

Subject: Slump cone test.

Hereafter checking of slump for each batch of concrete shall be mandatory. The procedure of preparing slump cone is given in Annexure – A.

The specified slump for ready mix upto 3 floors and site mix for any height is 80 to 100mm.

The specified slump for ready mix above 3 floors is 80 to 120mm.

The slump must be within the specified limits.

Notes:

1. It applies to footings, plinth beams, columns and slabs.
2. Slump must be tested for each and every load of RMC.
3. Slump must be tested for every 50 bags of cement of site mix.
4. Photograph of slump test with clear scale /tape must be sent to QC for every test.
5. QC to stop concreting if slump specification is not met.
6. 1.25 cft proportion boxes must be used for site mix. Photograph of the setup of proportion boxes, miller and lift must be sent to QC before 1st bag is mixed.
7. Column casting must be done in 2 to 3 parts. Do not cast at one time. Give a gap of a few minutes after casting 3 to 4 feet of each column.

Soham Modi.

Procedure of preparing slump cone

SLUMP CONE TEST:

Concrete slump test or slump cone test is to determine the work ability or consistency of concrete mix prepared at the laboratory or the construction site during the progress of the work.

Equipment's Required for Concrete Slump Test:

Mold for slump test i.e. slump cone, non porous base plate, measuring scale, temping rod. The mold for the test is in the form of the frustum of a cone having height 30 cm, bottom diameter 20 cm and top diameter 10 cm. The tamping rod is of steel 16 mm diameter and 60cm long and rounded at one end.

Procedure for Concrete Slump Cone Test:

1. Clean the internal surface of the mould and apply oil.
2. Place the mould on a smooth horizontal non- porous base plate.
3. Fill the mould with the prepared concrete mix in 4 approximately equal layers.
4. Tamp each layer with 25 strokes of the rounded end of the tamping rod in a uniform manner over the cross section of the mould. For the subsequent layers, the tamping should penetrate into the underlying layer.
5. Remove the excess concrete and level the surface with a trowel.
6. Clean away the mortar or water leaked out between the mould and the base plate.
7. Raise the mould from the concrete immediately and slowly in vertical direction.
8. Measure the slump as the difference between the height of the mould and that of height point of the specimen being tested.

When the slump test is carried out, following are the shape of the concrete slump that can be observed

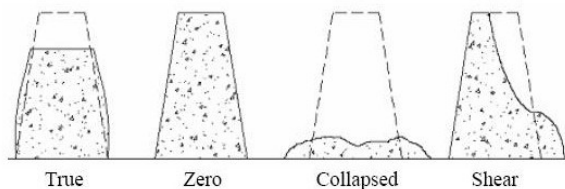


Figure-3: Types of Concrete Slump Test Results

NOTE:

The above operation should be carried out at a place free from Vibrations or shock and within a period of 2 minutes after

sampling.