
Test Procedure for**EXTENT OF CURE FOR HIGH FLOAT ANIONIC ASPHALT EMULSIONS****TxDOT Designation: Tex-532-C****Effective Date: August 1999**

1. SCOPE

- 1.1 Use this method to determine the extent of cure of high float anionic emulsions at specific laboratory conditions of time, temperature, humidity, and loading rate using mortar blocks.
- 1.2 The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.
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2. APPARATUS

- 2.1 *Mortar blocks*, 76 × 51 × 25 mm (3 × 2 × 1 in.), constructed and conditioned in accordance with ASTM D 5329.
- 2.2 *Spacers*, constructed from 0.80-mm (0.032-in.) diameter stainless steel wire, 5–10 mm (0.2–0.4 in.) in length.
- 2.3 *Disposable, plastic syringe*, 10 cc (optional).
- 2.4 *Spatula*, 100 mm (4 in.), square end.
- 2.5 *Controlled environmental room*, maintained at 23 ± 2°C (73.4 ± 3°F) and 50–60% humidity.
- 2.6 *Tensile testing machine*, capable of rate of extension of 100 mm (4 in.) per min.
- 2.7 *Grips*, to maintain the bonded area perpendicular to the load axis as load is applied.
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3. PROCEDURE

- 3.1 Place two mortar blocks opposing each other perpendicular on a flat surface. (See Figure 1.)
- 3.2 Place four stainless steel spacers on block B, as shown in Figure 1.
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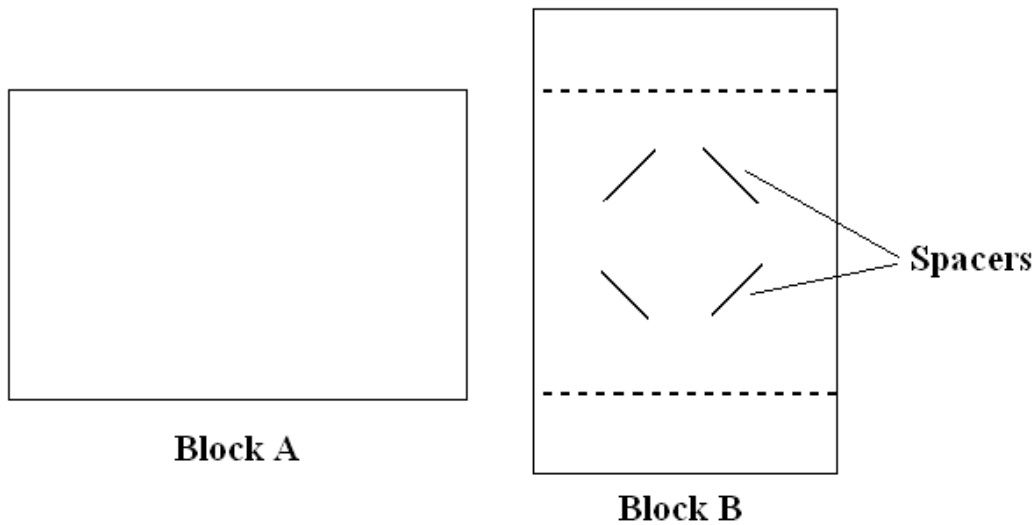


Figure 1—Mortar Blocks with Spacers

- 3.3 Using the disposable plastic syringe or by pouring, apply a continuous 50.8-mm (2-in.) wide layer of asphalt emulsion on block B (dashed lines in Figure 1). The layer of emulsion must be thick enough to cover the spacers.
- 3.4 As rapidly as possible, squarely and evenly place block A on top of block B in an opposing fashion. (See Figure 2.)

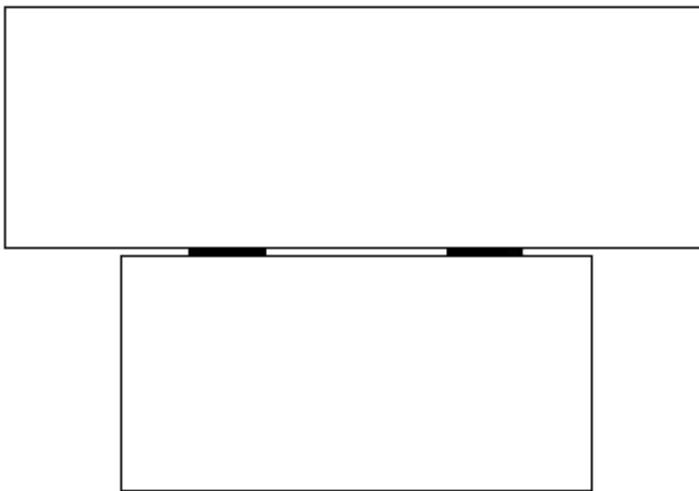


Figure 2—Blocks Assembled in Opposing Fashion

- 3.5 Press down until block A is resting evenly on the four stainless steel spacers.
- 3.6 Remove all excess emulsion off the sides of the blocks with the square end spatula. Take care not to disturb the bond when handling the blocks.

- 3.7 Allow the specimen to cure for 1 hr. in the controlled environment room.
- 3.8 Set the extension speed of the tensile testing machine at 100 mm (4 in.) per min.
- 3.9 Place the block in the grips, being certain not to disturb the bond.
- 3.10 Record the maximum load and divide the reading by the bond area (2580 mm² [4 in.²]).
- 3.11 Report the load per unit area (N/mm² [psi]).