MEASURING TEXTURE DEPTH OF PORTLAND CEMENT CONCRETE WITH METAL TINE FINISH

A Modification of Louisiana Dept. of Hwys. Designation TR 229

SCOPE

1. This method describes the procedure for measuring texture depth of fresh or hardened concrete finished with a metal tine.

APPARATUS

2. (a) A tire tread depth measuring gauge with 1/32 of an inch gradations similar to the one shown in Figure 1, or a similar device approved by the Engineer.

(b) Wire brush.

(c) Steel straightedge approximately 1/4" x 1" x 12".

PROCEDURE

3. (a) The depth of texture shall be measured from the original concrete surface. Any projections above the original surface shall be removed by wire brushing or with the steel straightedge prior to taking a measurement on hardened concrete. If measurements are being made on fresh concrete, the depth gauge shall be pressed down until substantially at the level of the original concrete surface. If measurements are being made on hardened concrete such that the depth gauge cannot be pressed down until substantially of the level of the original concrete surface, due to surface irregularities caused by the texturing operation, the height of these surface irregularities shall be measured and subtracted from the measured depth of texture.
(b) With the depth gauge guides in contact with the original concrete surface, the plunger is depressed until contact is made with the bottom of the groove in the concrete. The gauge is then removed from the surface with care being taken to prevent the plunger from being disturbed. The texture depth is then read to the nearest 1/32 of an inch on the calibrated plunger.

(c) The plunger is then re-zeroed and the procedure is repeated until the necessary measurements are completed.

(d) Sufficient measurements shall be taken at random locations along and across the paving width to ensure that the specification requirements are met. In most cases, one test per 12 foot width per 500 foot length should be sufficient. The results should be noted in the inspectors daily diary.