

SAMPLING FRESH CONCRETE
DOTD Designation: S 301-99

I. Sampling from Transports Without Discharge Chutes

A. Equipment

1. Sampling shovel, scoop and trowel.
2. Wheelbarrow or other suitable container.
3. Watch.
4. Testing equipment for Slump, Air, Cylinders, Unit Weight, Temperature, as needed.
5. MATT forms and envelopes.

B. Procedure

1. Discharge the contents of the transport into a pile onto the prepared subgrade. Note time discharged.

Note 1: Be careful when sampling fresh concrete from a pile. Do not disturb the prepared subgrade.

2. Using the sampling shovel, scoop or trowel, obtain adequate concrete to perform the necessary tests, compositing the sample from at least five locations of the pile. Place the concrete into a wheelbarrow or other suitable container.
3. Move the sample near the place where the tests are to be performed or cylinders to be molded. Protect the sample from adverse conditions, such as direct sunlight or wind.
4. Use the shovel, scoop or trowel to remix the sample in the holding container.
5. Complete the performance of the test procedure within 15 minutes of the discharge time noted in Step 1 or a new sample must be obtained and used.

II. Sampling from Transports or Mixers With Discharge Chutes

A. Equipment

Same as in Step I.A.

B. Procedure

1. Discharge concrete from the discharge chute until chute is coated with mortar from the concrete.
2. Discharge an adequate quantity of concrete to perform the test directly into a wheelbarrow or other suitable container. Note time discharged.

Note 2: The point of the batch at which the sample is to be obtained will be determined by the purpose of the test to be performed (control, acceptance or IA). Concrete for acceptance and IA tests will be sampled from midbatch. Concrete for control tests will be sampled as specified, directed or required.

3. Complete sampling procedure in accordance with Steps I.B. 3 - 5.

III. Sampling from Pumps

A. Equipment

Same as in Step I.A.

B. Procedure

1. Discharge cement grout through the pump until the discharge tubes are well lubricated.
2. Complete the sampling procedure in accordance with Steps I.B. 2 - 5.