

Australian Standard[®]

Methods for sampling and testing aggregates

Method 16: Angularity number

This Standard incorporates Amendment No. 1 (April 2016) and Amendment No. 2 (August 2019). The changes required by the Amendments are indicated in the text by a marginal bar, and amendment number against the clause, note, table, figure or part thereof affected.

1 SCOPE

This Standard sets out the method for determining the angularity number of an aggregate.

The angularity number is a measure of relative angularity based on the percentage voids in an aggregate after compaction in the prescribed manner. The least angular (most rounded) aggregates have about 33% voids. The angularity number is defined as the amount by which the percentage of voids exceeds 33. The angularity number ranges from 0 to about 12.

Since considerably more compactive effort is used in the angularity test than in the determination of unit mass (see AS 1141.4), the results of the two tests are different. Also, weaker aggregates may be crushed during compaction, and the angularity number test does not apply to any aggregate that breaks down under test.

A1

2 NORMATIVE REFERENCES

The following referenced documents are indispensable for the application of this document.

AS

1141 Methods for sampling and testing aggregates

A2

1141.1 Part 1: Definitions

1141.2 Method 2: Basic testing equipment

1141.4 Method 4.1: Bulk density of aggregate

1141.6.1 Method 6.1: Particle density and water absorption of coarse aggregate—
Weighing-in-water method

A2

[Text deleted]

3 TERMS AND DEFINITIONS

For the purposes of this document, the definitions given in AS 1141.1 apply.

4 APPARATUS

A2

The following apparatus, conforming to the relevant provisions of AS 1141.2 and the requirements given below, is required:

- (a) *Balance* A balance of adequate capacity, with a limit of performance not exceeding ± 5 g.