

**1307 RESISTANCE R-VALUE AND EXPANSION PRESSURE OF  
COMPACTED SOILS**  
AASHTO Designation T 190 (Mn/DOT Modified)

**1307.1 SCOPE**

This method covers the procedure for testing both treated and untreated, laboratory compacted soils or aggregates with the stabilometer and expansion pressure devices to obtain results indicative of performance when placed in the base, subbase, or subgrade of a road subjected to traffic. The R-value for design purposes will be determined at 1,655 kPa (240 psi).

This test is performed only in the Central Lab and is done in accordance with the AASHTO procedure.

**1308 UNCONFINED COMPRESSION STRENGTH OF COHESIVE SOILS**  
AASHTO Designation T 208

**1308.1 SCOPE**

This test method covers the determination of the unconfined compressive strength of cohesive soils in the undisturbed, remolded, or compacted condition, using strain-controlled application of the axial load.

The unconfined compression tests are used to determine shear strengths during construction of the soils for fills, allowable loads for soil footings. The shear strength determined permits the calculation of slope stability for roadway and bridge construction.

These tests are run by the Foundations Unit of the Central Lab in accordance with the AASHTO procedure.

**1309****DIRECT SHEAR TEST OF SOILS UNDER  
CONSOLIDATED DRAINED CONDITIONS**  
AASHTO Designation T 236**1309.1**

## SCOPE

This method describes procedures for determining the consolidated drained shear strength of a soil material in direct shear.

Direct shear is the process of determining the drained shear strength of a granular or plastic soil.

The primary purpose of the direct shear test is to obtain friction angles and cohesion values of soils in:

- A. Natural soils.
- B. Cuts in natural soil deposits
- C. Constructed embankment slopes

The results are used for studying slopes that have soils that are weak and/or unstable (as shown by other tests or visual inspection).

This test is run by the Foundations Unit of the Central Lab in accordance with the AASHTO procedure.