

SECTION 32 01 17.61

CRACK AND JOINT SEALING FOR ASPHALT PAVEMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Elastomeric hot applied crack and joint sealing in asphalt or portland cement concrete.

1.02 RELATED SECTIONS

- A. [Section 32 17 23.13 Pavement Marking]
- C. [Section 32 12 36.19 Pavement Sealing]
- D. [Section 32 01 17.01 Repairing Asphalt Concrete Pavements]
- E. []

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. D 6690-01 Specification for hot applied crack and joint sealant
 - 2. 1190 Specification for Concrete Joint Sealant, Hot Applied Elastic Type
 - 2. D 3405 Specification for Joint Sealants, Hot Applied, for Concrete and Asphalt
 - 3. D 5329 Test Methods for Sealants and Fillers, Hot Applied, for Joints and Cracks in Asphalt and Portland Cement Concrete Pavements

1.04 SYSTEM DESCRIPTION

- A. Provide installation of sealant.

1.05. SUBMITTALS

- A. Product Data
 - 1. Submit manufacturer's printed Product Data Sheet.

1.06 QUALITY ASSURANCE

- A. Certification
 - 1. Contractor to submit a letter stating that equipment used to heat the material meets requirements of this specification.

- B. Test Reports
 - 1. Upon request the contractor will submit manufacturer's test results on products used.

1.07 PROJECT/SITE CONDITIONS

- A. ENVIRONMENTAL REQUIREMENTS
 - 1. Apply sealant only to clean, dry, properly prepared cracks and joints.
 - 2. At ambient temperatures below forty (40) degrees F. use a hot compressed air lance to achieve clean, dry, warm space for sealant installation.

1.08 EXISTING CONDITIONS

- A. Cracks and joints under one quarter (1/4) inch width are not covered under this specification unless stipulated in writing by Architect/Engineer.
- B. Cracks and joints under one quarter (1/4) inch are to be addressed by means of routing and/or the use of a hot compressed air jet to remove all loose materials and assure the sidewalls of cracks are clean and dry.

PART 2 PRODUCTS

THE SPECIFIER MAY CHOOSE TO HAVE A CLOSED PROPRIETARY SPECIFICATION [B] OR AN OPEN PROPRIETARY SPECIFICATION [C] BY SELECTING ONE OF THE FOLLOWING:

2.01 MANUFACTURER

- A. Neyra Industries, Inc., Cincinnati, Ohio: Thermo-Seal PLS, Thermo-Seal Spec+Plus DF
 - 1. Materials are listed as a standard of quality.
- [B. No substitutions allowed.]
- [C. No other material will be acceptable unless approved by Architect/Engineer in writing ten (10) days prior to bid date.]

2.02 MATERIALS

- A. Sealant: Thermo-Seal PLS or Thermo-Seal Spec+Plus DF
 - 1. A hot applied elastomeric crack/joint sealant for asphalt and concrete pavements.

2.03 EQUIPMENT

- A. Melt down the sealant in a kettle or melter constructed as a double boiler. The space between the inner and outer shells filled with a high flash heat transfer oil or other indirect heating means.
- B. The kettle to be used must have constant agitation any time material is over three hundred (300) degrees F. The kettle must have temperature monitoring capabilities.
- C. Roofing kettles or other direct fired melters are not acceptable for these materials.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect existing pavement for conditions and defects that will adversely affect quality of work and which cannot be put into acceptable condition through normal preparatory work as specified.
- B. Starting installation constitutes contractors acceptance of surface as suitable for installation.

3.02 PREPARATION

- A. Cracks
 - 1. Remove vegetation and all incompressibles from cracks and joints by means of hot compressed air lance.
 - 2. Cracks and joints less than one quarter (1/4) inch in width must be routed to a minimum one half (1/2) inch by one half (1/2) inch in shape.
- B. Sealant
 - 1. Prepare sealant in specified equipment.
 - 2. Heat sealant according to manufacturer's Product Data Sheet.

3.03 APPLICATION

- A. Install heated sealant directly into cracks and joints not to exceed a four (4) inch wide band.
- B. Control thickness to one eighth (1/8) inch above pavement surface.
- C. Finished sealed cracks and joints will be uniformly level and all "sinkers" will be refilled to achieve flush to one eighth (1/8) inch concave surface appearance.

3.04 PROTECTION

- A. Care must be taken to keep the public from work area while sealant is being installed and traffic should not be allowed to cross sealant filled cracks and joints for a period of ten (10) minutes.
- B. Failure to follow manufacturer's printed recommendations could result in a severe burn hazard.

3.05 SCHEDULE

END OF SECTION