

TO: Chief Engineer  
Director of Construction & Maintenance  
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Engineering Branch Section Heads  
Regional Managers of Professional Services/Engineering  
Regional Managers, Operations  
Regional Geotechnical & Materials Engineers  
Regional Project Managers - Paving

SUBJECT: CRACK SEALING ASPHALT PAVEMENTS

### BACKGROUND

SHRP, FHWA and TAC have carried out pavement crack sealing studies and in all cases the importance of proper construction techniques were stressed to ensure that a quality product is produced. In all cases the routing, cleaning and drying of the cracks is very important in attaining a quality product. The following procedures are strongly recommended when applying crack sealer.

### RECOMMENDED PROCEDURES

Cracks less than 16mm in width should be routed to a minimum width of 19mm and to a depth of 25mm.

Crack sealing should be carried out when the cracks are at their widest opening, in the spring, and when the pavement is dry.

After routing all cracks should be cleaned utilizing hot compressed air. The crack and adjoining pavement surface should be dry and all debris should be removed from the crack area. Those cracks not requiring routing should be cleaned and dried prior to the application of the sealant and the debris removed from the crack area.

Sealing shall be carried out in such a manner, and at a rate that the crack is filled from the bottom to the surface, without entrapping air pockets. The crack should be overfilled to allow an overlap on to the undisturbed pavement surface for a width of 25mm to 40mm on either side of the crack.

Upon completion of the sealing, the sealant should be dusted; to prevent the asphalt from tracking, with a product approved by the Ministry Representative. This product is usually sand or cement powder.

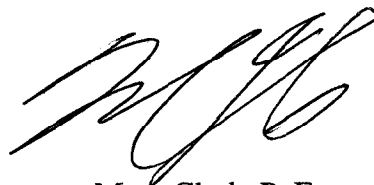
All crack sealing products are to be applied according to Standard Specification 536 unless special procedures are approved by Headquarters Engineering Branch, Geotechnical, Materials and Pavement Section.

BENEFITS:

The correct application of pavement crack sealing materials is essential to ensure product durability and extending pavement life. Cracksealing extends pavement life by excluding water from penetrating into the roadway. The accurate and correct application of sealant will enhance the riding characteristics of the pavement.

CONTACT:

Michael E Symons  
Pavement Research & Standards Technician  
Engineering Branch, Geotechnical & Materials Engineering Section  
(250) 387-7717



Merv Clark, P. Eng.  
Chief Engineer

- c.c. A.D.M. Highways Operations
- c.c. A.D.M. Planning and Major Projects
- c.c. All Regional Directors
- c.c. All District Highways Managers
- c.c. Purchasing Commission, Attn.: Ralph White, Purchasing Agent