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AS 1684—1992

Australian Standard®

National Timber Framing Code

+ Amendment 1 : 9/93
Amendment 2 : 6/94
Amendment 3 : 12/95

STANDARDS AUSTRALIA 

This Australian Standard was prepared by Committee TM/2, Timber Framing. It was approved on behalf of the Council of Standards Australia on 4 December 1991 and published on 22 June 1992.

The following interests are represented on Committee TM/2:

Association of Consulting Engineers, Australia
Australian Institute of Building
CSIRO, Division of Building, Construction and Engineering
Housing Industry Association, Australia
James Cook University of North Queensland
Master Builders Construction and Housing Association Australia
National Association of Forest Industries
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STD

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National Timber Framing Code

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PREFACE

This Standard was prepared by the Standards Australia Committee on Timber Framing to supersede AS 1684—1979, *SAA Timber Framing Code*.

This edition incorporates the following major changes from the previous edition:

- (a) The Standard is applicable to structures for design gust wind speeds based on the permissible stress method of 28 m/s, 33 m/s and 41 m/s subject to the limitations in this Standard, e.g. timber member sizes see Clause 1.5.3.3.
- (b) Limitations on the application of the Standard and Supplements are given.
- (c) The design criteria and design basis of the Standard and Supplements are given.
- (d) A new clause on materials is included.
- (e) The requirements for timber stumps and posts are amended.
- (f) A new series of tables for spans of bearers based on footing capacity is included.
- (g) The clause on floor joists under walls is revised.
- (h) The spacing of joists for F14 structural plywood is included.
- (i) Requirements for upper floor joists and deep floor joists are amended.
- (j) Requirements for studs for gable and skillion ends are included.
- (k) Inclusion of requirements for multiple top plates.
- (l) Clarification of details of studs at sides of openings and lintel support.
- (m) The requirements for bracings of stud walls are amended.
- (n) The requirements for underpurlins and roof struts are amended.
- (o) Minimum fixing requirements are amended.
- (p) A new clause on specific tie-down requirements is included.
- (q) The appendix on properties and grades of structural timbers is deleted.
- (r) The appendix on precautions against wind effects on timber framed structures is deleted.
- (s) A new appendix which gives guidance on platform floor construction is included.
- (t) Supplements 0, 2, 3, 4, 5, 9 and 15 are bound with this Standard.

The Supplements refer to Rule 4.4, Table 2, Figure 6 and Figure 16 of the previous edition of the Standard. In this edition these are Clause 4.4, Table 2.1, Figure 4.1 and Figure 5.9 respectively.

The increased scope and application of this Standard to modern housing design has necessitated the calculation of bracing requirements based on a quantifiable engineering method. The bracing requirements are based on wind forces derived from interpretation of AS 1170.2 for single and two storey housing. This interpretation is consistent with the proposed Standard on wind loads for housing. In addition an allowance has also been made for the contribution of non-structural walls (e.g. lining or cladding material) to the strength of the building. In some instances, particularly the lower storey of two storey construction, the amount of bracing required will be greater than that of the previous edition.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

The following Supplements are an integral part of the Standard and are to be used in conjunction with the Standard:

- Supp. No 1 Unseasoned timber—Stress Grade F4
- Supp. No 2 Unseasoned timber—Stress Grade F5
- Supp. No 3 Unseasoned timber—Stress Grade F7
- Supp. No 4 Unseasoned timber—Stress Grade F8
- Supp. No 5 Unseasoned timber—Stress Grade F11
- Supp. No 6 Unseasoned timber—Stress Grade F14
- Supp. No 7 Unseasoned timber—Stress Grade F17
- Supp. No 8 Unseasoned timber—Stress Grade F22
- Supp. No 9 Seasoned softwood—Stress Grade F5
- Supp. No 10 Seasoned softwood—Stress Grade F7
- Supp. No 11 Seasoned softwood—Stress Grade F8
- Supp. No 12 Seasoned softwood—Stress Grade F11
- Supp. No 13 Seasoned hardwood—Stress Grade F11
- Supp. No 14 Seasoned hardwood—Stress Grade F14
- Supp. No 15 Seasoned hardwood—Stress Grade F17
- Supp. No 16 Seasoned hardwood—Stress Grade F27
- Supp. No 17 Unseasoned timber (alternative sizes)—Stress Grade F4
- Supp. No 18 Unseasoned timber (alternative sizes)—Stress Grade F5
- Supp. No 19 Unseasoned timber (alternative sizes)—Stress Grade F8
- Supp. No 20 Unseasoned timber (alternative sizes)—Stress Grade F11
- Supp. No 21 Seasoned softwood—Stress Grade F4
- Supp. No 22 Seasoned softwood—Stress Grade F14

Standards Australia has endeavoured to co-ordinate the date of applicability of this edition of the Standard with its referencing in building regulations; via the Building Code of Australia. Owing to individual State and Territory legislative arrangements, it has not been possible to nominate a specific date at this stage.

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