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AS 2870—2011

AS 2870—2011

Australian Standard<sup>®</sup>

## Residential slabs and footings



This Australian Standard® was prepared by Committee BD-025, Residential Slabs and Footings. It was approved on behalf of the Council of Standards Australia on 20 December 2010. This Standard was published on 17 January 2011.

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The following are represented on Committee BD-025:

- Australian Building Codes Board
  - Australian Chamber of Commerce and Industry
  - Australian Geomechanics Society
  - Australian Institute of Building Surveyors
  - Cement Concrete and Aggregates Australia
  - Concrete Masonry Association of Australia
  - Construction Industry Advisory Council
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  - National Timber Development Council
  - Plastics and Chemicals Industries Association
  - Steel Reinforcement Institute of Australia
  - Think Brick Australia
  - University of Newcastle
  - University of South Australia
- 

This Standard was issued in draft form for comment as DR AS 2870.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard<sup>®</sup>

## Residential slabs and footings

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## PREFACE

This Standard was prepared by the Standards Australia Committee BD-025, Residential Slabs and Footings, to supersede AS 2870—1996.

The objective of this Standard is to specify performance criteria and specific designs for footing systems for foundation conditions commonly found in Australia and to provide guidance on the design of footing systems by engineering principles.

This Standard places particular emphasis on design for reactive clay sites susceptible to significant ground movement due to moisture changes. The Standard takes account of the following:

- (a) Swelling and shrinkage movements of reactive clay soils due to moisture changes.
- (b) Settlement of compressible soils or fill.
- (c) Distribution to the foundation of the applied loads.
- (d) Tolerance of the superstructure to movement.

Notes are included for clarification and general advice only and are not part of the mandatory provisions of the Standard.

Changes to the previous edition are as follows:

- (a) Revision of the overall Standard.
- (b) Site Class H split into Classes H1 and H2.
- (c) New Appendix H Guide to design of footings for trees.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

The Figures in this Standard are intended to show only the structural proportions of the footing system. All other details are purely illustrative.

Commentary to this Standard has been included at the back of this document. The Commentary is for information and advice only, and does not form part of the mandatory body of the Standard.

The layout of the Commentary follows that of the Standard. The numbering differs only in that its clauses, figures and tables are prefixed by the letter ‘C’, e.g. Clause C3.2.1 of this Commentary refers to Clause 3.2.1 of the Standard. Where there is no commentary to a Clause of the Standard it does not appear, therefore the Clause numbers in this Commentary are not consecutive. References to various publications and papers are listed as the last item of the Section or Appendix in which they occur. Section C7 provides recommendations not given in the Standard.

The Commentary is for information and advice only.

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