

GSP 17

[Back to Table of Contents](#)

A. General Description

Use this procedure to sample freshly mixed structural concrete.

Take samples of freshly mixed structural concrete from two sources:

- Mixers and Agitators
- Concrete buckets

NOTE: Ensure that all samples accurately represent the concrete to be placed.

NOTE: Take the sample, complete the tests, and mold the specimens within 15 minutes.

1. Sampling from Mixers and Agitators

Inspect the mixing unit.

- 1) Ensure that the rate of discharge of the batch is regulated by the drum's rate of revolution and not by the size of the discharge opening.

Take samples from agitators and mixers in two ways:

- 1) Pass a container through the entire discharge stream, or
- 2) Divert the stream completely so that it discharges into a container.

2. Sampling from Concrete Buckets

- a. Move the concrete bucket into a position above a sheet of plywood or some other suitable surface or container.
- b. Discharge the amount required for the sample.

3. Samples for Strength Tests

- a. Take fresh concrete samples for this test at the same time.
 - 1) Take the samples after at least 10 percent of the batch has been discharged and before the last 10 percent of the batch is discharged.
 - 2) Ensure that the sample contains at least 1 ft³ (0.028m³).
- b. Remix the samples with a shovel to ensure uniformity.
- c. Identify each strength test specimen on Form 319.
 - 1) Report results of tests performed in the field on both Form 319 and Form 525.

4. Samples for Air Content, Slump, and Temperature Tests

- a. You may take samples "early"—before any concrete is placed—for these tests.
 - 1) Take the entire sample from the batch at one time after more than 2 ft³ (0.057 m³) of concrete has been discharged.
 - 2) Ensure that samples are at least 0.5 ft³ (0.014 m³).
- b. Remix the samples with a shovel to ensure uniformity.
- c. Report results from the air content and slump tests on Form 319.
- d. Report results from the temperature test on Form 525.