



Test method T332

Inspection and capping of epoxy resin mortar test specimens

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 T332 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T332

Inspection and capping of epoxy resin mortar test specimens

1. Scope

This method sets out the procedure for the inspection and capping of epoxy mortar cylinders for use as compression test specimens.

2. Apparatus and Equipment

- (a) Engineer's square.
- (b) Sulphur heating pot with thermostatic control.
- (c) An alignment device, to ensure that the specified perpendicularity of the sulphur cap to the axis of the cylinder is obtained. The device is to be fitted with a circular base plate which has a circular recess with 45° sides, the thickness of the metal in the recessed area being at least 10 mm. The diameter of the recess is to be 5 mm larger than the nominal diameter of the test specimens.
- (d) Sulphur, mixed with at least 10 per cent of fly ash

3. Test Specimens

- (a) Prepare test specimens in accordance with Test Method T331.
- (b) Reject any specimen in which the end of the cylinder is not at right angles to the axis or where the departure from squareness exceeds 2° (approximately 1.75 mm on a 50 mm diameter).

4. Capping of Specimens

Requirements:

The uncapped end of a cylinder specimen which is to be placed in contact with that plate of the testing machine which is not spherically seated, or the surface of a cap similarly placed, must not depart from perpendicularity to the axis of the specimen by more than 0.5 degree (approximately 3 mm in 300 mm).

The ends of cylinders which will be in contact with the platens must be parallel within 2 degrees.

Caps are to be as thin as practicable and only one layer of capping material is to be used. However, small depressions may be filled prior to capping.

Procedure:

- (a) Heat the sulphur/fly ash mixture in the pot to suitable viscosity for capping. The temperature should be in the range of 145°C to 155°C.
- (b) Remove any loose particles from the ends of the cylinder with a wire brush, and ensure that the ends of the cylinder are dry, by drying in front of a current of warm air if necessary.
- (c) Pour enough molten sulphur mixture into the base of the capping device to form a complete layer across the bottom.
- (d) Place and hold the concrete cylinder to be capped firmly against the guide plates of the device and allow the cylinder to slide slowly down into the sulphur.
- (e) Hold the cylinder in position until the sulphur has set, then remove the base from the cap with a sharp blow, while holding the cylinder slightly above the bench level.
- (f) Repeat *Capping of Specimens - Procedure (b) to (e)* on the other end of the cylinder.
- (g) Return the capped cylinder to the specified curing conditions until testing is to be carried out.