Australian Standard®

Methods of testing concrete

Method 3.1: Determination of properties related to the consistency of concrete—Slump test

1 SCOPE

This Standard sets out the method for determining the slump of concrete, when the nominal size of aggregate does not exceed 40 mm.

NOTE: This Standard may involve hazardous materials, operations, and equipment. This Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS
1012 Methods of testing concrete
1012.1 Method 1: Sampling of fresh concrete
1012.2 Method 2: Preparation of concrete mixes in the laboratory

3 PRINCIPLE

This Standard describes the procedure of filling a slump cone with fresh concrete in layers, rodding each layer and then removing the support given to the concrete by the slump cone.

The vertical subsidence of the concrete that occurs, when the slump cone is raised, is termed the 'slump' of the concrete.

It is considered that the slump of fresh concrete will not vary between individual batches of concrete, if the characteristics and proportions of the ingredients used to make the concrete do not vary from batch to batch of the concrete made.

4 APPARATUS

4.1 Mould

The mould shall be a hollow frustum of a cone made of non-reactive rigid material at least 1.5 mm thick which will hold its shape and the internal surface shall be smooth. The bottom and the top of the mould shall be open and at right-angles to the axis of the cone. The mould shall be provided with a means of holding in place during filling and lifting the cone when filled. The internal dimensions of the mould shall be as follows:

(a) Bottom diameter ..... 200 ±5 mm.

(b) Top diameter ..... 100 ±5 mm.

(c) Vertical height ..... 300 ±5 mm.