

# Compliance Document for New Zealand Building Code Clause F2 Hazardous Building Materials

Prepared by the Department of Building and Housing

This Compliance Document is prepared by the Department of Building and Housing. The Department of Building and Housing is a Government Department established under the State Sector Act 1988.

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Compliance Documents are prepared by the Department of Building and Housing in accordance with section 22 of the Building Act 2004. A Compliance Document is for use in establishing compliance with the New Zealand Building Code.

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Users should make themselves familiar with the preface to the New Zealand Building Code Handbook, which describes the status of Compliance Documents and explains alternative methods of achieving compliance.

Defined words (italicised in the text) and classified uses are explained in Clauses A1 of the Building Code and in the Definitions at the start of this Compliance Document.

<b>F2: Document History</b>			
	<b>Date</b>	<b>Alterations</b>	
First published	July 1992		
Amendment 1	19 August 1994	pp. i and ii, Document History p. v, Contents p. vi, References	p. 3, 1.1, 1.1.1, 1.2, 1.2.1, 1.3 to 1.4.3 deleted p. 4, 1.4.4 deleted p. 5, Index
Reprinted incorporating Amendment 1	July 1996		
Amendment 2	1 December 2000	p. ii, Document History p. vi, References	p. 3, 1.2.1
<b>Note: Page numbers relate to the document at the time of Amendment and may not match page numbers in current document.</b>			

### Document Status

The most recent version of this document, as detailed in the Document History, is approved by the Chief Executive of the Department of Building and Housing. It is effective from 1 December 2000 and supersedes all previous versions of this document.

People using this Compliance Document should check for amendments on a regular basis. The Department of Building and Housing may amend any part of any Compliance Document at any time. Up-to-date versions of Compliance Documents are available from [www.dbh.govt.nz](http://www.dbh.govt.nz)

# New Zealand Building Code

## Clause F2 Hazardous Building Materials

This Clause is extracted from the New Zealand Building Code contained in the First Schedule of the Building Regulations 1992.

42	<i>Building Regulations 1992</i>	1992/150
<b>FIRST SCHEDULE—continued</b>		
<b>Clause F2—HAZARDOUS BUILDING MATERIALS</b>		
<b>Provisions</b>	<b>Limits on application</b>	
<b>OBJECTIVE</b>		
<p><b>F2.1</b> The objective of this provision is to safeguard people from injury and illness caused by exposure to <i>hazardous building materials</i>.</p>		
<b>FUNCTIONAL REQUIREMENT</b>		
<p><b>F2.2</b> <i>Building materials</i> which are potentially <i>hazardous</i>, shall be used in ways that avoid undue risk to people.</p>		
<b>PERFORMANCE</b>		
<p><b>F2.3.1</b> The quantities of gas, liquid, radiation or solid particles emitted by materials used in the <i>construction of buildings</i>, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.</p>		
<p><b>F2.3.2</b> Transparent panels capable of being mistaken for an unimpeded path of travel shall be marked to make them visible.</p>		<p>Performance F2.3.2 does not apply to <i>Housing</i></p>
<p><b>F2.3.3</b> Glass or other brittle materials with which people are likely to come into contact shall:</p>		
<p>(a) If broken on impact, break in a way which is unlikely to cause injury, or</p>		
<p>(b) Resist a reasonably foreseeable impact without breaking, or</p>		
<p>(c) Be protected from impact.</p>		

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Amend 1  
Aug 1994

# References

For the purposes of New Zealand Building Code compliance, referenced documents shall be deemed to include any amendments issued prior to the date of the Approved Document as displayed at the foot of the page on which the references are listed.

## Standards New Zealand

Amends 1  
and 2

NZS 4223:- Glazing in buildings  
Part 3: 1999 Human impact safety requirements

Amend 1  
Aug 1994

## Where quoted

AS1 1.1.1, 1.2.1

# Definitions

This is an abbreviated list of definitions for words or terms particularly relevant to this Approved Document. The definitions for any other italicised words may be found in the New Zealand Building Code Handbook.

**Asbestos** as defined by the Asbestos Regulations 1983 means:

- a) Actinolite, amosite, chrysotile, crocidolite, fibrous anthophyllite, or tremolite; or
- b) A mixture containing a mineral specified in paragraph a) of this definition; or
- c) A material that is composed wholly or partly of any such mineral; or
- d) A material or article that is contaminated by any such material.

**Building** has the meaning ascribed to it by the Building Act 1991.

**Construct** in relation to a *building*, includes to build, erect, prefabricate, and relocate; and **construction** has a corresponding meaning.

**Hazardous** Creating an unreasonable risk to people of bodily injury or deterioration of health.

**Intended use** of a *building* includes:

- a) Any reasonably foreseeable occasional other use that is not incompatible with the *intended use*; and
- b) Normal maintenance; and
- c) Activities taken in response to *fire* or any other reasonably foreseeable emergency – but does not include any other maintenance and repairs or rebuilding.

**Safety glass** means a glass so treated or combined with other materials as to reduce the likelihood of injury to persons when it is cracked or broken.

# Verification Method F2/VM1

No specific test methods have been adopted for verifying compliance with the Performance of NZBC F2.

# Acceptable Solution F2/AS1

## 1.0 Glazing

### 1.1 Human impact safety

**1.1.1** Glazing likely to be subject to human impact shall comply with NZS 4223: Part 3 as modified by Paragraph 1.2. Requirements for wind loading might exceed those for human impact.

### 1.2 Modifications to NZS 4223: Part 3

**1.2.1** NZS 4223: Part 3 is modified as follows:

**Clause 301.1** Delete the second sentence and replace with:

“Only glazing within 2000 mm of the floor level is normally likely to be subject to human impact. Part 3 of this Standard therefore is concerned only with glazing in this zone.”

**Clause 303.5** Add the words:

“Alternatively, safety glazing material may be used in accordance with the relevant tables for Grade A and B safety glazing.”

**Clause 308.1(a)** Add the word “and” after “bath enclosures;”

**Clause 308.1(b)** Substitute the words:

“All glazing less than 1500 mm above the abutting finished floor level or standing area of a bath or shower in bathrooms and enclosures containing spa pools, except where a vanity unit or a bench of a minimum height of 760 mm and a minimum width of 300 mm is located in front of the glazing.”

**Figure 3.D4** Delete Figure 3.D4.

## 2.0 Asbestos

**2.0.1** *Asbestos* or materials containing *asbestos* are acceptable when the *asbestos* is bonded in a matrix, or encapsulated with an appropriate coating to ensure that no free particles can escape.

**COMMENT:**

Procedures for encapsulation can be obtained from the Occupational Safety and Health section of the Department of Labour, who can also advise on the special legislation covering *asbestos* and the handling of products containing *asbestos*.

Amend 1  
Aug 1994

Amends 1  
and 2

Amend 2  
Dec 2000

**Table 3.D4** Replace this Table with the following:

**Table 3.D4 Human Impact Safety Requirements for Glazed Panels and Windows in Bathrooms**

Panel details	Human impact safety requirements
Framed shower screen and bath enclosures	Grade A safety glazing material in accordance with Table 3.1 (308.1(a))
Panels and doors with one unframed edge	Toughened safety glass minimum thickness 5 mm (308.2)
Frameless pivot or hinge doors	Toughened safety glass minimum thickness 6 mm (308.4)
Glazing within 1500 mm above the abutting finished floor level or standing area of a bath or shower	Grade A safety glazing material in accordance with Table 3.1 (308.1(b))
Glazing greater than 1500 mm above the abutting finished floor level or standing area of a bath or shower	Annealed glass to NZS 4223:Part 4

Amend 2  
Dec 2000



# Index F2/VM1 & AS1

All references to Verification Methods and Acceptable Solutions are preceded by **VM** or **AS** respectively.

**Asbestos** ..... **AS1** 2.0

**Glazing**

human impact safety ..... **AS1** 1.1

modifications to NZS 4223 ..... **AS1** 1.2

Amend 1  
Aug 1994