

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

### Surface Mount Seismic Slide Plate System

#### **DESCRIPTION**

The SMS Series is designed for wide expansion joint openings without conventional blockouts. The SMS can accommodate heavy loading and multi-directional seismic movement. Surface mounted aluminum base frames provide the seismic slide plate with a flat sliding surface. A seismic centering device with impact dampers and displacement springs allow the slide plate to displace and return to its natural position after a seismic occurrence. The integral impact-sound damper also acts as a waterstop. The moisture barrier in conjunction LokCrete® Bedding Compound enhance the system's waterproofing capability.



SMS is a traffic bearing expansion joint for parking structures requiring seismic movement capability without the need for blockouts in the concrete deck.

#### **FEATURES**

- For wide joints with multi-directional seismic movement.
- Heavy load carrying capability.
- Structural aluminum base members with interlocking frame designed to insure proper alignment.
- Waterproof integral fabric reinforced rubber gutter.
- No blockout design is ideal for retrofit and new construction.
- Base member incorporates tire impact deflection design.
- Complies with ADA guidelines.

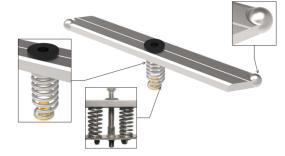
#### SPECIAL FEATURES

- Slide Plate with impact/sound damper and waterstop.
- <u>Solid</u> aluminum seismic centering device with dynamic load impact dampers. (No plastic)
- LokCrete® Bedding Compound hard, elastic, gap filler bonds aluminum frame to concrete deck reducing water intrusion.
- Fire Barriers MM expansion joint systems are available with 2 to 4 hour fire protection ratings.

#### **STORAGE**

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

Tire Load Bearing Seismic Rubber Aluminum Slide Plate Centerina Impact Sound Deflector (Slip Resistant Surface) Device Dampers **LokCrete®** Structural Flexible Fabric **Bedding Compound** Base Reinforced 60-mil (recommended) Frame Rubber Gutter



#### SEISMIC CENTERING DEVICE

Structural Seismic Centering Device, aluminum bar with solid aluminum ball ends, rubber impact damper and adjustable single or dual tension springs – an industry first invented by MM Systems.

#### **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**

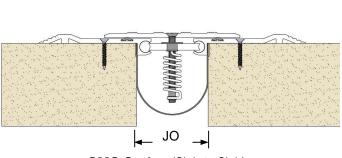
LokCrete - Use splash goggles and chemical resistant gloves to avoid prolonged or repeated skin contact. Use with adequate ventilation. In case of eye contact, immediately flush (low pressure) with lukewarm water. In case of skin contact, immediately wash skin with soap and water. Read and follow labels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

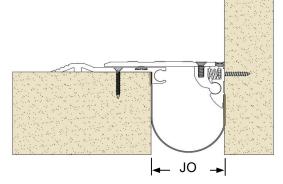
#### LIMITATIONS

- Concrete blockouts must be properly formed, finished, and provide sound substrate.
- Joints located in turning lanes or exposed to forktruck traffic must be engineered for greater impact loads – contact MM Systems.

www.mm.systems 50 MM Way, Pendergrass,

## MM® SMS Series Expansion Joint





SMS Series (Slab-to-Slab)

SMS-C Series (Slab-to-Wall)

SIZES: Custom Seismic 4 inch – to – 24 inch nominal

**JO** – Joint Openings shown on contract drawings are normally calculated as a nominal dimension when the concrete deck temperature (not ambient air temperature) is at 65 degrees Fahrenheit. Joint opening dimensions may vary as the deck temperature changes. Typically, as the deck temperature decreases, concrete decks shrink subsequently widening or opening the concrete joints. Likewise, as the deck temperature increases, concrete decks expand subsequently narrowing or closing the concrete joints. This information should be reviewed at the concrete pre-pour meeting.

**Confirm Joint Opening Dimension:** Prior to installing any expansion joint system always confirm that the size system supplied will accommodate both the minimum and maximum joint width. Refer to MM Systems product drawings and the project specific contract drawings. Too often the concrete is poured without adjustment resulting in larger than anticipated joint openings. Not knowing the actual expected minimum and maximum joint opening could result in product failure or a costly replacement order if it is not properly sized.

#### INSTALLATION

- 1) Ensure that the joint opening width has been adjusted based on temperature at time of concrete placement. Consult with engineer of record for adjustment table.
- 2) Remove and repair all unsound concrete in and around the blockout. All spalls must be repaired with approved structural patching material.
- 3) Optional apply LokCrete Bedding Compound. Mask-off top of deck parallel with outside edge of aluminum base frame prior to application.
- 4) Install Microwaterseal Tape, secondary gutter, base frames with anchors supplied.
- 5) Install seismic centering bars, rubber impact dampers, and slide plate cover.
- 6) Install seismic slide plate splice connectors and slip connectors at time of cover plate installation.
- 7) Torque hardware per SMS Installation Guideline.
- 8) Refer to SMS Installation Guideline for detailed step-by-step instructions.

#### LIMITED WARRANTY

MM Systems warrants the SMS Expansion Joint 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 onsite 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 Systems Certified Contractor.

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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