

Australian/New Zealand Standard™

Plumbing and drainage

Part 1: Water services



AS/NZS 3500.1:2018

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS-014, Plumbing and Drainage. It was approved on behalf of the Council of Standards Australia on 13 June 2018 and by the New Zealand Standards Approval Board on 2 May 2018.

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The following are represented on Committee WS-014:

Association of Hydraulic Services Consultants Australia
Australian Building Codes Board
Australian Industry Group
Australian Stainless Steel Development Association
International Copper Association of Australia
Master Plumbers Australia
Master Plumbers, Gasfitters and Drainlayers New Zealand
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Plumbing and drainage

Part 1: Water services

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-014, Plumbing and Drainage, to supersede AS/NZS 3500.1:2015.

The objective of this Standard is to provide installers with Deemed to Satisfy solutions to comply with—

- (a) the National Construction Code of Australia (NCC), Volume Three, Plumbing Code of Australia (PCA); and
- (b) the New Zealand Building Code (Clause G12, Water Supplies).

This Standard is part of a series for plumbing and drainage, as follows:

AS/NZS

- 3500 Plumbing and drainage
- 3500.0 Part 0: Glossary of terms
- 3500.1 Part 1: Water services (this Standard)
- 3500.2 Part 2: Sanitary plumbing and drainage
- 3500.3 Part 3: Stormwater drainage
- 3500.4 Part 4: Heated water systems

The objective of this revision is to update requirements relating to backflow prevention, plastic pipes in direct sunlight, circulatory heated water, non-drinking water and clarification for jointing methods.

Some materials and products used in a water service are provided with instructions for installation and use. Whilst not a requirement of this Standard, or acceptable as an alternative to the requirements of this Standard, conformance to these instructions generally ensures that—

- (i) the material or product is fit for the application;
- (ii) the performance of the system is not degraded;
- (iii) the durability of the material or product is not impaired; and
- (iv) the manufacturer's warranty remains valid.

PROVISION FOR REVISION

This Standard necessarily deals with existing conditions, but is not intended to discourage innovation or to exclude materials, equipment and methods that may be developed in future. Revisions will be made from time to time in view of such developments and amendments to this Edition will be made only when absolutely necessary.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to figures and tables are deemed to be requirements of this Standard.

Notes used in this Standard are of an advisory nature only and are used to provide explanation or guidance to the user on recommended considerations or technical procedures, or to provide an informative cross-reference to other documents or publications. Notes to clauses in this Standard do not form a mandatory part for compliance with this Standard.

This Standard includes a commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by 'C' preceding the clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the Standard.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Plumbing and drainage

Part 1: Water services

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the design, installation and commissioning of cold water services from a point of connection to the points of discharge, and non-drinking water from a point of connection to the points of discharge. It applies to new installations as well as alterations, additions and repairs to existing installations.

Illustrations used in this Standard are diagrammatic only and have been chosen without prejudice.

NOTES:

- 1 The requirements for heated water services are set out in AS/NZS 3500.4.
- 2 See Figure 1.1 for typical installation of a property service and water service.

1.2 APPLICATION

1.2.1 Australia

This Standard shall be read in conjunction with the National Construction Code (NCC), Volume Three, the Plumbing Code of Australia (PCA) in Australia.

Where alternative Australian or New Zealand standards are referenced (e.g. AS 1345) the Australian Standard shall be used for Australia.

For Australia, this Standard does not preclude the use of any design or method of installation, provided the completed system and installation meet the performance requirements of the NCC, as appropriate.

1.2.2 New Zealand

This Standard shall be read in conjunction with the New Zealand Building Code in New Zealand. This Standard may be used for compliance with the New Zealand Building Code Paragraph G12, Water Supplies.

Where alternative New Zealand standards are referenced (e.g. NZS 5807) the New Zealand Standard shall be used for New Zealand.

1.3 NORMATIVE REFERENCES

The following are the normative documents referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS

1074	Steel tubes and tubulars for ordinary service
1172	Water closets (WCs)
1172.1	Part 1: Pans
1172.2	Part 2: Flushing devices and cistern inlet and outlet valves