



MM[®] BIS Expansion Joint

Bolt-In Seismic System for Shallow Concrete Decks

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

DESCRIPTION

The BIS Series is designed for wide expansion joint openings with the ability to accommodate heavy loading and multi-directional seismic movement. The bolt-in design is engineered for shallow blockouts in low-height concrete decks. The recessed design allows the seismic slide plate to remain flush with finished deck surface. A seismic centering device with dynamic load impact dampers and displacement springs allow the slide plate to displace and return to its natural position after a seismic occurrence. The high-density rubber impact-sound dampers also act as a waterstop. The flexible fabric reinforced rubber gutter enhances the system's waterproofing capability.



BASIC USE

BIS is a traffic-bearing expansion joint for parking structures with shallow concrete decks and other open-air structures requiring seismic movement and heavy duty low profile loading bearing designs.

FEATURES

- For wide joints with multi-directional seismic movement.
- AASHTO HS-20 load carrying capability.
- Low profile aluminum frames facilitate installation into shallow concrete decks.
- High-density rubber impact/sound dampers provide for a quite non-clanging service environment.
- Slide plate cover available aluminum with slip-resistant raised pattern surface or custom stainless steel.
- Recessed slide plates allow for a smooth slab-to-slab transition.
- Complies with ADA guidelines.

SPECIAL FEATURES

- High-density rubber impact/sound dampers in the slide plate double as a waterstop.
- Solid aluminum seismic centering device with dynamic load impact damper. (Zero plastic)
- Fabric reinforced 60-mil rubber waterproofing gutter.
- Fire Barriers - MM expansion joint systems are available with 2 - 4 hour fire protection ratings.

SEISMIC CENTERING DEVICE

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

PACKAGING

Slide plates and lock-down panels supplied in 10' lengths shipped on wooden pallets. Accessories packaged in cardboard cartons.

STORAGE / PRECAUTIONS

Store in a dry location prior to use. Read and follow labels and Material Safety Data Sheet before use.

LIMITATIONS

- Concrete must be properly consolidated beneath and around the expansion joint system.
- Joints located in turning lanes or exposed to forklift traffic must be engineered for greater impact loads – contact MM Systems.

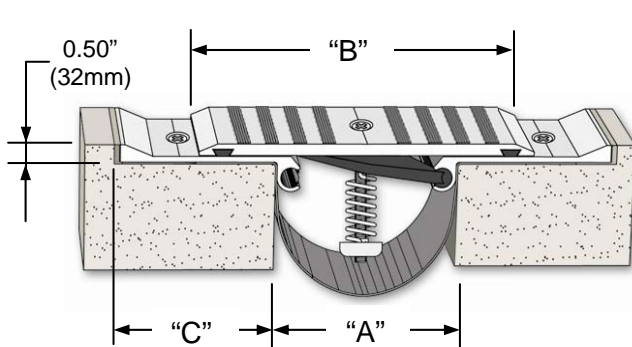
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SELECTION GUIDE

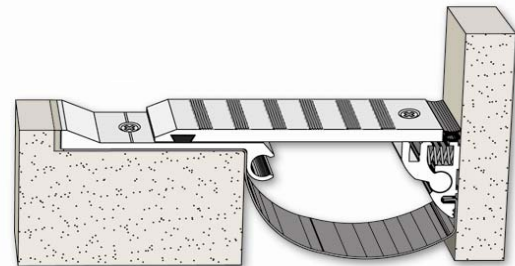
Model Number	Total Movement		Joint Opening "A"						Slide Plate "B"		Bolt-In Base "C"	
			Min.		Nominal		Seismic Max.					
BIS-400	3.50	89	2.5	64	4	102	6.0	152	8.0	203	5.25	133
BIS-600	6.50	165	2.5	64	6	152	9.0	229	11.0	279	5.25	133
BIS-800	9.50	241	2.5	64	8	203	12.0	305	14.0	356	7.25	184
BIS-1000	12.5	318	2.5	64	10	254	15.0	381	17.0	432	7.25	184
BIS-1200	15.5	394	2.5	64	12	305	15.0	381	20.0	508	7.25	184
BIS-C-400	2.50	64	2.5	64	4	102	5.0	127	5.5	140	5.25	133
BIS-C-600	5.00	127	2.5	64	6	152	7.5	191	8.0	203	5.25	133
BIS-C-800	7.50	191	2.5	64	8	203	10.0	254	10.5	267	7.25	184
BIS-C-1000	10.0	254	2.5	64	10	254	12.5	318	13.0	330	7.25	184
BIS-C-1200	12.5	318	2.5	64	12	254	15.0	381	15.5	395	7.25	184

Dimensions are shown in **inches** (bold) and millimeters. Contact MM Systems for larger sizes.

Note: BIS-1200 requires a 1/2" thick load bearing slide plate cover. All other covers are 3/8" thick.



BIS Series (Slab-to-Slab)



BIS-C Series (Slab-to-Wall)

LIMITED WARRANTY

MM Systems warrants the Bolt-In Seismic 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) Insure 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 compatible patching material.
- 3) Install the 60-mil fabric reinforced rubber gutter.
- 4) Attach bolt-in aluminum lock-down base frame to expansion joint opening blockout.
- 5) Install seismic centering devices and slide plate with impact damper.
- 6) Install seismic slide plate along with splice connectors and slip connectors.
- 7) Torque hardware per BIS Installation Guideline.
- 8) Refer to BIS 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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