

MP 46-20 Provisional Standard Specification for Balanced Mix Design

October 2020

Dear Customer:

AASHTO has issued an errata, which includes technical revisions, for *MP 46-20 Provisional Standard Specification for Balanced Mix Design*. A description/list follows on the reverse.

To ensure that your edition is both accurate and current, re-download the MP 46-20 PDF using the same instructions as you used to download the content initially.

AASHTO staff sincerely apologizes for any inconvenience.

List of Errata for MP 46-20 *Provisional Standard Specification for Balanced Mix Design*

Original Page Range	Standard Number	Incorrect Content	Corrected Content
MP 46-5	MP 46	Section 6.3 text wrongly duplicates Section 6.4 text. Please note that the table is correct.	<p>Section 6.3 now reads:</p> <p>6.3. <i>Direct Tension Cyclic Fatigue Test (TP 107):</i></p> <p>6.3.1. <i>Specimen Conditioning and Aging</i>—Condition loose mix test samples according to R 30, Section 7.2 Short-Term Conditioning for Mechanical Property Testing.</p> <p>6.3.2. <i>Test Temperature</i>—Select the test temperature as the 98 percent reliability climatic PG determined based on LTPP Bind software at the location of interest, but not exceeding 21°C.</p> <p>6.3.3. <i>Test Criteria</i>—Compare the test results with the criteria given in Table 7, or criteria specified by the state highway agency (Note 7).</p>

6. CRACKING TESTS

- 6.1. Highway agencies should select one of the tests in this section.
- 6.2. *BBR Mixture Bending Test (TP 125):*
- 6.2.1. *Specimen Conditioning and Aging*—No specimen conditioning and aging procedure has been recommended at this time.
- 6.2.2. *Test Temperature*—For quality control, select the temperature 10°C above the specified binder low-temperature grade used in the mixture. For performance prediction, select at least three temperatures at 6°C intervals. The test temperatures of 4°C, 10°C, and 16°C above the specified binder grade used in the mixtures have been successfully used. Other temperatures can also be used depending on the project requirements.
- 6.2.3. *Test Criteria*—Compare the test results with the criteria given in Table 6, or criteria specified by the state highway agency (Note 6).

Table 6—BBR Mixture Bending Test Criteria

Traffic Level, million ESALs	Criteria
3 to <10	TBD
10 to <30	TBD
≥30	TBD

Note 6—Researchers at the University of Utah proposed a preliminary failure envelope on the creep modulus versus m-value Black Space diagram that was able to identify asphalt mixtures susceptible to thermal cracking (Romero, 2016).

- 6.3. *Direct Tension Cyclic Fatigue Test (TP 107):*
- 6.3.1. *Specimen Conditioning and Aging*—Condition loose mix test samples according to R 30 Section 7.2, “Short-Term Conditioning for Mechanical Property Testing.”
- 6.3.2. *Test Temperature*—Select the test temperature as the 98 percent reliability climatic PG determined based on LTPP Bind software at the location of interest, but not exceeding 21°C.
- 6.3.3. *Test Criteria*—Compare the test results with the criteria given in Table 7, or criteria specified by the state highway agency (Note 7).

Table 7—Direct Tension Cyclic Fatigue Test Criteria

Traffic Level, million ESALs	Criteria
3 to <10	TBD
10 to <30	TBD
≥30	TBD

Note 7—No criteria has been established at this time.

- 6.4. *Disc-Shaped Compact Tension Test (ASTM D7313):*
- 6.4.1. *Specimen Conditioning and Aging*—No specimen conditioning and aging procedure has been recommended.
- 6.4.2. *Test Temperature*—Select the test temperature of 10°C greater than the low temperature PG of the asphalt binder.