STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 1289.3.1.1—2009
Methods of testing soils for engineering purposes
Method 3.1.1: Soil classification tests—Determination of the liquid limit of a soil—Four point Casagrande method

RECONFIRMATION NOTICE

Technical Committee CE-009 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 20 January 2017.

The following are represented on Technical Committee CE-009:

Association of Geotechnical Testing Authorities (Qld)
Australian Building Codes Board
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(Incorporating Amendment No. 1)
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Australian Standard®

Methods of testing soils for engineering purposes

Method 3.1.1: Soil classification tests—Determination of the liquid limit of a soil—Four point Casagrande method

This Standard incorporates Amendment No. 1 (October 2015). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

1 SCOPE

This Standard sets out a method for determining the liquid limit of soil (the moisture content at which a soil passes) from the plastic to the liquid state).

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS		
1289	Methods of testing soils for engineering purposes	
1289.1.1	Method 1.1:	Sampling and preparation of soils—Preparation of disturbed soil samples for testing
1289.2.1.1	Method 2.1.1	Soil moisture content tests—Determination of the moisture content of a soil—Oven drying method (standard method)
A1 1683	Methods of test for elastomers	
1683.15.1	Method 15.1:	International rubber hardness

3 APPARATUS

The following apparatus is required:

(a) A thick, flat, rigid mixing plate of suitable size made of non-absorbent material.

(b) A mixing bowl of convenient size with a suitable close-fitting lid.

(c) Palette knives of convenient size.

(d) Liquid limit apparatus conforming in the essential details to the device illustrated in Figure 1. The base of the liquid limit apparatus is made either of four equal-thickness laminations of vulcanized rubber bonded into a block of the dimensions given in Figure 1, or from a single vulcanized rubber block (natural rubber with carbon black loading) finished to the dimensions given in Figure 1. The hardness of the finished block, measured on the upper and lower surfaces of the complete block by AS 1683.15.1, shall be in the range 86 to 94 IRHD. A1

NOTE: The interval between checking of the hardness of the base and using the apparatus should not exceed 2 years if the hardness lies in the range 91 to 94 IRHD or 3 years if the hardness lies in the range 86 to 90 IRHD.