



COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET

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GOVERNOR

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SECRETARY

CONSTRUCTION MEMORANDUM

No. 03-2022

TO: Executive Directors
Project Delivery and Preservation Branch Managers
Engineering Support Branch Managers
Materials Section Supervisors

FROM: Matthew P. Simpson, P.E. *MPS*
Director, Division of Construction

Joshua M. Rogers, P.E. *JMR*
Director, Division of Maintenance

Allen H. Myers, P.E. *AHM*
Director, Division of Materials

DATE: May 16, 2022

SUBJECT: Performance Testing Requirements for Laboratory Asphalt Mixture Designs

The Kentucky Transportation Cabinet continues to look for ways to improve the life of pavements in our state. Based on the work of the Pavement Durability Task Force and supporting research efforts over the past four years, effective with the May 26, 2022, letting, we are implementing a supplemental specification for performance testing of laboratory asphalt mixture designs. This change adds a new Subpart 5 to Subsection 403.03.03 (Preparation of Mixture), Part C (Mix Design Criteria) as follows:

5) Mix Performance Verification. FOR ALL 0.5-inch and 0.38-inch nominal surface mixtures with PG 64-22, ensure that the following limits are met or exceeded to obtain approval:

| Mix Design Performance Limits | | |
|--------------------------------------|---|---|
| <u>Class</u> | <u>Hamburg Passes¹</u> <u>(min)</u> | <u>KYCT Index²</u> <u>(min)</u> |
| 2 | <u>7500</u> | <u>95</u> |
| 3 | <u>10000</u> | <u>95</u> |
| 4 | <u>10000</u> | <u>125</u> |

¹Mixture rutting resistance shall meet the above number of passes for a critical rut depth of 1/2” (12.5 mm). The “Hamburg Passes” value is determined by averaging the results from both sides of the test.

²Test in accordance with KM 64-450.

After an evaluation period of one year, the intent of the Cabinet is to modify this specification further. Effective with the letting of May 2023, these requirements will be revised as given below:

| Mix Design Performance Limits | | |
|--------------------------------------|---|---|
| <u>Class</u> | <u>Hamburg Passes¹</u> <u>(min)</u> | <u>KYCT Index²</u> <u>(min)</u> |
| 2 | <u>7500</u> | <u>110</u> |
| 3 | <u>10000</u> | <u>110</u> |
| 4 | <u>10000</u> | <u>125</u> |

By copy of this memorandum, asphalt mixture contractors are notified to provide ample opportunity to design asphalt mixtures satisfying the revised minimum values. Thank you for your cooperation as we strive to improve the performance of asphalt pavements in Kentucky. Please let us know if you have any questions.

MPS/JMR/AHM/ahm

- c: James Ballinger, State Highway Engineer
- John Moore, Assistant State Highway Engineer
- Tracy Nowaczyk, Assistant State Highway Engineer
- Chad Larue, KAHC
- Brian Wood, PAIKY