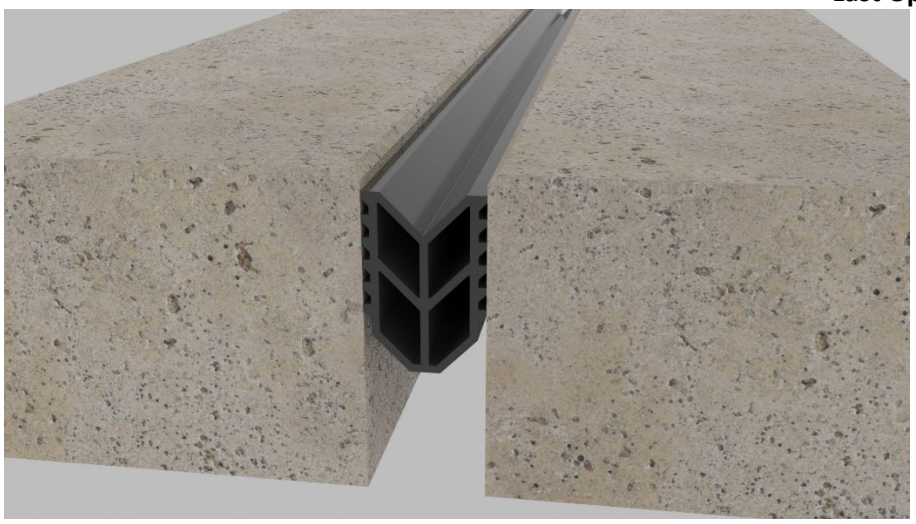
Installation Procedure

Last Updated: August 2025



Epoxy Bonded Seal (EBS)

Multi-Directional Structural Sealing Joint System

The following installation procedure is very important and must be fully understood prior to beginning any work. To ensure proper installation and performance of expansion joint system the following actions must be completed by the installing contractor. Failure to do so will affect product warranty.

1) Carefully read and understand installation procedure. Contact WBA's Technical Service Department at (800) 677-4922 for product assistance.
2) Inspect all shipments and materials for missing or damaged components and hardware. Contact Customer Service at (800) 677-4922 with WBA's order number and invoice for prompt assistance.
3) Inspect substrate or adjacent construction for acceptance before beginning work. Report unacceptable construction to the project manager for scheduled repair work.
4) Review WBA typical cut sheet drawings for project specific detailed information.

Watson Bowman Acme
95 Pineview Drive
Amherst, NY 14228
Phone: 716-691-7566
Fax: 716-691-9239
watsonbowmanacme.com

SIKA CORPORATION
201 Polito Avenue
Lyndhurst, NJ 07071 USA
Phone: +1-800-933-7452
Fax: +1-2019336225
www.usa.sika.com

Health & Safety

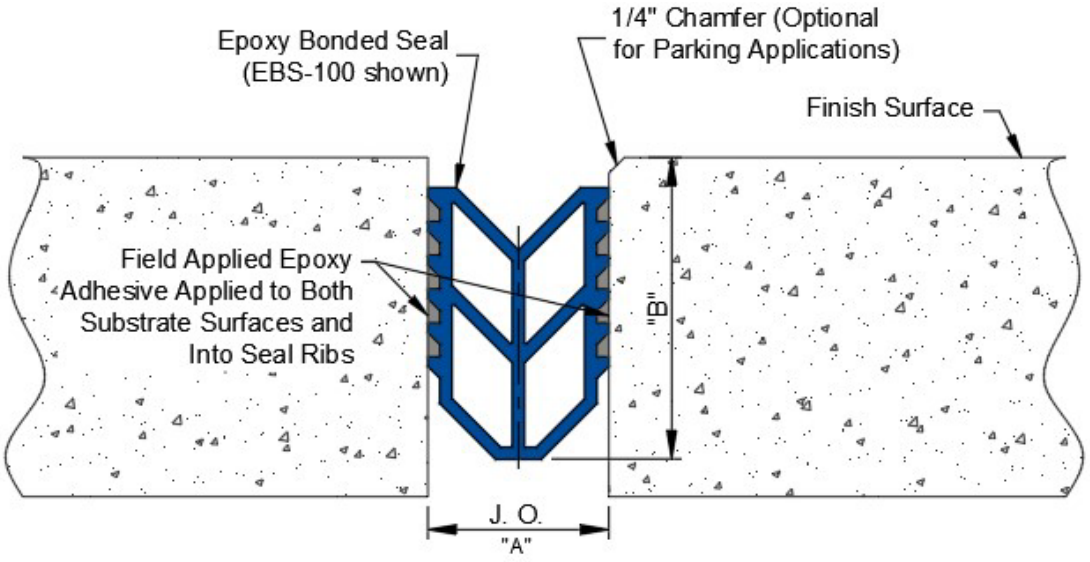
During the installation of any Watson Bowman Acme product, appropriate personal protective items should be worn at all times, including but not limited to the following:

- Proper work clothing
- Safety glasses
- Safety boots
- Gloves
- Hard hat

Local rules and regulations regarding safe work environments and health should be followed.

General

The work shall consist of furnishing and installing a Wabo®Epoxy Bonded Seal (EBS) in accordance with the details shown on the plans and the requirements of the specifications. Placement of the seal shall consist of proper surface preparations, materials, and application of materials.
EBS shall be shipped in the longest practical continuous length. Epoxy adhesive will be shipped in manufacturers labeled containers. Seals shall be cut to length on jobsite where required. Miter cut or bend seal (depending on size) in the field to conform to directional changes.



Epoxy Bonded Seal (EBS)
(Refer to chart below for size and part number)

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Model Number	WBA Part Number	Nominal Relaxed Seal Width	Joint Opening "A" @ Install (Midrange Temp)	Minimum Joint Opening @ Install	Min. Joint Opening "A"	Max Joint Opening "A"	Total Movement Rating (MR)	Seal Depth "B"
EBS-100	2211	1 ½" (38)	1" (25)	7/8" (22)	½" (13)	2-1/2" (64)	2" (51)	2-1/2" (64)
EBS-200	2213	3" (76)	2" (51)	1-3/8" (35)	1" (25)	4" (102)	3" (76)	2-3/4" (70)

(Minimum and Maximum values reflect values after movement occurs.)

Job Preparation

Joint Preparation

- Store material at a minimum of 50° F (10° C) for a minimum of 24 hours prior to installation, regardless of temperature at location of installlation. Store materials in a dry, enclosed area. Make sure materials are off the ground and out of direct sunlight.

- Forming materials should be carefully removed to avoid edge spalling of the concrete. Edge spalling conditions should be repaired and allowed to properly cure prior to installation of the Epoxy Bonded Seal. Installation must be performed in joint gap openings with sound, clean and dry substrates. Repairs shall be made as directed by the Engineer.

- Prior to installing seal, solvent wipe the seal with denatured alcohol using clean white cotton rags (ribbed area on sides only). The substrate sidewalls must be sound and free of all contaminants such as grease, oil, form release agents, etc. prior to installation of Epoxy Bonded Seal.

- The preferred method of surface preparation is abrasive blasting. Where this is not permitted, disc grinding should be utilized. The gap openings should be blown out with clean air to remove dust.

Preparation of Concrete - New or Aged Concrete

- Prior to beginning work, inspect for proper joint interface and ensure that joint opening has enough depth to accept the Epoxy Bonded Seal. Verify joint opening as called for on chart. Deficiencies in joint opening must be corrected prior to beginning work, such as spalled edges. Recommended Concrete Surface Profile is 2-4.

- New concrete must be cured (minimum of 14 days). Suitable preparation methods include sandblasting, chipping and scarification.

    - Durable Concrete - Sound and durable concrete should have a cap pull-off strength that meets or exceeds ACI 503R, Appendix A.

- Unsound Concrete – Loose, contaminated, weak, spalled, deteriorated and/or delaminated concrete must be removed to sound concrete and repaired. Prior to placement, any spalling, voids or structural cracking at the joint interface must be repaired. Follow International Concrete Repair Institute (ICRI) and American Concrete Institute (ACI) concrete repair and maintenance guidelines.

For Best Results

- Protect the work area with appropriate plastic sheeting. Utilize plastic sheeting on the underside of the joint opening to protect from objects, dripping liquids, or other materials from falling through the opening to lower levels.
- Epoxy shelf life is 12 months from date of manufacture.
- Proper application is the responsibility of the user. Field visits by Watson Bowman Acme personnel are for the purposes of making technical recommendations only.
- When installing on steel, contact your Sika WBA rep for further information

1 Mixing of Adhesive

Stir each component separately. Mix 1-part A with 1-part B (1:1 mix ratio) in a clean mixing container. Mix the epoxy using a slow speed drill with a mixing paddle attachment. Carefully scrape the sides and bottom of the pail during mixing with a paint stirring stick. Blend for 3 minutes.

Seal Installation with Adhesive

2A Apply a uniform coating with a trowel - approximately 1/8" (3 mm) thick to both substrate surfaces and to the ribbed area of the seal.

2B With gloved hands, compress the material and with the help of a blunt probe push down into the joint until it is recessed approximately 1/4" (6mm) below the surface. Using only denatured alcohol or isopropyl alcohol clean all excess epoxy from the edges of the joint and from the top of the seal as soon as it is pushed into the desired depth. DO NOT allow the adhesive to cure before removing it. Use care not to use excess pressure while cleaning the seal as the seal could inadvertently be pushed lower or out of the joint opening.

For stage work or directional changes, see step 2C

2C Allow the adhesive to set approximately 20 minutes @75° F (24°C) before traffic is allowed onto the joint, slightly longer times are required during cooler weather. When a continuous joint cannot be finished, the adhesive on the substrate and on the seal material must end evenly. Install the seal past the epoxied surfaces at least 12 inches (150-300mm) dry or without epoxy. This can be pulled out later to be re-glued and the installation continued.

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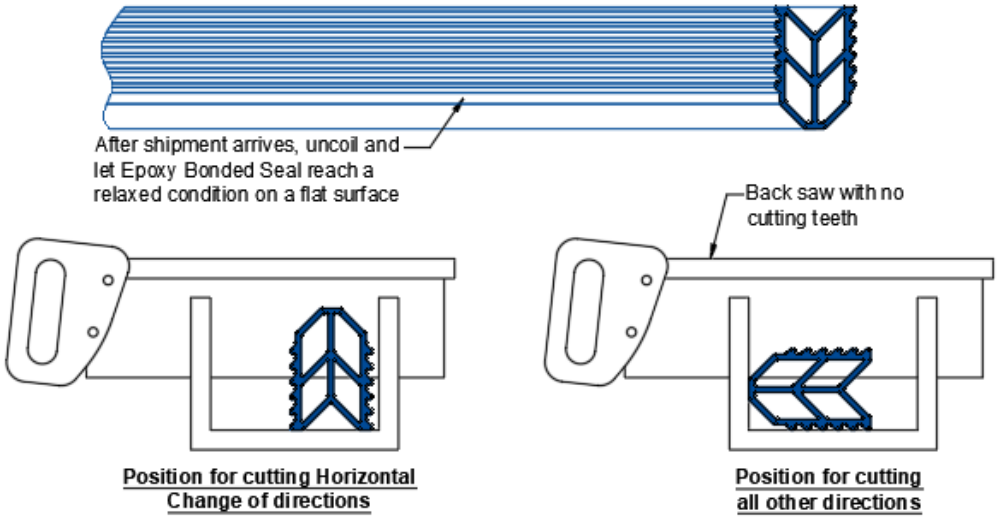
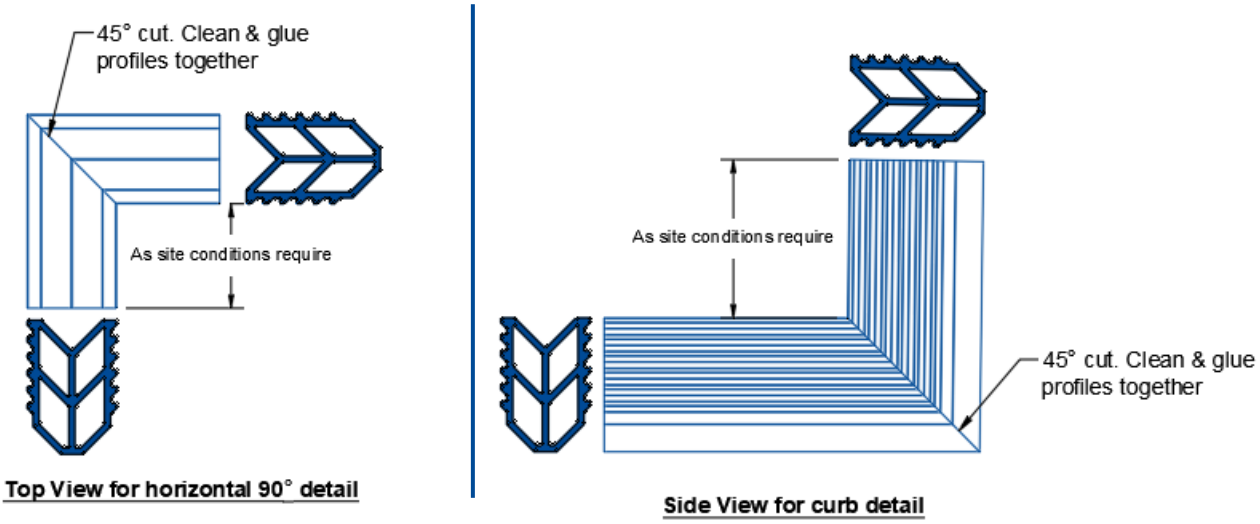
3 All starting and ending pieces must be square to the termination point.
Allow seal to be uncoiled and relaxed before cutting seal into desired lengths or for butt splicing.

NOTE: Manufacturer recommends to grind off all teeth of the back saw and apply denatured alcohol at cutting location(s) to ensure the cleanest and straightest cut.
Use #241 glue if required (optional add-on) on end profiles for butt splices. Profile not required to be prepped by Drummel Tool, but must be clean and smooth for proper splice applications. At upturn locations, "caps" should be glued to the end of each open profile (material not included).





4 For transitions other than a Butt Splice, please contact Watson Bowman Acme for optional Factory Fabricated Transitions

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