

## ITEM 409 SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS

### 409.01 Description

### 409.02 Materials

### 409.03 Construction Details

### 409.04 Method of Measurement

### 409.05 Basis of Payment

**409.01 Description.** This work consists of saw cutting and sealing the finished surface of the asphalt concrete pavement and shoulders directly over and in line with transverse joints in the underlying PCC pavement.

**409.02 Materials.** Use joint sealant conforming to 705.04 and approved by the Laboratory before shipment to the project.

**409.03 Construction Details.** Saw cut, clean, and seal transverse joints as a continuous operation. If the surface course is not placed within 5 days after the intermediate course is placed, make a 1/8-inch (3 mm) wide saw cut that is one-fourth the depth of the intermediate course over contraction joints and a 1/2-inch (13 mm) wide cut that is one-fourth the depth of the intermediate course expansion joints.

Saw joints in the surface course as soon as the saw can be operated without damaging the asphalt concrete, but no later than 48 hours after the asphalt concrete is placed.

Locate the sawed joints directly over each existing transverse pavement joint, including joints at full-depth pavement repairs. Accurately locate joints with pins or stakes before paving. Pre-mark the saw cut on the new asphalt surface with a chalk line or other acceptable method. Obtain the Engineer's approval of the method for locating and accurately marking the proposed saw cuts before starting any resurfacing operations.

Saw all transverse joints and create a joint sealant reservoir according to the following table:

Measurement	Inches (mm)
Saw cut depth	2 (50)
Joint sealant Reservoir	
Width	3/8 (10)
Depth	3/4 (19)
Recess below surface course	1/8 (3)

The Contractor may make one pass to achieve the full width and depth of the saw cut. Use either dry or wet cutting.

Clean dry sawed joints with compressed air to remove dirt, dust, or deleterious matter. Use an air compressor with a minimum rated capacity of 100 pounds per square inch (689 kPa) and sufficient hose for continuous cleaning operations.

Clean wet sawed joints with a water blast to remove sawing slurry, dirt, or deleterious matter. Dry wet sawed joints with a propane torch or lance unit capable of producing a blast of hot air at 2000 °F (1093 °C) and with a gas velocity of 2000 feet per second (610 m/s).

Extend the transverse saw cut joints the full width of the asphalt over the concrete pavement and paved shoulders.

Do not allow traffic to knead together or damage the sawed joints before sealing.

Heat joint sealant material in a kettle or melter constructed as a double boiler, with the space between the inner and outer shells filled with oil or other heat transfer medium. Provide positive temperature control and mechanical agitation.

Heat the material according to the manufacturer's recommendation. Consider the first gallon (4 L) of material that flows out of the applicator wand at the start of the day spoil, and discard it into a container so designated.

After cleaning, immediately seal the joints with hot-poured sealant applied through a nozzle projected into the sawed joint, filling from the bottom up. Ensure that the seal completely fills the joint such that after cooling, the level of the seal is not greater than 1/8 inch (3 mm) below the pavement surface. Fill any depression in the seal greater than 3/16 inch (5 mm) to the specified limit by adding additional hot poured sealant. Do not overfill the joints. Take care in the sealing of the joints so that the final appearance will present a neat line.

**409.04 Method of Measurement.** The City will measure Sawing and Sealing Asphalt Concrete Pavement Joints by the number of feet (meters) of joints sawed and sealed.

**409.05 Basis of Payment.** The City will not pay for saw cuts in the intermediate course.

The City will pay for accepted quantities at the contract price as follows:

<b>Item</b>	<b>Unit</b>	<b>Description</b>
409	Foot (Meter)	Sawing and Sealing Asphalt Concrete Pavement Joints