

Australian Standard<sup>®</sup>

**Water supply—Metallic fittings and end  
connectors**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee WS-001, Water Fittings. It was approved on behalf of the Council of Standards Australia on 3 May 2005. This Standard was published on 4 August 2005.

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  - Brisbane City Council
  - Building Research Association of New Zealand
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  - Plastics New Zealand
  - Queensland Brassware Industry Advisory Panel
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  - Water Corporation Western Australia
- 

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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 public comment period.

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Australian Standard<sup>®</sup>

**Water supply—Metallic fittings and end  
connectors**

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## PREFACE

This Standard was prepared by the Joint Standards Australia and Standards New Zealand Committee WS-001, Water Fittings, to supersede AS 3688—1994, *Water supply—Copper and copper alloy compression and capillary fittings and threaded-end connectors*.

*This Standard incorporates Amendment No. 1 (October 2006). 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 for innovation and for a range of fittings that allows for a mixture of pipe materials to be used.

This edition includes amendments and various industrial and editorial revisions according to Standards Australia requirements.

It has been expanded to include fittings of other materials and end connectors used to connect pipes and fittings of dissimilar materials.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of the Standard.

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## STANDARDS AUSTRALIA

**Australian Standard**  
**Water supply—Metallic fittings and end connectors**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies requirements for metallic body pipe fittings and connectors for use with copper tube and stainless steel pipes, and tubes and adaptor fittings for connection to other pipe materials in water supply and gas systems where the normal working temperature does not exceed—

- (a) 95°C, and where the maximum operating pressure does not exceed 1.4 MPa; or
- (b) the ambient supply temperature, where the maximum operating pressure does not exceed 2.1 MPa. Products designed for a temperature in excess of 95°C are included where tested to the appropriate temperature criteria.

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

**1.2 APPLICATION**

Fittings, end connectors, and couplings shall comply with Sections 1 to 4 and with Sections 5 to 11 as follows:

- (a) Capillary fittings—copper and copper alloy.....Section 5.
- (b) Compression fittings.....Section 6.
- (c) Threaded-end connectors.....Section 7.
- (d) Union end connectors and couplings.....Section 8.
- (e) Roll-grooved jointing end connectors.....Section 9.
- (f) Mechanical.....Section 10.
- (g) Other copper alloy fittings.....Section 11.

Fittings such as end connectors intended to join alternative pipe systems made from other materials (e.g., plastics) shall also comply with the relevant dimensional and performance requirements of the appropriate Australian, New Zealand or Joint Australian/New Zealand Standard for the alternative pipe system.

For regulations on use of fittings in gas applications, see AS 5601.

Metallic systems, fittings, end connectors and couplings joined to alternative systems may be certified to this Standard (AS 3688).

Means for demonstrating compliance with this Standard are given in Appendix A.

**1.3 REFERENCED DOCUMENTS**

The documents referred to in this Standard are listed in Appendix B.