RAPID METHOD OF SAMPLING FRESH CONCRETE FROM REVOLVING DRUM TRUCK MIXERS OR AGITATORS

1. Scope

1.1. This method describes a procedure for obtaining early samples of fresh concrete from truck mixers or agitators. The samples obtained are considered adequate for determining compliance with air content, slump specifications and temperature specifications.

2. Significance and Use

2.1. AASHTO T-141, requires that approximately half the load of concrete be discharged before the total sample can be obtained. This generally results in some of the concrete being placed in the work before the results of the tests are known. If the subsequent tests indicate that the material does not comply with the specifications, it becomes a very difficult and time-consuming operation to remove the unacceptable material from the job. This method allows the sample to be taken from the first 8.83 ft³ (0.25 m³) load. Thus, all the concrete can be held in either the truck or the tremie bucket until the results of the air content, slump test and temperature test are known.

3. Size of Sample

3.1. The sample shall consist of not less than 0.7 ft³ (0.02 m³).

4. Procedure for Sampling

4.1. The sample shall be taken after not less than 1.76 ft³ (0.05 m³) of concrete has been discharged from the batch being sampled.

4.2. Sampling shall be done by repeatedly passing a receptacle through the entire discharge stream, or by diverting the stream completely so that it discharges into a container.

5. Remixing Sample

5.1. The sample shall be remixed with a shovel to insure uniformity.

5.2. The sample shall be protected from sunlight and wind.

5.3. The period between taking and using the sample shall not exceed 15 minutes.