SPECIFICATION

Wabo®Flex Joint System
Molded Rubber Segmental Expansion Joint System
for Bridge & Highway Applications

A. General

The work shall consist of fabricating, furnishing and installing a bridge deck joint sealing system in accordance with the details shown on the plans and the requirements of the specifications.

B. Product

Provide a watertight joint sealing system that is capable of accommodating the structures movement. The joint sealing system shall consist of elastomeric molded neoprene panels that are reinforced with structural steel angles and imbedded wear plates. The system is cast into the structure by cast in place anchors. The elastomeric panels shall be designed to withstand traffic loads. Provide panel size that satisfies project requirements including movement and watertightness. Install all components utilizing manufacturer's recommended sealants for complete installation.

C. 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 Molded Panels

The 6'-0" elastomeric molded panels (4'-0" for SR 13) shall be comprised of a formed steel shape suspended in an elastomeric material. The profile-riding surface shall have imbedded wear plates to ensure skid resistance and shall be capable of accommodating traffic loads. Each elastomeric molded panel shall be supplied with integrated bolt hole cavities and tongue and groove end connections.

The elastomer used to mold the panels shall be manufactured of a neoprene compound exhibiting the physical properties listed in the table below:

PHYSICAL PROPERTIES	TEST METHOD	REQUIREMENT
Hardness, Type A Durometer	ASTM D2240 modified	45 +/- 5 points
Tensile Elongation	ASTM D412	1800 psi, min.
Elongation @ break	ASTM D412	400%, min.
Compression Set, 22 hrs @ 158°F	ASTM D395 Method B	20%, max
Low Temperature @ -40°F	ASTM D746	not brittle
Ozone Resistance, 70 hrs @ 100°F 20% strain, 100 pphm	ASTM D1149 Method B	No Cracks
Oil deterioration 70 hrs @ 212 F After immersion in ASTM Oil #3	ASTM D471	120% volume increase max

Requirements shown reflect test results taken immediately following compound mixing. Results may vary and are not indicative of product performance if specimens are skived from finished, molded parts.

2. Wear Plate

Wear plate material utilized for skid-resistant surface shall be from alloy 6061-T6 (ASTM B 221-73)

3. Steel Angle

The steel angles imbedded in the molded neoprene panels are formed from ASTM A-36steel.

4. Bolt Cavity Sealant

Bolt hole cavities shall be filled using a two part polyurethane sealant that meets Federal Specification TT-S-00227E. Contractors to ensure that the anchor blocks are dry from moisture prior to placement of material.

5. Edge Void Sealant

Edge voids shall be filled with a one part polysulfide base synthetic rubber sealant conforming to Federal Specification TT-S-00230C Type II Non-Sag. Contractor shall ensure that the anchor blocks are dry from moisture prior to placement of material.

6. Bedding Compound

Apply edge void sealant as a bedding material to the blockout base prior to placement of the elastomeric gland. Material shall be a one part polysulfide base synthetic rubber sealant conforming to Federal Specification TT-S-00230C Type II Non-Sag.

D. Construction Requirements

The Contractor shall submit product information and necessary shop drawings 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

Then device shall be accurately set and securely supported at the correct grade and elevation and the correct joint opening as shown on the plans and on the shop drawings.

The manufacturer instructions for the proper installation of the joint system shall be entered on the shop drawings. Shop drawings, which lack manufacturer installation instruction, may be returned without approval.

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E. Payment

The accepted quantity of bridge deck joint sealing system will be paid for at the contract unit price per lineal foot. Measurement of the bridge deck joint sealing system 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 Deck Joint Sealing System	Lineal Foot

Payment will be full compensation for all work necessary to complete the items including furnishing and installing the bridge deck joint sealing system and any miscellaneous patching required.