

Colorado Procedure - Laboratory 3106-13

Standard Method of Test for

Grain Size Analysis of Soil for Unified Soil Classification System

(This procedure modifies Colorado Procedure 21. The current CP 21 is to be used with this procedure.)

1. SCOPE

1.1 This method covers the determination of the particle size distribution of soil material for Unified Soil Classification System (USCS).

2. REFERENCED DOCUMENTS

2.1 *AASHTO Standards:*

- M 145 Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
- T 265 Moisture Content of Soils
- T 311 Grain-Size Analysis of Granular Soil Materials

2.2 *ASTM Standards:*

- D2487 Classification of Soils for Engineering Purposes (Unified Soil Classification System)

2.3 *Colorado Procedures:*

- CP 20 Dry Preparation of Disturbed Soil Samples for Test
- CP 21 Mechanical Analysis of Soils

3. APPARATUS

Note: Colorado Procedure (CP) 21 shall be used to determine the sieve analysis of soils with the following exceptions:

3.4 *Sieves* – Sieves of the following sizes conforming to AASHTO M 92: 3-in. (75 mm), 1.5-in. (37.5mm), 3/4-in. (19.0 mm), 3/8-in (9.5mm), No. 4, No. 10, No. 20, No. 40, No. 50, No. 100, and No. 200.

3.4.1 Sample shall not be split.

5. PROCEDURE

5.2.4 Weigh and record the material retained cumulatively in grams.

7. RECORD

7.1 CDOT HQ Soils database work sheet.

For Geotechnical Samples Only

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