

Detailed Application Specification Three-Coat Application

1. Purpose:

The intent of this specification is to provide a guideline for the preservation and improvement of a previously prepared sound, bituminous concrete pavement. This surface treatment shall consist of three (3) consecutively applied coats of Action-Pave™ rubberized coal-tar pitch. All three coats are to be fortified with mineral aggregate. This coating will protect the pavement from the deleterious effects of fuel spillage, salts, weather and oxidation.

2. Scope:

The work covered by this specification consists of furnishing all labor, equipment and materials, and performance of all operations in connection with the application of rubberized coal-tar pitch emulsion slurry sealcoat on bituminous pavements, complete, in strict accordance with these specifications and the applicable drawings and subject to the contract terms.

3. Materials:

- Rubberized coal-tar pitch emulsion—shall be Action-Pave as manufactured by Copeland Coating Company, Inc., Albany, NY, as outlined in Action-Pave Product Specification. The rubberization shall take place prior to emulsification of the finished product. The oil-resistant rubber shall be blended with the hot refined coal-tar base.
- The rubberized coal-tar emulsion shall be prepared for a refined tar, high-temperature, coal-tar pitch (RT-11 or harder) meeting or exceeding the requirements of Federal Specification RT-143. Oil and water gas tars shall be excluded. Under no circumstances will there be allowed the addition of carbon black or lamp black to enhance the color of the material.
- The contractor shall be prepared to show certification that the product to be delivered and applied is Action-Pave and that said product complies with Federal Specification RP-355d and the specifications of this contract.
- Mineral aggregate shall be added at a rate of 3 to 6 lbs./gal. ratioed to the undiluted Action-Pave. The mineral aggregate shall be clean, dry, hard, durable, evenly graded silica sand. This sand will have a sieve gradation rating of 45 to 85. Sand gradations may vary according to local availability and field conditions.
- Water used for blending the slurry mix and for rinsing or wetting the pavement surface shall be clean, potable and carefully measured to obtain job-specific slurry mixes.

4. Surface Preparation:

- The pavement surface to be coated must be properly designed, structurally sound, surface cured and free of oil, grease, vegetation and other deleterious materials. The surface must demonstrate "Coatability," evidenced by becoming thoroughly wetted when a quantity of clean water is splashed on the surface where it must sheet, and wet the surface uniformly without showing oily rings.
- Surface cleaning equipment can include motorized sweepers, water flushing equipment, power blowers, and compressors along with hand brooms, shovels, etc., to be employed in those areas inaccessible to power equipment.
- All vegetation shall be removed from surfaces to be coated. Where necessary, sterilization to prevent re-growth shall be accomplished by the application of herbicide or by burning with a propane torch.
- Cracks of $\frac{1}{8}$ " and wider shall be cleaned, and filled in accordance with the standard approved method as is necessary for the application of crack-filling materials meeting Federal Specifications SS-S-1401B or SS-S-164. Routing may be required.
- Patching of areas determined to be in need of repair: potholes, alligator cracks, petroleum softened areas, etc., shall be completed at least 15 days prior to actual application of sealcoat so that the patched areas will have proper time to cure.

- Petroleum stains and oil spots shall be cleaned by scraping or wire brushing the area and/or lightly burning off the area with a propane torch to remove volatiles. The areas thus prepared shall be coated with Oil Spot Primer as manufactured by Copeland Coating Company, Inc., Albany, NY, in accordance with the manufacturer's instruction. Apply by brush, allow to dry thoroughly before applying coal-tar sealer.
- Just prior to application of the coat of Action-Pave, the surface to be coated, in addition to the above-listed preparations, shall be blown clean of all remaining loose dust, stones, etc., by means of compressor, air broom, or power blower that is capable of directing a wind velocity of not less than 100 m.p.h. directly across the pavement surface. Brooms or other hand tools may be used to facilitate this final cleaning process.

5. Application of Sealcoat Material:

- When the prepared surface and the rubberized coal-tar pitch emulsion sand slurry have been inspected and approved, apply three (3) coats of Action-Pave sand slurry. The first coat shall be applied only to high-traffic, high-wear areas, including entrances and exits, traffic lanes, loading dock areas, corners and traffic merge areas. The successive two coats of Action-Pave slurry shall be applied to the entire prepared pavement surface.
- Action-Pave shall be applied in a uniform manner over the entire prepared pavement surface. The Action-Pave shall be applied in such a manner that it provides a contiguous, adherent coating with no holidays, voids, or pinholes. Areas previously treated with Oil Spot Primer, and those patched or repaired shall be inspected and "touched up," if necessary, along with any holidays or pinholes prior to the application of the second coat of Action-Pave.
- Action-Pave shall be applied at a minimum coverage rate of 0.10 gallon per square yard.
- Action-Pave shall be applied only under good drying conditions, i.e. ambient air and pavement temperatures of 40°F and rising must be present. A relative humidity near 50% accompanied by a breeze and 75°F temperatures with no rain eminent comprise ideal coating conditions. The application of Action-Pave under conditions other than the above is at the contractor's discretion, and it is his responsibility to insure the Action-Pave has dried to a rain-resistant condition before the ambient temperature is below 40°F or the occurrence of any precipitation. It is the contractor's responsibility that no Action-Pave enters the storm drainage system, either during application or as surface run-off, should rain occur.
- The first coat of Action-Pave shall be thoroughly dry and tack-free prior to the application of the second coat. The second coat should be applied immediately over the first, with no traffic or contamination of the first coat being allowed. The three coats should be allowed to dry and cure for a minimum of 10 hours under good drying conditions before being returned to traffic.

6. Method of Application:

- The mixing/applicator machine shall be a self-propelled, pneumatic-tired vehicle capable of applying sand sealer slurry as required by this specification. The agitation system shall be such that the combined slurry mixture shall remain in constant agitation without the possibility of foaming or entraining any air. The spray or squeegee application device shall be capable of providing a smooth, adherent, uniformly coated surface. There will be easy access to the mixing vessel at all times to allow accurate measurement of emulsion, aggregate, and water, if necessary, into the vessel.

7. Clean-up:

- The contractor shall remove from the site within 24 hours of completion all job-related tools, equipment, barricades, and job debris unless previous arrangements have been made with the owner.

8. Pavement Marking:

- Where pavement marking is required, the sealcoat should be thoroughly dry. Striping layouts shall comply with all local, state and federal requirements.