



Engineering Specifications For
Applying SealMaster Pavement Sealer To
Bituminous Surfaces

1. **SCOPE**

1.1 The following specifications pertain to the application of SealMaster pavement sealer over bituminous pavement surfaces.

1.2 Uses: SealMaster pavement sealer is designed to protect and beautify all bituminous pavement surfaces including, but not limited to: airport runways and taxiways, secondary roads and streets, highway shoulders, parking lots, and driveways. SealMaster pavement sealer prevents oxidation of the asphaltic binder, prevents weather damage, beautifies pavement, reduces maintenance costs, and adds years of life to pavement.

2 **MATERIALS**

Pavement Sealer Available Through SealMaster (Not Including Acrylics)

Coal-Tar: A Clay-Stabilized, Fuel-Resistant Coal Tar Emulsion. Formulated to be job mixed with sand and water.

Master-Seal: A Clay-Stabilized Mineral Filled Asphalt Emulsion. Formulated to be job mixed with sand and water.

LV: A Clay-Stabilized Asphalt Based Emulsion Fortified With Coal-Tar. Formulated to be job mixed with sand and water.

PMCTS: Coal-Tar Emulsion Fortified With Cross-Linking Rubber Polymer And Other Surfactants. Formulated to be job mixed with sand.

PMM: Mineral Reinforced Asphalt Emulsion With Polymers And Other Surfactants. Formulated to be job mixed with sand.

Liquid Road: High Performance Mineral And Fiber Reinforced Asphalt Emulsion Blended With Polymers And Other Surfactants. Formulated to be job mixed with sand.

PMB: A Polymer-Modified, Clay-Stabilized Coal-Tar Emulsion Fortified With Other Surfactants. Formulated to be job mixed with sand.

3. Application Equipment Requirements

- 3.1 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.
- 3.2 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 the bituminous pavement. Equipment shall have continuous agitation or mixing capabilities to maintain homogenous consistency of pavement sealer mixture throughout the application process.
- 3.3 Hand squeegee and brushes shall be acceptable in areas where practicality prohibits the use of mechanized equipment.

4. Surface Preparation

- 4.1 New Asphalt must be allowed to cure at least 30 days – 60 days under good weather conditions. Before applying sealer, pour water on the asphalt surface. If a film of oil appears, the surface is not sufficiently cured. Required cure time shall be determined by project engineer.
- 4.2 Alligatored Areas -
 - 4.2.1 Option 1- Alligatored areas shall be cut out, removed, and replaced with hot mix asphalt material
 - 4.2.2 Option 2 – Alligatored areas shall be coated with GatorPave patching compound as manufactured by ThorWorks Industries, Inc.
- 4.3 Crack Repair
 - 4.3.1 Surface and hairline cracks up to 1/8” wide do not require repair
 - 4.3.2 Option 1 – Repair cracks with CrackMaster Hot Pour Crack Sealing Materials as supplied by SealMaster. Cracks shall be routed or wire brushed and blown clean and dry with a compressed air heat lance. Hot pour material shall then be poured into cracks and squeegeed flush to adjoining pavement.
 - 4.3.3 Option 2 – Repair cracks with SealMaster cold applied pourable crack filler. Cracks shall be cleaned with a wire brush and power blower. Crack sealant shall be poured and squeegeed flush to adjacent pavement surface.

4.4 Oil Spot Treatment – Treat all grease, oil, gasoline and similar petroleum stains or spots with SealMaster PetroSeal, or PrepSeal oil spot primer.

4.5 Pavement Cleaning – Immediately prior to sealing, all loose materials, dirt, and debris shall be removed from pavement surface by power blower or mechanical sweeping equipment.

5. Pavement Sealer Mixing Procedure

5.1 For optimum results, mix SealMaster pavement sealer in accordance with the manufacturers specifications of the specific sealer being used.

5.2 Charge undiluted sealer to the mixing tank and dilute sealer (if necessary in accordance with mix design) with clean potable water while agitating. If using additives in the mix design, predilute Sealer VM, Top Tuff, or Zetac with water (1:1 ratio) to avoid polymer shock and facilitate uniform dispersion. Add prediluted Sealer VM, Top Tuff, or Zetac slowly while agitating. When the rubberized mixture has thickened, add the sand slowly. Mix thoroughly before and slowly during application.

6. Pavement Sealer Application Procedures

6.1 A minimum of two (2) coats are recommended. Apply by squeegee, brush, or mechanical spray, or squeegee application equipment designed specifically for such purposes (refer to section 3 of specification)

6.2 Weather Requirements – Temperature must be a minimum of 50 degrees F and rising for a period of not less than 24 hours. Do not apply when temperature is expected to drop below 50 degrees F in a 24 hour period. Do not apply if rain is forecast within 24 hours.

6.3 Curing Time – Allow final coat of pavement sealer to cure a minimum of 24 hours before opening to traffic.

7. Traffic Markings

7.1 Materials – Traffic Paint applied to freshly sealed bituminous pavement shall be a 100% Acrylic Waterborne paint. Use of solvent borne paints shall not be permitted.

7.2 Equipment – Mechanical equipment designed primarily for traffic markings shall be used to apply Acrylic-Based paints.

7.3 Application – Pavement sealer must cure a minimum of 24 hours prior to applying traffic marking paint.

8. Performance of Work

- 8.1 The contractor and project engineer shall coordinate their efforts to ensure the accessibility of work area to avoid project delays.
- 8.2 The project engineer shall use his/her best efforts to minimize activities that might prove detrimental to the work in progress such as automatic sprinkler systems, customer or construction traffic, etc.

WARRANTY

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