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Standard Practice for Application of Emulsified Coal-Tar Pitch (Mineral Colloid Type)[1]

This standard is issued under the fixed designation D3423/D3423M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

ε[1] NOTE—Units information was editorially revised in June 2011.

1. Scope

1.1 This practice covers the application of mineral-colloid-stabilized, emulsified coal-tar pitch meeting the requirements of Specification D3320, as a weather protection and aliphatic-solvent-resistant sealer for use on bituminous pavements of airports, parking lots, and driveways.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D3320 Specification for Emulsified Coal-Tar Pitch (Mineral Colloid Type)

3. Preparation of Surface

3.1 *Old Asphalt Surfaces* (those which have weathered over a change of seasons):

3.1.1 Repair and patch all pavement defects. If a solvent containing cold-applied material is used, this should be done a minimum of 90 days prior to the planned application of the sealer to permit solvent escape before sealing.

3.1.2 Thoroughly inspect the pavement surface for minor cracks or other imperfections. Ignore hairline cracks. Open minor cracks (less than 12.7 mm [½ in.]) to a minimum depth and width of 12.7 mm and fill with a crack filler approved by the manufacturer of the sealer. Wider cracks, along with soft or sunken spots, indicate that the pavement or the pavement base should be repaired or replaced.

3.1.3 Treat old, badly oxidized asphalt pavement or asphalt pavement that has lost binder by erosion leaving exposed aggregate with a prime coat recommended by the sealer manufacturer after all loose aggregate is removed. This prime coat is to dry thoroughly before proceeding.

3.1.4 Immediately prior to application of the sealer, clean the surface of all loose dust, dirt, leaves, and other foreign materials by sweeping, by flushing well with water, or a combination of both.

3.1.5 Remove oil or grease that has not penetrated the asphalt pavement by scrubbing with a detergent until a water-break-free surface is obtained after thorough flushing with clear water. If cleaning is unable to produce a true "water-break-free" surface, and the size of the unsatisfactory area is too small to warrant replacement as described in 3.1.1, the questionable area should be treated with a spot sealer as per the pavement sealer manufacturer's recommendation. Do not use only solvents to remove oil or grease as the solvents may affect adhesion of the sealer.

3.1.6 Remove and patch pavement that has been penetrated by oil and grease in accordance with the precautions described in 3.1.1 if a cold patch is required.

3.1.7 Treat old parking and traffic control lines with a prime coat. If control lines are excessively built-up from multiple applications, abrade to the pavement surface before application of the prime coat.

3.2 *New Asphalt Surfaces:*

3.2.1 Allow conventional hot-mix asphalt surfaces to age a minimum of 30 days prior to the application of the sealer.

3.2.2 Before application of sealer over a pavement constructed by the use of solvent-containing cold-mix asphalt, age the pavement a minimum of 90 days. A careful review and

[1] This practice is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.09 on Bituminous Emulsions.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.