



Transport
Roads & Maritime
Services

Test method T323

Expansion and bleeding of grout

OCTOBER 2012



Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D.Dash	May 1999
		Date on Test Method Revised to Agree with Date on Revision Summary	D.Dash	Feb 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	October 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T323 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T323

Expansion and bleeding of grout

1. Scope

This test method sets out the procedure for assessing the expansion and bleeding of grout used for filling ducts in prestressed concrete beams. The method may also be used for the assessment of grouting additives, intrusion aids, etc.

2. Apparatus

- (a) An electrically driven mixer unit fitted with at least a 125W motor which imparts both a planetary and a revolving motion about a vertical axis to the mixing paddle, the paddle revolving at a rate of 140 ± 5 revolutions per minute when set on slow and 285 ± 10 revolutions when set on medium. The dimensions of the machine to comply with those set out in the Australian Standard 1315, Specification and Methods of Test for Portland Cement.
- (b) Glass tube approximately 32 mm diameter and 300 mm long, sealed at one end by a tight-fitting rubber stopper. A piece of adhesive marking tape is fitted 250 mm above the upper edge of the rubber stopper.

3. Procedure

- (a) Prepare a sample of grout as set out in Test Method T322 increasing the quantity of cement sufficiently to enable the flow properties of the grout to be assessed in addition to the test for Expansion and Bleeding.
- (b) Pour the grout carefully into the cylinder taking care not to smear the sides of the glass above the gauge mark. Fill to as close to the 150 mm level as possible. Tap the side of the tube to level the surface of the grout and stand on a level surface free from vibration.
- (c) Make a mark at the actual level of the surface of the grout. Cover the top of the tube with a watch glass or a small inverted beaker and allow to stand for 24 hours.
- (d) After standing examine the level of the cement in the tube and apply a second mark at the point at which the surface of the cement has come to rest.
- (e) Measure the increase or decrease in the length of the cement column and calculate as a percentage of the original length of the column of cement.

4. Reporting

Report the change in the length of the column of cement as a percentage shrinkage (or bleeding) or percentage expansion.