SPECIFICATION

Jeene®
Structural Sealing System
for Bridge & Highway Applications

A. General

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

Manufacturer shall a minimum ten (10) years experience specializing in the design and manufacture of expansion control systems

B. Quality Control

Manufacturer shall be ISO-9001:2008, RC14001:2008 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 9001:2008, RC14001:2008 certified prior to the project bid date.

C. Product

The structural sealing joint system shall be deigned to withstand structural movement and harsh environmental conditions. The system shall consist of a preformed neoprene profile, installed using the same dimensions as the joint gap at mid-range temperature, bonded with a two component epoxy adhesive and pressurized during the adhesive cure time. Serrated sidewalls shall be extruded to ensure an effective and quality surface for adhesion. Provide seal profile that satisfies project requirements including movement and watertightness. Install all components utilizing manufacturer's recommended adhesive for complete installation.

D. 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

The structural sealing joint profile shall be preformed and manufactured from an extruded neoprene compound exhibiting the physical properties listed in the table below:

PHYSICAL PROPERTIES	TEST METHOD	REQUIREMENT
Tensile Strength	ASTM D412	2000 psi,
Elongation @ break	ASTM D412	250%, min
Hardness, Type A Durometer	ASTM D2240	65 +/-5 % points
Low temp stiffening 7 days @ 14°F		0 - +15
Oven Aging 70 hrs @ 212°F	ASTM D573	
Tensile Strength		20% loss max
Elongation		20% loss max
Hardness		0 to +10 points
Oil Swell, 70 hrs @ 212°F (100°C)	ASTM D471	45%
Ozone Resistance, 20% strain, 3 PPM in Air 70 hrs @ 104°F (40°C)	ASTM D1149	No Cracks

2. Adhesive

Elastomeric seal shall be installed utilizing a two component epoxy based adhesive which meet the requirements of the properties listed below:

PHYSICAL PROPERTIES	REQUIREMENT
Tensile Strength	3500 to 4000 PSI min.
Compressive Strength	8000 PSI min.
Solids hardness	5 mohs
Pot Life	40 minutes @ 77°F (25°C)
Flash Point	Greater than 150°F (65.5°C)
Tensile Strength, 24 hr	3000 PSI min.
Axial Compression, 24 hr	6500 PSI min.

E. 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 the project specifications

Where indicated and noted on the contract plans, install structural sealing joint system in a neat and workmanlike manner. All foreign materials and debris which may be detrimental to effectively sealing the joint must be totally removed from the gap. The joint interfaces must be first cleaned by disc grinding or sandblasting and then vacuumed or blown with dry, oil free compressed air before the two component epoxy adhesive is mixed and applied

Pressurization is done through a valve with cap system. The profile is pressurized during installation and curing time of adhesive to assure complete bonding throughout gap/profile surfaces. Air pressure will bleed itself with time or air valve can be released at any time after 24 hours of installation.

Structural sealing joint system shall be set to the proper width for ambient temperature at the time of installation and shall be installed in strict accordance with the manufacturers written instructions along with the advice of their qualified representative.

F. Payment

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

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