Verification Method B1/VM4: Foundations

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Abbreviation
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Cites
This resource cites 11 documents (show Citations)

Description

Verification Method B1/VM4 provides a means of compliance with Building Code Clause B1 Structure. This document covers the ultimate limit state design of foundations, including those of earth retaining structures. Methods are given for determining ultimate

Scope

This document does not describe a means of determining the value of the soil parameters used in the document (e.g. cl, fl and su). The derivation of these parameters, which must be based on the most adverse moisture and groundwater conditions likely to occur, is outside of the scope of this verification method.

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

This document assumes general ground or slope stability and provides methods only for ensuring against local failure of the foundation. Overall ground stability needs to be verified before this document can be applied; this is outside the scope of this verification method.

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

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

Previous versions:

B1/VM4 (First edition, Amendment 14)
B1/VM4 (First edition, Amendment 13)
B1/VM4 (First edition, Amendment 12)
B1/VM4 (First edition, Amendment 11)
B1/VM4 (First edition, Amendment 10)

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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 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 Structural Design Actions - Wind Actions from 14/02/2014

- AS/NZS 1170.3:2003

  B1/VM4 cites AS/NZS 1170.3:2003 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: 1981

  B1/VM4 cites ASTM D1143:1981 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

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