MM® EVA Series Expansion Joint

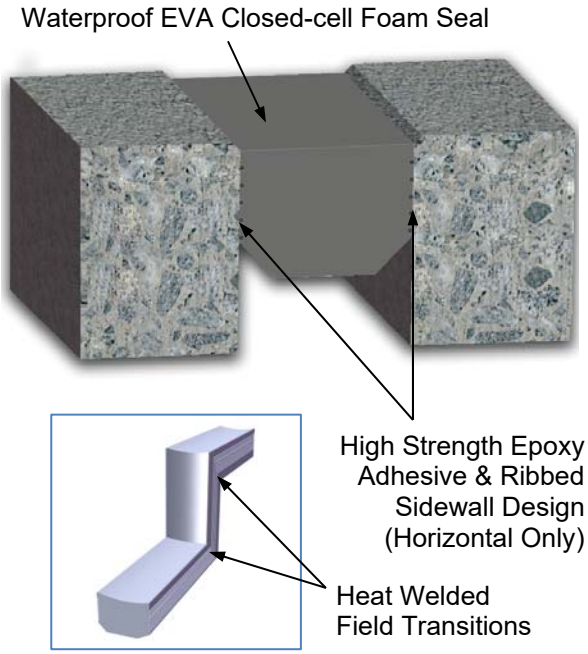
Ethylene Vinyl Acetate Foam Sealing System

SPEC DATA

MM Systems • 50 MM Way, Pendergrass, GA 30567 • 800.241.3460 • www.mm-usa.com

DESCRIPTION

The EVA Series is designed for standard horizontal and vertical expansion joint openings. Horizontal joints can accommodate vehicular and pedestrian traffic. Horizontal water tightness is achieved by epoxy bonding the EVA foam seal into the concrete structural joint opening. Vertical joints are adhered with a sealant/adhesive. EVA is a closed-cell copolymer cross-linked ethylene vinyl acetate nitrogen blown foam which facilitates superior heat welded transitions. The EVA seal will remain flush throughout the expansion and compression cycle.



BASIC USE

EVA expansion joint is a vertical & horizontal sealing system for bridges, stadiums (stair tread & risers), arenas, plaza decks, and parking structures that require a watertight seal. The EVA system is approved for use

FEATURES

- Waterproof sealing system not requiring blockouts.
- Ideal for bridges, seating bowl areas (treads and risers), stair towers, around elevator shafts and slab-to-wall conditions.
- Designed to accommodate complex miters and changes in direction with heat welded transitions.
- Closed-cell waterproof foam seal.
- Approved for use in potable water and processed water projects.
- Tenacious thixotropic epoxy anchoring system bonds to concrete, aluminum and steel.
- Capable of thermal and vertical movement.
- Resistant to UV, ozone, acid rain, most chemicals and extreme temperatures.

SPECIAL FEATURES

- Safe for use in potable water applications.
- Difficult transition splicing simplified through heat welded seams.
- Fire Barriers - MM expansion joint systems are available with 2 to 4 hour fire protection ratings.

LIMITATIONS

- Horizontal pedestrian applications beyond 2-inch joint openings may require a cover plate – contact MM Systems.
- Joint opening substrate must be sound, dry, and free of any laitance, curing agents or foreign matter.
- Install temperature must be 40ºF and rising.

PACKAGING

MM High Strength Epoxy Adhesive is supplied in Part A & Part B plastic containers. “Easy-mix” pre-measured packaging of 1 part black + 1 part white equals thoroughly mixed grey that insures consistent field performance. (Horizontal Joints)

Flexible Seal supplied in 10.3 fl. oz. (305-ml) cartridges. (Vertical Joints)

EVA Foam Rubber Seals are supplied in 8 foot (2.4 meters) lengths shipped in cartons or pallets.

STORAGE

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

COLOR OPTIONS

EVA is only available in UV stable gray.

PRECAUTIONS

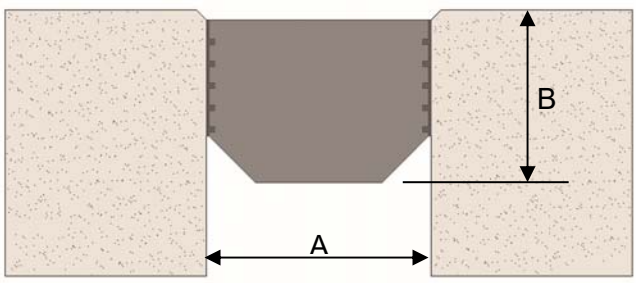
Use splash goggles and chemical resistant gloves to avoid prolonged or repeated skin contact with epoxy adhesive. Use with adequate ventilation. In case of eye contact, immediately flush (low pressure) with lukewarm water. In case of skin contact, immediately wash skin with soap and water. If swallowed, do not induce vomiting. Drink several glasses of water and call physician or poison control center. Read and follow labels and Material Safety Data Sheet before use.

MM EVA Series Expansion Joint

SELECTION GUIDE

Model Number	Total Movement		Joint Opening "A" Minimum		Nominal		Maximum		Installation Width Min.		Max.		Seal Depth "B"	
EVA-100	**0.85**	22	**0.40**	10	**1.00**	25	**1.250**	32	**1.00**	25	**1.250**	32	**1.50**	38
EVA-150	**1.28**	32	**0.60**	15	**1.50**	38	**1.875**	48	**1.50**	38	**1.875**	48	**1.50**	38
EVA-200	**1.70**	43	**0.80**	20	**2.00**	51	**2.500**	64	**2.00**	51	**2.500**	64	**3.00**	76
EVA-250	**2.13**	54	**1.00**	25	**2.50**	64	**3.125**	79	**2.50**	64	**3.125**	79	**3.00**	76
EVA-300	**2.55**	65	**1.20**	30	**3.00**	76	**3.750**	95	**3.00**	76	**3.750**	95	**3.00**	76
EVA-350	**2.98**	76	**1.40**	36	**3.50**	89	**4.375**	111	**3.50**	89	**4.375**	111	**3.00**	76
EVA-400	**3.40**	86	**1.60**	41	**4.00**	102	**5.000**	127	**4.00**	102	**5.000**	127	**3.00**	76
EVA-450	**3.83**	97	**1.80**	46	**4.50**	114	**5.625**	143	**4.50**	114	**5.625**	143	**3.00**	76
EVA-500	**4.25**	108	**2.00**	51	**5.00**	127	**6.250**	159	**5.00**	127	**6.250**	159	**3.00**	76
EVA-550	**4.68**	119	**2.20**	56	**5.50**	140	**6.875**	175	**5.50**	140	**6.875**	175	**3.00**	76
EVA-600	**5.10**	130	**2.40**	61	**6.00**	152	**7.500**	191	**6.00**	152	**7.500**	191	**3.00**	76

*Dimensions are in **inches** (bold) and millimeters. Depth "B" is at full compression.*
Contact MM Systems for other sizes based on project design requirements.
Note: Certain pedestrian traffic applications may require the use of a cover plate.



PHYSICAL PROPERTIES

Physical Property	Test Method	Typical Value
EVA Copolymer Foam Seal		
Tensile strength	ASTM D3575	115 psi +/-25%
Ultimate elongation	ASTM D3575	255% +/-25%
Tear Resistance	ASTM D624	15 lbs./in. +/-20%
Water Absorption (by weight)	ASTM D3575	<.02 lbs./ft^2
Density Average	ASTM D3575	2.7-3.2 lbs./cu.ft.
Epoxy Adhesive		
Tensile strength	ASTM D638	1800 psi
Compressive Strength	ASTM D695	7000 psi
Pot Life, @ 25°C (77°F)		40 minutes
Hardness, shore D	ASTM D2240	>93°C(200°F)
Initial curing time		24 Hours
Complete cure		7 Days

Listed properties are approximate values - actual field results may vary.

LIMITED WARRANTY

MM Systems warrants the EVA Series Expansion Joint System to be free of defects in material and conform to technical data listed. 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. Joint opening sidewall interface areas must be clean and dry prior to installation.
2) Prepare substrate by abrasive blasting just prior to application of the two-component adhesive.
3) Allow it to relax in the sun for as long as possible before installation.
4) Joint opening must be blown with compressed air immediately prior to seal installation.
5) Clean and prepare sidewalls of the seal and joint opening interface per the installation instructions.
6) Horizontal - apply a thin layer of the two-component adhesive to the sides of the seal (enough to fill the ribs) and to the sidewalls of the expansion joint opening.
7) Vertical – inject Flexible Seal sealant/adhesive between the seal and the building sidewalls.
8) Install the seal by pushing it down into the joint opening with glove covered hands.
9) Position seal according to dimensional guidelines.
10) Refer to EVA Installation Guide for detailed step-by-step instructions.

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