



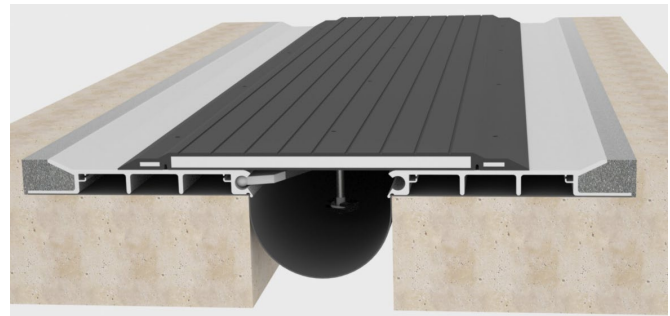
BUILDING TRUST



# Wabo® Seismic SafetyFlex (SSF)

Heavy Duty Seismic Expansion Control System (Patent Pending)

Features	Benefits
<ul style="list-style-type: none"> <li>• Accommodates wide openings</li> </ul>	Standard systems designed for joint openings up to 24 inches.
<ul style="list-style-type: none"> <li>• Multi-directional movement</li> </ul>	System can accommodate multi-directional seismic movement.
<ul style="list-style-type: none"> <li>• Sound Attenuation</li> </ul>	Rubber encapsulated metal plates eliminates the loud noise associated with most metal cover plate systems.
<ul style="list-style-type: none"> <li>• Durability</li> </ul>	Carbon Steel plates are encapsulated inside a molded rubber cover protecting the material from deterioration.



### RECOMMENDED FOR:

For use in various construction projects including:

- Parking Decks
- Plaza Decks
- Airports
- Convention Centers
- Hospitals
- Garages
- Commercial Buildings
- Interior/Exterior Applications
- Stadium Parking / Decks

### DESCRIPTION:

The Patent Pending Wabo® Seismic SafetyFlex system is an elastomeric molded cover plate system recommended for wider joint openings exposed to heavy loading or when design considerations call for the ability to accommodate multi-directional seismic movement. Independent metal plates integral to the rubber cover, allows the system to flex in response to changes in vertical displacement between opposing sides of the expansion joint. SSF model complies with ADA guidelines. A newly redesigned self-centering bar mechanism is incorporated to aid in the installation, performance and robustness expected from a Emseal seismic joint system.

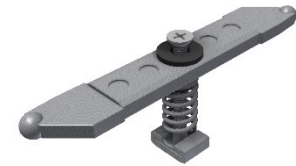
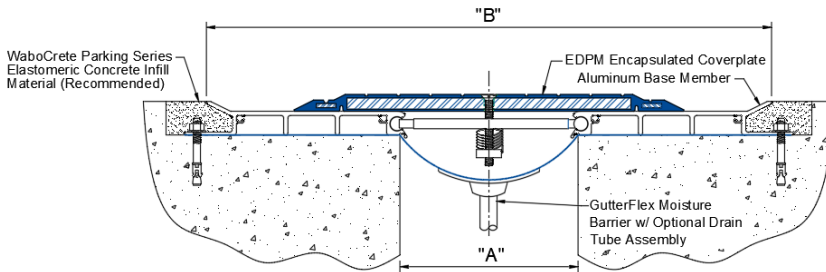
### PACKAGING/COVERAGE:

- SSF-200/400 Standard 12 ft length kit
- SSF-600/800: Standard 10 ft length kit
- SSF-1000/1200: Standard 10 ft length kit
- SSF-1800/2000: Standard 10 ft length kit
- SSF-2200/2400: Standard 8 ft length kit
- Moisture Barrier: Longest possible continuous length
- Accessories: Packaged in Manufacturer's standard label carton
- Shipped: Standard 11 ft. length pallet

**TECHNICAL DATA:**

**Design Information:**

The SSF model cover plates are recessed allowing it to be out of harm's way. The Wabo®SeismicSafetyFlex has a fabric reinforced neoprene sheet good as its heavy-duty moisture barrier and when combined with the optional drain tubes can effectively channel water away from the expansion joint location. There are 5 standard models in this product line. The SSF-200/400 is used for 2" and 4" nominal openings, the SSF-600/800 is used for 6" and 8" nominal openings, the SSF-1000/1200 is used for 10" and 12" nominal openings, the SSF-1800/2000 is used for 18" and 20" nominal openings and the SSF-2200/2400 is used for 22" and 24" nominal openings. When an elastomeric concrete noising (optional) is utilized as the edge void filler, it enhances the system's durability. The improved spring loaded self-centering seismic devices allow the slide plate to return to its natural position after a seismic occurrence.



**Note:** see product sales drawings for additional details

**Movement Table**

Model Number	Joint Opening "A"					
	Min.		Max.		Total	
	Inches	mm	Inches	mm	Inches	mm
SSF-200/400	1.75	44	8.50	216	6.75	171
SSF-600/800	1.25	32	16.00	406	14.75	375
SSF-1000/1200	1.25	32	23.00	584	21.75	552
SSF-1800/2000	1.25	32	28.50	724	27.25	692
SSF-2200/2400	1.25	32	36	914	34.75	883

**EPDM Rubber**

PHYSICAL PROPERTY	ASTM TEST METHOD	REQUIREMENTS
Tensile Strength, min	D-412	1500 psi
Elongation at Break, min	D-412	350%
Hardness, Shore A	D-2240	60 +/- 5
Heat Resistance (70hrs@212°F)	D-573	25%
Tensile Strength, max		
Elongation, max		
Hardness, max		

**EPDM Rubber (cont'd)**

PHYSICAL PROPERTY	ASTM TEST METHOD	REQUIREMENTS
Oil Resistance (70 hrs@212°F)	D-471	
Volume, max		120%
Ozone Resistance 50 pphm for 72 hrs @ 104°F	D-518	100 rating
Compression Set 22 hrs @ 212F, max	D-395	50%



## PHYSICAL PROPERTIES:

**Aluminum Extrusions and Shapes:** Materials shall conform to properties of ASTM B221, 6063-T6 or ASTM B209, 6063-T6 aluminum alloy.

**Self-Centering Bars:** Manufactured incorporating Heavy Duty Stainless Steel springs and spherical ends for the larger sizes, non-metallic for the SSF-200/400 system.

**Moisture Barrier:** Fabric reinforced neoprene sheetgood material. Minimum thickness shall be 0.060”.

## INSTALLATION SUMMARY:

- Blockouts must be made to the dimensions and elevations shown on the standard system drawings.
- Finish grade should be made perpendicular to the joint opening extending to 2 feet on each side of floor slab.
- Tolerance should be flush with zero vertical offset as determined by a 6-foot straight edge.
- Protect all expansion joint component parts from damage during installation.
- Expansion joint system should be set to proper width at the given ambient temperature at time of installation.
- Refer to Emseal installation procedure for additional information.

## RELATED DOCUMENTS:

- Material Safety Data Sheets
- Wabo®SeismicSafetyFlex Specification
- Wabo®SeismicSafetyFlex CAD Drawings
- Wabo®SeismicSafetyFlex Installation

## FOR BEST RESULTS:

- Install when concrete substrate is clean, sound, dry, and cured (14 day minimum). Follow International Concrete Repair Institute (ICRI) concrete repair and maintenance guidelines.
- Do not install if the joint’s anticipated movement will exceed the system’s movement range.
- Protect the work area with appropriate slab protection (i.e. roofing paper)
- To ensure a watertight installation, Sika Emseal recommends using Wabo®Crete Parking Series as the edge void filler.
- Minimize splice points by installing seals in longest possible continuous lengths.
- Do not allow any of the components to freeze prior to installation. Store all components out of direct sunlight in a clean, dry location between 50°F (10°C) and 90°F (32°C).
- Periodically inspect the installed material and repair localized areas as needed. Consult a Sika Emseal representative for additional information.
- Make certain the most current version of the product data sheet is being used. Please consult the website ([www.emseal](http://www.emseal)) or contact a customer service representative.
- Proper application is the responsibility of the user. Field visits by Sika Emseal personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.
- Since methods of application and on-site conditions are beyond our control and can affect performance, appearance or color, Sika Emseal makes no other warranty, expressed or implied.



#### LIMITED WARRANTY:

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