

STANDARDS AUSTRALIA

RECONFIRMATION
OF
AS 1141.21—1997
Methods for sampling and testing aggregates
Method 21: Aggregate crushing value

RECONFIRMATION NOTICE

Technical Committee CE-012 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 29 March 2016.

The following are represented on Technical Committee CE-012:

ARRB Group Ltd - Australian Road Research Board
Australasian (iron & steel) Slag Association
Australasian Procurement and Construction Council
Australian Asphalt Pavement Association
Australian Geomechanics Society
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Engineering & Construction Laboratories Association
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NOTES

Australian Standard®

Methods for sampling and testing aggregates

Method 21: Aggregate crushing value

1 SCOPE This Standard sets out the method for determining the crushing value of coarse aggregate.

The test is performed on dry material and is carried out in duplicate. The standard aggregate size for testing is -13.2 mm, $+9.50$ mm. Provision is made for testing other size fractions (see Clause 8).

NOTE: The results obtained for other size fractions may not be the same as for the standard fraction.

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

AS

1141 Methods for sampling and testing aggregates

1141.1 Method 1: Definitions

1141.2 Method 2: Basic testing equipment

1152 Specification for test sieves

2193 Methods for calibration and grading of force-measuring systems of testing machines

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

4 APPARATUS The following apparatus, complying with the relevant provisions of AS 1141.2, is required:

- (a) *Balance*—a balance of adequate capacity, with a limit of performance not exceeding ± 5 g.
- (b) *Cylinder*—an opened-ended steel cylinder with a tapered plunger and a baseplate for use in the crushing value tests on coarse aggregates. The form and dimensions of three sizes of cylinder, plunger and baseplate are given in Figure 1. The surface in contact with the aggregate shall be machined to a reasonably smooth finish and shall have a surface hardness of not less than Rockwell C50.
- (c) *Measure*—a cylindrical metal measure, of sufficient rigidity to retain its form under rough usage. The standard measure shall have an internal diameter of 115 ± 5 mm and an internal height of 180 ± 5 mm. The small measure shall have an internal diameter of 60 ± 3 mm and an internal height of 90 ± 3 mm.
- (d) *Oven*—thermostatically controlled oven, to operate at temperature of 105 to 110°C.
- (e) *Sieves*—test sieves complying with AS 1152 as required (see Table 1).