



****THIS IS A NEW IM. - PLEASE READ CAREFULLY.****

SAMPLING OF SOILS FOR CONSTRUCTION PROJECT

GENERAL

This method describes the procedure for sampling soils on construction sites. The obtained sample will be used for the proctor test (IM 309), for the measurement of moisture content (IM 335), or nuclear gauge moisture correction (IM 334).

The intent of sampling is to obtain a suitable amount of soils from the earth with as little disturbance as possible to the natural density, moisture content, and structural arrangement of the particles. A representative sample of soil shall be a combination of the various particles in the same proportion as they exist in the natural ground, roadway or pit. Representative samples should also contain only materials of like color and texture, and should not be a composite of materials apparently different in character.

Soil samples can be collected by using a spade, shovel, or auger, depending on the terrain, the soil type, and the depth of material below the surface.

SAMPLING PROCEDURE FOR THE PROCTOR TEST

The sample consists of a composite of four approximately equal volume samples from select locations within the area under investigation. The recommended minimum sample size is 25 pounds which is sufficient for a four-point test in field.

- Select four representative locations within the sampling area.
- Identify the layer of soils needed to be sampled.
- Remove soils above the sampling layer.
- Take approximately a quarter of the sample from each the selected locations by using a proper tool.
- Place the four obtained samples into a bag or other acceptable container. These samples will be combined into a composite sample.
- Label the sample with a proper ID.

SAMPLING PROCEDURE FOR THE MOISURE TEST

The recommended minimum sample size is 3.0 pounds.

- Select a random location in the sampling area. Sample will be comprised of soil from three locations at this station, the center and the ¼ points from each side of the center.
- Identify the layer of soils needed to be sampled.
- Remove soils above the sampling layer.
- Take approximately one-third of the sample from each the selected locations by using a spade or shovel.
- Composite the soils taken from these three locations.

- Before performing the test, reduce the sample size to 1.1 lbs by quartering or other acceptable method.
- Place the obtained sample in a proper bag or container to prevent moisture loss if the test is not immediately performed.
- Label the sample with a proper ID.

Because moisture content may vary significantly over a project site, several samples and tests may be needed in order to obtain more realistic result of moisture content.