

SPECIFICATIONS  
FOR  
FIBERIZED  
CRACK SEALING

## CRACK SEALING

Crack sealing material shall be applied on various streets as designated by the Engineer.

## SPECIFIED CRACK SEALING PREPARATION

Prior to the filling of the crack with the crack sealing material, the Contractor will clean the crack by air blowing with compressed air.

## MATERIAL: FIBERIZED CRACK SEALER

The crack filling material shall be PG 64-22 hot liquid asphalt cement and Fiber Pave 5010, a short length polypropylene fiber manufactured by Hercules Corporation or an approved equal. The blended mixture by weight shall be in accordance with the manufacturer's recommendations. The blended mixture by weight shall be 7% fiber and 93% asphalt cement.

## MIXING AND APPLICATION EQUIPMENT

The sealing applicator shall be equipped with a pump and agitator. The degree of mixing shall be kept to minimum and the compound should be mixed only enough to ensure uniform dispersion of the fibers in the asphalt matrix. The speed of the agitator should be kept as slow as possible and the temperature must not exceed 285 degrees F or less than 260 degrees F. Heating equipment shall be double-walled oil transfer units and shall be a part of the sealing applicator.

The placement of the material shall be done through a standard hand hose as standard kettles have, with the addition that the head have and extrudamat applicator that is either 4 or 5 inches in diameter.

## TANK AND AUGER

Dial type temperature gauges shall be mounted so as to allow monitoring of the temperature of the product in the tank and the heating oil. Tank is not to be used if temperature gauges are not certified to be correct within five (5) degrees F.

Tank shall be a coil-lined tank with the coils fully surrounding the sides and bottom in order to provide only indirect heat to the product within the tank. Coils must provide high volume flow of the synthetic heat transfer liquid in a specific pattern to provide even and positive heat transfer to the crack sealant material without creating hot spots to burn the fiber and/or the material. The tank shall be fully insulated. There shall be positive and automatic control of the heating system used to heat the heat transfer liquid to eliminate any possibility that the heating transfer liquid could be heated to a temperature beyond the melting point of the fiber material. This heat transfer liquid is to be heated in a vessel remote from the crack sealant tank. Tank shall contain a full-width and height, hydraulically driven, full sweep, bi-directional, heavily padded stirring apparatus.

Additionally, all product pumps and lines handling crack sealant material (except the application hoses and applicators) shall be jacketed with circulating heat transfer liquid to avoid the need for excessive hand torching of the product in those lines. Unit is to be equipped with all lights necessary for safe and legal operation on public roadways.

## ROLLING

After the crack has been filled and sealed, the Contractor shall immediately wet roll the crack. The Contractor is only required to roll the crack once and any size roller is acceptable.

## CLEAN-UP

Twenty-four (24) hours after the streets have been crack sealed, all debris and surplus material must be vacuumed with a vacuum type sweeper. Cost of vacuum sweeping shall be included as part of the cost for this bid item and no additional compensation for vacuum sweeping will be given.

## TESTING

The Contractor shall supply the City a certified test result for every one thousand (1,000) gallons of crack sealing material used. The testing shall be performed by an independent, level two, testing laboratory that is approved by the Ohio Department of Transportation. The test report must contain the percentage of polypropylene fiber, viscosity, and penetration of the PG 64-22 liquid asphalt. Testing shall be at the Contractor's expense.

## METHOD OF PAYMENT

The unit price for payment for all labor, material, and equipment shall be by the number of gallons used.