Transport Roads & Maritime Services

NSW GOVERNMENT

Test method T1151

Extrusion of preformed joint filler

NOVEMBER 2012

Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D. Dash	June 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	November 2012

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

The most recent revision to Test method T1151 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T1151

Extrusion of preformed joint filler

1. Scope

This test method sets out the procedure for determining the extrusion of preformed joint filler when the material is subjected to compression under specified conditions. The test method is adapted from the American Society for Testing and Materials Designation D545-67.

2. Apparatus

(a) Compression testing machine calibrated in accordance with the British Standard 1610 and maintained to Grade A Standard.

(b) A steel mould so constructed as to confine the lateral movement of the specimen to one side only, the interior dimensions of the mould being 100 mm by 100 mm with a permissible variation of 0.4 mm. The sides of the mould to be of such a height as to extend at least 13 mm above the test specimen.

(c) A steel plate machined to have plane parallel faces. The plate to be machined to fit snugly without binding within the three restraining faces of the steel mould.

(d) A dial gauge or some such suitable measuring device reading to 25μm.

(e) A load transfer device such as is illustrated in Fig. 1.

3. Preparation

The test specimens consist of square freshly cut samples 100 mm by 100 mm. In the case of self-expanding cork joint fillers only, the test specimens are cut from samples 120 mm by 120 mm subsequent to boiling of 1 hour and air drying for 24 hours.

4. Procedure

(a) Measure the average thickness of the expansion joint filler.

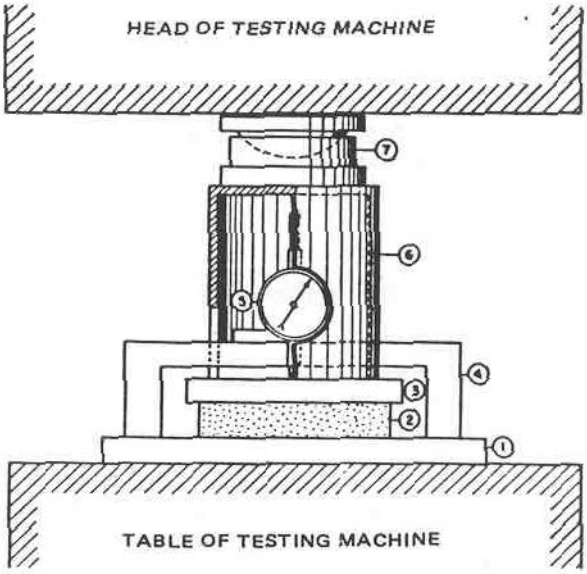
(b) Place the specially prepared test specimen in the steel mould and cover the specimen with the machined steel plate.

(c) Support the dial gauge or other suitable measuring device above the centre of the specimen and apply a force through a suitable load transfer device as shown in Fig. 1 until the specimen is compressed to 50 per cent of its original thickness. Apply the force without shock at such a rate that the specimen is compressed at a rate of 1.3 mm per minute.

(d) Determine the amount of extrusion in mm by measuring the maximum movement of the free edge of the test specimen during the compression.

5. Reporting

Record the amount of extrusion and report in mm.



1 — Flat Metal Plate 200 mm by 200 mm by 12.5 mm
2 — Specimen
3 — Metal Plate 15 mm by 115 mm by 12.5 mm
4 — U-Shape Bridge
5 — Measuring Device
6 — Hollow Cylinder
7 — Spherical Bearing Block

FIG. 1 Typical Mounting of the Specimen for Extrusion Test