



Water supply and gas systems—Metallic fittings and end connectors



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 - CSIRO
 - Department of Agriculture and Water Resources (Australian Government)
 - Gas Technical Regulators Committee
 - Housing Industry Association
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 - Plastics Industry Pipe Association of Australia
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 - The Institute of Plumbing Australia
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Australian Standard[®]

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	6
1.2 APPLICATION	6
1.3 REFERENCED DOCUMENTS.....	6
1.4 DEFINITIONS.....	7
1.5 DESIGNATION OF SIZE	7
1.6 MARKING	8
1.7 PRODUCT DOCUMENTATION.....	8
SECTION 2 MATERIALS	
2.1 SCOPE OF SECTION	9
2.2 MATERIALS IN CONTACT WITH DRINKING WATER	9
2.3 METALLIC MATERIALS	9
2.4 PLASTIC COMPONENT MATERIALS.....	10
2.5 OTHER COMPONENT MATERIALS.....	10
SECTION 3 DESIGN AND DIMENSIONS	
3.1 SCOPE OF SECTION	11
3.2 TUBE STOPS	11
3.3 SLIP FITTINGS	11
3.4 SPIGOTS.....	11
3.5 FIXING DEVICE	12
3.6 WATERWAYS.....	12
3.7 THICKNESS OF METAL PARTS OF FITTINGS SPECIFIED BY DIMENSION... 12	12
3.8 PIPE THREADS	14
3.9 FABRICATED FITTINGS	14
3.10 GEOMETRY OF FITTINGS	15
3.11 PLATING AND OTHER SURFACE FINISHES	15
3.12 FINISH AND WORKMANSHIP.....	15
SECTION 4 PERFORMANCE REQUIREMENTS	
4.1 SCOPE OF SECTION	16
4.2 LEAKTIGHTNESS UNDER INTERNAL PRESSURE TEST	16
4.3 STRENGTH OF FABRICATED JOINT (TORQUE TEST).....	16
4.4 STRENGTH OF JOINT ASSEMBLY (PRESSURE CYCLING TEST).....	16
4.5 RESISTANCE TO PULL-OUT OF ASSEMBLED JOINTS	16
4.6 STRENGTH OF NUT AND ASSEMBLY (TORQUE TEST).....	16
4.7 LEAKTIGHTNESS UNDER INTERNAL PRESSURE WHILST SUBJECTED TO BENDING	16
4.8 METHOD FOR DETERMINING COMPATIBILITY OF WATER FITTINGS WITH PIPE.....	17
4.9 ROLL-GROOVED ASSEMBLY (JOINT PRESSURE RESISTANCE TEST)	17
4.10 VACUUM TEST FOR LEAKTIGHTNESS OF JOINTS WITH TUBE UNDER VACUUM	17
4.11 LEAKTIGHTNESS UNDER INTERNAL PNEUMATIC PRESSURE.....	17
4.12 RESISTANCE OF GAS PRESS FITTINGS TO TEMPERATURE CYCLING	17
4.13 RESISTANCE OF PRESS FITTING JOINTS AND TUBES TO VIBRATION.....	17
4.14 RESISTANCE OF GAS PRESS FITTINGS TO HIGH TEMPERATURE.....	17

SECTION 5	CAPILLARY FITTINGS—COPPER AND COPPER ALLOY	
5.1	SCOPE OF SECTION	18
5.2	DESIGN AND DIMENSIONS	18
5.3	PERFORMANCE REQUIREMENTS	19
SECTION 6	COMPRESSION FITTINGS	
6.1	SCOPE OF SECTION	20
6.2	DESIGN	20
6.3	PERFORMANCE REQUIREMENTS	20
SECTION 7	THREADED-END CONNECTORS	
7.1	SCOPE OF SECTION	23
7.2	DIMENSIONS.....	23
7.3	DESIGN	23
7.4	PERFORMANCE REQUIREMENTS	23
SECTION 8	UNION END CONNECTORS AND COUPLINGS	
8.1	SCOPE OF SECTION	28
8.2	DESIGN	28
SECTION 9	ROLL-GROOVED JOINTING END CONNECTORS AND COUPLING BODY	
9.1	SCOPE OF SECTION	29
9.2	MATERIALS.....	29
9.3	DESIGN	29
9.4	PERFORMANCE REQUIREMENTS AND TEST METHODS.....	31
9.5	INSTALLATION INSTRUCTIONS	31
SECTION 10	MECHANICAL JOINTING	
	PUSH-ON AND PRESS-FIT END CONNECTORS	
10.1	SCOPE OF SECTION	32
10.2	DESIGN	32
10.3	PERFORMANCE	32
10.4	INSTALLATION INSTRUCTIONS	32
10.5	MARKING FOR GAS PRESS-FIT FITTINGS	33
SECTION 11	OTHER COPPER ALLOY FITTINGS	
11.1	SCOPE OF SECTION	34
11.2	THREADED SOCKETS.....	34
11.3	REDUCING BUSHES WITH OVERLAPPING INTERNAL AND EXTERNAL THREADS.....	34
11.4	CONTINUOUSLY THREADED FITTINGS	34
11.5	PERFORMANCE REQUIREMENTS	34
APPENDICES		
A	MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	35
B	LIST OF REFERENCED DOCUMENTS.....	41
C	SIZES AND TYPES OF FITTINGS	43
D	LEAKTIGHTNESS UNDER INTERNAL PRESSURE TEST	46
E	STRENGTH OF FABRICATED JOINT—TORQUE TEST.....	48
F	STRENGTH OF JOINT ASSEMBLY—PRESSURE CYCLING TEST.....	50
G	RESISTANCE TO PULL-OUT OF ASSEMBLED JOINTS	52
H	STRENGTH OF NUT AND ASSEMBLY—TORQUE TEST.....	55
I	METHOD FOR DETERMINING LEAKTIGHTNESS UNDER INTERNAL HYDROSTATIC PRESSURE WHILST SUBJECTED TO BENDING	57
J	METHOD FOR DETERMINING COMPATIBILITY OF FITTINGS WITH PIPE ..	59

K	ROLL-GROOVED ASSEMBLY JOINT PRESSURE RESISTANCE TEST	61
L	SIMULATED SAMPLES	63
M	VACUUM TEST FOR LEAKTIGHTNESS OF PRESS FIT JOINTS WITH TUBE UNDER VACUUM	65
N	LEAKTIGHTNESS OF GAS PRESS FITTINGS UNDER INTERNAL PNEUMATIC PRESSURE.....	67
O	RESISTANCE OF GAS PRESS FITTINGS TO TEMPERATURE CYCLING	69
P	RESISTANCE OF PRESS FITTING JOINTS AND TUBES TO VIBRATION.....	72
Q	RESISTANCE OF PRESS FITTING JOINTS AND TUBES TO HIGH TEMPERATURE	75

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. 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 limitations on use of fittings in gas applications, refer to the AS/NZS 5601 series and AS/NZS 4645.1.

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.