



Test method T318

Saturated surface dry moisture content of coarse aggregate

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 T318 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T318

Saturated surface dry moisture content of coarse aggregate

1. Scope

This test method sets out the procedure for the determination of the saturated surface dry moisture content or water absorption of coarse aggregate. This method is an excerpt from Test Method T209.

2. Apparatus

- (a) A balance of 5 kg capacity accurate and readable to 0.5 g
- (b) A thermostatically controlled oven with good air circulation maintaining a temperature within the range 105°C - 110°C

3. Test Portions

Take a test portion large enough to yield approximately 2 kg for sizes up to and including 19 mm and 5 kg for larger sizes. Remove by sieving all material passing the 4.75 mm sieve.

4. Procedure

- (a) Wash the test portion thoroughly to remove dust or any other coatings from the surface of the particles.
- (b) Immerse the test portion in distilled water for a period of not less than 24 hours.
- (c) At the end of this period drain off the water and roll the test portion in a large absorbent cloth wiping the larger particles individually if necessary with the absorbent cloth.
- (d) Continue the procedure of rolling and wiping taking care to minimise evaporation until all visible films of water have been removed but the surface of the particles still appear to be damp.
- (e) Determine the mass of the saturated surface dry test portion (Mass *B*).
- (f) Dry the test portion to constant mass and record the mass (Mass *A*).

5. Calculations and Reporting

Calculate the percent water absorption as follows:

$$\text{Percent Water Absorption} = \frac{B - A}{A} \times 100$$