



## **Timber structures**

### **Part 3: Design criteria for timber-framed residential buildings**



This Australian Standard® was prepared by Committee TM-010, Timber Structures and Framing. It was approved on behalf of the Council of Standards Australia on 13 June 2016. This Standard was published on 29 June 2016.

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  - Building Research Association of New Zealand
  - Engineered Wood Products Association of Australasia
  - Engineers Australia
  - Forest and Wood Products Australia
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  - New Zealand Timber Industry Federation
  - Timber Development Association, NSW
  - Timber Queensland
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  - Wood Processors & Manufacturers Association of New Zealand
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This Standard was issued in draft form for comment as DR AS 1720.3:2015.

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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AS 1720.3:2016

Australian Standard<sup>®</sup>

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Originated as AS 1684.1—1999.  
Revised and redesignated as AS 1720.3:2016.

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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee TM-010, Timber Structures and Framing, to supersede AS 1684.1—1999, *Residential timber-framed construction*, Part 1: *Design criteria*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide users with the design criteria considered suitable for the design of conventional timber-framed residential buildings, subject to the requirements and limitations described in the Scope. Design criteria for the most commonly used timber members are provided.

This revision continues to recognize the ongoing development of timber framing systems and the need to cater for a widening variety of materials and design conditions. Significant changes include—

- (a) closer alignment with the relevant requirements of AS 1720.1;
- (b) adoption of the nomenclature and relevant requirements of the AS/NZS 1170 series of loading standards and, in particular, the recently revised edition of AS 4055;
- (c) de-linking of this Standard from the timber member span tables components of AS 1684.2, AS 1684.3 and AS 1684.4;
- (d) inclusion of design criteria for additional members—wind beams;
- (e) limitation to Class 1 and 10 buildings as defined by the National Construction Code—Building Code of Australia;
- (f) adjustment of the structural models used for joist and bearer design;
- (g) removal of alternative characteristic beam shear strengths for F-grades; and
- (h) correcting errors and addressing anomalies and inconsistencies.

Mandatory statements in notes and footnotes to tables are deemed to be requirements of this Standard.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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