

Method of Test for Slump Loss of Portland Cement Concrete

1. Scope:

This test is for determining the slump loss of fresh concrete.

2. Apparatus:

- 2.1 Mold conforming to AASHTO T 119.
- 2.2 Tamping rod. A round smooth 5/8" steel rod with the tamping end rounded to a hemispherical tip of 5/8" diameter. The minimum length shall be 18".
- 2.3 Trowel, rubber mallet, small scoop, shovel, and a metal straight edge a minimum of 12 long.
- 2.4 Measuring tape capable of measuring to 1/4.
- 2.5 Plastic sheeting.
- 2.6 Air meter conforming to AASHTO T 152. (Type A or B).

3. Procedure:

- 3.1 The Contractor shall batch at least 1 yd³ and place it in an earthen pit or suitable container lined with plastic sheeting. Plastic sheeting shall be used to prevent moisture loss through the ground or forms.

NOTE: The concrete shall be isolated from vibration for the duration of the test.

- 3.2 Obtain a sample of fresh concrete by scooping the concrete from multiple locations within the pit or container. The concrete may be placed directly into the slump cone and air meter bucket or placed into a container.
- 3.3 Test the fresh concrete for initial slump in accordance with SD 404.
- 3.4 Test the fresh concrete for initial air content in accordance with SD 403.
- 3.5 Cover the concrete with plastic sheeting.
- 3.6 At two and four hours after batching, remix the sample locations with a shovel and obtain a sample in accordance with 3.2 above. Test for slump in accordance with SD 404.

4. Report:

Report each slump test, initial air content and time each test was performed on a DOT-23.

5. References:

AASHTO T 119
ASSHTO T 152
SD 403
SD 404
DOT-23