



New Zealand Standard

# **Engineering design of earth buildings**

**Superseding NZS 4297:1998**

**NZS 4297:2020**

**COMMITTEE REPRESENTATION**

This standard was prepared by the P4297-99 Earth Buildings Committee. The membership of the committee was approved by the New Zealand Standards Approval Board and appointed by the New Zealand Standards Executive under the Standards and Accreditation Act 2015.

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## NOTES

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## REFERENCED DOCUMENTS

Reference is made in this document to the following:

### New Zealand standards

NZS 1170:- - -	Structural design actions
Part 5:2004	Earthquake actions – New Zealand
NZS 3101:2006	Concrete structures Standard
NZS 3109:1997	Concrete construction
NZS 3602:2003	Timber and wood-based products for use in building
NZS 4210:2001	Masonry construction: Materials and workmanship
NZS 4230:2004	Design of reinforced concrete masonry structures
NZS 4298:2020	Materials and construction for earth buildings
NZS 4299:2020	Earth buildings not requiring specific engineering design
NZS 7601:1978	Specification for polyethylene pipe (Type 3) for cold water services

### Joint Australian/New Zealand standards

AS/NZS 1170:- - -	Structural design actions
Part 0:2002	General principles
Part 1:2002	Permanent, imposed and other actions
Part 2:2011	Wind actions
Part 3:2003	Snow and ice actions
AS/NZS 1530:- - -	Methods for fire tests on building materials, components and structures
Part 3:1999	Simultaneous determination of ignitability, flame propagation, heat release and smoke release
AS/NZS 1554:- - -	Structural steel welding
Part 3:2014	Welding of reinforcing steel
AS/NZS 2053:- - -	Conduits and fittings for electrical installations
Part 1:2001	(Reconfirmed 2016) General requirements
AS/NZS 4671:2001	Steel reinforcing materials

### Australian standards/or of other national standards bodies

AS 1530: - - -	Methods for fire tests on building materials, components and structures
Part 4: 1975	Fire-resistance tests for elements of construction
AS 3700:2018	Masonry structures

## British standard

BS EN ISO 10319:2015    Geosynthetics. Wide-width tensile test

## Other publications

CSIRO (1995), CSIRO Australia Bulletin 5: Earth-Wall Construction.

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1998 Walker, R, and Morris, H. 'Development of New Performance Based Standards for Earth Buildings'. *Australasian Structural Engineering Conference, Auckland 1998*, Proceedings Vol 1 477 – 484.

1985 Yttrup, P. 'Strength of Earth Masonry (Adobe) Walls Subjected to Lateral Wind Forces'. *Proceedings, 7th International Brick Masonry Conference*. Melbourne, February 1985.

## New Zealand legislation

Building Act 2004

New Zealand Building Code