	7 1/2" (190mm)	7 1/2" (190mm)
CPR-800-200-02	8" (200mm)	8" (200mm)

Warranty

Standard or project-specific warranties are available from EMSEAL on request. This product can only perform its designed function if it, and the joint-gap into which it is installed, is sized to suit anticipated joint movements in consideration of the movement capability of the product and in consideration of the temperature at time of installation, and if it is installed in strict accordance with EMSEAL's installation instructions.

Availability & Price

COLORSEAL-PR is available for domestic or international shipment. Prices are available from local representatives and/or directly 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.