

Australian Standard™

**Copper pipe and fittings—Installation
and commissioning**

This Australian Standard was prepared by Committee WS-018, Copper and Copper Tubes for Plumbing and Gasfitting. It was approved on behalf of the Council of Standards Australia on 13 December 2002 and published on 16 January 2003.

The following are represented on Committee WS-018:

Australian Industry Group
Brisbane Water
Certification Bodies (Australia)
Copper Development Centre Australia
CSIRO Manufacturing Science and Technology
Department of Land and Water Conservation NSW
Hunter Water Australia
Master Plumbers Australia
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**Copper pipe and fittings—Installation
and commissioning**

First Published as AS 4809—2003.
Reissued incorporating Amendment No. 1 (April 2003).

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Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5004 4

PREFACE

This Standard was prepared by the Standards Australia Committee WS-018 Copper and Copper Alloy Tubes for Plumbing and Gasfitting.

This Standard incorporates Amendment No. 1 (April 2003). 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.

This 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.

Regulatory requirements

Attention is drawn to the relevant regulatory requirements with respect to—

- (a) Design and installation — this Standard should be read in conjunction with AS/NZS 3500. As AS/NZS 3500 is called up in various regulations AS/NZS 3500, which takes precedence.
- (b) The qualifications of persons permitted by law to do plumbing work.
- (c) The administrative procedures to be followed by persons performing plumbing work.
- (d) The authorization for certain materials, products, fittings, and other components to be connected to water supply systems in accordance with the National Certification of Plumbing and Drainage Products Scheme (NCPDP) 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 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.

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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 up to 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 comply with AS 1432.

4.1.2 Tube sizes and temper

Copper tube in the sizes specified in the following tables may be manufactured in—

- (a) Type A, in accordance with Table 4.1, in annealed, bendable or ‘as drawn’ temper;
- (b) Type B, in accordance with Table 4.2, in annealed, bendable or ‘as drawn’ temper;
- (c) Type C, in accordance with Table 4.3, in annealed, bendable or ‘as drawn’ temper; and
- (d) Type D, in accordance with Table 4.4, in ‘as drawn’ temper.