

Concrete Basics – Slump Test

CSA A23.2 - 5C

A small variation in slump caused by improper procedure or equipment, may cause the rejection of an entire load of concrete. A little extra effort to observe good practice is the key to ensure that the concrete properties are properly evaluated.

1. **SAMPLING:** Obtain a representative 30 L grab sample from between the 10% and 90% points of discharge.
2. After moistening the slump cone, place it on a moist, smooth, non-absorbent, level & stable surface which is large enough to accommodate the foot lugs.
3. Standing on the foot lugs throughout the test, fill the cone one third by volume and rod 25 times
- with a 16 mm diameter x 600 mm long hemispherically tipped steel rod. (DO NOT USE any other substitute for this rod.) The rodding should be distributed evenly over the cross section of the sampling.
4. Fill the cone to two-thirds of its volume and rod 25 times as above with the rod just penetrating into the first layer.

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5. Fill the cone to overflowing and rod 25 times as above with the rod just penetrating into the second layer. Add additional concrete to keep an excess of concrete in the mold at all times.
6. Strike off the excess concrete with the rod so that the cone is exactly full. Remove all spilled concrete from around the base.
7. Lift the cone vertically with a slow even motion, taking approximately 5 seconds to remove the cone.
8. Lay the rod across the top of the slump cone and measure the amount of the slump to the nearest 10 mm from the bottom of the rod to average top of the slumped concrete.
9. The test for slump shall be completed within 10 minutes of obtaining the concrete sample.

References:

CSA A23.2-04 - 5C Slump of Concrete

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