



## Copper pipe and fittings—Installation and commissioning



This Australian Standard® was prepared by Committee WS-018, Copper and Copper Alloy Tubes for Plumbing and Gasfitting. It was approved on behalf of the Council of Standards Australia on 6 April 2017.

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The following are represented on Committee WS-018:

- Australasian Corrosion Association
  - Australian Industry Group
  - Energy Networks Association
  - International Copper Association Australia
  - Master Plumbers Australia
  - Plumbing Products Industry Group
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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard<sup>®</sup>

## Copper pipe and fittings—Installation and commissioning

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## PREFACE

This Standard was prepared by the Standards Australia Committee WS-018, Copper and Copper Alloy Tubes for Plumbing and Gasfitting, to supersede AS 4809—2003.

The objective of this Standard is to provide the minimum requirements for the selection, installation and commissioning of copper plumbing, gas and waste water systems, including some aspects of design, to assist the industry in the installation of copper piping systems.

Attention is drawn to the following relevant requirements with respect to:

- (a) *Design and installation*—this Standard should be read in conjunction with the AS/NZS 3500 series, AS/NZS 5601 series and AS/NZS 4645.1.
- (b) The qualifications of persons permitted by law to do plumbing and gasfitting work.
- (c) The administrative procedures to be followed by persons performing plumbing and gasfitting work.
- (d) The authorization for certain materials, products, fittings, and other components to be connected to water supply systems in accordance with the WaterMark Certification Scheme (WMCS) in Australia and the Building Industry Authority (BIA) in New Zealand.

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

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## STANDARDS AUSTRALIA

**Australian Standard****Copper pipe and fittings—Installation and commissioning****1 SCOPE**

This Standard specifies requirements for the selection, installation and commissioning of copper plumbing, gas and waste water systems. Some aspects of design are also specified.

**2 REFERENCED DOCUMENTS**

A list of the documents referred to in this Standard, is given in Appendix A.

**3 DEFINITIONS**

For the purposes of this Standard, the definitions in AS/NZS 3500.0 and the one below apply.

**3.1 Water hammer**

A condition where a quick closing tap or valve closes against velocity of water at high pressure within a water supply system.

NOTE: A shock wave potentially in excess of 3 000 kPa can be created causing damage to not only the piping material but to appliances, tap ware and fittings.

**4 PRODUCTS****4.1 Copper tube****4.1.1 General**

Copper tubes shall be in accordance with AS 1432 with the sizes shown in Tables 4.1 to 4.4. Copper tube may be supplied in annealed, bendable or hard drawn temper.