

215-R-543 DYNAMIC CONE PENETROMETER TEST FOR COMPACTION OF CHEMICALLY  
MODIFIED SOILS

(Adopted 05-31-07)

The Standard Specifications are revised as follows:

SECTION 215, BEGIN LINE 83, DELETE AND INSERT AS FOLLOWS:

**215.09 Compaction**

*The moisture content of the mixture shall be at the optimum moisture or above the optimum moisture content as determined by the mix design in accordance with 215.03. Moisture content will be determined in accordance with ITM 506. Aeration or drying by further mixing, or the addition of water and further mixing, may be done to obtain the required moisture content. Compaction of the mixture shall begin as soon as practicable after mixing. Compaction after mixing shall be as follows:*

- (a) For cement modified soils, mixing shall be completed within 30 min of cement placement and compaction shall be completed within 3 h after mixing.
- (b) Fly ash modified soils shall be compacted within 4 h.
- (c) Lime modified soils shall be compacted within 24 h.

Compactive efforts shall be in accordance with 203 or 207.03 as applicable.

~~Maximum dry densities will be determined in accordance with AASHTO T 272 at the same time and location as each in-place density test is performed when in-place densities do not meet AASHTO T 99. The field in-place dry density shall be in accordance with AASHTO T 191 or AASHTO T 310.~~

*Acceptance testing for compaction of chemically modified soils will be performed on the finished grade with a Dynamic Cone Penetrometer (DCP) in accordance with ASTM D 6951. The chemically modified soil lift shall meet the following requirements for compaction:*

- (a) *A minimum DCP blow count of 17 for the top 6 in. (150 mm) of a 16 in. (400 mm) lift*
- (b) *A minimum DCP blow count of 20 for the bottom 10 in. (250 mm) of a 16 in. (400 mm) lift*
- (c) *A minimum DCP blow count of 20 for an 8 in. (200 mm) lift*
- (d) *A minimum of 1 passing test for each 1500 lft (450 m) of chemically modified soil for each two-lane pavement*

~~The moisture content of the mixture shall be between the optimum moisture and the optimum moisture plus 2.0%. Aeration or drying by further mixing, or the addition of water and further mixing, may be required to obtain the optimum moisture content.~~

Construction traffic or equipment shall not be *operated* on the treated soils within 72 h after compaction.

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