MM® ECS Expansion Joint

Elastoprene Rubber Compression Seal System

SPEC DATA

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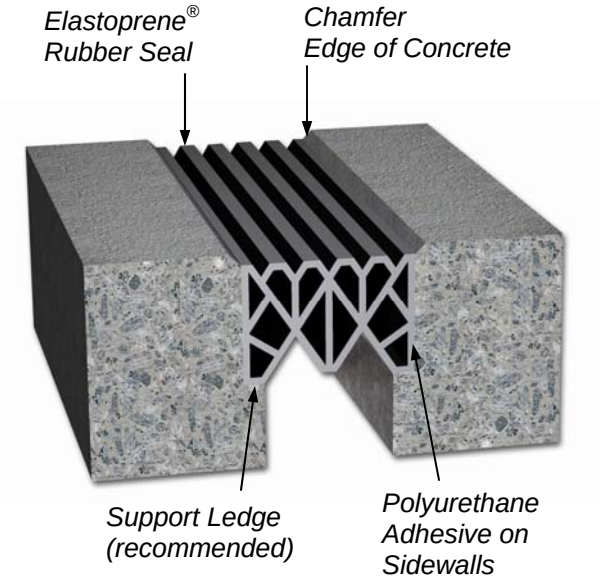
DESCRIPTION

ECS Series expansion joint is a continuous multi-web Elastoprene® Rubber compression seal that remains in compression through out its entire movement cycle. It is bonded in place with a polyurethane adhesive creating a water resistant seal. Optional epoxy adhesive with vacuum installation is available. The seals are available in colors.

BASIC USE

ECS Series expansion joint is cost effective water resistant sealing system for parking structures, buildings & bridges. The system accommodates high vehicular traffic and pedestrian access. For waterproof applications see EBS Series.



FEATURES

- No mechanical anchors or metal components.
- Seals profiles are ADA compliant and provide a smooth transition for pedestrian traffic areas.
- Multi-web rubber seal profile accommodates expansion and compression.
- Splices can be heat welded or bonded with specialty adhesive.
- Available in continuous lengths for horizontal and vertical applications.
- High abrasion and ultraviolet resistance.
- Cost effective and easy to install.

SPECIAL FEATURES

- Elastoprene® rubber designed specifically for expansion joints and enhanced durability.
- Fire Barriers – MM Expansion Joint Systems are available with 2 to 4 hour fire protection ratings.

LIMITATIONS

- It is recommended that horizontal applications utilize a support ledge to stop the seal from migrating downward.
- Joint opening sidewalls must be parallel and equidistant with each other to achieve water tightness.
- ECS Rubber Seal must always remain in compression throughout entire movement cycle.

PACKAGING

Elastoprene® rubber seals are supplied in longest possible lengths shipped in cartons or pallets.

SM7108 Permathane Adhesive – one part polyurethane adhesive supplied in 20 oz. tubes.

STORAGE

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

COLOR OPTIONS

Available in black, gray, beige and custom color match options.

PRECAUTIONS

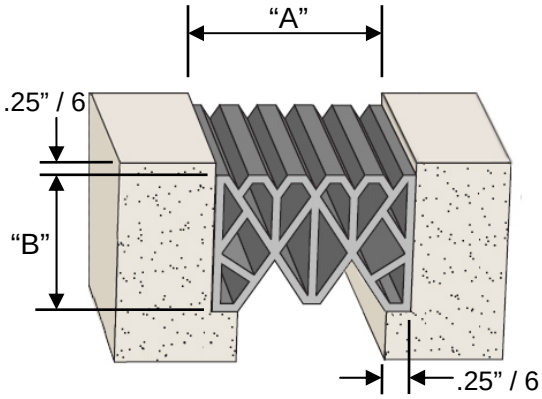
Use splash goggles and chemical resistant gloves to avoid prolonged or repeated skin contact with polyurethane adhesive. Use with adequate ventilation. In case of eye contact, immediately flush (low pressure) with lukewarm water. In case of skin contact, immediately wash skin with soap and water. If 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® Elastoprene Compression Seals

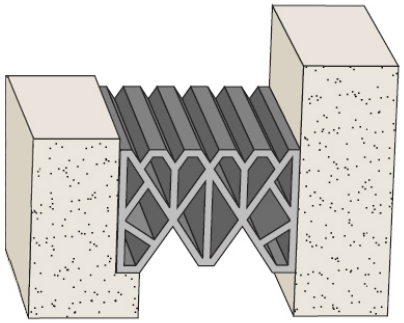
SELECTION GUIDE

Model Number	Total Movement		Joint Opening "A" Min.		Nominal		Max.		Installation Midpoint "A"		Seal Depth "B"	
ECS-200	**0.88**	22	**0.88**	22	**1.25**	32	**1.75**	44	**1.32**	33	**2.125**	54
ECS-300	**1.75**	44	**1.00**	25	**2.00**	51	**2.75**	70	**1.88**	48	**2.375**	60
ECS-400	**2.63**	67	**1.12**	28	**2.50**	64	**3.75**	95	**2.44**	62	**3.063**	78
ECS-500	**3.50**	89	**1.25**	32	**3.00**	76	**4.75**	121	**3.00**	76	**3.750**	95
ECS-600	**4.25**	108	**1.50**	38	**3.75**	95	**5.75**	146	**3.63**	92	**4.500**	114

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



Slab-to-Slab



Slab-to-Wall

LIMITED WARRANTY

MM Systems warrants the MM Elastoprene Compression Seals 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.

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. 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 polyurethane lubricant 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 with a blunt/flat metal bar. Contact MM for optional vacuum method.
8) Position seal according to dimensional guidelines.
9) Clean excess adhesive from seal and concrete.
10) Refer to ECS Installation Guide for detailed step-by-step instructions.

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