SPECIFICATION

**Wabo®SiliconeSeal Joint System**

Silicone Expansion Joint Sealant

for Bridge Applications

**SECTION I –** **General**

1.01 Work Included

1. The work shall consist of furnishing and installing an elastomeric bridge joint seal in accordance with the details shown on the plans and the requirements of the specifications.
2. Manufacturer shall a minimum ten (10) years experience specializing in the design and manufacture of expansion control systems

1.02 Quality Control Program

1. Manufacturer shall be ISO-9001:2000 certified and shall provide written confirmation that a formal Quality management System and Quality Processes have been adopted in the areas of, (but not limited to) Engineering, Manufacturing, Quality Control and Customer Service for all processes, products and their components. Alternate manufacturers will be considered provided they submit written proof that they are ISO 9001:2000 certified prior to the project bid date.

**SECTION II – Product Requirements**

2.01 Product

A. Provide an elastomeric bridge joint seal that is capable of accommodating movements as shown in the contract plans. The bridge joint seal shall be a rapid cure, two component silicone seal. The silicone seal shall be designed to accept +100% / -50% of the joint installation opening and bond to the joint interface without the use of any primers.

* 1. Component and Materials

The Contractor shall furnish a manufacturer’s certification that the materials proposed have been pre-tested and will meet the requirements as set forth in the specification.

1. Elastomeric Seal

Material shall be a cold applied, two component, self-leveling, low modulus silicone sealant exhibiting the physical properties listed in the table below. When properly mixed, the sealant cures rapidly to form a well-bonded elastomeric seal.

AS SUPPLIED PROPERTIES PART A PART B

Color White Gray

Extrusion Rate (ASTM C 1183) 200-600 ml/min. 200-600 ml/min.

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MIXED PROPERTIES TEST METHOD REQUIREMENT

Leveling ASTM C639 self levels

Tack Free Time ASTM C679 60 min. max

Joint Elongation ASTM D5329 (1)(2) 600% min.

Joint Modulus, 100% extension ASTM D5329 (1)(2) 15 psi max.

Cure Evaluation ASTM D5893 Pass @ 4hr max

Ultimate Elongation ASTM D 412 Die C (1) 1000% min.

Stress at 150% Elongation ASTM D 412 Die C (1) 25 psi max.

Shore Hardness, 00 ASTM C 661 (1) 40 – 80

Specific Gravity ASTM D 792 (1) 1.20 – 1.40

**Note:** (1) Specimens cured at 77 ± 3°F. and 50 ± 5% R.H. for 7 days.

 (2) Specimens size is ½” wide by ½” deep by 2” long.

**SECTION III – Construction Requirements**

3.01 Construction Requirements

1. 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 the project specifications
2. The manufacturer shall provide instructions for the proper installation of the joint system. Any patching materials must be approved prior to use from the bridge joint seal manufacturer. Bridge joint seal shall be installed at locations shown on the contract plans.

**SECTION IV – Payment**

4.01 Payment

1. The accepted quantity of bridge joint seal will be paid for at the contract unit price per lineal foot. Measurement of the bridge joint seal will be taken horizontally and vertically along the centerline of the joint system between the outer limits indicated on the contract plans. Payment will be made under:

PAY ITEM PAY UNIT

Bridge Joint Seal Lineal Foot

1. Payment will be full compensation for all work necessary to complete the items including furnishing and installing the bridge joint seal and any miscellaneous patching