



# MM<sup>®</sup> EIC Expansion Joint

## Expanding Impregnated Chemical Resistant Seal

SPECIALTY DATA

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

### DESCRIPTION

EIC Series Expansion Joint combines three high performance expansion joint properties into one monolithic waterproof chemical resistant sealing system. A factory applied chemical resistant polysulfide rubber seal acts as the primary waterproofing and chemical resistant shield. The secondary micro-cell self-expanding foam is impregnated with an acrylic polymer that is UV stable, flame resistant, chemical resistant and meets ASTM 283, ASTM 518, and DIN 18542. The high strength epoxy sidewall adhesive provides the third layer of protection.

### BASIC USE

EIC Series Expansion Joints provide a durable, chemical resistant, weather-tight, dustproof, soundproof and airtight seal. EIC is very effective in waste water applications, potable water tanks, clean-rooms, spill guards, food storage, chemical plants or where exposure to solvents or chemicals is anticipated.

### FEATURES

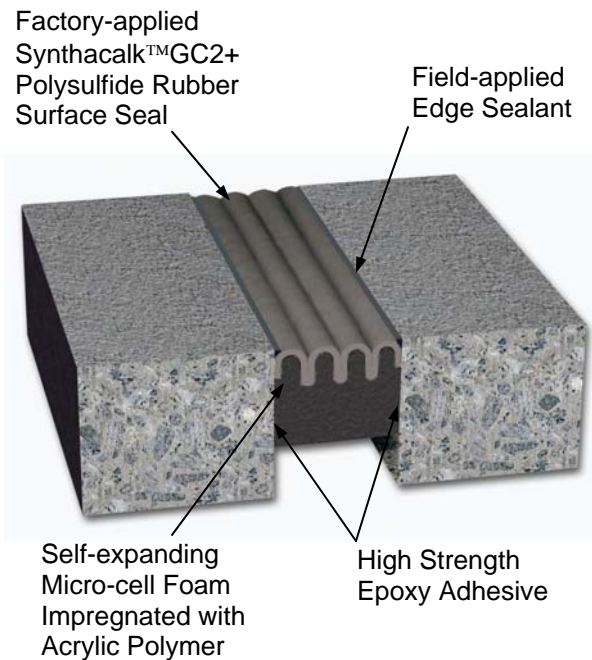
- Resistant to UV, ozone, acid rain, wind driven rain and the full list of chemicals on page 2.
- ± 25% (50% total) movement capability.
- Near zero tensile stress at bond line.
- Conforms to irregular openings virtually eliminating the risk of costly water damage.
- Epoxy bonded acrylic impregnated foam block provides additional point load support.
- Permanently elastic and will expand and accommodate the required joint movement. .
- Easy to install, no fasteners or anchors.

### SPECIAL FEATURES

- EIC polysulfide seal is formulated to meet toxicological and extraction test requirements of NSF/ANSI Standard 61.
- Resilient and flexible to -39°F.
- Provides interior vapor, dust, acoustical, air and sound-dampening control.

### LIMITATIONS

- Contact MM Systems for static head pressure calculation for submerged applications.
- Do not install when substrate or ambient temperatures is above 95°F (35°C) or below 50°F (10°C).



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### PACKAGING

EIC Series Expansion Joint is supplied in 5-foot lengths.

Sealant is packaged in 1-1/2 gallon (3.8L) unit consisting of base and activator nested in 2-gallon pail. (Field Applied Edge Sealant)

### STORAGE

All materials should be stored off the ground in a cool, dry location 70-80°F (20-27°C) for a minimum of 24 hours prior to installation regardless of the temperature at installation location.

### PRECAUTIONS

Use with adequate ventilation. Uncured sealant may cause skin and eye irritation. In case of eye contact, immediately flush with water. Avoid prolonged or repeated skin contact. Read and follow labels and Material Safety Data Sheet before use.

### COLOR

Available in UV stable Dark Grey

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## CHEMICAL RESISTANT CHART

*This data should only be used as a guide for chemicals at room temperature. It is recommended to test the material under actual (or at least simulated) service conditions before specification and/or use.*

### RECOMMENDED

Aluminum Sulfate Solution, 50%  
 Ammonium Chloride Solution, 50%  
 Ammonium Perchlorate, 15%  
 Ammonium Perchlorate, 50%  
 Ammonium Polysulfate  
 Ammonium Sulfate Solution, 30%  
 Amyl Alcohol  
 ASTM Fuel A  
 ASTM Fuel B  
 ASTM Fuel C  
 ASTM Fuel D  
 Barium Hydroxide, 10%  
 Borax Solutions, 25%  
 Boric Acid Solution, 20%  
 Borohydride Solution  
 1-4 Butanediol  
 Butyl Cellosolve  
 Butyl Dioxitol  
 Butyl Oxitol  
 Calcium Chloride Solutions, 50%  
 Calcium Hydroxide, 20%  
 Calcium Hypochlorite, 50%  
 Caustic Potash, 45%  
 Chlorinated Water, 1ppm  
 Chlorinated Water, 10ppm  
 Chlorinated Water, 100 ppm  
 Copper Sulfate Solution, 20%  
 Cyclohexane  
 Dibutyl Carbotol  
 Diethylene Glycol  
 Ethyl Alcohol  
 2-Ethyl Hexyl Acrylate  
 Ethylene Glycol  
 Ferrous Sulfate, 10%  
 Fluoboric Acid, 10%  
 Fuel Oil/Diesel Fuel

Gasoline, Leaded  
 Gasoline, Unleaded  
 Gashol  
 Heptane  
 Herbicides  
 -Marksman  
 -Banvel  
 -Aatrex 4L  
 -Prowl 3.3 EC  
 -Tri-4  
 -Treflan  
 -Serve 24E  
 -Sonalan E.C.  
 Hexane  
 Hexane Glycol  
 Hydrofluoric Acid, 5%  
 Hydrofluoric Acid, 10%  
 Hydrofluoric Acid, 23%  
 Hydrogen Peroxide, 3%  
 Hydrogen Peroxide, 20%  
 Hydrogen Peroxide, 35%  
 Isobutyl Alcohol  
 Isobutyl Isobutryate  
 Isopropyl Alcohol  
 Isoteric Acid  
 Jet Fuel (See ASTM Fuels)  
 Kerosene  
 Lacquer Solvents  
 Linseed Oil  
 Lubricating Oils  
 Magnesium Chloride Solution, 20%  
 Magnesium Hydroxide Solution, 30%  
 Maleic Anhydride, 25% Slurry  
 Methanol  
 Methyl Tert-Butyl Ether, 98%  
 Mineral Spirits

Motor Oil 10W/40  
 N-Butyl Acrylate  
 N-Butyl Alcohol  
 NaphthaVM & P  
 Naphthalene Oil  
 Oleic Acid  
 Oxalic Acid, 20%  
 Paraffinic Oil  
 Pesticides  
 -Arrosolo 3.3E  
 -Eradicane 6.7E  
 Phenolic Resins  
 Phosphoric Acid, 50%  
 Phthalic Andrydride, 38% slurry  
 Potassium Carbonate  
 Potassium Hydroxide Solution, 25%  
 Potassium Hydroxide, 50%  
 Propylene Glycol  
 SAE 10 Oil  
 Shell Tellus Oil 46  
 Skydrol 500B  
 Soap Solutions  
 Sodium Bicarbonate Solution, 25%  
 Sodium Chloride Solution, 25%  
 Sodium Hydroxide, 50%  
 Sodium Hydroxide, 50% @ 120°F  
 Sodium Sulfide, 25%  
 Stearic Acid, 20%  
 Sulfuric Acid, 20%  
 Texanol  
 Transmission Fluid  
 Urea, 10%  
 Urea Ammonium Nitrate, 32%  
 Vinyl Acetate  
 Zinc Chloride, 10%  
 Zinc Nitrate, 17%

### INTERMITTENT CONTACT

Acetic Acid, 10%  
 Acetic Acid, 50%  
 Acetone  
 Acrylonirile  
 Ammonium Hydroxide Solution, 28%  
 Carbon Tetrachloride  
 Ethyl Acetate  
 Ethyl Acrylate  
 Ferric Chloride, 50%

Herbicides  
 -Dual 8E  
 -Bicep 6L  
 Hydrochloric Acid, 20%  
 Isopropylamine  
 Methyl Acrylate  
 Methyl Carbitol  
 Methyl Ethyl Ketone  
 Methyl Methacrylate

Methyl n-Amyl Ketone  
 Phosphoric Acid, 60%  
 Phosphoric Acie, 75%  
 Sodium Cyanide, 5%  
 1,1,1 Trichloroethane  
 TritonX100  
 Vinylidene Chloride  
 Xylene

### NOT RECOMMENDED

Acetic Acid, Glacial  
 Arcosolv PM Acetate  
 Benzene  
 Benzoflex 9-88  
 Benzoic Acid, 5%  
 Butyl Benzyl Phthalate  
 Butyl Cellosolve Acetate  
 Carbon Disulfide  
 Carbitol Acetate  
 Cellosolve Acetate  
 Chromic Acid, 15%  
 Ahromic Acid, 35%  
 Creosote  
 Cumene Hydroperoxide  
 Dimethyl Formanide

Epichlorohydrin  
 Ethylene Dichloride  
 Formic Acid, 90%  
 2-Furaldehyde  
 Glycol Ether EM  
 Hydrochloric Acid, 37%  
 Isophorone, 97%  
 Malathion 50  
 2-Mercaptoethanol  
 Methyl Cellosolve Acetate  
 Methylene Chloride  
 Nitric Acid, 10%  
 Nitric Acid, 30%  
 Nitric Acid, 60%

Pickling Solution  
 -20% Nitric Acid, 4% HF  
 -17% Nitric Acid, 4% HF  
 Potassium Permanganate, 6%  
 Propylene Oxide  
 Sodium Hypochlorite, 5%  
 Sodium Hypochlorite 8%  
 Solvent 150  
 Styrene  
 Sulfuric Acid, 50%  
 Sulfuric Acid, 66%  
 Sulfuric Acid, 8% @ 120°F  
 Tetrahydrofuran  
 Tetrahydrofurfuryl Alcohol  
 Toulene



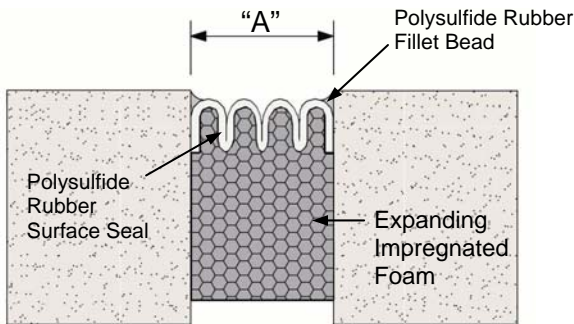
Spec Data

# MM<sup>®</sup> EIC Expansion Joint System

## SELECTION GUIDE

Model Number	Total Movement		Movement Range "A"						Seal Depth	
			Min.		Nominal		Max.			
EIC-050	<b>0.25</b>	6	0.375	10	0.50	13	0.625	16	1.50	38
EIC-063	<b>0.312</b>	8	0.469	12	0.625	16	0.7813	20	1.50	38
EIC-075	<b>0.375</b>	10	0.563	14	0.75	19	0.938	24	1.50	38
EIC-100	<b>0.50</b>	13	0.750	19	1.00	25	1.250	32	2.00	51
EIC-125	<b>0.625</b>	16	0.938	24	1.25	32	1.563	40	2.00	51
EIC-150	<b>0.75</b>	19	1.125	29	1.50	38	1.875	48	2.00	51
EIC-175	<b>0.875</b>	22	1.313	33	1.75	44	2.188	56	2.00	51
EIC-200	<b>1.00</b>	25	1.500	38	2.00	51	2.500	64	2.00	76
EIC-225	<b>1.125</b>	29	1.688	43	2.25	57	2.813	71	2.00	76
EIC-250	<b>1.25</b>	32	1.875	48	2.50	64	3.125	79	2.00	76
EIC-275	<b>1.375</b>	35	2.063	52	2.75	70	3.438	87	3.00	76
EIC-300	<b>1.50</b>	38	2.250	57	3.00	76	3.750	95	3.00	76
EIC-325	<b>1.625</b>	41	2.438	62	3.25	83	4.063	103	3.00	76
EIC-350	<b>1.75</b>	44	2.625	67	3.50	89	4.375	111	3.00	76
EIC-375	<b>1.875</b>	48	2.813	71	3.75	96	4.688	119	4.00	102
EIC-400	<b>2.00</b>	51	3.000	76	4.00	102	5.000	127	4.00	102
EIC-500	<b>2.50</b>	64	3.750	95	5.00	127	6.250	159	4.00	102
EIC-600	<b>3.00</b>	76	4.500	114	6.00	152	7.500	191	4.00	102

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



Certain applications may require the use of a cover plate. Contact MM Systems to discuss service conditions and loading requirements.

## LIMITED WARRANTY

MM Systems warrants the EIC 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 Systems Certified Contractor.

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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## PHYSICAL PROPERTIES

Expanding Impregnated Foam	Test Method	Typical Value
Density Average	ASTM D3575	10 lb./cu.ft.
Resistance - Thermal	ASTM C518	3.3*, hr-°F-ft <sup>2</sup> /Btu
Conductivity - Thermal	ASTM C518	0.05 W/m.°C
Temperature Stability Range	ASTM D1056	-40°F to 212°F
Shear Strength		8N/cm <sup>2</sup> min.
Tensile strength	ASTM 3574	21 psi, min
Compression Set Resistance	ASTM 3574	2.5%, max.
Bleeding (212°F at 20% compress)		None
Mildew Resistance		Excellent

Polysulfide Rubber Seal	Test Method	Typical Value
Durometer Hardness, Shore A	ASTM C661	25-30
Tensile Strength, maximum	ASTM D412	150-200 psi
Elongation (%)	ASTM D412	500-550
Tensile, at 100% modulus	ASTM D412	50
at 200% modulus	ASTM D412	80
Solids (%)	ASTM C1250	100

Listed properties are approximate values - actual field results may vary.  
\*Thermal Resistance per one (1") inch depth of EIC seal.

## INSTALLATION

- 1) Repair all unsound concrete. Joint opening sidewall interface areas must be clean and dry prior to installation. Surfaces must be sound, dry, and free of any laitance, curing agents or foreign matter.
- 2) Lay out the EIC next to the joint opening to check for appropriate length and width. EIC supplied should be precompressed to a size smaller than the intended opening.
- 3) Remove shrink-wrap and masonite packaging from the EIC Seal. Remove release paper from both sides of the EIC prior to installation.
- 4) SPLICES - The ends will be compressed and butt spliced together. Apply rubber sealant supplied across splice area. Allow the EIC ends to expand against each other creating an interference fit.
- 5) Position seal as per dimensional guidelines. Do not twist or stretch. The rate of expansion is dependent on the temperature.
- 6) Apply polysulfide rubber fillet bead along both side of the seal as an edge sealant.
- 7) Refer to EIC Installation Guideline for detailed step-by-step instructions.