

Wabo® Expandex

Asphaltic Plug Joint System

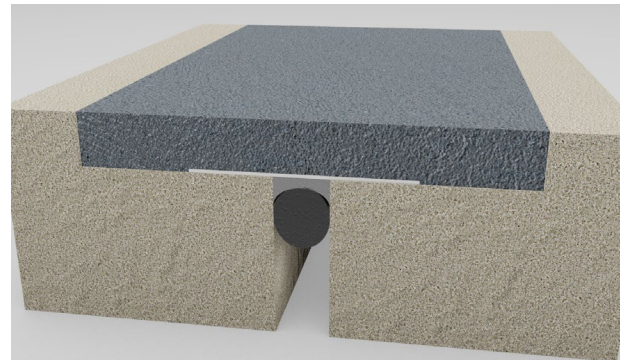
Features	Benefits
<ul style="list-style-type: none"> Anchorless system 	<p>Cost effective expansion joint system with smooth top finish. Hot applied binder and aggregate eliminates need for mechanical anchors.</p>
<ul style="list-style-type: none"> Versatility 	<p>Can accommodate inconsistencies in the expansion joint opening.</p>
<ul style="list-style-type: none"> Ease of Installation 	<p>Single pour application reduces traffic downtime.</p>

DESCRIPTION:

Wabo® Expandex is a flexible asphaltic plug joint system designed to accommodate minimum structure movement while providing a smooth transition between the approach pavement and the bridge deck. Wabo® Expandex is used typically at abutments or with asphalt overlays due to its unique asphalt compatibility. The system combines the use of a traffic bearing plate with special aggregate reinforced modified elastomeric material.

RECOMMENDED FOR:

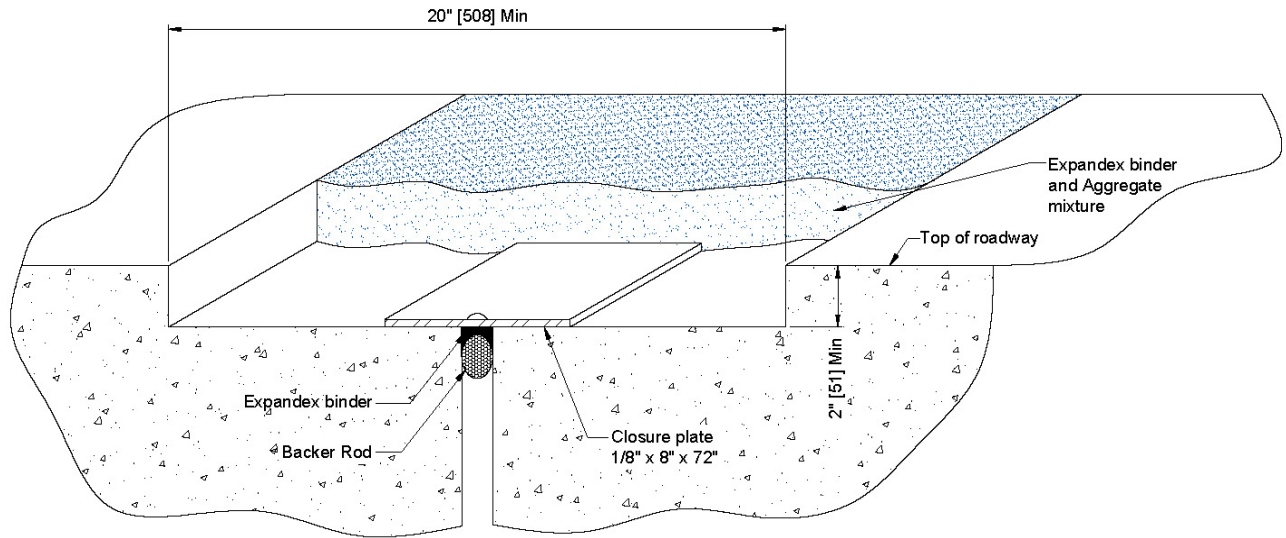
- Expansion joint openings with movements up to +/- 0.75" at time of installation
- Repair and maintenance of existing joints
- Asphalt Overlay projects



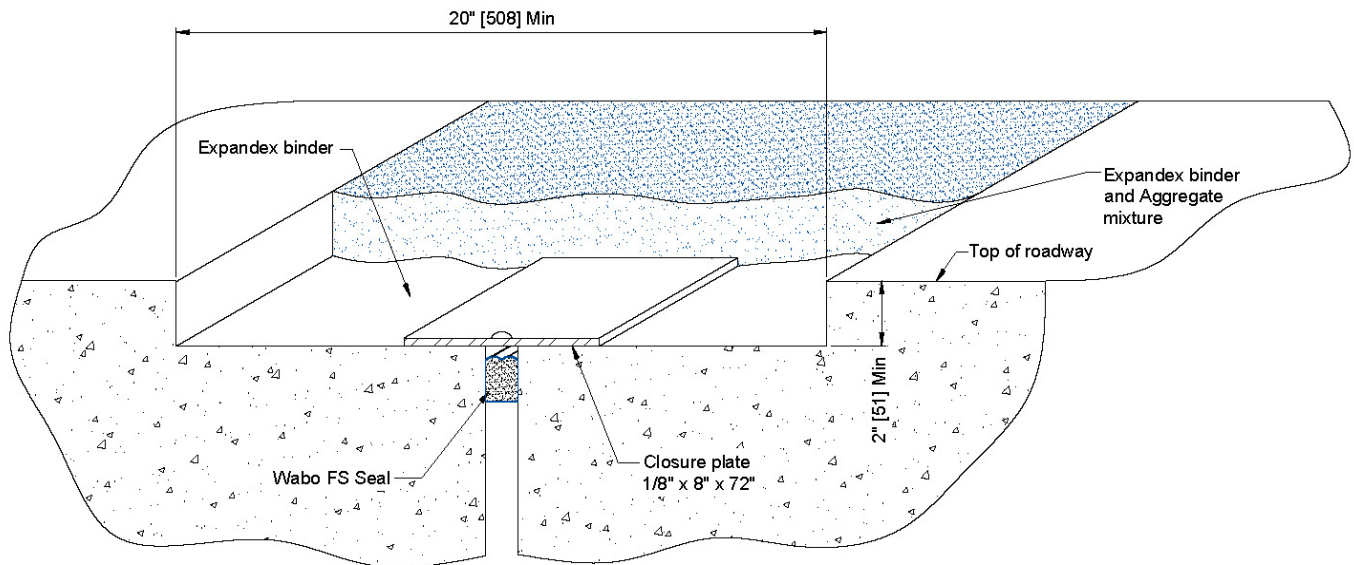
PACKAGING/COVERAGE:

- Wabo® Expandex elastomeric binder is supplied in standard 30 lb blocks (1 block per unit).
- Specialty aggregate is supplied in 40 lb bags, 2 bags per unit.
- 31 of each A&B fit onto one pallet
- 31 bags of aggregate on a second pallet.
- Add-Ons:
 - Traffic bearing plate is supplied in standard 6'-0" lengths.
 - Heat resistant backer rod or Pre-compressed Wabo®FS-Seal
- Coverage:
 - 1 unit of Wabo® Expandex will yield 0.69 ft³ (0.02 m³)
 - One unit will provide enough material for 2.5 LF of joint length, based on a standard blockout of 2"d x 20"w

TECHNICAL DATA:



**Wabo® Expandex
Bridge and Highway Series**



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PHYSICAL PROPERTIES:
Elastomeric Binder

Modified elastomeric binder shall meet or exceed the requirements of ASTM-3405 and ASTM-1190.

PHYSICAL PROPERTIES	TEST METHOD	REQUIREMENT
Softening point, min	ASTM D 36	83°C
Tensile adhesion, min	ASTM D 5329	700%
Ductility, min at 25°C(77°F)	ASTM D 113	400 mm
Penetration @ 77°F (25°C) 150 g,5 s	ASTM D 5329	75 max
Low temperature penetration Min at -18°C (0°F) 200 g, 60 s	9.1	1.0 mm
Flow, max 5 h at 60°C(140°F)	ASTM D 5329	3.0 mm
Resiliency, min-max at 25°C(77°F)	ASTM D 5329	40-70 %
Asphalt compatibility	ASTM D 5329	Pass
Recommended installation Temperature range		182°C -199°C
Safe heating temperature range		199°C - 216°C
Bond 3 cycles at -7°C (+20°F), 100 % Elong	ASTM D3405	Pass
Flexibility, at -23°C (-10°F)	ASTM D5329	Pass

Granite Aggregate

GRANITE SIZE	SIEVE SIZE	REQUIREMENT
"B" Size Granite	1 inch	100%
	½ inch	90 – 100%
	¼ inch	0-40%
"C" Size Granite	1 1/2inch	100%
	1 inch	90 – 100%
	1/2 inch	0-40%

INSTALLATION SUMMARY:

- Installation temperature shall be close to median joint range.
- The blockout should be of sound material with no vertical misalignment and parallel with the plane of the roadway. All surfaces shall be dry, then abrasive-blasted to remove contaminants and loose aggregate.
- Measure the blockout to ensure the dimensions are correct. The blockout width must be at least 20" and not exceed 24" and a depth of at least 2". All surfaces must be dry, abrasive blast the blockout to remove all latencies and contaminants which may cause bonding problems. Clean the blockout of dust and debris with hot air lance.
- Place backer rod into the joint opening and pour the properly heated binder material filling the joint opening and spreading the binder evenly by coating all interfaces and surfaces of the blockout.
- *Note: for wider openings (2"+), it is recommended to use pre compressed foam seal (such as Wabo[®]FS Bridge Seal) in place of heat treated backer rod. (Do we place binder over foam seal) SEE INSTALLATION PROCEDURE FOR ALT INSTALLATION
- Position and center the traffic bearing plates over joint gap. Insert the proper nails into the pre-drilled holes of the plate and pour the properly heated binder evenly over the bearing plates completely encapsulating the plates.
- Place pre-measured granite aggregate into a rotating drum mixer and heat to a minimum of 350°F (176°C).
- Pour recommended amount of heated binder (check for min. temperature of 380°F (193°C) into pre-calibrated container and add it to the heated aggregate. Mix binder and aggregate for approximately 3 minutes or until all aggregate is fully coated.

- Pour aggregate and binder mixture in blockout leveling the mix with the deck surface. See installation procedure for compaction instructions.
- Seal top surface of joint with heated binder.

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 +/- ¼" or if the joint opening is greater than 3" at the time of installation.
- Do not install at joint locations with skews greater than 45 degrees.
- Do not install at joint locations where dynamic intermittent vertical displacements exceed ¼".
- Protect the work area with appropriate plastic sheeting.
- **Storage:** No temperature limitations, provided materials are kept clean and dry.
- Shelf life of binder components is 3 years.
- 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.

OPTIONS/EQUIPMENT:

- Oil jacketed, double boiler asphalt melter with built in agitator.
- Rotating steel mixers.
- Hot air lance.
- Plate tamper or two-ton roller
- Steel wheelbarrow, rake and shovels
- Large bottles of propane
- Demo saw

RELATED DOCUMENTS:

- Material Safety Data Sheets
- Wabo® Expandex Specification
- Wabo® Expandex Sales Drawings
- Wabo® Expandex Installation Procedure

LIMITED WARRANTY:

Watson Bowman Acme Corp. warrants that this product conforms to its current applicable specifications. WATSON BOWMAN ACME CORP. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. The sole and exclusive remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of Watson Bowman Acme Corp. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL WATSON BOWMAN ACME CORP. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Other warranties may be available when the product is installed by a factory trained installer. Contact your local Watson Bowman Acme representative for details. The data expressed herein is true and accurate to the best of our knowledge at the time published; it is, however, subject to change without notice.

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