
Standard Practice for Sand Seal Design

AASHTO Designation: PP 90-18 (2020)¹

**Technical Subcommittee: 5b, Bridge and Pavement
Preservation**

Release: Group 1 (April)



**American Association of State Highway and Transportation Officials
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1. SCOPE

- 1.1. This standard determines application quantities for applied graded cover aggregate and emulsified asphalt for sand seals on properly prepared bituminous streets. A sand seal is the application of emulsified asphalt following immediately by an application of a single layer of fine graded cover aggregate. The seal may be applied in multiple lifts depending on traffic demands and existing road surface conditions.

2. REFERENCED STANDARDS

- 2.1. *AASHTO Standard:*
■ [MP 27](#), Materials for Emulsified Asphalt Chip Seals

3. TERMINOLOGY

- 3.1. *Definitions:*
- 3.1.1. *badly pocked, porous, oxidized*—severe raveling of surface with much texture.
- 3.1.2. *flushed-bleeding*—free asphalt on the pavement surface with little or no texture.
- 3.1.3. *slightly pocked, porous, oxidized*—raveling beginning to show with moderate texture.
- 3.1.4. *slightly porous, slightly oxidized*—little or no free asphalt on the surface with noticeable but low texture.
- 3.1.5. *smooth, non-porous*—significant free asphalt on the pavement surface, but with noticeable but low texture.

4. SIGNIFICANCE AND USE

- 4.1. This standard practice may be used to determine the quantities of materials required for the construction of emulsified asphalt sand seals.
- 4.2. Sand seal is recommended for low volume roads of less than 750 ADT. For use on compacted bases, a prime coat should be applied to the base prior to application of the sand seal. As an initial