



MM[®] ASM Series Expansion Joint

Armored Strip Membrane System

SPECC DATA
 MM Systems Corp. • 50 MM Way, Pendergrass, GA 30567 • 866.506.6929 • www.mmsystems.com

DESCRIPTION

The Armored Strip Membrane System - ASM Series is a waterproof expansion joint system that is cast-in place with impact absorbing elastomeric concrete that bonds a heavy-duty aluminum frame through a punched flange directly to the concrete deck. A protective interlocking stainless steel retaining angle protects the continuous Elastoprene[®] membrane seal. Rubber gutter provides secondary waterproofing containment.

BASIC USE

ASM is a watertight membrane sealing system designed for traffic-bearing expansion joints in plaza decks, parking structures, ramps and open-air structures exposed to extreme weather conditions.

FEATURES

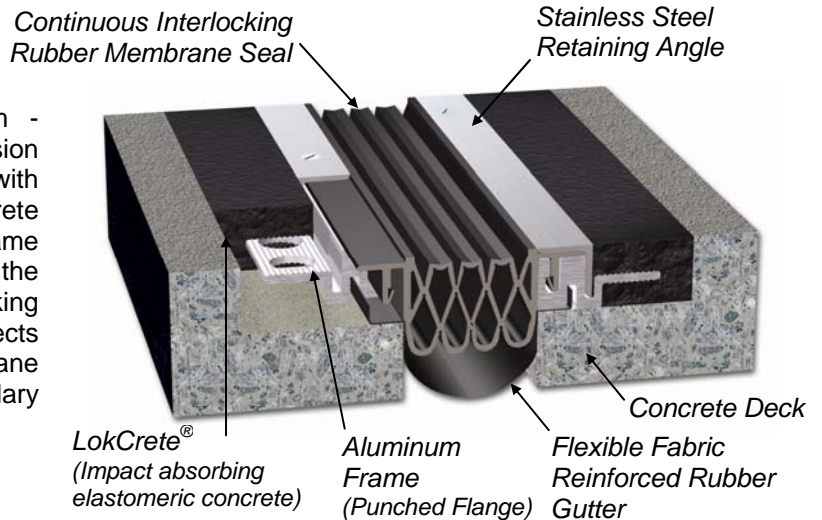
- Continuous locking Elastoprene[®] seal secured with armored stainless steel retaining angle.
- Heavy-duty aluminum frame cast-in to concrete deck with LokCrete elastomeric concrete.
- LokCrete[®] is a hard, elastic, abrasion resistant embed material that flexes with deck loads.
- System is integral with the concrete deck.
- Capable of thermal, seismic, vertical and lateral shear movement.
- Exceptionally durable under heavy vehicular traffic loads and extreme weather conditions.
- ADA compliant seal profile provides pedestrian a friendly walking surface.
- Seal profile splices can be heat or chemically welded.
- Factory fabricated tees, crosses and directional changes are available.

SPECIAL FEATURES

- Fire Barriers – MM Expansion Joint Systems are available with 2 - 4 hour fire endurance ratings.

LIMITATIONS

- Concrete blockouts must be properly formed, finished and have sound substrate.
- Surfaces must be dry, free of any laitance, curing agents or foreign matter.
- Install temperature must be 40°F and rising.



Additional Safety Margin Movement capacity accommodates concrete shrinkage, vertical deflection and unexpected movement.

PACKAGING

Aluminum cast-in extrusion in 10-foot lengths shipped on wooden pallets.

Stainless Steel Retaining Angle supplied in 10-foot lengths shipped on wooden pallets.

Hardware and other accessories packaged in cardboard cartons.

ASM Membrane Seals are supplied in longest possible lengths shipped on pallets or spools.

STORAGE

All materials should be stored in a cool, dry location 60-80°F (15-27°C) prior to use.

COLOR OPTIONS

ASM Rubber Membrane Seal and LokCrete are available in UV stable Black or special order Gray.

PRECAUTIONS

Use protective goggles and gloves. Read and follow labels and Material Safety Data Sheet before use.

MM ASM Series Expansion Joint System

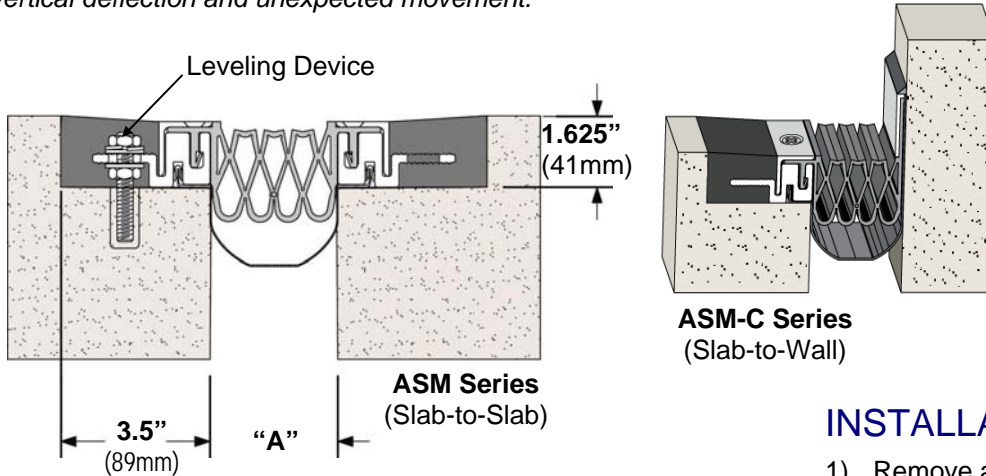
SELECTION GUIDE / ASM SERIES

Model Number	Movement Range		Joint Opening "A"						Installation Width "A"			
			Min.		Max.		Safety Max.		Min.		Max.	
ASM-250	2.50	64	.750	19	2.50	64	3.25	83	1.25	32	2.25	57
ASM-350	3.25	83	1.00	25	3.50	89	4.25	108	1.50	38	3.25	83
ASM-450	4.00	102	1.50	38	4.50	114	5.50	140	2.25	57	4.25	108
ASM-550	5.00	127	1.50	38	5.50	140	6.50	165	3.00	76	5.25	133

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

See web site for ASM-C Slab-to-Wall Movement Table.

Safety Max. – Safety Margin Movement capacity accommodates concrete shrinkage, vertical deflection and unexpected movement.



LIMITED WARRANTY

MM Systems warrants the Armored Strip Membrane 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.

PHYSICAL PROPERTIES

Physical Property	Test Method	Value
Elastoprene 100 Rubber		
Tensile Strength	ASTM D412	1000 psi
Ultimate Elongation	ASTM D412	445%
Hardness, Shore D	ASTM D2240	65 +/-3
Tear Strength @ 73°F (23°C)	ASTM D624	140 pli / 24.5 kN/m
Tear Strength @ 212°F (100°C)	ASTM D624	58 pli / 10.2 kN/m
Compression Set @ 168 hours	ASTM D395	25% @ 23°C/ 73°F
Compression Set @ 168 hours	ASTM D395	38% @ 100°C/ 212°F
Ozone Resistance	ASTM D1149	No Cracks
UV Resistance	ASTM D695	Very Good
Brittle Point	ASTM D746	-76°F (-60°C)

NOTE: The foregoing information is published as general information only. The listed properties and performance characteristics are approximate values while actual field results may vary.

INSTALLATION

- 1) Remove and repair all unsound concrete in and around the joint opening. All spalls must be repaired with compatible patching material.
- 2) Uncoil seal and allow it to relax in the sun for as long as possible before installation.
- 3) Factory Prefabricated Seal Transitions – splice seals transitions into place (insert steel splice pins to align and reinforce butt splice connections).
- 4) Secure ASM frame to deck with leveling anchors.
- 5) Adjust overall system height – utilize anchor adjustment system to match deck elevation.
- 6) Insert membrane seal into aluminum frame.
- 7) Install retaining cap over membrane wing.
- 8) LokCrete - Pour Part B into Part A mixing for 1 minute with a drill and jiffy-paddle type mixer. Pour premixed A&B into a clean 5-gallon bucket. Immediately and gradually blend in Part C (aggregate). Mix all 3 components for 3 minutes.
- 9) Immediately place LokCrete into blockout and trowel.
- 10) Install in accordance with detailed installation guide.

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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