



Transport
Roads & Maritime
Services

Test method T276

Foreign materials content of recycled
crushed concrete

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 T276 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T276

Foreign materials content of recycled crushed concrete

1. Scope

- (a) This test method sets out the procedure for the determination of the foreign materials content in a sample of recycled crushed concrete.

2. Apparatus

- (a) A 4.75 mm sieve conforming to AS 1152.
- (b) Sieve brush.
- (c) A thermostatically controlled oven with good air circulation, capable of maintaining a temperature within the range of 50°C to 60°C.
- (d) A metal mixing and quartering tray.
- (e) Mixing apparatus such as a trowel and quartering apparatus such as metal plates 400 mm by 125 mm and 200 mm by 125 mm.
- (f) Sample dividers (riffle boxes) of appropriate size openings (Optional).
- (g) Balance accurate to 0.1% of the mass of the sample.
- (h) Metal dishes 225 mm and 350 mm diameter.

3. Test Portion

- (a) The sample submitted for testing shall be reduced, as required, by quartering or riffing to provide a subsample of at least 6 kg.

4. Procedure

- (a) The test portion shall be dried to constant mass in an oven at a temperature within the range of 50°C to 60°C. Record the mass of the portion.
- (b) The dried test portion shall be let to cool down to ambient temperature.
- (c) The test portion shall be divided into lots in order to avoid overloading of the test sieve. The size of the lot shall be such that after sieving, the mass retained on the 4.75mm AS sieve shall not exceed the permissible mass specified in the following table for either a 200mm, 300mm or 450mm diameter test sieve.

Nominal Size Opening A.S. Sieve	Test Sieve Diameter		
	200mm	300mm	450mm
4.75mm	200 (g)	400 (g)	1000 (g)

- (d) Each lot shall be sieved for not less than two minutes. Continue agitation until no more than 1 per cent of the residue passes the sieve.
- (e) On completion of sieving, weigh the material retained and record the mass. The mass of material from each lot retained shall be added together and considered as a single size increment.
- (f) Sort out by hand all foreign material retained and classify it in accordance with the following table:

Foreign Material Type	Percentage Retained
Type I: Metal, Glass, Asphalt, Stone, Ceramics and Slag (other than blast furnace slag) Type II: Plaster, Clay lumps and other Friable Material Type III: Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood and other Vegetable Matter	

- (g) Weigh the material in each group and record the masses.

5. Calculations

- (a) Calculate the mass of material for each Foreign Material Type as a percentage of the mass of the original test portion.

6. Reporting

- (a) Report the percentage of material of each Foreign Material Type retained on the 4.75 mm sieve to the nearest 0.1%.