

SECTION 32 12 18 (Revised Amendment 00001)
ASPHALT PAVEMENT CRACK AND JOINT FILLING AND SEALING

1.0 Description.

This work consists of filling cracks and joints in existing asphalt pavement.

2.0 Material

Crack filler, hot applied, for asphalt pavements meeting requirements of ASTM D 5078.

3.0 Construction Requirements

3.1 Equipment.

Furnish equipment with the following capabilities:

(a)DELETED

(b)Router. Power rotary impact router or vertical spindle router capable of cleaning cracks or joints to the required depth and width.

(c)Hot-compressed air lance. A lance capable of providing clean, oil-free compressed air at a volume of 100 cubic feet per minute at a pressure of 120 pounds per square inch and at a temperature of 2000 °F.

(d)Application wand. A crack sealant applicator wand attached to a heated hose that is attached to a heated sealant chamber. The temperature controls shall maintain temperature of the sealant within manufacturer's tolerances.

(e)Heating kettle. An indirect-heating-type double boiler with the space between the inner and outer shells filled with oil or other heat transfer medium capable of constant agitation. Provide an accurate and calibrated thermometer having a range from 200 to 600 °F in 5 °F graduations. Locate the thermometer such that the temperature of the joint sealant may be safely checked.

(f)Squeegee. A hand-held squeegee for ensuring that the crack is filled to the existing surface.

4.0 DELETED

5.0 Crack Cleaning and Filling/Sealing.

(a) Clean the existing surface of all loose material, dirt, or other deleterious substances by brooming, flushing with water, or other approved methods. When specified, rout and clean all cracks with an

average opening of 1/2 inch or more to make a sealant reservoir to the depth of the routed crack or at least 3/4 inch deep. Dry cracks before sealing.

- (b) When using the hot-compressed air lance, keep it moving so as not to burn the surrounding pavement and the joint. Place and finish sealant within 5 minutes after heating with the hot-compressed air lance.
- (c) For cracks with a width of 3/4 inch, but less than 1 inch, seal with an approved slurry seal mix, fine aggregate-asphalt binder mix, or fine aggregate-emulsified asphalt mix. Use a squeegee or other suitable equipment to force the mix into the cracks, full-depth.
- (d) Immediately screed the joint sealant or asphalt mix to the elevation of the existing surface. Use a squeegee to ensure that a 3-inch wide band is centered on the finished sealed crack. Cover the sealed crack with a light application of blotter.
- (e) For cracks with a width greater than or equal to 1 inch, fill flush to the existing surface with and approved hot-mixed asphalt (HMA) mix. Submit product data and mix design to the contracting officer for approval, if required. The HMA mix shall meet the Texas Department of Transportation Specifications.

- - - E N D - - -