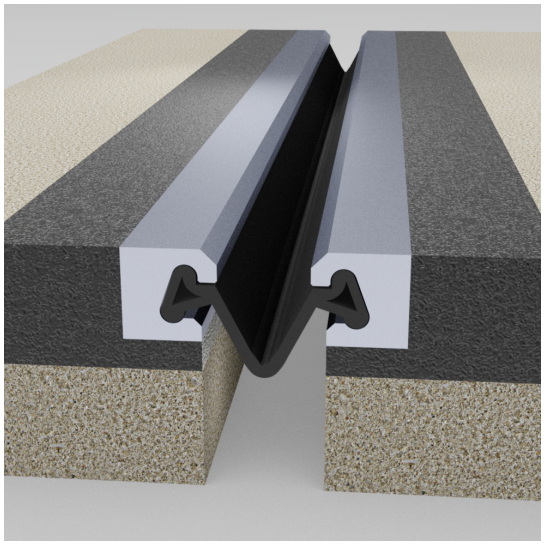
Wabo®Crete StripSeal

Armored joint and elastomeric concrete expansion joint system
Bridge Series

Features	Benefits
• Flexible applications	Variable steel extrusions provide greater flexibility to accommodate any new construction or repair project condition
• Versatile movement	Accommodates various expansion joint movements and configurations.
• Heavy duty	Accommodates heavy duty loads and bridge deflections.
• Watertight	Continuous sealing element prevents water from leaking through the expansion joint opening



DESCRIPTION:

The WaboCrete StripSeal expansion joint system is a unique and superior joint system used in the construction and rehabilitation of expansion joints for bridges and parking decks. When poured into the blockout, WaboCrete II flows and completely fills any voids, spalls or irregularities forming a monolithic unit.

The WaboCrete StripSeal system is well suited to high impact applications due to its durability and resistance to chemical attack in harsh environments. The rugged design of the system and WaboCrete II's high bond capability to both steel and concrete allows the system to accommodate the high loads of vehicular traffic. WaboCrete StripSeal systems can accommodate a variety of field configurations along with multidirectional movements. WaboCrete II, a unique aggregate reinforced elastomeric concrete used in conjunction with the WaboStripSeal and steel sinusoidal anchorage, provide an effective and easily installed waterproof sealing system. Ideal for asphalt or concrete overlay Bridge Applications.

RECOMMENDED FOR:

- New bridge construction or repair and maintenance of existing bridge expansion joint systems.
- Skewed joints
- High impact and repetitive loading conditions
- Expansion joint applications with a maximum movement of 5 inches.
- Overlay projects/ Low profile applicability

PACKAGING/COVERAGE:

- Steel extrusions are shipped in standard 20 foot lengths. Other lengths available, contact WBA for details.
- Rubber seals are cut to length and shipped on pallets per limitations of shipping methods

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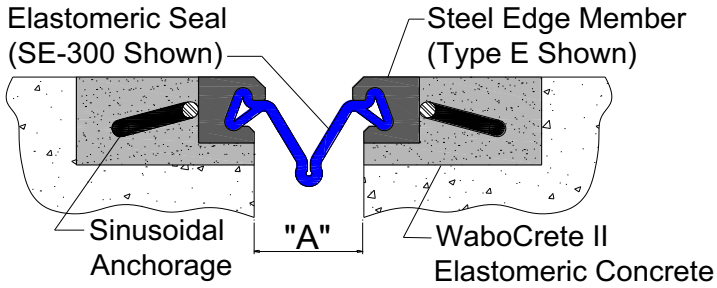
- WaboCrete II
  - PTA – ½ gal container
  - PTB – 1 gal container
  - PTC – 60 lbs aggregate
  - A+B+C = 1 unit
    1 unit = 0.6 ft^3 (1030 in^3)
- Wabo®PrimaLub – 1 gal container
  - Coverage = lineal ft x 0.00361

TECHNICAL DATA:



Movement Table

Model Number	Movement Range "A"						Min. Install Width	
	Min.		Max.		Total			
	in	mm	in	mm	in	mm	in	mm
SE-300	0.00	0	3.00	76	3.00	76	1.50	38
SE-400	0.00	0	4.00	102	4.00	102	1.50	38
SE-500	0.00	0	5.00	127	5.00	127	2.00	51
EFE-400	0.50	13	4.50	114	4.00	102	2.50	64

Consult your WBA Representative for factory molded horizontal changes, severe skews or joint intersections.

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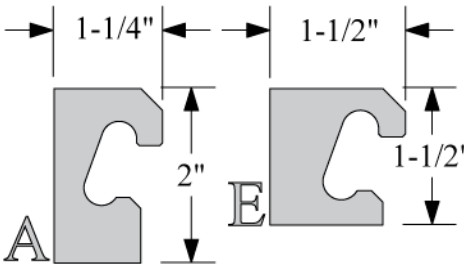
Steel Edge Members

The WaboCrete StripSeal system incorporates the use of two standard profile configurations. See details below for profile configurations. All steel edge members are produced from ASTM A588 or A36 grade steel. Available in coated or uncoated finishes. Customers need to specify options when ordering.



Elastomeric Gland

The WaboStripSeal system utilizes two standard glands; SE and EFE series. The elastomeric gland of the WaboStripSeal system can handle movements up to 5 inches (127mm). Several sizes of the elastomeric gland offer solutions to a wide range of field applications. The elastomeric glands can be factory molded for horizontal changes, severe skew, or joint intersections. All glands are produced from neoprene and meet the properties identified in the physical properties table.

SE Series EFE Series

PHYSICAL PROPERTIES (Elastomeric Gland)

PHYSICAL PROPERTY	ASTM TEST METHOD	REQUIREMENTS
Tensile Strength, min	D 412	2,000 psi (13.8 Mpa)
Elongation at Break, min	D 412	250%
Hardness, Shore A	D 2240	55 +/- 5
Oven Aging, 70 hrs. @ Tensile, max loss Elongation, max loss Change in Hardness	D 573	 20% 20% 0 to 10 pts.
Oil Swell, 70 hrs. @ 212ºF(100ºC) Weight Change, max	D 471	 45%
Ozone Resistance 70 hrs. @ 104ºF(40ºC)	D 1149	no cracks
Low Temperature Stiffening	D 2240	0 to +15

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PHYSICAL PROPERTIES (WaboCrete II)

PHYSICAL PROPERTY	ASTM TEST METHOD	REQUIREMENTS
Binder Only		
Tensile Strength	D 638	750 psi (5MPa) min.
Elongation at Break	D 638	150% min.
Hardness (Shore D)	D 2240	30-49
Compression Set (22hrs @ 158F)	D 395	50% max.
Tear Resistance	D 624	80lbs/in min.
Water Absorption (By Weight)	D 570	3% max.
Heat Shrinkage	D 1299	1.6% max.
Over Aging (@158F, 72 hrs) Tensile Strength Elongation	D 638	 750 psi (5MPa) min. 150%
Binder and Aggregate		
Compressive Strength	D 695[1]	Min. 15 MPa (2200 psi)
Resilience (@5% deflection)	D 695	90% min.
Pot Life (@75F)		10 mn
Slant Shear Bond Strength	D 882	251 psi (2MPa) min.
Impact Resistance @ -20F (-29C) @ 32F (0C) @ 158F (70C)	See Note[2]	 no cracks no cracks no cracks

1 - ASTM D 695 modified for compressive properties by performing the test at 0.25 in/min.
2 - Specimens are cast discs with a 2.5" diameter and 0.375" thickness. Specimens are conditioned for four hours at test temperatures. A one pound steel ball is dropped onto the center of the specimen through a plastic tube from an initial height of 5 feet. The drop height is increased by intervals up to 7 feet or until the specimen cracks.

APPLICATION:

INSTALLATION SUMMARY:

- Concrete substrates must be abrasive blasted to remove all latencies and contaminants which may cause bonding problems.
- Apply WaboBonding Agent (primer) to surface of the properly prepared concrete prior to installation of WaboCrete II. Do NOT apply WaboBonding Agent to steel substrates. There must be no visible moisture prior to the application of the primer. Primer can be brush applied. Do NOT allow primer to dry prior to placement of WaboCrete II.
- Thoroughly pre-mix (approximately 20 seconds) Part B separately before pouring entire contents of Part B into clean 5 gallon container. Add Part A and mix both components for approximately 30 seconds, or until well blended.
- Slowly add the aggregate component to the mixed liquids and mix until all aggregate is coated (approximately 1 minute). This mix can be poured into the properly prepared blockout, in which the primer is still wet. The material will flow and self-level. Use a margin trowel to work material and finish surface.
- For sloped conditions, add WaboNon Flow Additive to the liquid-aggregate mixture.
- If the system is to be installed in sections, special care should be taken to the field weld details on shop drawings.
- The WaboStripSeal joint system is lifted and lowered into final position. The steel edge members are suspended into the blockout utilizing adjustable leveling devices.

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- Before securing or casting the system to the structure, the joint opening of the system should be adjusted to the proper ambient temperature.
- Complete all bolted or welded connections to the superstructure. When casting the joint into the structure, proper compaction of concrete around the system is required.
- The neoprene elastomeric gland should be field installed in continuous lengths spanning the entire roadway width. WaboPrimaLub adhesive is brushed into the full perimeter of the gland cavity on the steel edge member prior to actual gland installation.

FOR BEST RESULTS:

- Install when concrete substrate is clean, sound, dry, and cured (14 day minimum).
- Do NOT install if the joint's anticipated movement will exceed the total movement range of the system.
- Protect the work area with appropriate plastic sheeting.
- Minimize splice points by installing seals in longest possible continuous lengths.
- Do NOT allow any of the 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 install when surface temperature is less than 40˚F (4˚C).
- Shelf life of chemical components is 1 year. Shelf life of Wabo®Crete II is 18 months.
- Periodically inspect the applied material and repair localized areas as needed. Consult a Watson Bowman Acme representative for additional information.
- Make certain the most current version of the product data sheet is being used. Please consult the website (www.watsonbowmanacme.com) or contact a customer service representative.
- Proper application is the responsibility of the user. Field visits by Watson Bowman Acme personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

RELATED DOCUMENTS:

- Material Safety Data Sheets
- WaboCrete StripSeal Specification
- WaboCrete StripSeal Sales Drawings
- WaboCrete StripSeal Installation Procedure

OPTIONS/EQUIPMENT:

- Elastomeric gland installation tool, contact WBA for details.
- Use a ¾" slow speed, high torque, drill with a egg-beater (or mud beater) style mixing paddle to mix WaboCrete II
- Certified welder to be utilized for field welding of sections.

LIMITED WARRANTY:

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