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NZS 4210:2001 Code of practice for masonry construction: materials and workmanship

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Abbreviation

NZS 4210:2001

Amendment

Amendment 1 - appended. Published 30/05/2002.

Valid from

30/05/2001

Replaces

Information provider

Standards New Zealand

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Standards New Zealand

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PDF

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Description

This Standard sets out requirements for the materials and workmanship of clay, concrete and natural stone masonry to be used in conjunction with NZS 3604, NZS 4229 and NZS 4230 for the construction of masonry buildings and masonry veneers.

NZS 3604, NZS 4229 and NZS 4230 are Standards cited in the MBIE's supporting documents. Compliance with NZS 4210 is an essential requirement of all of these Standards.

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- [B1/AS3 \(First edition, Amendment 12\)](#)

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- [B1/AS3 \(First Edition, Amendment 17\)](#)

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- [B1/AS3 \(First edition, Amendment 14\)](#)

NZS 4210:2001 is cited by Acceptable Solution B1/AS3: Small Chimneys from 30/09/2010

- [SH/AS1 \(First edition, unamended\)](#)

NZS 4210:2001 is cited by SH/AS1 Simple House Acceptable Solution

- [AS/NZS 2699.3:2002](#)

NZS 4210:2001 is cited by AS/NZS 2699.3:2002 Built-in components for masonry construction - Lintels and shelf angles (durability requirements)

- [CP01:2011 \(Errata 1 January 2015\)](#)

NZS 4210:2001 is cited by Code of Practice for Weathertight Concrete and Concrete Masonry Construction

- [NZS 3116:2002](#)

NZS 4210:2001 is cited by NZS 3116:2002 Concrete segmental and flagstone paving

- [NZS 3604:2011](#)

NZS 4210:2001 is cited by NZS 3604:2011 Timber-framed buildings

- [NZS 4229:2013](#)

NZS 4210:2001 is cited by NZS 4229:2013 Concrete masonry buildings not requiring specific engineering design

NZS 4210:2001 is cited by NZS 4229:2013 Concrete masonry buildings not requiring specific engineering design

- [NZS 4230:2004](#)

NZS 4210:2001 is cited by NZS 4230:2004 Design of reinforced concrete masonry structures

- [NZS 4251.1:2007](#)

NZS 4210:2001 is cited by NZS 4251.1:2007 Solid plastering - Cement plaster for walls, ceilings and soffits

- [NZS HB 4236:2002](#)

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- [AS/NZS 2699.1:2000](#)

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- [AS/NZS 4455:1997](#)

NZS 4210:2001 cites AS/NZS 4455:1997 Masonry units and segmental pavers

- [AS/NZS 4456.10:1997](#)

NZS 4210:2001 cites AS/NZS 4456.10:1997 Masonry units and segmental pavers - Methods of test - Determining resistance to salt attack

- [AS/NZS 4456.11:1997](#)

NZS 4210:2001 cites AS/NZS 4456.11:1997 Masonry units and segmental pavers - Methods of test - Determining coefficients of expansion

- [AS/NZS 4456.12:1997](#)

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- [AS/NZS 4456.16:1997](#)

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- [AS/NZS 4456.17:1997](#)

NZS 4210:2001 cites AS/NZS 4456.17:1997 Masonry units and segmental pavers - Methods of test - Determining initial rate of absorption (suction)

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NZS 4210:2001 cites AS/NZS 4456.18:1997 Masonry units and segmental pavers - Methods of test - Determining tensile strength of masonry units and segmental pavers

- [AS/NZS 4456.1:1997](#)

NZS 4210:2001 cites AS/NZS 4456.1:1997 Masonry units and segmental pavers - Methods of test - Sampling for compliance testing

- [AS/NZS 4456.2:1997](#)

NZS 4210:2001 cites AS/NZS 4456.2:1997 Masonry units and segmental pavers - Methods of test - Assessment of mean and standard deviation

- [AS/NZS 4456.3:1997](#)

NZS 4210:2001 cites AS/NZS 4456.3:1997 Masonry units and segmental pavers - Methods of test - Determining dimensions

- [AS/NZS 4456.4:1997](#)

NZS 4210:2001 cites AS/NZS 4456.4:1997 Masonry units and segmental pavers - Methods of test - Determining compressive strength of masonry units

- [AS/NZS 4456.5:1997](#)

NZS 4210:2001 cites AS/NZS 4456.5:1997 Masonry units and segmental pavers - Methods of test - Determining breaking

load of segmental paving units

- [AS/NZS 4456.6:1997](#)

NZS 4210:2001 cites AS/NZS 4456.6:1997 Masonry units and segmental pavers - Methods of test - Determining potential to effloresce

- [AS/NZS 4456.7:1997](#)

NZS 4210:2001 cites AS/NZS 4456.7:1997 Masonry units and segmental pavers - Methods of test - Determining core percentage and material thickness

- [AS/NZS 4456.8:1997](#)

NZS 4210:2001 cites AS/NZS 4456.8:1997 Masonry units and segmental pavers - Methods of test - Determining moisture content and dry density

- [AS/NZS 4456.9:1997](#)

NZS 4210:2001 cites AS/NZS 4456.9:1997 Masonry units and segmental pavers - Methods of test - Determining abrasion resistance

- [NZS 3101 PARTS 1 AND 2:1995](#)

NZS 4210:2001 cites NZS 3101 PARTS 1 AND 2:1995 Concrete structures standard - The design of concrete structures

- [NZS 3103:1991](#)

NZS 4210:2001 cites NZS 3103:1991 Specification for sands for mortars and plasters

- [NZS 3104:1991](#)

NZS 4210:2001 cites NZS 3104:1991 Specification for concrete production - High grade and special grade

- [NZS 3105:1986](#)

NZS 4210:2001 cites NZS 3105:1986 Specification for concrete mixers (batch type and truck type)

- [NZS 3109:1997](#)

NZS 4210:2001 cites NZS 3109:1997 Concrete construction

- [NZS 3112.1:1986](#)

NZS 4210:2001 cites NZS 3112.1:1986 Methods of test for concrete - Tests relating to fresh concrete

- [NZS 3112.2:1986](#)

NZS 4210:2001 cites NZS 3112.2:1986 Methods of test for concrete - Tests relating to the determination of strength of concrete

- [NZS 3113:1979](#)

NZS 4210:2001 cites NZS 3113:1979 Specification for chemical admixtures for concrete

- [NZS 3117:1980](#)

NZS 4210:2001 cites NZS 3117:1980 (BS 1014:1975) Specification for pigments for Portland cement and Portland cement products

- [NZS 3121:1986](#)

NZS 4210:2001 cites NZS 3121:1986 Specification for water and aggregate for concrete

- [NZS 3122:1995](#)

NZS 4210:2001 cites NZS 3122:1995 Specification for Portland and blended cements (General and special purpose)

- [NZS 3123:1974](#)

NZS 4210:2001 cites NZS 3123:1974 Specification for Portland pozzolan cement (type PP cement)

- [NZS 3124:1987](#)

NZS 4210:2001 cites NZS 3124:1987 Specification for concrete construction for minor works

- [NZS 3125:1991](#)

NZS 4210:2001 cites NZS 3125:1991 Specification for portland-limestone filler cement

- [NZS 3402:1989](#)

NZS 4210:2001 cites NZS 3402:1989 Steel bars for the reinforcement of concrete

- [NZS 3604:1999](#)

NZS 4210:2001 cites NZS 3604:1999 Timber framed buildings

- [NZS 4229:1999](#)

NZS 4210:2001 cites NZS 4229:1999 Concrete masonry buildings not requiring specific engineering design

- [NZS 4230:1990](#)

NZS 4210:2001 cites NZS 4230:1990 (Parts 1 and 2:1990) Code of practice for the design of masonry structures - Code of practice for the design of masonry structures

Australian Standards

- [AS 1478:1992](#)

NZS 4210:2001 cites AS 1478:1992 Chemical admixtures for concrete

- [AS 2163:1995](#)

NZS 4210:2001 cites AS 2163:1995 Laboratory glassware - Measuring cylinders

- [AS 3700-1998](#)

NZS 4210:2001 cites AS 3700-1998 Masonry structures

Other

- [BS 5390:1976](#)

NZS 4210:2001 cites BS 5390:1976 Code of practice for stone masonry

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- [BS 890:1995](#)

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