

Chapter 40

Tex-245-F, Cantabro Loss

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Section 1

Overview

Effective date: November 2004 – September 2005.

Use this test procedure to determine the abrasion loss of Permeable Friction Course (PFC) using six inch compacted specimens. This test procedure measures the breakdown of compacted specimens utilizing the Los Angeles Abrasion machine. The percent of weight loss (Cantabro loss) is an indication of PFC durability and is related to the quantity and quality of the asphalt binder. The percentage of weight loss is measured and reported.

Units of Measurement

The values given in parentheses (if provided) are not considered to be standard and may not be exact mathematical conversions. Each system of units shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

Section 2

Apparatus

Use the following apparatus:

apparatus used in “Tex-410-A, Abrasion of Coarse Aggregate Using the Los Angeles Machine”

balance, readable to 0.1 g and accurate to 0.5 g.

Section 3

Test Specimens

Test specimens are six-inch laboratory-molded mixtures.

Six-inch specimens are compacted with Superpave Gyratory Compactor for 50 gyrations.

Specimens are compacted at optimum asphalt content, design gradation and design air void percent.

Section 4

Procedure

Follow these steps to determine the abrasion loss of compacted PFC specimens.

Determining Cantabro Loss

Step	Action
1	After molding specimens, cool to room temperature and weigh. Record and designate this weight as 'A' under 'Calculations.'
2	Place the test specimen in the Los Angeles testing machine. <i>Note:</i> Do not include the steel balls.
3	Rotate the Los Angeles machine at a speed of 30 to 33 revolutions per minute for 300 revolutions.
4	After the 300 revolutions, discard the loose material broken off the test specimen. Do not include any of this material in the weight. Weigh the test specimen. Record and designate this weight as 'B' under 'Calculations.'

Section 5 Calculations

Calculate the Cantabro Loss using the following formula:

$$CL = \frac{A - B}{A} \times 100$$

Where:

CL = Cantabro Loss, %

A = Initial weight of test specimen

B = Final weight of test specimen.

Section 6

Report Forms

[‘Cantabro’](#)