



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

**STANDARDS**  
Australia

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This Australian Standard® was prepared by Committee WS-001, Water Fittings. It was approved on behalf of the Council of Standards Australia on 13 June 2016. This Standard was published on 27 June 2016.

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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>

**Water supply and gas systems—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—2005, *Water supply and gas systems—Metallic fittings and end connectors*.

The objective of this Standard is to provide for innovation and for a range of fittings that allow for a mixture of pipe materials to be used.

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 appendices to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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

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## STANDARDS AUSTRALIA

**Australian Standard****Water supply and gas systems—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, stainless steel pipe, stainless steel tube and adaptor fittings for connection to other pipe materials in water supply and gas systems where the continuous working temperature—

- (a) does not exceed 95°C, and where the maximum operating pressure does not exceed 1 400 kPa; or
- (b) is the ambient supply temperature, where the maximum operating pressure does not exceed 2 100 kPa. Products designed for a temperature in excess of 95°C are included where tested to the appropriate temperature criteria.

**1.2 APPLICATION**

Fittings, end connectors, and couplings shall comply with Sections 1 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 and coupling body ..... Section 9.
- (f) Mechanical jointing push-on and press-fit end connectors ..... 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. plastic) 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 limitations on use of fittings in gas applications, refer to the AS/NZS 5601 series and AS/NZS 4605.1.

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.

Fittings used for gas applications have modified performance requirements relevant to the AS/NZS 5601 series. Fittings used exclusively for gas do not need to comply with the requirements of AS/NZS 4020.

**1.3 REFERENCED DOCUMENTS**

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