

MICHIGAN  
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION  
FOR  
**OVERBAND CRACK FILL  
CRACK PRETREATMENT APPLICATION  
(Preventive Maintenance)**

C&amp;T:KPK

1 of 2

C&T:APPR:JWB:JAR:06-24-04  
FHWA:APPR:08-03-04

**a. Description.** Conform to Section 505 of the Standard Specifications for Construction except as modified by this special provision.

**b. Materials.** Delete subsection 505.02 Materials and replace with the following.

1. The Contractor will select the material from one of the following alternates.

**Alternate #1:** A field blended liquid mixture.

Penetration grade asphalt cement	85-100 dmm
Rubber-R-Road Product # R-570	5% by weight
Polyester fibers	5% by weight

**Alternate #2:** A plant blended liquid mixture of a polymer modified asphalt cement and polyester fibers in the following proportions. The polyester fibers are field blended.

Polyester Fibers	0.5 - 1.0% by weight
Polymer Modified Asphalt Cement	Remainder by weight

**Alternate #3:** Asphalt Rubber Plus, Type 2.

A product from Crafc0, Inc.

2. Materials Acceptance Criteria.

A. **Penetration Grade Asphalt Cement** - A General Certification from an approved manufacturer is required for this material.

B. **Rubber R-Road (Product # R-570)** - This material will be treated as a Qualified Product for the purpose of project documentation.

C. **Polyester Fibers** - A General Certification is required for this material. The polyester fibers must meet the following requirements:

Length	6.4 mm $\pm$ 0.05 mm
Crimps, (ASTM D-3937)	None
Tensile Strength, (ASTM D-2256)*	480 MPa minimum
Denier, (ASTM D-1577)*	3.0 to 6.0
Specific Gravity	1.32 to 1.40

Melting Temperature	245 °C minimum
Ignition Temperature	540 °C minimum

\* This data must be obtained prior to cutting the fibers.

**D. Polymer Modified Asphalt Cement.** A General Certification from an approved manufacturer is required for this material. The Polymer Modified Asphalt Cement shall meet the following requirements.

Test		
R&B Softening Point, °C	80 min	ASTM D-36
Elastic Recovery, 25°C, 10cm pull	85 % min	AASHTO T301
Ductility, 25°C, 5cm/min, cm	40 min	ASTM D-113
Force Ductility, 25°C, 30-40 cm	8.0 lbs/in <sup>2</sup> min	AASHTO T300

**E. Prepackaged Material Certification.** This material will be treated as a Qualified Product for the purpose of project documentation.

**c. Construction.**

1. Add to subsection 505.03.B Pre-Construction Meeting. The Contractor will designate an authorized Contractor's representative at the pre-construction meeting.
2. Add to subsection 505.03.F Required Project Documentation. Documentation provided by the Contractor will contain the signature of Contractor or the Contractor's Authorized Representative.
3. Replace subsection 505.03.G Weather Limitations. Material shall be placed when the air temperature is between 45 °F and 85 °F. No material shall be placed unless the pavement is dry and the cracks are free of moisture.
4. Replace subsection 505.03.H Protecting the Work. The Contractor must allow the material to cool sufficiently before opening to traffic. Blotting materials such as sand, aggregate, sawdust, or paper is prohibited. Any damage by traffic to the treated pavement areas shall be repaired by the Contractor at no expense to the Department. If the existing pavement markings are obliterated as a result of the crack treatment work, temporary pavement markings shall be placed before the roadway is opened to traffic at the Contractor's expense

**d. Measurement and Payment.** Overband crack fill pretreatment application will be measured and paid according to subsection 505.04 of the Standard Specifications for Construction.