



# MM<sup>®</sup> STS Series Expansion Joint

## Seismic Top-mount Slide Plate System

SPECC DATA  
 MM Systems Corporation • 50 MM Way, Pendergrass, GA 30567 • 866.506.6929 • www.mm-usa.com

### DESCRIPTION

The STS Series is designed for wide expansion joint openings with the ability to accommodate heavy loading and multi-directional seismic movement. The seismic slide plate rides on the top of the finished deck surface. A seismic centering device with impact dampers and tension springs allow the slide plate to accommodate accelerated seismic movement. The integral impact and sound damper also acts as a waterstop. The moisture barrier in conjunction with LokCrete Elastomeric Concrete leveling bed enhances the STS waterproofing capability.

### BASIC USE

STS is a traffic bearing expansion joint for parking structures and other open-air structures requiring seismic movement capability. Contact MM for SSP Series recessed aluminum cover design, SSS Series stainless steel cover design and SNB Series "no-bump" interior design.

### FEATURES

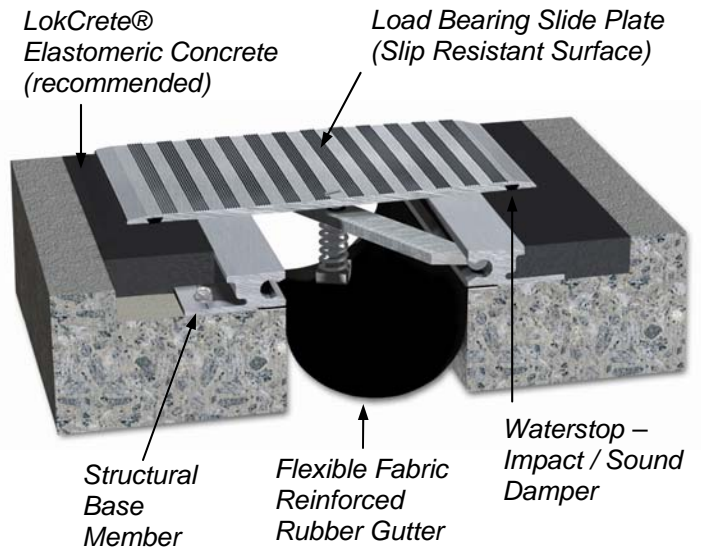
- For wide joints with multi-directional seismic movement.
- AASHTO HS-20 load carrying capability.
- Heavy-duty aluminum base members with interlocking frame design insures proper alignment.
- Fabric reinforced rubber gutter provides added moisture protection.
- Impact / Sound Dampers reduce noise caused by clanging slide plates.
- Complies with ADA guidelines.

### SPECIAL FEATURES

- Slide Plate with impact/sound damper and waterstop.
- Solid aluminum seismic centering device with dynamic load impact dampener. (No plastic)
- LokCrete<sup>®</sup> - hard, elastic, abrasion resistant embed material that flexes with deck loads.
- Fire Barriers - MM expansion joint systems are available with 2 - 4 hour fire protection ratings.

### STORAGE

- LokCrete should be stored in a cool, dry location 60-80°F (15-27°C).



### SEISMIC CENTERING DEVICE

Structural bar, solid aluminum ball ends, impact dampener and adjustable single or dual tension springs.

### PACKAGING

Aluminum extrusion in 10-foot lengths shipped on wooden pallets. LokCrete is supplied in pre-measured Part A, B and C components. Accessories packaged in cardboard cartons.

### PRECAUTIONS

LokCrete - Use splash goggles and chemical resistant gloves to avoid prolonged or repeated skin contact. Use with adequate ventilation. In case of eye contact, immediately flush (low pressure) with lukewarm water. In case of skin contact, immediately wash skin with soap and water. Read and follow labels and Material Safety Data Sheet before use.

### LIMITATIONS

- Concrete deck surface must be flat and at the same elevation for 12 inches each side of joint.
- Not recommended for use with snow removal equipment or high-speed traffic - see recessed version SSP Series.

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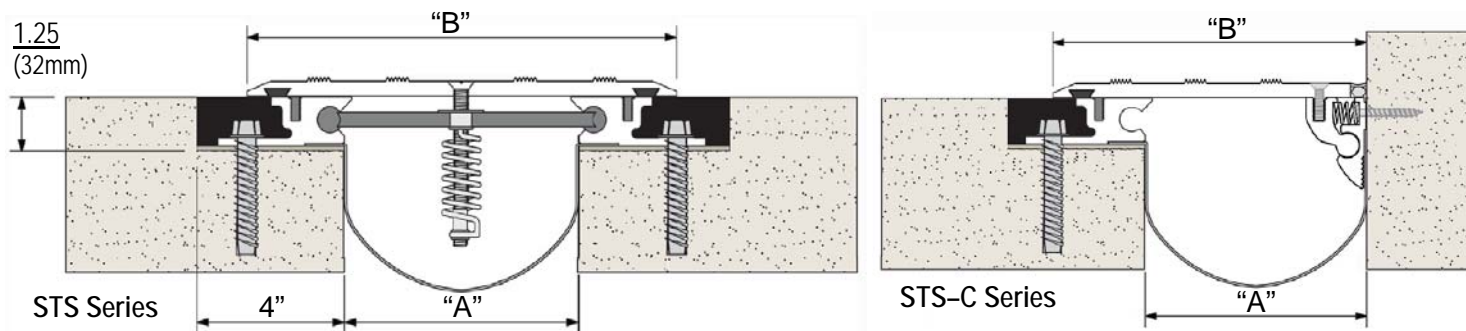
## SELECTION GUIDE

Model Number	Total Movement		Joint Opening "A"						Slide Plate "B"	
			Seismic Min.		Nominal		Seismic Max.			
STS-400	<b>5.0</b>	127	<b>1.0</b>	25	4	102	<b>6.0</b>	152	<b>8.0</b>	203
STS-600	<b>8.0</b>	203	<b>1.0</b>	25	6	152	<b>9.0</b>	229	<b>11.0</b>	279
STS-800	<b>11.0</b>	279	<b>1.0</b>	25	8	203	<b>12.0</b>	305	<b>14.0</b>	356
STS-1000	<b>14.0</b>	356	<b>1.0</b>	25	10	254	<b>15.0</b>	381	<b>17.0</b>	432
STS-1200	<b>17.0</b>	432	<b>1.0</b>	25	12	305	<b>18.0</b>	457	<b>20.0</b>	508
STS-C-400	<b>3.25</b>	83	<b>1.75</b>	44	4	102	<b>5.0</b>	127	<b>6.0</b>	152
STS-C-600	<b>5.75</b>	146	<b>1.75</b>	44	6	152	<b>7.5</b>	191	<b>8.5</b>	216
STS-C-800	<b>8.25</b>	210	<b>1.75</b>	44	8	203	<b>10.0</b>	254	<b>11.0</b>	279
STS-C-1000	<b>10.75</b>	273	<b>1.75</b>	44	10	254	<b>12.5</b>	318	<b>13.5</b>	343
STS-C-1200	<b>13.25</b>	337	<b>1.75</b>	44	12	305	<b>15.0</b>	381	<b>15.5</b>	394

Dimensions are shown in **inches** (bold) and millimeters.

Contact MM Systems for larger sizes.

Note: STS-1200 requires a 1/2" thick cover. All other covers are 3/8" thick.



## LIMITED WARRANTY

MM Systems warrants the Seismic Top-mount Slide Plate System to be free of defects in material and conform to technical data listed. We make no warranty as to color or appearance. Since methods of application can affect performance and on site conditions are beyond our control, MM Systems makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. MM Systems sole obligation shall be, at its option, to replace, or to refund the purchase price of the quantity of system proved to be defective. In no event shall MM Systems be liable for any special, incidental, consequential, loss of profits or punitive damages. Other warranties may be available when installed by a MM Certified Contractor.

## INSTALLATION

- 1) Remove and repair all unsound concrete in and around the blockout. All spalls must be repaired with compatible patching material.
- 2) Prepare substrate by sandblasting. The blockout must be clean and dry prior to installation of LokCrete Elastomeric Concrete (blockout filler).
- 3) Install base member with wedge anchors.
- 4) Install seismic centering devices.
- 5) Mask-off top of deck parallel with edge of blockout and top of aluminum base member.
- 6) Backfill blockout with infill material (LokCrete recommended) up to the height of the concrete blockout.
- 7) Install slide plate cover with impact dampers.
- 8) Torque hardware per the STS Installation Guideline.
- 9) Refer to the STS Installation Guideline for detailed step-by-step instructions.

MM Systems reserves the right to amend or withdraw information contained herein, without notice, and will not be liable for any inaccuracy or ambiguity of said information.

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