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# Special Specification 4001

## Asphaltic Plug Expansion Joint System

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### 1. DESCRIPTION

Furnish and install an expansion joint system that consists of a blended polymer-modified asphalt with a special aggregate in a prepared expansion joint blockout and that provides for all deck movements up to the manufacturer's recommended limits.

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### 2. MATERIALS

Provide joint system components for system shown on the plans and approved for use with minimum rated joint movement range as shown on the plans but not less than 1 in.

Ensure that the polymer-modified asphalt, aggregate, backer rod, steel bridging plate, and joint binder conform to recommendations of the manufacturer of the approved joint system installed. Provide properly sized bridging plate based on the width of joint opening.

The manufacturer of the joint system must certify that all materials furnished meet manufacturing specifications and conform to the materials listed in the latest product literature. No substitution of materials is permitted.

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### 3. CONSTRUCTION METHODS

Provide 2 copies of the manufacturer's product literature, specifications, and installation instructions, including required equipment to perform installation, to the Engineer.

Arrange to have a representative of the joint manufacturer on site during installation for the first 200 ft. of joint on the project. Have the representative verify that the substrate is properly prepared, the steel bridging plate is correctly sized for the joint opening, and that the joint materials are mixed, placed, and cured according to the manufacturer's recommendations. Provide written instructions from the manufacturer's representative on job specific issues not covered in the standard product installation procedures. Obtain the services of the manufacturer's representative for an additional 100 ft. of joint installation each time a change is made to the installation crew.

Install the joint system according to the manufacturer's recommendation in a joint blockout prepared as shown in the plans and according to the manufacturer's specifications. If the joint blockout is less than 2 in. deep at any point along the joint, immediately notify the Engineer, who will determine suitability of the joint.

Secure the backer rod, and seal it in the joint opening according to the manufacturer's directions.

Center the bridging plate, and secure it over the joint opening according to the manufacturer's directions.

Place the joint binder, polymer-modified asphalt, and aggregate in the sequence and by the methods recommended by the manufacturer. Compact the completed joint by methods recommended by the manufacturer such that final grade of the joint after compaction matches the finished grade of the deck.

Remove and replace any installed joint that fails to meet manufacturer's specifications or is showing signs of failure with a properly installed and functioning joint at the expense of the Contractor.

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**4. MEASUREMENT**

This Item will be measured by the foot or cubic foot. Length measurement will be along the centerline of the joint at the surface of the roadway. Calculate volume using the length and width shown on the plans and the depth measured in place.

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**5. PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Asphaltic Plug Expansion Joint." This price will be full compensation for preparing the blockout, furnishing and installing the system, for all costs and expenses of having the joint manufacturer's representative on site during installation, and for all material, tools, equipment, labor, and incidentals necessary to complete the work.