

Horizontal Foam Seal

Pre-compressed, Foam-supported Silicone Expansion Joint System

PRODUCT DESCRIPTION

- The Horizontal Foam Seal is comprised of 100% acrylic impregnated polyurethane foam seal coated in a highway grade UV stable silicone.
- The resilient monolithic construction works under its own constant internal pressure to maintain its sealing function and without the potential for debonding from adjacent materials or built-up foam layers delaminating over time.
- The silicone surface seal thickness provides best-in-class water & fuel resistance.
- Horizontal Foam Seal offers long term cycling and joint sealing performance in all climates and thermal shock conditions.

FEATURES & BENEFITS

- Base foam construction manufactured in one piece that **will not delaminate** within the product's design movement range.
- Manufactured with no fillers or microspheres for industry leading lowest compression set.
- Factory assembled joint transitions available: made to meet custom job configurations where a field configured transition is impractical. Critical elements manufactured under controlled conditions and eliminates costly field labor.
- Designed for +/- 60% of joint opening and accommodates rapid rates of joint movement.



RECOMMENDED FOR

- Sealing joints in, parking decks, stadiums, buildings, and plaza decks.
- Retrofitting, maintenance, and preservation of parking & stadium expansion joints.
- Secondary seal for other expansion joint systems.
- Parapets, double-columns, and sound-walls.

PACKAGING

- Seal profiles are shipped pre-compressed in nominal lengths of 6.5 feet (2 meter) sticks.

STORAGE

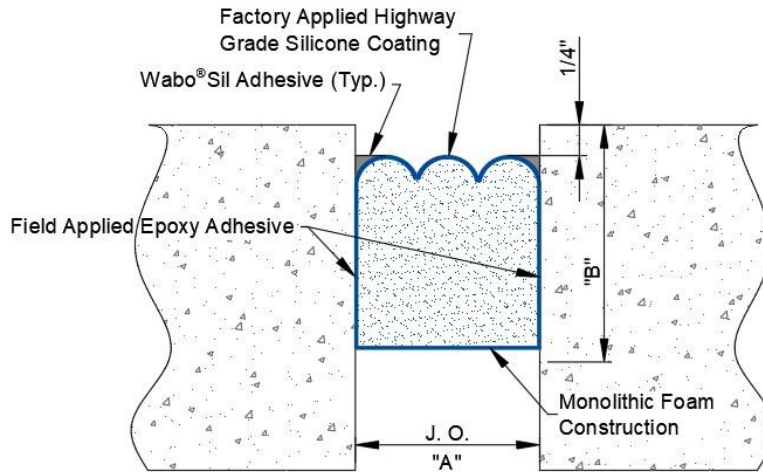
- Do not allow any of the chemical components to freeze prior to installation. Store all components out of direct sunlight in a clean, dry location between 50°F (10°C) and 90°F (32°C). Do not store in high humidity.

RELATED DOCUMENTS

- Safety Data Sheet SDS – Adhesive only
- Horizontal Foam Seal Specification
- Horizontal Foam Seal Sales Drawings
- Horizontal Foam Seal Installation Procedure
- Wabo®Gel Loc Data Sheet

TECHNICAL DATA:

Typical Detail:



Movement Capability: WBAsics™ Horizontal Foam Seal can accommodate +60% / -60% movement of the joint opening.
 Note: Seal chart shows standard sizes. Made to order sizes are available. Contact WBA with your project requirements.

Seal Size			Joint Opening @ Midrange Temperature "A"		Minimum Joint Closure "A"		Maximum Joint Opening "A"		Total Movement Rating (MR)		Groove Depth "B"	
Model Number	Width x Height (in.)	Width x Height (mm.)	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
HFS-050	1/2 x 1 1/2	12 x 38	1/2"	12	0.20	5	0.80	20	0.60	15	2.00	51
HFS-075	3/4 x 1 1/2	19 x 38	3/4	19	0.30	7.5	1.20	30.5	0.90	23	2.00	51
HFS-100	1 x 2	25 x 50	1	25	0.40	10	1.60	40.5	1.20	30.5	2.50	63.5
HFS-125	1 1/4 x 2	31.75 x 50	1 1/4	31.75	0.50	13	2.00	51	1.50	38	2.50	63.5
HFS-150	1 1/2 x 2	38 x 50	1 1/2	38	0.60	15	2.40	61	1.80	46	2.50	63.5
HFS-175	1 3/4 x 2	44.5 x 50	1 3/4	44.5	0.70	18	2.80	71	2.10	53.25	2.50	63.5
HFS-200	2 x 3	50 x 75	2	50	0.80	20	3.20	81	2.40	61	3.50	89
HFS-225	2 1/4 x 3	57 x 75	2 1/4	57	0.90	23	3.60	91.5	2.70	68.5	3.50	89
HFS-250	2 1/2 x 3	63.5 x 75	2 1/2	63.5	1.00	25	4.00	101	3.00	76	3.50	89
HFS-275	2 3/4 x 3	70 x 75	2 3/4	70	1.10	28	4.40	112	3.30	84	3.50	89
HFS-300	3 x 3	75 x 75	3	75	1.20	30.5	4.80	122	3.60	91.5	3.50	89
HFS-325	3 1/4 x 3	82.5 x 75	3 1/4	82.5	1.30	33	5.20	132	3.90	99	3.50	89
HFS-350	3 1/2 x 3	89 x 75	3 1/2	89	1.40	35.5	5.60	142.25	4.20	106.75	3.50	89
HFS-375	3 3/4 x 3	95.25 x 75	3 3/4	95.25	1.50	38	6.00	152	4.50	114	3.50	89
HFS-400	4 x 4	100 x 100	4	100	1.60	40.5	6.40	162.5	4.80	122	4.50	114
HFS-425	4 1/4 x 4	108 x 100	4 1/4	108	1.70	43	6.80	172.75	5.10	129.5	4.50	114
HFS-450	4 1/2 x 4	114 x 100	4 1/2	114	1.80	45.75	7.20	183	5.40	137	4.50	114
HFS-475	4 3/4 x 4	120.5 x 100	4 3/4	120.5	1.90	48.25	7.60	193	5.70	144.75	4.50	114
HFS-500	5 x 4	127 x 100	5	127	2.00	50	8.00	203	6.00	152	4.50	114

(Note: In cases where Joint Opening exceeds 6", a Coverplate is recommended. Please contact WBA.)

PHYSICAL PROPERTIES:

Seal Profile:

WBAsics Horizontal Foam Seal profile is a pre-compressed, hydrophobic acrylic foam seal manufactured without any vertical laminations. Material composition shall be free of inert fillers any waxes or wax compounds, asphalts, or asphalt compounds.

PHYSICAL PROPERTIES	TEST METHODS	REQUIREMENTS
Foam Core	N/A	Cellular, high density, polyurethane foam
Impregnation	N/A	Proprietary, modified, water-based, acrylic
Tensile Strength	ASTM D3574	21 psi., min.
Elongation @ Break	ASTM D3574	105% - 145%
UV / Light & Moisture Resistance	DIN 18542	Pass
Compression Set	ASTM D3574	3%, max.
Density	ASTM D545	4.0-6.0 lbf/ft ³
Tear Resistance	ASTM D624	21 lbf/in, min.
Vertical Laminations		None
Water Absorption	ASTM D3574	<0.02 lbf/ft ²
Temperature Service Range	ASTM C711	-40° F to 185° F

Surface Seal:

The WBAsics Horizontal Foam Seal Grade Silicone Coating surface seal provides a barrier layer for water and fuel resistance. Uniform bellows allow free movement of the foam seal system under its entire movement range without initiating tension in the surface seal.

PHYSICAL PROPERTIES	TEST METHODS	REQUIREMENTS
Color	Visual	Gray
Durometer (Shore A)	ASTM C 661	20
Resilience	ASTM D5329	≥ 95%
Tensile Strength	ASTM D412	140 psi
Joint modulus at 50% 100% 150%	D3574 E	7 psi max 8 psi max 9 psi max
Elongation @ break	D3574 E	>1400%
Weatherability		Unaffected by climate extremes
Flexibility		Cured sealant stable from -50° F to 300° F

Silicone Sealant:

Wabo@Sil Adhesive is a one component, medium modulus neutral cure highway grade silicone sealant and adhesive used as a finish bead to the top edge of the Horizontal Foam Seal profile and the substrate on both sides. Tool silicone on both sides and at joint connections so that the bellows are not constrained by any excess silicone.

PHYSICAL PROPERTIES	TEST METHODS	REQUIREMENTS
Color	Visual	Gray
Durometer (Shore A)	ASTM C661	25 +/-5
Peel Strength	ASTM C794	55 lbs/in min
Ozone and UV Resistance	ASTM C793	Excellent
Tensile Strength	ASTM D412	250 psi
Joint Movement Capability	ASTM C719	+/-50 %
Elongation	ASTM D412	700%

Epoxy Adhesive:

Wabo@Gel-Loc is a low modulus general purpose epoxy gel that meets ASTM C-881, Type: III, Grade:3, Class: B & C. Gel-Loc LP is a two component, 100% solids, epoxy gel that is used for patching, bonding, and surface sealing.

PHYSICAL PROPERTIES	TEST METHODS	REQUIREMENTS
Tensile Strength	ASTM D 638	2400 psi
Flexural Strength	ASTM D 790	500 psi
Bond Strength (48 hrs)	ASTM C 321	565 psi
Water Absorption	N/A	0.3% (24 hours)
Viscosity	N/A	Non-sagging gel
Blended Color	N/A	Gray Concrete