

Australian Standard[®]

Methods for sampling and testing aggregates

Method 12: Materials finer than 75 μm in aggregates (by washing)

1 SCOPE This Standard describes the method for the determination of the amount of material finer than 75 μm in aggregate, by washing.

Clay particles and other aggregate particles which are dispersed by the wash water and water soluble materials will be removed from the aggregate during the test for inclusion in the general term 'materials finer than 75 μm '.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1141 Methods for sampling and testing
- 1141.1 Method 1: Definitions
- 1141.2 Method 2: Basic testing equipment
- 1141.13 Method 13: Material finer than 2 μm
- 1152 Specification for test sieves

3 DEFINITIONS For the purpose of this Standard the definitions in AS 1141.1 and those below apply.

3.1 Graded aggregate—an aggregate for which more than 15 percent by mass of the total material is retained on at least three consecutive sieves in the set 75.0 mm, 37.5 mm, 26.5 mm, 19.0 mm, 13.2 mm, 9.50 mm, 6.70 mm, 4.75 mm, 2.36 mm, 0.600 mm and 0.075 mm. Crushed rock which consists of a mixture of fine and coarse aggregates, the coarse fraction being graded, is considered a graded aggregate for the purpose of this definition.

3.2 One-sized aggregate—an aggregate of which at least 60 percent of the mass of the whole material passes a sieve, selected from the set 75.0 mm, 37.5 mm, 26.5 mm, 19.0 mm, 13.2 mm, 9.50 mm, 6.70 mm, 4.75 mm, 3.35 mm, which is immediately less than the normal size of the aggregate and is retained on the sieve immediately following the selected sieve in this series.

4 APPARATUS The following apparatus is required:

- (a) *Balance*—of adequate capacity having a limit of performance of ± 0.5 g.
- (b) *Drying oven*—complying with the requirements of AS 1141.2 and capable of operating at a temperature of 105 to 110°C (see Note to Clause 6(e)).
- (c) *Sample divider*—complying with requirements of AS 1141.2.
- (d) *Sieves*—1.18 mm and 75 μm test sieves complying with AS 1152.