



Methods of testing rocks for engineering purposes

Method 0: General requirements and list of methods

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Australia



AS 4133.0:2019

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- Austrroads
- Cement Concrete and Aggregates Australia — Aggregates
- Engineering and Construction Laboratories Association
- Engineers Australia
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- The University of Melbourne
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Preface

This Standard was prepared by the Standards Australia Committee CE-009, Testing of Soils for Engineering Purposes, to supersede AS 4133.0—2005, *Methods of testing rocks for engineering purposes, Part 0: General requirements and list of methods*.

The objective of this Standard is to provide the general requirements, test methods, terms and definitions, and apparatus for the AS 4133 series.

While this part of the AS 4133 series provides the general requirements for the series, each part contains the requirements specific to that test method.

A list of all parts in the AS 4133 series can be found in the Standards Australia online catalogue.

The major changes in this edition are the removal of [Clause 7](#) and an update of [Table 1](#).

The methods in this series are concerned with rock as a natural material such as a foundation stratum or as a tunnelling or mining environment. The methods given are laboratory index tests which will produce repeatable results on the same material.

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1 Scope

This Standard is fundamental to all test methods in the AS 4133 series. It provides the following information which is common across the series:

- (a) Terms and definitions, including quantity and unit symbols used.
- (b) Main apparatus and the standards to which they should conform.
- (c) Other supplementary information.

The methods listed are index tests intended only for classification and characterization of intact rock. The actual classification systems or basis of comparison between rocks are not the subject of this series.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents for informative purposes are listed in the Bibliography.

AS 1289.0, *Methods of testing soils for engineering purposes, Part 0: Definitions and general requirements*

AS 1726, *Geotechnical site investigations*

AS 2102, *Micrometer callipers for external measurement*

AS 2103, *Dial gauges and dial test indicators (metric series)*

AS 2193, *Calibration and classification of force-measuring systems*

AS ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

ISO 3310, *Test sieves — Technical requirements and testing*

3 Terms and definitions

For the purpose of this series of test methods, the definitions below apply.

3.1
bulk volume

V_b
volume contained within the gross external dimensions of a rock specimen

3.2
dry density

ρ_d
mass per unit of bulk volume of a rock sample or specimen after drying to constant mass at a temperature ranging between 105 °C and 110 °C