

**ITEM 402.76030018 ASPHALT PAVEMENT JOINT ADHESIVE**

**DESCRIPTION**

This work shall consist of furnishing and installing joint adhesive in accordance with the contract documents and as directed by the Engineer.

**MATERIALS**

Use one of the following joint adhesives manufactured by:

Joint Adhesive	XJB eXtruded Joint Bond	Crafco Joint Adhesive
Deery American Corp	Asphalt Materials Inc.	Crafco, Inc.
420 N. Roosevelt Ave.	5400 W. 86 <sup>th</sup> Street	420 N. Roosevelt Ave.
Chandler, AZ	Indianapolis, IN	Chandler, AZ

Equivalent product may be used with the approval of the Materials Bureau.

Deliver the joint adhesive in the manufacturer's original sealed container legibly marked with the following information:

- Manufacturer's name.
- Trade name of adhesive.
- Manufacturer's batch or lot number.
- Minimum application temperature.
- Maximum (or Safe) heating temperature.

Provide the Engineer with a copy of the manufacturer's recommendations pertaining to heating and application of the adhesive prior to commencing work.

**CONSTRUCTION DETAILS**

**General.** Furnish all equipment that is necessary to clean the construction joint and to apply the joint adhesive. Use equipment meeting the description and/or performance requirements described herein and approved by the Engineer. Apply the joint adhesive to the final construction joints.

**Joint Preparation.** Prepare longitudinal and transverse construction joints as discussed below and place adjacent asphalt pavement on the same day that the joint adhesive is applied.

Use a high pressure air lance to thoroughly clean the joint surface of dust, dirt, foreign material, sand and any other extraneous materials immediately prior to applying the joint adhesive. Install suitable traps or devices on the compressed air equipment to prevent moisture and oil from contaminating the joint surfaces. Maintain these devices and see that they are functioning properly. Protect the public from potentially objectionable and/or hazardous airborne debris.

**Joint Adhesive.** Heat and melt the joint adhesive in a melter constructed either as a double boiler filled with a heat-transfer medium between the inner and outer shells, or with internal tubes or coils carrying joint adhesive through a heated oil bath and into a heated double wall hopper. The melter will be equipped with separate thermometers to indicate the temperature of the heat

transfer medium and the joint adhesive material, positive temperature controls, and with a mechanical agitator or a recirculation pump to assure a homogeneous blend of the joint adhesive.

Check the discharge temperature of the joint adhesive with a non-contact infrared thermometer or other suitable thermometer. Discharge the joint adhesive at the manufacturer's recommended application temperature and maintain the joint adhesive at  $\pm 5^{\circ}\text{C}$  of the application temperature indicated on the material packaging.

Applying joint adhesive is not permitted if the melter and discharge temperatures do not meet with the requirements described above.

Equip the discharge hose with a thermostatically controlled heating apparatus or insulate it to maintain the proper joint adhesive application temperature. Holster the discharge hose to the melter if it is not thermostatically heat controlled. Circulate the joint adhesive from the discharge hose and the melter to maintain the proper joint adhesive application temperature.

Do not use joint adhesive material that has been heated beyond the safe heating temperature. If the manufacturer's recommendations allow the joint adhesive to be reheated or heated in excess of six hours, recharge the melter with fresh material amounting to at least 20 percent of the volume of the material remaining in the melter.

**Application.** Apply the joint adhesive when ambient air temperature is  $5^{\circ}\text{C}$  and rising. Use an applicator wand fitted with a sealing shoe to strike-off the adhesive. Strike-off the joint adhesive to provide a 6 mm to 10 mm thick band. The finished bands are to be approved by the Engineer.

**Wedge Joints.** Apply the joint adhesive to the entire vertical face and the upper 50 mm of the wedge joint.

**Butt Joints.** Apply the joint adhesive to the entire vertical face of the butt joint.

After application, the joint adhesive shall be cured to prevent construction and/or vehicular traffic from tracking or picking up the material. Reapply joint adhesive to any areas damaged by construction and/or vehicular traffic prior to paving the adjacent asphalt pavement.

#### **METHOD OF MEASUREMENT**

This work will be measured as the number of linear meter of joint adhesive satisfactorily furnished and installed.

#### **BASIS OF PAYMENT**

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
402.76030018	Asphalt Pavement Joint Adhesive	Linear Meter