

12 February 2024

Dear Authorised Representative

Subject: Notice to facilities regarding AS 1289.7.1.1 Soil reactivity tests—Determination of the shrinkage index of a soil—Shrink-swell index

It has been identified at assessments that facilities have been using AS 1289.7.1.1 outside its intended scope of application. The Scope of the method is clear that this test is for undisturbed soil.

Facilities are reminded that this test method is not applicable to remoulded specimens and endorsed reports for remoulded specimens shall not be issued.

The method is quite specific in detailing this as shown below.

1 SCOPE

This Standard sets out a method for conducting a swell test and a simplified core shrinkage test on companion samples of undisturbed soil...

3 APPARATUS

The following apparatus is required:

(a) Thin-walled sampler consisting of a tube with a bevelled cutting edge machined directly on the sample tube. The bevelled cutting edge shall make an angle not exceeding 15° to the axis of the tube with a permitted land width at the cutting edge not exceeding 0.5 mm. The ratio of net projected area of sampler to projected area of sample core shall not exceed 10%, and any internal clearance shall not exceed 1% of the diameter at the cutting edge.

4 SAMPLE

An intact cylindrical sample of soil shall be obtained from a thin-walled sampler pushed into the soil. For the swell test, the sample shall have a minimum diameter of 45 mm. For the shrinkage test, the sample diameter shall be between a minimum of 38 mm and a maximum of 65 mm...

Any reference to this method or Shrink-Swell Index (I_{ss}) in an in-house method for remoulded specimens shall **not be made** as the results obtained from undisturbed samples can be significantly different to those obtained from remoulded specimens. If a report is prepared to the in-house method, it shall not be NATA endorsed and the client shall be advised that the result is not equivalent to one obtained using AS 1289.7.1.1.

Standards Australia is in the process of revision of AS 1289.7.1.1, which has been delayed, but this method will still preclude remoulded specimens.



A proposal is being prepared for an additional method to cover remoulded specimens but further discussions with interested parties such as the Australian Geomechanics Society, the Footings and Foundations Society and the Housing Engineering Design and Research Organisation and experts in the field regarding interpretation of the results for the Footings Code is required before this can proceed.

If you have questions about this notice, please contact me at Diane.Hobday@nata.com.au.

Yours sincerely

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