



MM[®] ERS Expansion Joint

Expanded Rubber Sealing System

DESCRIPTION

ERS is a waterproof expansion joint system with a continuous EPDM expanded closed-cell rubber seal that is bonded in place with a high strength epoxy adhesive creating a watertight seal. The system is capable of multi-directional movement.

BASIC USE

ERS expansion joint is a vertical & horizontal sealing system for parking garages, stadiums and concrete structures that require a watertight seal. The system is ideal for varying and irregular joint openings, vertical slab offsets and slab-to-wall conditions around stair & elevator towers.

FEATURES

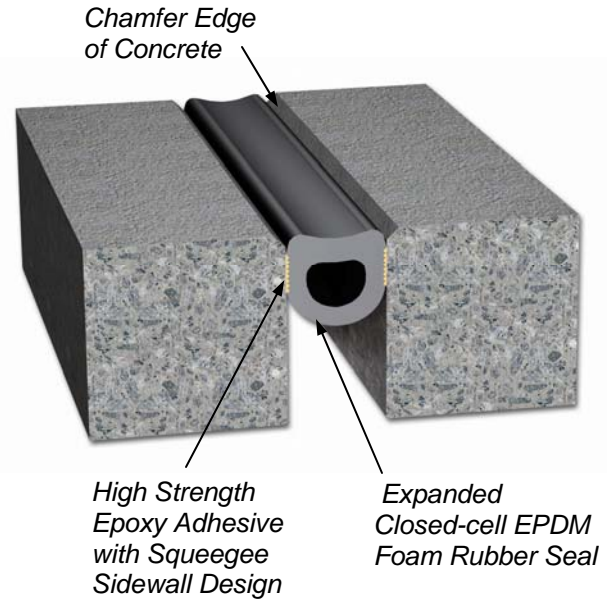
- Waterproof sealing system not requiring blockouts.
- Closed cell expanded EPDM foam rubber seal.
- Tenacious thixotropic epoxy anchoring system bonds to concrete, aluminum and steel.
- Capable of thermal and vertical movement.
- Designed to accommodate complex miters and changes in direction.
- Vertical applications – brick, block, precast, and perimeter walls.
- Horizontal applications – seating bowl areas (treads and risers), stair towers, around elevator shafts and slab-to-wall conditions.
- Resistant to UV, ozone, acid rain, most chemicals and extreme temperatures.

SPECIAL FEATURES

- Designed for varying and irregular expansion joint openings.
- Fire Barriers - MM expansion joint systems are available with 2-4 hour fire protection ratings.

LIMITATIONS

- Certain horizontal sizes and applications may require the use of a cover plate – contact MM Systems for more information.
- Joint opening substrate must be sound, dry, and free of any laitance, curing agents or foreign matter.
- Not intended for applications related to roofing - contact MM with specific application questions.
- Install temperature must be 40°F 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.

EPDM rubber seals are supplied in longest possible 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

ERS is only available in UV stable black.

PRECAUTIONS

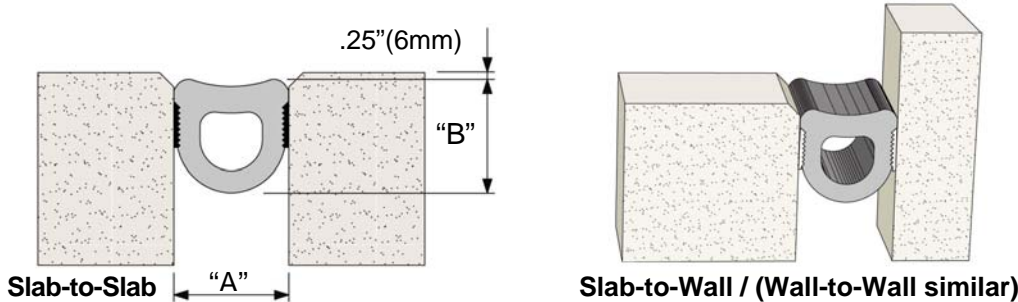
Use splash goggles and chemical resistant gloves to avoid prolonged or repeated skin contact with epoxy adhesive. Use with adequate ventilation. In case of eye contact, immediately flush (low pressure) with lukewarm water. In case of skin contact, immediately wash skin with soap and water. If swallowed, 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[®] Expanded Rubber Sealing System

SELECTION GUIDE

Model Number	Total Movement		Joint Opening "A"						Installation Width				Seal Depth "B"	
			Min.		Mid.		Max.		Min.		Max.			
ERS-100	0.75	19	0.50	13	.875	22	1.25	35	0.75	19	.90	23	1.50	38
ERS-150	1.50	38	0.50	13	1.25	32	2.00	51	1.13	29	1.35	34	2.13	54
ERS-200	1.75	44	0.75	19	1.63	41	2.50	67	1.50	38	1.80	46	2.75	70
ERS-250	2.25	57	1.00	25	2.13	54	3.25	79	1.88	48	2.25	57	3.38	86

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



Note: Certain applications may require the use of a cover plate.

PHYSICAL PROPERTIES

Physical Property	Test Method	Typical Value
EPDM Expanded Rubber		
Tensile strength	ASTM D412	125 psi
Ultimate elongation	ASTM D412	200%
Hardness, shore 00	ASTM D2240	35-65
Water Absorption (by weight)	ASTM D1056	5%
Density Average	ASTM D1056	12-25 pcf
Compress Set (50% for 22 hours @ 70°F)	ASTM D1056	15-25%
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 MM Expanded Rubber Sealing 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 sandblasting just prior to application of the two-component adhesive.
- 3) Uncoil seal and 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) 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) Install the seal by pushing it down into the joint opening.
- 8) Position seal according to dimensional guidelines.
- 9) The squeegee sidewall design will force the epoxy into the joint opening. Clean residue.
- 10) Refer to ERS Installation Guide 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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Spec Data

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