OverKote® Asphalt Pavement Coating

1.0 – SCOPE OF WORK

The work covered by this specification consists of furnishing all labor, equipment, materials and performance of operation in connection with the application of OverKote® Asphalt Pavement Coating. The major items of work shall consist of, but not be limited to the following operations: A) Remove and sterilize any incidental vegetation, B) Repair cracks, C) Patch low areas and failed pavement, D) Cleaning the pavement surface, E) Application of bond coat (Optional), F) Application of sealer.

2.0 – MATERIALS

2.1 OverKote® Asphalt Pavement Coating as manufactured by Diversified Asphalt Products Inc. A cold applied composition of a refined petroleum asphalt emulsion, fillers and fibers. Asphalt shall not be of the clay type.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>LIMITS</th>
<th>TEST METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residue at 300 400°F</td>
<td>55 - 65</td>
<td>See Note 1</td>
</tr>
<tr>
<td>Dehydration, 96 hours at 100°F</td>
<td>0.6 min.</td>
<td></td>
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<tr>
<td>Solubility of residue in C2HCl3 Elements (%)</td>
<td>15 - 20</td>
<td>AASHTO T 45.46</td>
</tr>
<tr>
<td>Loss of ignition of insoluble residue, %</td>
<td>16 max</td>
<td>ASTM D 6</td>
</tr>
<tr>
<td>Cone penetration at 77°F dmm</td>
<td>400 - 700</td>
<td>ASTM D 217</td>
</tr>
</tbody>
</table>

NOTE 1
Method for determination of residue: A 25 gram sample shall be placed in a tin lid not less than 5” in diameter and heated on an electric hot plate at a temperature between 300 - 400°F for approximately 15 - 20 minutes until the vapor changes from white to a bluish color and bubbling ceases.

2.2 OverKote® Crack Filler as manufactured by Diversified Asphalt Products Inc. An emulsified petroleum asphalt and suitable fillers, modified with latex rubber. A cold applied product designed for use in filling cracks in asphaltic concrete pavement.

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>LIMITS</th>
<th>ASTM D 2939 **(b)</th>
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<tbody>
<tr>
<td>Residue (%)</td>
<td>60 - 70</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>Solubility of residue in C2HCl3 Elements (%)</td>
<td>89 - 95</td>
<td>ASTM D 2042</td>
</tr>
<tr>
<td>Firm Set</td>
<td>90 min.</td>
<td>ASDM D 2939 **(a)</td>
</tr>
<tr>
<td>Ash content of insoluble residue, %</td>
<td>70 min</td>
<td>ASDM D 2939</td>
</tr>
<tr>
<td>Viscosity @ 77°F, Brookfield Spindle #3, 20 RMP</td>
<td>300 - 600 Cps</td>
<td></td>
</tr>
<tr>
<td>Water resistance</td>
<td>Pass</td>
<td>ASDM D 2939 alt.(b)</td>
</tr>
</tbody>
</table>

** Modifications
(a) Test at 30 min. intervals cast on 15# felt
(b) Air dry to consistent weight at 75 ± 10% relative humidity; condition mandrel and specimens 2 hours at 60°F before test.

2.3 OverKote® Oil Spot Seal as manufactured by Diversified Asphalt Products Inc. – a quick drying latex emulsion with suitable additives to coat and promote adhesion of the sealer to oil, grease and gasoline stained pavement.

2.4 Emulsified Asphalt Binder – shall conform to State of California specifications for SS 1h Asphalt Emulsion.

2.5 Sand – shall be 30 mesh sand blast sand composed of clean, hard, durable uncoated particles, free from lumps of clay or organic matter.

2.6 Water – shall be fresh and potable when used in all mixtures.

3.0 – SURFACE PREPARATION

3.1 Damaged asphalt and areas completely saturated by oil or grease should be removed and replaced or repaired as required.

3.2 All weeds or other vegetation growing through the asphaltic concrete shall be removed and sprayed with a suitable chemical sterilant.

3.3 Thoroughly clean all cracks of all foreign matter. Cracks 1/8” to a maximum of 1/2” in width should be cleaned and filled with OverKote Crack Filler, per manufacturer's recommendations. Cracks wider than 1/2” should be repaired with asphaltic concrete. Allow crack filler to cure prior to sealing. All cracks under 1/8” should be filled with multiple coats of sealer.
3.4 The surface must be free of all foreign material, such as sand, clay and grease, which might adversely affect bonding of the Sealer. High pressure air blowers, vacuums or sweepers shall be used to remove these objectionable materials. Where there are deposits of grease and oil, these areas must be cleaned by scraping, burning and/or the use of detergent. Trisodium Phosphate and a stiff brush should be used to scrub the area clean. When detergents are used, the pavement shall be thoroughly rinsed with water. After cleaning and removing grease and oil spots, seal areas with Oil Spot Sealant.

4.0 – BOND COAT (Optional)
A tack coat consisting of one (1) part Emulsified Asphalt Binder (SS-1h) and four (4) parts water shall be uniformly applied over the entire surface at the rate of .05 to 0.10 gallons per square yard. Sweep out any “pools” of wet binder remaining in the depressions. Allow to dry before applying sealer. A bond coat is recommended in any case where the bond between the asphalt pavement and sealer may be questionable.

5.0 – EQUIPMENT
5.1 Mixing or agitation equipment furnished shall be a tank type power mixer with a round bottom and equipped with a power driven mixer of sufficient capacity to maintain the mineral content in complete suspension.
5.2 The mixture shall be applied by the combined or individual use of rubber face squeegees and/or mechanized material spreading equipment or other suitable method approved by the inspector.

6.0 – APPLICATION PROCEDURES
6.1 Sealer shall be mixed to a uniform free flowing consistency. Water shall be added (not to exceed 15% by volume) to obtain a semi fluid consistency.
6.2 Prior to the first application of sealer in exceptionally hot weather, dampen the surface with water. Remove any excess water to leave the surface only slightly damp.
6.3 Sealer should be applied to the area in continuous parallel lines and spread immediately by use of rubber faced squeegees and/or mechanized material spreading equipment.

7.0 – APPLICATION – NEW PAVEMENT OR OLD PAVEMENT WITH ONLY MINOR VOIDS
To be used on generally smooth areas where surface voids in the pavement are less than 3/16” between the top of the exposed aggregate to the bottom of the void.
7.1 Two (2) or more applications shall be made using a minimum of 30 gallons of undiluted Sealer per 1,000 square feet of area. However, the controlling factor should be not the number of applications, nor the quantity of Sealer used (except that 30 gallons per 1,000 square feet should be a minimum) but that the surface should be smooth and uniform, showing no evidence of coarse or uneven textures.

8.0 – APPLICATION – EXCESSIVELY ROUGH PAVEMENT
To be used on excessively rough areas, where surface voids in the pavement are equal to or greater than 3/16” between the top of the exposed aggregate to the bottom of the void.
8.1 First Application – to each gallon of sealer, 3 pounds of 30 mesh sand should be added. Water should be added to obtain a semi-fluid consistency.
8.2 Subsequent Application – one application of Sealer shall be made without the addition of the sand filler.
8.3 Quantity of Applications – a total of two (2) or more applications shall be made using a minimum of 40 gallons of undiluted sealer per 1,000 square feet of area. However, the controlling factor should be not the number of applications, nor the quantity of sealer used (except that 40 gallons per 1,000 square feet should be a minimum), but that the surface should be smooth and uniform, showing no evidence of coarse or uneven texture.

9.0 – GENERAL
9.1 Asphalt should be thoroughly cured before application.
9.2 Weather Limitation – no part of the construction involving the application of sealer shall take place during or just prior to rainfall or freezing temperatures. Air temperature shall be at least 55°F and rising.
9.3 Salt & De-icing Agents – residues from rock salt or other de icing agents can cause dis-bonding of the sealer. In areas where these materials are used, the pavement should be cleaned with a detergent, then thoroughly rinsed with water.
9.4 Curing Time – as soon as any application is dry to the touch and won't scuff under normal walking, another application can be made. Complete curing will probably take 24 hours in warm, clear weather.
9.5 Contractor shall supply agency with scale tags for the project with the following information: Product, Project Name, Gallonage/Tons supplied to the project.

Due to the wide range of variables affecting the results of application such as weather conditions, construction equipment, and quality of other materials, there is no warranty, expressed or implied, that following this specification or using the material covered thereby will assure satisfactory results.

MATERIAL SAFETY DATA SHEETS AVAILABLE – www.diversifiedasphalt.com