
Standard Practice for Microsurfacing Design

AASHTO Designation: R 103-22¹

Adopted: 2022

Technical Subcommittee: 5b, Bridge and Pavement Preservation



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

- 1.1. This standard practice for mix design evaluation uses mixture properties to determine the proportions of polymer-modified emulsified asphalt, mineral aggregate, water, mineral filler, and additives to produce a microsurfacing job-mix formula.
- 1.2. The values stated in SI units are to be regarded as the standard. The inch-pound units are presented in parentheses for informational purposes and may not be exact equivalents.
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2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
- M 85, Portland Cement
 - M 295, Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
 - M 303, Lime for Asphalt Mixtures
 - M 316, Polymer-Modified Emulsified Asphalt
 - M 341, Materials for Microsurfacing
- 2.2. *ANSI Standard:*
- NSF/ANSI 60-2013, Drinking Water Treatment Chemicals-Health Effects
- 2.3. *ISSA Standards:*
- ISSA TB 100, Test Method for Wet Track Abrasion of Slurry Surfacing Systems
 - ISSA TB 109, Test Method for Measurement of Excess Asphalt in Bituminous Mixtures by Use of a Loaded Wheel Tester and Sand Adhesion
 - ISSA TB 113, Test Method for Determining Mix Time for Slurry Surfacing Systems
 - ISSA TB 114, Test Method for Wet Stripping of Cured Slurry Surfacing Mixtures
 - ISSA TB 139, Test Method to Determine Set and Cure Development of Slurry Surfacing Systems by Cohesion Tester
 - ISSA TB 144, Test Method for Classification of Aggregate Filler-Bitumen Compatibility by Schulze-Breuer and Ruck Procedures
 - ISSA TB 147, Test Method for Measurement of Stability and Resistance to Compaction, Vertical and Lateral Displacement of Multilayered Fine Aggregate Cold Mixes