



# Building Newsflash

## Advice on the Use of Loading Standards BCA Amendment No.12

### Purpose

To provide advice to private certifiers on changes to the Building Code of Australia (BCA) Amendment No.12 reference to the loading standards.

### Background

Amendment No.12 reintroduces the 1989 edition of AS 1170, resulting in a choice for practitioners in achieving the structural requirements of the BCA between –

- AS/NZS 1170 2002 series – applied through BCA provisions regarding societal goals that include reference to the Standards; or
- AS 1170 1989 series – applied through a direct BCA reference, with societal goals contained within the Standards.

### Documentation

Included with this advice is an Advisory Notice entitled ‘Advice On the Use of Loading Standards’, produced by the ABCB in conjunction with the States and Territories. It provides more detailed information on the changes.

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## **Advice on the Use of Loading Standards BCA Amendment No. 12**

### **Purpose**

The purpose of this paper is to provide practitioners with advice on changes to the Building Code of Australia (BCA) Amendment No. 12 references to the loading standards.

### **Background**

The BCA references the AS 1170 series of Australian Standards as Deemed-to-Satisfy Provisions for the determination of loads on buildings and structures. Standards Australia Committee BD-006 has undertaken a review of the AS 1170 series and has produced the following parts as joint Australian/New Zealand 2002 versions:

AS/NZS 1170.0 - Structural design actions - General principles

AS/NZS 1170.1 - Structural design actions - Permanent, imposed and other actions

AS/NZS 1170.2 - Structural design actions - Wind actions

Parts 3 (snow loads) and 4 (earthquake loads) are still in the course of revision at this time.

From 1 July 2002 (BCA Amendment No. 11), the 2002 versions of AS/NZS 1170 Parts 0, 1 and 2 replaced the 1989 versions of AS 1170 Parts 1 and 2 in the Deemed-to-Satisfy Provisions of the BCA.

Since the publication of BCA Amendment No. 11, a number of industry representatives have requested reintroduction of the earlier 1989 editions of AS 1170 Parts 1 and 2 as an alternative to the use of the 2002 editions of AS/NZS 1170 Parts 0, 1 and 2. The reason for the request was to allow for a transition to the 2002 editions of AS/NZS 1170 Parts 0, 1 and 2 to enable adjustments to designs, publications, etc.

### **BCA Amendment No. 12**

B1.0 of Volume One of the BCA has been amended to now state:

#### **B1.0 Deemed-to-Satisfy Provisions**

*Performance Requirement* BP1.1 and BP1.2 are satisfied by complying with either-

- (a) B1.1, B1.2 and B1.4; or
- (b) B1.3 and B1.4.

As part of these changes, it has been necessary to re-number the existing B1.3 dealing with the determination of structural resistance of materials and forms of construction, to B1.4. This allows the insertion of a new B1.3 which is based on the BCA prior to Amendment No. 11 and references the 1989 editions of the AS 1170 series of standards.

The overall result is the BCA allows two different methods of compliance in the documents they reference. The first method of compliance (B1.1, B1.2 and B1.4) allows the use of the 2002 editions of AS/NZS 1170 Parts 0, 1 and 2, whereas the second method of compliance (B1.3 and B1.4) allows the use of the 1989 editions of AS 1170 Parts 1 and 2.

It is not acceptable to use a combination of these two methods of compliance.

Similar amendments have also been made to the Housing Provisions (Volume Two) of the BCA.

### Use of AS 1720.1

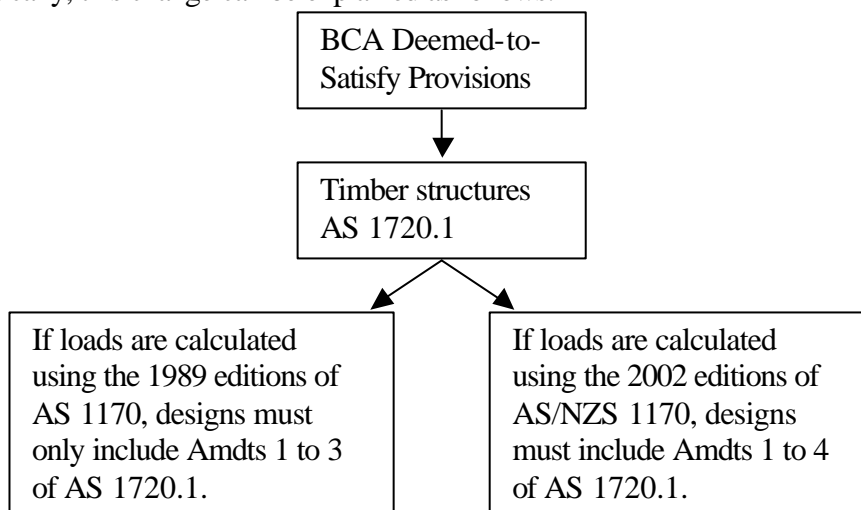
AS 1720.1 - Timber structures - Design methods is reference in the Deemed-to-Satisfy Provisions as an alternative to AS 1684 for the design of timber structures. Standards Australia Committee TM-001 have introduced Amendment No. 4 to AS 1720.1. However, this amendment is only suitable for use with the 2002 editions of AS/NZS 1170 Parts 0, 1 and 2. Its use with the 1989 editions of AS 1170 Parts 1 and 2 could lead to under-sized timber members in some cases.

It is therefore important that if AS 1720.1 is being used in conjunction with the 1989 editions of AS 1170 Parts 1 and 2, Amendment No. 4 to AS 1720.1 is not included in any design. The reference to AS 1720.1 in Table 1 of Volume One of the BCA therefore includes the following note.

If AS 1720.1 is being used in conjunction with AS/NZS 1170.0, AS/NZS 1170.1 and AS/NZS 1170.2, it must include Amdts 1 to 4.

If AS 1720.1 is being used in conjunction with AS 1170.1 and AS 1170.2, it must only include Amdts 1 to 3.

Diagrammatically, this change can be explained as follows:



### Conclusion

Both Volumes of the BCA have been amended to allow the use of either–

- the 1989 editions of AS 1170 Parts 1 and 2; or
- the 2002 editions of AS/NZS 1170 Parts 0, 1 and 2.

Both Volumes of the BCA have been amended to reference Amendment No. 4 to AS 1720.1. However, the amendment may only be used in conjunction with the 2002 editions of AS/NZS 1170; it may not be used in conjunction with the 1989 editions of AS 1170.