

# Australian/New Zealand Standard™

## Plumbing and drainage

### Part 1: Water services



### **AS/NZS 3500.1:2003**

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 29 July 2003 and on behalf of the Council of Standards New Zealand on 8 August 2001.

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The following are represented on Committee WS-014:

- ACT Planning and Land Authority
- Association of Hydraulic Services Consultants Australia
- Australian Building Codes Board
- Australian Industry Group
- Australian Stainless Steel Development Association
- Building Officials Institute of New Zealand
- A2 | Copper Development Centre–Australia
- Department of Building and Housing (New Zealand)
- Department of Infrastructure and Planning, (Qld)
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- Department of Planning and Infrastructure (NT)
- Gas Appliance Manufacturers Association of Australia
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- Plastic Industry Pipe Association of Australia
- Plastics New Zealand
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*This Standard was issued in draft form for comment as DR 03199.*

# Australian/New Zealand Standard™

## 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, National Plumbing and Drainage Code, to supersede AS/NZS 3500.1.2:1998, National plumbing and drainage, Part 2: *Water—Acceptable solutions*.

*This Standard incorporates Amendment No. 1 (November 2005) and Amendment No. 2 (December 2010). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

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

- (a) the 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
3500.5	Part 5: Domestic installations

This revision includes the following changes:

- (a) Aligning the requirements with the Plumbing Code of Australia.
- (b) Clarification of the sections on hydrants and water tanks.
- (c) New provisions for non-drinking water and rainwater tanks.
- (d) Revision of the materials used in plumbing.
- (e) Incorporation of Amendment 1, 2002 and PL/1 rulings 2002 numbers 1 to 35.

A2 | This Standard is to be read in conjunction with the Plumbing Code of Australia (PCA) in Australia and the New Zealand Building Code in New Zealand.

Where alternative Australian or New Zealand standards are referenced (such as AS 1345 or NZS 5807 as appropriate) the Australian Standard shall be used for Australia and the New Zealand Standard shall be used for New Zealand.

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.

*This document includes commentary on some of the clauses of the Standard. 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.*

**PROVISION FOR REVISION**

This Standard necessarily deals with existing conditions, but is not intended to discourage innovation or to exclude materials, equipment and methods, which 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.

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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 the 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.

NOTE: The requirements for heated water services are set out in AS/NZS 3500.4.

**1.2 APPLICATION**

*CI.2 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 PCA or BCA, appropriate.*

*Details of such systems, installation and methods should be submitted for consent to the authority having jurisdiction. Systems not covered by this Standard are usually the province of a recognized expert in accordance with Clause A2.2 of the PCA.*

**1.2.1 Plumbing Code of Australia**

This Standard will be referenced in the Plumbing Code of Australia.

**1.2.2 New Zealand Building Code**

This Standard may be used for compliance with the New Zealand Building Code Clause G12, Water Supplies.

**1.3 NORMATIVE REFERENCES**

The normative documents referenced in this Standard are listed in Appendix A.

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

**1.4 DEFINITIONS**

For the purpose of this Standard the definitions given in AS/NZS 3500.0 apply.

**1.5 EQUIVALENT PIPE SIZES**

Where the nominal size of a pipe is specified in this Standard, an equivalent pipe size, appropriate to the material being used, shall be selected from Appendix J.