

CRACK SEALING



What is Crack Sealing

- ❖ The least expensive, most cost effective method of preventive maintenance available.
- ❖ This process will prevent water damage to the pavement subbase, which will extend the life of your roadways.

Features & Benefits

- ❖ Sealing will prevent moisture from entering the different pavement layers and the sub base.
- ❖ It will prevent the growth of plants and weeds.
- ❖ Crack sealing is a very fast moving construction practice, many miles of roadway can be sealed in one day.
- ❖ Low disruption of traffic
- ❖ Material sets up quickly so traffic can return to pavement in 10 minutes.

Equipment

- ❖ Air compressor
- ❖ Double jacket kettle
- ❖ Pickup truck to pull compressor & kettle.
- ❖ One unit truck with compressor and kettle incorporated on the bed of the truck

Materials

❖ PennDOT 408 Section 705.4 (c) or (g)

- (c) Rubberized Joint Sealing Materials
 - Modified AASHTO M173
- (g) Asphalt Rubber Sealing Compound
 - ASTM D 5078

The Process

- ❖ Clean cracks with compressed air at a minimum pressure of 100 PSI.
- ❖ Damp or cold conditions (below 40 degrees F) should be dried with a heat lance.
- ❖ Apply sealant at the temperature recommended by the manufacturer.
- ❖ Strike off excess material flush with the roadway

Specifications

❖ PennDOT 408 Section 469

- Temperature 40 - 90 F
- Application - Band 1 - 3"
- Seal cracks 1/4" to 1" wide

Routing

- ❖ Best performance for crack sealing
 - Creation of uniform crack reservoir
 - Creates smooth walls within the crack for better bonding
 - 1/2 inch by 1/2 inch reservoir
- ❖ Higher initial Cost
- ❖ Pavement must be less than 7 years old.

Vegetation



Compressed air cleaning cracks



1,000 Gallon capacity truck mounted crack seal unit



Rear traffic direction board



Application of crack sealant



Application and strike off



Striking off excess material to leave no over-banding



**Crack is sealed and closed with no
over-banding**



Crack sealing is effective but not cosmetic



Crack sealing with micro-surfacing application



Crack sealing concrete joints before hot mix overlay



Crack sealing asphalt roadway before new overlay is installed



Overview

- ❖ Use crack sealing every season.
- ❖ Clean cracks before sealing
- ❖ Cracks should be dry before sealing
- ❖ Apply crack sealant at recommended temperature
- ❖ Strike off excess material
- ❖ Do not over band crack sealant.

THANK YOU

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