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APPLICATION INSTRUCTIONS

HFS – HIGH FRICTION SURFACE

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READ BEFORE USING THIS PRODUCT

Description HFS is a high friction, traffic calming multipurpose surface treatment suitable for application on asphalt or concrete pavements as well as wood surfaces. The installed system will provide a durable, high friction surface for vehicles on dry or wet pavements. It will also give a three dimensional calming effect to the pavement.

Materials The system is comprised of a two part cold applied epoxy resin surface treatment containing (pigmented) epoxy/amino binder covered with natural or pigmented aggregates furnished by Crafco, Inc. The binder and aggregate colors shall be as indicated on the plans using the materials, colors and aggregates as available from Crafco, Inc.

Construction Details

Weather Limitations. Do not apply epoxy binder material on a wet surface or when anticipated weather conditions would prevent the proper construction of the surface treatment as determined by the manufacturer. The ambient and/or surface temperature should be a minimum of 45°F and rising.

Surface Preparation. Existing surfaces shall be cleaned by use of sweepers, high pressure air or other methods prior to use. Receiving surfaces must be clean, dry and free of all dust, oil, debris and any other material that might interfere with the bond between the epoxy binder material and existing surfaces. Surfaces may need to be washed with a mild detergent, rinsed and dried using a hot compressed air lance. Remove any existing pavement markings as deemed necessary by the manufacturer. Adequate cleaning of all surfaces will be determined by the Engineer and/or manufacturer's representative.

Cover and protect all existing pavement markings and utilities prior to placement.

Clean and fill all inadequately sealed joints and cracks, including shoulder areas. **HFS may be applied over pavements exhibiting minor rutting or heaving; however, the product is not intended as a repair for these conditions and will not level pavements.**

A manufacturer's representative or manufacturer's approved applicator must be on site to provide technical assistance during preparation, material placement and during any necessary remedial work.

Installation. Measure and mark the pavement to be treated. Apply marking tape as necessary at the perimeter of the area to be treated. The epoxy binder components (A & B) shall be proportioned to the correct ratio (50:50 +/- 5% by weight) and mixed using a low speed high torque drill fitted with a helical stirrer. The mix time is 3 minutes and is not to be altered. The product is spread by a serrated squeegee. The coverage rate is to be approximately 30 square feet per gallon and will vary with the texture of the pavement.

Epoxy binder shall be uniformly distributed over the section to be treated and within the temperature range specified. Operations shall proceed in such a manner that will not allow the epoxy material to chill, set up, dry or otherwise impair retention of the covered aggregate.

Tinting of the Epoxy

If the epoxy is to be tinted, use only an approved tint at the rate recommended by the manufacturer. The tint must first be mixed in component A for 3 minutes prior to mixing A with B.

Binder

The mixed components may be machine or hand applied onto the cleaned surface at a minimum coverage rate of approximately 2.4 lbs. - 2.8 lbs. per square yard depending on surface porosity. Hand applied binder shall be uniformly spread onto the substrate surface by means of an serrated squeegee. Machine applied distributing equipment shall include accurate measuring devices and/or calibrated containers and thermometers for measuring the binder temperature prior to placement. Binder applied to the existing surface shall achieve approximately 50-75 mils of thickness.

Immediately apply the appropriate aggregate as supplied by the manufacturer, at a rate of 14-18 lbs. per square yard coverage.

Traffic Grade Aggregate (Bauxite)

Pedestrian Grade Aggregate (Granite)

Utilities, drainage structures, curb and any other structure within/adjacent to the treatment location shall be protected against the application of the surface treatment materials.

The placement of this material does not require any compaction.

Curing. Allow the treatment to cure in accordance with manufacturer recommendations, approximately 3 hours at an ambient temperature of 68°F. Remove the excess aggregate by hand or suction sweeping before opening to traffic. Additional sweeping may be necessary after the system fully cures. The coverage rate of the retained aggregate is approximately 12-14 lbs. per square yard.

Installations on New Asphalt Pavement. On new asphalt pavement, it is recommended that a period of two weeks to a month be allowed for the pavement to oxidize by trafficking. On open course asphalt, stone mastic asphalt or pavement that has been treated with prior surface treatments, contact Crafco, Inc. technical service department for guidance.

Method of Measurement

This work shall be measured as the number of square yards of architectural treatment material installed as shown in the contract documents, or as directed by the Engineer.

Basis of Payment The unit price bid per square yard shall include the cost of all labor, materials, and equipment necessary to complete the work, except that any necessary joint and crack work will be paid for under their appropriate items.