

**SECTION 32 01 17
ASPHALT PAVING REPAIR**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for asphalt paving repair (crack repair and/or pavement sealer/coating).

1.02 SUBMITTALS

- A. See Section 01 33 00 – Submittal Procedures, for submittal procedures.
- B. Product Data: Provide manufacturer's specifications and descriptive literature, installation instructions, and maintenance information.
- C. Shop Drawings: Indicate plans for each unit or groups of units, elevations with model number, overall dimensions; construction, and anchorage details.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Hot Pour Asphalt Crack Filler shall be as provided by:
1. Henry Company, 999 North Sepulveda Blvd., Suite 800, El Segundo, CA 90245, Tel. 800-486-1278 Fax 866-223-1285. Product: HE093 Duroflex Hot Pour Crack Sealant. productssupport@henry.com
 2. The Extendit Company, 601 Jones Street, Youngstown, OH 44502, Tel. 800-245-0005 Fax 330-743-4397. Product: Hot Pour Crack Filler Product #9075. extenditco@aol.com
 3. P&T Products, Inc., 472 Industrial Parkway, Sandusky, OH 44870, Tel. 877-690-4093, Fax 419-621-1988. Product: DURA-Fill 5078.
 4. or an equal product.
- B. Asphalt Pavement Sealer shall be as provided by:
1. SealMaster, Pavement Products and Equipment, 157 Grant Avenue, Islip, NY 11751, Tel. 631-277-2043, Tel. 800-395-7325. Product: MasterSeal Concentrate Asphalt Based Pavement Sealer www.sealmaster.net
 2. Or an equal product
- C. Asphalt Pavement Coating shall be as provided by:
1. GAF, 1 Campus Drive, Parsippany, NJ 07054. Local Representative is Zacharia Associates, Phone 631.454.7663 attn: Michael Zacharia, cell 516.459.3510. Product: StreetBond DuraShield Pavement Coating contains 100% acrylic polymer. Color to be determined by the Landscape Architect.
 2. Or an equal product.

PART 3 EXECUTION

3.01 CONSTRUCTION

- A. Before placing crack sealant, all cracks must be thoroughly cleaned to ensure a clean, dry crack channel and to optimize adhesion between the sealant and the pavement surface.
- B. To effectively clean the crack, high-pressure air blasting, which uses compression to produce a jet stream of air, is used to remove dust, debris or loose pavement fragments. Airflow should be free of oil and moisture and the compressed air should have a minimum pressure of 100 lb/in² and minimum blast flow of 1503 feet/min.
- C. For proper crack sealing the crack must be free of moisture. For drying, a hot air lance can be used.
- D. Ambient temperature should be at least 40 degrees Fahrenheit and rising. No fog or dew shall be present. Early morning operations need to be done in direct sunlight. Sealant should be placed immediately after crack cleaning Surface must be clean and free from all loose material and dirt. Pavement surface repairs should be made with a suitable hot or cold asphalt mix.

Cracks should be filled with hot pour or cold applied crack fillers. Treat all grease, oil and gasoline spots or stains.

- E. When sealing large cracks, it is important that the sealant does not drain to the bottom of the crack. To prevent this, sand or backer rods may be placed in the cracks.
- F. Cracks that have horizontal or vertical movements greater than 1 inch are recommended for routing. Crack routing involves cutting along the crack to provide a uniform rectangular reservoir in which the sealant is to be placed.
- G. Hot pour materials should not be applied when the cracks and pavement surface are moist and damp. There should be no bubbles formed due to moisture present in the crack. If bubbling occurs, moisture still exists in the crack and work must be postponed until the cracks are dry.
- H. The hot pour sealant is heated in a double jacket heater using heat transfer oil so that no direct flame comes in contact with the shell of the vessel containing the sealant.
- I. To ensure the sealant is circulated during the heating process to achieve a uniform rise in temperature and to maintain desired temperature, the heated reservoir should be equipped with an agitator. Temperature should be monitored through accurate temperature gauges to avoid overheating the material. Ideally the material should be maintained between 350 and 375 degrees Fahrenheit, unless manufacturer notes otherwise.
- J. After application of the sealant material to the crack, a metal shaped U-shaped squeegee should be used for finishing and shaping to ensure a smooth flat finish. It is critical that the squeegee work be completed immediately after the sealant is placed and before it cools. Excess sealant should be removed before hardening occurs. In most cases the hot pour sealant will cure in about 15-30 minutes.
- K. Asphalt pavement sealer (not to be applied to existing asphalt pavement prior to Asphalt Resurfacing or to asphalt pavement directly under Color Wearing Surface) shall be applied by either pressurized spray application equipment or self-propelled squeegee equipment. Pressurized spray equipment shall be capable of spraying pavement sealer with sand added. Equipment shall have continuous agitation or mixing capabilities to maintain homogenous consistency of pavement sealer mixture throughout the application process. Self-propelled squeegee equipment shall have at least 2 squeegee or brush devices (one behind the other) to assure adequate distribution and penetration of sealer into bituminous pavement. Hand squeegees and brushes shall be acceptable in areas where practicality prohibits the use of mechanized equipment. Asphalt Pavement Sealer shall be mixed according to manufacturer's recommendations. Asphalt Pavement Sealer shall have the Manufacturer's recommended amount of coats applied to the surface.
- L. Asphalt Pavement Coating shall be applied as a two-coat application as per Manufacturer's specifications and instructions.
- M. Shipments of material shall be made in watertight vehicles previously cleaned of all foreign material, and delivered to the job site, so that it will not become contaminated in any way.
- N. The Contractor shall provide suitable means for keeping tools free and clean of bituminous accumulations.
- O. The Contractor shall provide and have ready for use at all times sufficient tarpaulins or covers as may be directed by the Inspector for use in any emergency such as rain, unavoidable delay, chilling winds, etc. for covering and protecting any material not spread.
- P. In instances where the asphalt pavement to remain is damaged by the removal of rubber safety surfacing, the damage must be repaired by patching, scraping/grinding or a combination of these to create a smooth even surface. Asphalt sealer should also be installed in this situation, except in areas that are to receive pavement markings/surface games/colored wearing surfacing.

END OF SECTION 32 01 17