

Australian Standard™

Methods of testing concrete

Method 3.3: Determination of properties related to the consistency of concrete— Vebe test

PREFACE

This Standard was prepared by Standards Australia Committee BD/42, Methods of Testing Concrete, to supersede, in part, AS 1012.3—1983. This Method is one of a series applying to the sampling and testing of concrete.

METHOD

1 SCOPE This Standard sets out the method for determining the vebe value 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 Method describes the procedure for determining the time required for a sample of fresh concrete to achieve full compaction when subjected to a standardized vibratory action.

It is considered that the time required for fresh concrete to be fully compacted when subjected to a standardized vibratory action 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 Consistometer The consistometer is shown diagrammatically in Figure 1 and photographically in Figure 2. It shall consist of the following items:

- (a) *Container* The metal cylindrical container (A), the internal diameter and height of which shall be 240 ± 5 mm and 200 ± 5 mm, respectively, shall be watertight, of sufficient rigidity to retain its shape under rough usage, fitted with handles, and protected from corrosion. The container shall be provided with suitable footpieces to enable it to be securely clamped to the top of the vibrating table by means of wingnuts (H).