
Standard Practice for Asphalt Tack Coat Design

AASHTO Designation: PP 93-18 (2020)

Technical Subcommittee: 2a, Emulsified Asphalt

Release: Group 3 (July)



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1. SCOPE

- 1.1. This standard determines an application rate for emulsified asphalt or performance-graded (PG) asphalt binder for tack coats.
- 1.2. A tack coat is the application of an emulsified asphalt or performance-graded (PG) asphalt binder, to an existing pavement surface just prior to placement of a pavement overlay course. The tack coat is used to ensure a good bond between an existing asphalt or concrete pavement and a pavement overlay course, between multiple pavement lifts of a structural pavement, and at any vertical surfaces to which a new pavement layer will be placed adjacent, such as curbs, gutters, utilities, and construction joints.
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2. REFERENCED STANDARDS

- 2.1. *AASHTO Standards:*
- M 320, Performance-Graded Asphalt Binder
 - M 332, Performance-Graded Asphalt Binders Using Multiple Stress Creep Recovery (MSCR) Test
 - MP 36, Materials for Asphalt Tack Coats
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3. SIGNIFICANCE AND USE

- 3.1. This standard may be used to select the residual asphalt application quantity of the asphalt material required for the construction of an asphalt tack coat. Consult with the asphalt tack coat material supplier for their recommended application temperatures, material cure time to reduce material tracking, and unique handling requirements of their product type or grade.
- Note 1**—Many agencies use “special purpose” tack applications that yield much higher bond strengths, reduce tracking, and allow tack coat materials to be applied at much higher rates. Examples include hot-applied materials, non-tracking tack coats, and tack coats applied through a spray paver. These applications may be proprietary and should be specified through local agency standards.
- 3.2. Tack coats are applied to a number of different pavement surface types (Table 1). The application rate for a PG binder will be equivalent to the residual asphalt rate. Materials specifications for tack coats can be found in MP 36.
- 3.2.1. When using slow-setting emulsified asphalt, dilute by adding one part additional water (1:1), unless otherwise specified by the purchasing agency. Dilution involves the controlled addition of
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