

Menu

- [Home Home](#)
- [About this portal](#)
- [Latest updates](#)

[Print](#) [Save](#) [Email](#)

[Resource detail](#)

[Citations](#)

## Verification Method B1/VM4: Foundations

[View on Information Provider website](#) [Download this resource \(PDF, 1.6MB\)](#) `{{ linkText }}`

This resource is no longer current. The current versions are [B1/VM4 \(First Edition, Amendment 18\)](#), [B1/VM4 \(First edition, Amendment 19\)](#)

Abbreviation

B1/VM4

Amendment

13

Version

First edition, Amendment 13

Valid to

30/05/2017

Valid from

01/06/2016

---

Information provider

Ministry of Business, Innovation and Employment

Information type

Verification Method

Format

PDF

---

Cites

[This resource cites 11 documents \(show Citations\)](#)

---

### Description

Verification Method B1/VM4 provided a means of compliance with Building Code Clause B1 Structure.

This document covered the ultimate limit state design of foundations, including those of earth retaining structures.

Methods were given for determining ultimate bearing and lateral sliding strengths.

### Scope

This document did not describe a means of determining the value of the soil parameters used in the document (e.g.  $c_l$ ,  $f_l$  and  $s_u$ ). The derivation of these parameters, which were based on the most adverse moisture and groundwater conditions likely to occur, was outside of the scope of this verification method.

Serviceability limit state deformations were not covered in this document. The determination of such deformations and their acceptability to the design in question needed to be considered but was outside the scope of this document.

This document assumed general ground or slope stability and provided methods only for ensuring against local failure of the foundation. Overall ground stability needed to be verified before this document could be applied; this was outside the scope of this verification method.

This document could not be used to design foundations on loose sands, saturated dense sands or on cohesive soils having a sensitivity greater than 4.

This document could not be used for foundations subject to continuous vibration.

**Previous versions:**

[B1/VM4 \(First edition, Amendment 12\)](#)

[B1/VM4 \(First edition, Amendment 11\)](#)

[B1/VM4 \(First edition, Amendment 10\)](#)

For assistance with locating previous versions, please contact the information provider.

[View on Information Provider website](#) [Download this resource \(PDF, 1.6MB\)](#) {{ linkText }}

Previous versions

[B1/VM4 Amendment 12 First edition, Amendment 12](#)

[B1/VM4 Amendment 11 First edition, Amendment 11](#)

[B1/VM4 Amendment 10 First edition, Amendment 10](#)

For assistance with locating previous versions, please contact the information provider.

This resource is not cited by any other resources.

## Verification Method B1/VM4: Foundations

This document is not CITED BY any other resources:

Back

## Verification Method B1/VM4: Foundations

Show what documents this resource is CITED BY

Show what documents this resource CITES

**Description**

Verification Method B1/VM4 provided a means of compliance with Building Code Clause B1 Structure.

This document covered the ultimate limit state design of foundations, including those of earth retaining structures.

Methods were given for determining ultimate bearing and lateral sliding strengths.

[View on Information Provider website](#) [Download this resource \(PDF, 1.6MB\)](#)

[Verification Method B1/VM4: Foundations](#)

This resource is no longer current. The current versions are [B1/VM4 \(First Edition, Amendment 18\)](#), [B1/VM4 \(First edition, Amendment 19\)](#)

**Description**

Verification Method B1/VM4 provided a means of compliance with Building Code Clause B1 Structure.

This document covered the ultimate limit state design of foundations, including those of earth retaining structures.

Methods were given for determining ultimate bearing and lateral sliding strengths.

[View on Information Provider website](#) [Download this resource \(PDF, 1.6MB\)](#)

This resource cites:

## Verification Method B1/VM4: Foundations

This document CITES:

New Zealand Standards

- [AS/NZS 1170.0:2002](#)

B1/VM4 cites AS/NZS 1170.0:2002 Structural Design Actions - General principles from 01/12/2008

- [AS/NZS 1170.1:2002](#)

B1/VM4 cites AS/NZS 1170.1:2002 (R2016) Structural Design Actions - Permanent, imposed and other actions from 01/12/2008

- [AS/NZS 1170.2:2011](#)

B1/VM4 cites AS/NZS 1170.2:2011 (R2016) Structural Design Actions - Wind Actions from 14/02/2014

- [AS/NZS 1170.3:2003 \(Reconfirmed in 2016\)](#)

B1/VM4 cites AS/NZS 1170.3:2003 (R2016) Structural Design Actions - Snow and ice actions from 01/12/2008

- [NZS 3603:1993](#)

B1/VM4 cites NZS 3603:1993 Timber structures standard from 01/09/1993

- [NZS 3605:2001](#)

B1/VM4 cites NZS 3605:2001 Timber piles and poles for use in building from 30/09/2010

- [NZS 3640:2003](#)

B1/VM4 cites NZS 3640:2003 Chemical preservation of round and sawn timber from 30/09/2010

- [NZS 4402.4.2.3:1988](#)

B1/VM4 cites NZS 4402.4.2.3:1988 Methods of testing soils for civic engineering purposes - Soil compaction tests - Determination of the minimum and maximum dry densities and relative density of a cohesionless soil - Test 4.2.3 Relative density from 01/12/2000

Australian Standards

- [AS 2159:1995](#)

B1/VM4 cites AS 2159:1995 Rules for the design and installation of piling (known as the SAA Piling Code) from 01/12/2000

Other

- [ASTM D1143 - 81\(1987\)e1](#)

B1/VM4 cites ASTM D1143 - 81(1987)e1 Test method for piles under static axial compressive load from 01/12/2000

- [BS 8004:1986](#)

B1/VM4 cites BS 8004:1986 Code of practice for foundations from 01/07/1992

Back

Close

Table of Contents

Print [Save](#) Email

[Feedback](#)

--	--	--

--

- [Contact us](#)
- [Privacy policy](#)
- [Disclaimer](#)
- [Copyright](#)

--	--	--

--

[Feedback](#)