

# SPECIFICATION



## Wabo®SPS Joint System

*Preformed Silicone Joint Sealing System*

### PRODUCT INFORMATION

Manufacturer: **Watson Bowman Acme Corp.**

95 Pineview Drive  
Amherst, NY 14228

(P) 800-677- 4922

(F) 716-691-9239

[www.wbacorp.com](http://www.wbacorp.com)

Product Name **Wabo®SPS Joint System**

Product

Description: Wabo®SPS Joint System is an expansion joint system which bonds a preformed silicone seal to concrete, steel, elastomeric concrete or viscoelastic concrete joint interface with a silicone adhesive

Intended Use: To seal expansion joints on bridges

### B. Quality Control

Expansion Joint Manufacturer shall be ISO-9001 and RC-14001 certified, and shall provide written confirmation that a formal Quality Management System has been independently audited and approved to these standards. Alternate manufacturers will be considered provided they submit written proof that they are ISO 9001 and RC 14001 certified prior to the project bid date.

### C. Product

Provide a preformed silicone joint sealing system that is capable of accommodating movements as shown in the contract plans. The preformed silicone joint seal shall be manufactured from extrusion grade organic silicone compound, and preformed by an extruding process.

The preformed silicone seal shall be bonded to the joint interface with a silicone adhesive and without the use of any primers.

### A. General

The work shall consist of furnishing, placing and bonding a preformed silicone joint seal with a silicone adhesive to adjacent structures in accordance with the details shown on the plans and the requirements of these specifications. Components of the preformed silicone joint sealing system shall not be substituted and shall be supplied from one expansion joint manufacturer.

Expansion Joint Manufacturer shall have a minimum ten (10) years experience specializing in the design and manufacture of silicone technology expansion joint systems

### D. Component and Materials

The Contractor shall furnish the selected expansion joint manufacturer's certificate of compliance that materials proposed will meet the requirements as set forth in these specifications.



The Chemical Company

# SPECIFICATION



## Wabo<sup>®</sup>SPS Joint System

Preformed Silicone Joint Sealing System

### 1. Preformed Silicone Seal

Preformed silicone seal shall be manufactured of an extrusion grade, custom organic silicone compound meeting the following physical requirements. Alternative elastomeric materials are not allowed.

PHYSICAL PROPERTY	TEST METHOD	REQUIRMENTS
Color	Visual	Gray
Durometer (Shore A)	ASTM D 2240	55+/- 5
Tensile Strength	ASTM D 412	1000 psi, min
Elongation	ASTM D 412	400% min
Tear Resistance (die B)	ASTM D 624	100 lbs/in min
Compression Set @ 100 ° F, 22 hrs	ASTM D 395	30% max

### 2. Silicone Adhesive

The adhesive shall be medium modulus, neutral cure sealant manufactured of silicone meeting the following physical properties.

PHYSICAL PROPERTY	TEST METHOD	REQUIRMENTS
Color	Visual	Gray
Durometer (Shore A)	ASTM D2240	25 +/- 5
Elongation	ASTM D412	700% min
Tensile at 100% Elongation	ASTM C1184	70 psi, min
Peel Adhesion to substrates	ASTM C 794	55 lbs/in min
Work Life (tool time)		20 -30 minutes

### E. Cyclic Testing of Silicone Bridge Joint Systems

The preformed silicone joint sealing system shall be pre-qualified through cyclic testing by an independent laboratory. The cyclic testing procedure shall determine the durability of the preformed silicone joint sealing system after two hundred cycles in compression and tension. Any defects, tears or bond failure will be cause for rejection.

A document signed by an independent, third party testing or inspection laboratory to verify testing will be basis of acceptance.

CYCLIC LOADING TEST PROPERTIES	REQUIREMENT
Test sample Length	2 foot sample
Number of Cycles	200 cycles
Movement	+/- 1 " (1" compression , 1" tension)
Joint Opening	2 inches
Joint Skew	45 °
Temperature	68 °F (20 °C) and -20 ° F (- 29 °C)

### F. Construction Requirements

The Contractor shall submit product information and necessary details after the award of the contract. At the discretion of the Engineer, the manufacturer may be required to furnish a representative sample of material to be supplied in accordance with these specifications.

Store all materials per manufacturer's recommendations

# SPECIFICATION



## Wabo<sup>®</sup>SPS Joint System

*Preformed Silicone Joint Sealing System*

The contractor shall ensure and properly prepare all joint interfaces prior to installation and in accordance with the manufacturer's installation guidelines. Repair joint interfaces where needed and with materials approved by the expansion joint manufacturer.

All joint interfaces must be completely dry prior to application of the silicone adhesive. Install the preformed silicone joint seal in one continuous length. Prior to installation, clean the silicone seal profile using a solvent approved by the manufacturer. Apply the silicone adhesive per manufacturer's installation guidelines to insure complete contact with joint interface and preformed silicone seal.

Position the silicone seal to the proper depth and apply silicone adhesive along each side of seal and fill per manufacturer's installation guidelines.

Preformed silicone joint sealing system shall be sized in accordance with manufacturer's recommendations, and installed at locations shown on the contract plans.

### G. Payment

The accepted quantity of preformed silicone joint sealing system will be paid for at the contract unit price per lineal foot. Measurement of the preformed silicone joint sealing system will be taken along the centerline of the joint system between the outer limits indicated on the contract plans.

Payment will be made under:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Preformed Silicone Joint Sealing System	Lineal Foot

Payment will be full compensation for all work necessary to complete the items including furnishing and installing the preformed silicone joint sealing system and any miscellaneous patching

### 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.

### Contact

**Watson Bowman Acme Corp.** 95 Pineview Drive, Amherst, NY 14228  
phone: 716-691-7566 / fax: 716-691-9239 / web site: <http://www.wbacorp.com>