

## ADVISORY NOTE FOR NZS 3604:2011 AND SNZ HB 3604:2011

On 1 August 2011, the Department of Building and Housing announced changes to the B1 Structure and E2 External Moisture Building Code documents. This announcement was made in the Building Controls Update Bulletin No. 116. The changes to the Structure documents include the referencing of NZS 3604:2011 *Timber-framed buildings*, which was published in February 2011.

These changes took effect immediately with a transition period through to 31 January 2012. During the transition period, both NZS 3604:1999 and NZS 3604:2011 will be Acceptable Solutions. From 1 February 2012, only NZS 3604:2011 will apply.

The Department also announced the following modifications to its referencing of NZS 3604:2011.

- **Modifications for the Canterbury earthquake region**

On 19 May 2011, the Department made changes to Acceptable Solution B1/AS1, which applies to the Canterbury earthquake region. These changes took effect immediately. The definition of 'good ground' was changed to exclude ground subject to liquefaction and/or lateral spread, and stronger foundations were required for that region. These modifications to the referencing of NZS 3604:1999 have been carried forward to the referencing of NZS 3604:2011.

The changes for Canterbury were made to allow homeowners in the region to quickly progress with their repairs or rebuilding. Details on the changes for Canterbury can be found in the Department's information sheet.

- **Modifications for all New Zealand for concrete slab floors and foundations**

On 1 August 2011 the Department extended the requirement for stronger foundations to the rest of New Zealand. The Department modified its referencing of NZS 3604:2011 to exclude unreinforced slabs. All concrete floor slabs on 'good ground' are required to have reinforcing steel mesh and all perimeter foundations are required to be tied to the concrete slab with reinforcing steel.

This modification has been made to provide the rest of New Zealand with the same readily administered, effective, and robust Acceptable Solution requirements for foundations as those already made in the Canterbury earthquake region.

To read the Building Controls Update Bulletin No. 116 and the Department's questions and answers on the changes, please go to the Department's website – [www.dbh.govt.nz/bc-update-116](http://www.dbh.govt.nz/bc-update-116).

It is important to review the modifications to the referencing of NZS 3604:2011 when using the Standard as the basis of compliance with the New Zealand Building Code.

If you have any questions about the Department's modifications, please contact the Department on 0800 242 243 or email [info@dbh.govt.nz](mailto:info@dbh.govt.nz).

This Advisory Note was issued by Standards New Zealand on 30 September 2011.

New Zealand Handbook

# Timber-framed buildings—

Selected extracts from NZS 3604:2011

SNZ HB 3604:2011



**COMMITTEE REPRESENTATION**

This Handbook was prepared under the supervision of the P SNZ HB 3604 committee the Standards Council established under the Standards Act 1988. The committee consisted of the following:

**Nominating Organisation**

Architectural Designers New Zealand Inc.  
Building Officials’ Institute of New Zealand  
Certified Builders’ Association of New Zealand Inc.  
New Zealand Institute of Architects  
Registered Master Builders’ Federation

**Committee Member**

Colin Hill  
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**ACKNOWLEDGEMENT**

Standards New Zealand gratefully acknowledges the contribution of time and expertise from all those involved in developing this Standard.

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AMENDMENTS			
No.	Date of issue	Description	Entered by, and date

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THIS HANDBOOK MUST NOT BE SUBSTITUTED FOR NZS 3604:2011

## NOTES

THIS HANDBOOK MUST NOT BE SUBSTITUTED FOR NZS 3604:2011

REFERENCED DOCUMENTS

Reference is made in this document to the following:

NEW ZEALAND STANDARDS

NZS 3101:----	
Parts 1 and 2:2006	Concrete structures Standard
NZS 3109:1997	Concrete construction
NZS 3603:1993	Timber structures Standard
NZS 3604:2011	Timber-framed buildings
NZS 3622:2004	Verification of timber properties
NZS 3631:1988	New Zealand timber grading rules
NZS 4210:2001	Masonry construction: Materials and workmanship
NZS 4229:1999	Concrete masonry buildings not requiring specific engineering design
NZS 4402.2.2:1986	Methods of testing soils for civil engineering purposes – Soil classification tests – Test 2.2 Determination of the liquid limit
NZS 4402.2.6:1986	Methods of testing soils for civil engineering purposes – Soil classification tests – Test 2.6 Determination of the linear shrinkage
NZS 4431:1989	Code of practice for earth fill for residential development

JOINT AUSTRALIAN/NEW ZEALAND STANDARDS

AS/NZS 1170:----	
Part 0:2002	Structural design actions – General principles
Part 1:2002	Structural design actions – Permanent, imposed and other actions
Part 2:2002	Structural design actions – Wind actions
Part 3:2002	Structural design actions – Snow and ice actions
AS/NZS 4534:2006	Zinc and zinc/aluminium-alloy coatings on steel wire
AS/NZS 4680:2006	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles

## AUSTRALIAN STANDARDS

AS 1214-1983	Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series)
AS 1397-2001	Steel sheet and strip – Hot-dipped zinc-coated or aluminium/zinc-coated
AS 3566 Class 4	
Part 1-2002	Self-drilling screws for the building and construction industries – General requirements and mechanical properties
Part 2-2002	Self-drilling screws for the building and construction industries – Corrosion resistance requirements

## NEW ZEALAND LEGISLATION

Building Act 2004, New Zealand Building Code (NZBC) Handbook and Compliance Documents

## WEBSITES

[www.legislation.govt.nz](http://www.legislation.govt.nz)

## LATEST REVISIONS

The users of this handbook should ensure that their copies of the above-mentioned New Zealand Standards are the latest revisions. Amendments to referenced New Zealand and Joint Australian/New Zealand Standards can be found on [www.standards.co.nz](http://www.standards.co.nz).

## REVIEW OF HANDBOOKS

Suggestions for improvement of this handbook will be welcomed. They should be sent to the Chief Executive, Standards New Zealand, Private Bag 2439, Wellington 6140.

## OUTCOME STATEMENT

SNZ HB 3604:2011 provides users with a collection of the most referred to on-site figures and tables from NZS 3604:2011 along with some linking text. This handbook also directs users to the appropriate section of the Standard for full information.

Figures and tables are numbered identically to NZS 3604:2011 and colour coding of the figures and tables matches that used in NZS 3604:2011.

FOREWORD

The MP 3600:1992 *Builders’ guide to NZS 3604* was a supplementary document to NZS 3604:1990, written primarily for builders, who by following the figures shown could construct timber-framed buildings that complied with NZS 3604:1990. The guide provided different/new information from that in NZS 3604:1990. The subsequent revision to NZS 3604:1999 was larger in size due in part to the incorporation of many of the figures from MP 3600. Combining NZS 3604 and MP 3600 superseded the need for the guide.

During the development of NZS 3604:2011 *Timber-framed buildings* (NZS 3604), the need for a product containing selected extracts from the Standard was identified. Standards New Zealand undertook four consultation meetings with various interested parties and this handbook is the outcome of that consultation.

SNZ HB 3604:2011 *Timber-framed buildings – Selected extracts from NZS 3604:2011* (SNZ HB 3604) provides users with a collection of figures and tables extracted from NZS 3604 and directs them to the appropriate section of the Standard for full information.

**SNZ HB 3604 is not a design guide.** When designing buildings to comply with NZS 3604:2011 reference should be made only to the full version of the Standard.

To ensure the handbook aligns with NZS 3604, figures and tables are numbered identically and colour coding of the figures and tables replicates that of the Standard. In the figures and tables of this handbook (including their captions/ titles), clause references shown in brackets are to NZS 3604:2011. Where tables appear only in SNZ HB 3604, these are numbered A, B and C as appropriate and contain no clause references. All references in the text refer to this handbook unless noted otherwise.

The handbook is laid out in four sections based on the construction sequence for a timber-framed building.

- Section 1 outlines the limits for buildings covered by NZS 3604, identifies activities which shall be carried out before building starts, sets out criteria such as tolerances and moisture content that apply to all subsequent sections, and explains the basis for determining bracing requirements and the durability of materials.
- Section 2 covers the framing and bracing requirements below floor level including piles, concrete and concrete masonry foundation walls, bearers, jack framing, floor joists and flooring, and the relationship of those members to other parts of the building. It also includes concrete floor slabs.
- Section 3 covers wall framing for loadbearing walls and non-loadbearing walls, the construction and bracing of, and the forming of openings, within those walls.
- Section 4 covers the framing requirements and the construction of bracing for roofs and ceilings.

In addition to inclusion in section 1, the nailing schedule (NZS 3604 table 2.2) is included at the back of sections 2, 3 and 4.

SNZ HB 3604 must not be substituted for NZS 3604:2011.



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