



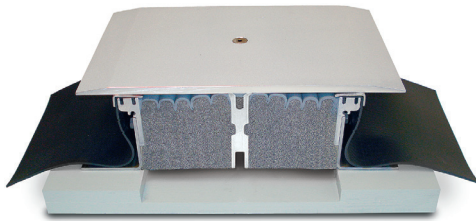
BUILDING TRUST



## PRODUCT DATA SHEET

# SJS-FP System

**Watertight, Seismic and Large-Gap Deck Expansion Joint System for Split-Slabs, Plazas, Stadium Concourses, etc.**



SJS-FP sample shown here is displayed in substrate mock-up

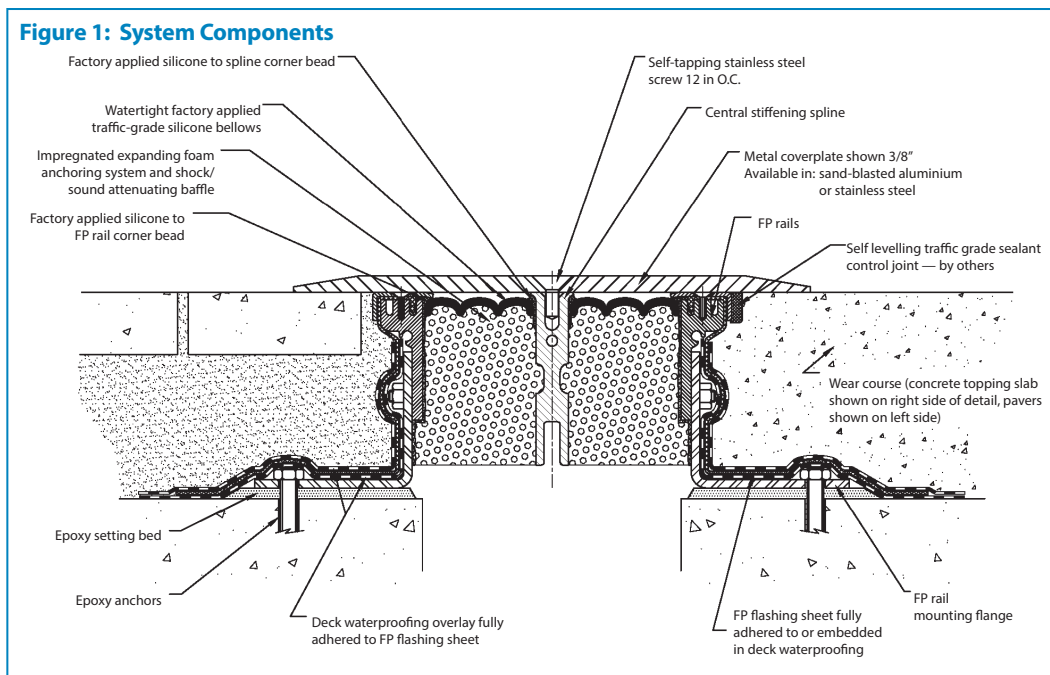
### Product Description

- **SJS-FP** by Sika Emseal is designed to provide a watertight, trafficable joint system in large (2-inch /50mm) and larger joint openings, in decks of split-slab design.
- The **SJS-FP System** consists of two sub-assemblies:
  1. The structural-slab mounted sup-porting legs with integral waterproofing side sheets; and
  2. the joint sealing and coverplate assembly.
- The mounting leg assembly is delivered with opposing legs factory-set to the nominal joint size. It is installed into a wet-setting bed of epoxy mortar and bolted to the deck.
- The joint sealing and bridging assembly consists of a central stiffening spline flanked by two watertight sealant bellows supported by precompressed, impregnated foam shock absorbers, and covered by a heavy duty coverplate.
- The factory-assembled spline, bellows, foam units are shipped with factory-attached, installation hanger-bars. Epoxy gel adhesive is applied to the faces of the previously installed mounting leg assembly.
- The sealing assembly is lowered into the joint gap where it self-expands into wet epoxy adhesive.
- Consecutive lengths are joined through the field-application of manufacturer-supplied, low-modulus, high-movement sealant to the spline and intersecting bellows surfaces. Friction fit alignment pins prevent joints from moving during sealant cure.
- A field-applied sealant band is injected at the bellows to joint substrate interface to complete the waterproofing.

- The deck waterproofing membrane is installed on the deck and brought up to the SJS-FP System. With the SJS-FP side flashing sheets pulled out of the way, the membrane is installed over the top of, and up the SJS-FP mounting legs. The side flashing sheets are lowered into the liquid membrane (or into the non-sag mastic component of a sheet-waterproofing System) and sandwiched with another layer of water-proofing.
- Concrete, pavers, asphalt, or other topping slab or wearing course material is installed up to the stainless steel retaining caps on the SJS-FP mounting rails.
- The SJS-FP joint-sealing assembly installation hanger bars are removed sequentially as coverplates are lowered over the joint and screwed to the center spline, completing the installation.

### Uses and Applications

- For new construction and retrofit of old or failed joint Systems.
- For restoring watertightness to chronic leaking over occupied spaces.
- Uniquely suited to joint openings designed for seismic separation of structural building elements.
  - split-slab decks
  - plaza decks
  - airport roadways
  - stadium concourses, etc.
  - parking decks
  - podium decks
  - mall bridge connectors



## Features

**Watertight** – the tensionless sealant bellows are installed flush to the mounting height of the system and just below the coverplate. This ensures that watertightness is achieved at the deck surface. The need for moisture barriers and secondary gutter Systems is eliminated. Integration of the SJS-FP side flashing sheets into a sandwich with the deck waterproofing membrane ensures the deck-to-joint interface is watertight.

**Non-Invasive Anchoring** – there are no hard metal-to-concrete connections in the coverplate System at all. This includes embedded pins, anchors, screws, bolts or tracks, trays or rails. The coverplate assembly is locked to the joint faces by means of the backpressure of the foam and the epoxy adhesive, and by the weight of the assembly.

**Sound Attenuation** – the flanking impregnated foam and sealant hybrid acts not only as the anchoring System, but also as a highly effective sound and shock dampener. Optional sound attenuating polyurethane nosing material further dampens sound and provides a plate levelling mechanism. The result is a sound-attenuated, watertight coverplate System.

**Self-Locating Coverplate Screws** – the center spline is a continuous receptor for the coverplate screws that are self-tapped into the anchor channel. This feature dramatically reduces installation-related problems of locating self-centering, sliding ball devices and pantographs. The probability of screws being left out is eliminated by the ease of anchoring which also ensures proper plate alignment between sections.

**Self-Locking, Vibration-Dampened Screws** – Vibration in alternative Systems that rely on metal-to-metal connections and contact points is the primary cause of screw loosening. Vibration that might otherwise work to loosen screws in these technologies is, in the SJS-FP, first dampened by the massive and continuous springs of impregnated foam along the entire length of the joint. In addition, 30 pounds of force is required to loosen the screws which translates into excellent resistance to loosening without the need for thread-lock compounds.

**Field-Adjustable Plate Support** – installation over a levelling-bed of Emseal-supplied elastomeric nosing material provides the opportunity to fine-tune the support of the coverplate sections to reduce rocking and noise caused by unlevel plates. Concrete in new and retrofit applications is inevitably uneven across and along the joint. Systems that attach or embed extruded rails to receive sliding ball and socket devices cannot be adjusted to eliminate unevenness across and down the length of the joint.

**Continuity of Seal** – as in all Emseal expansion joint Systems, continuity of seal through changes in plane and direction is an essential performance differentiator. Factory-fabricated transitions at curbs, sidewalks, parapets, tees, and crosses are available with the SJS System. Details for watertight, field-fabricated transitions between the different Emseal product Systems are available.

## Performance & Selection

**Joint Sizes** – For mean-temperature, structural-slab, joint sizes from:

**2-inch (50mm) up to 16-inches (400mm)**. For special sizing conditions consult Emseal.

**Movement Capability** – 100% (+50% and -50%) of nominal material size.

**Leg Heights** – 2 1/2-inches (60mm) to 12-inches (300mm)

**Depth of Seal (Foam Depth)** –

Width: 2" (50mm) to 3 1/2" (90mm) Depth: 3" (100mm)

Width: 4" (100mm) to 8" (200mm) Depth: 4" (100mm)

Width: 9" (225) to 16" (400mm) Depth: 5" (125mm)

**Coverplates** – Standard coverplate is 3/8-inch (10mm) sand-blasted aluminium or stainless steel. Other custom metals are possible — consult Emseal.

Coverplate thicknesses can be customized to suit load and traffic expectations — Consult Emseal.

**Fire Rating** – 2-hour fire rating can be achieved with the use of Emseal's SJS-FP-FR.

*Consult Emseal for model number suitable to your specific application.*

## CAD & Guide Specs

[Guide Specifications](#) and [CAD details](#) are available online at [Emseal.com](http://Emseal.com) or by [contacting Emseal](#).

## Warranty

Standard or project-specific warranties are available from Sika Emseal upon request.

## Availability & Price

SJS-FP 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 Sika Emseal reserves the right to modify or withdraw any product without prior notice.

**EMSEAL JOINT SYSTEMS, LTD**  
25 Bridle Lane  
Westborough, MA 01581 USA  
Phone: 508.836.0280  
Fax: 508.836.0281  
[www.emseal.com](http://www.emseal.com)

**EMSEAL, LLC**  
111 Royal Group Crescent  
Woodbridge, ON L4H 1X9 Canada  
Phone: +1-416-740-2090  
Fax: +1-416-740-0233  
[www.emseal.com](http://www.emseal.com)

**SIKA CORPORATION**  
201 Polito Avenue  
Lyndhurst, NJ 07071 USA  
Phone: +1-800-933-7452  
Fax: +1-2019336225  
[www.usa.sika.com](http://www.usa.sika.com)

**Product Data Sheet**  
Sika Emseal SJS-FP  
June 2023 Version SE-1.1



**BUILDING TRUST**

