

**AS 3688—2005**  
(Incorporating Amendment No. 1)

AS 3688—2005

Australian Standard<sup>®</sup>

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



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.

---

The following are represented on Committee WS-001:

- Australian Chamber of Commerce and Industry
  - Australian Industry Group
  - Australian Valve Manufacturers Association
  - AUSTAP
  - Brisbane City Council
  - Building Research Association of New Zealand
  - Business New Zealand
  - Certification Bodies (Australia)
  - Department of Land and Water Conservation NSW
  - Department of Local Government and Planning (Queensland)
  - Institute of Plumbing Australia
  - Master Plumbers, Gasfitters and Drainlayers New Zealand
  - Plastics New Zealand
  - Queensland Brassware Industry Advisory Panel
  - South Australian Water Corporation
  - Water Corporation Western Australia
- 

This Standard was issued in draft form for comment as DR 04545.

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.

---

### **Keeping Standards up-to-date**

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **[www.standards.org.au](http://www.standards.org.au)**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **[mail@standards.org.au](mailto:mail@standards.org.au)**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

**AS 3688—2005**  
(Incorporating Amendment No. 1)

**Australian Standard<sup>®</sup>**

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

Originated as AS 3688—1994.  
Third Edition AS 3688—2005.  
Reissued incorporating Amendment No. 1 (October 2006)..

## **COPYRIGHT**

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 6810 5

## 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 a Standard.

## CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE .....	5
1.2 APPLICATION .....	5
1.3 REFERENCED DOCUMENTS .....	5
1.4 DEFINITIONS .....	6
1.5 DESIGNATION OF SIZE .....	6
1.6 MARKING .....	6
1.7 PRODUCT DOCUMENTATION .....	7
SECTION 2 MATERIALS	
2.1 SCOPE OF SECTION .....	8
2.2 MATERIALS IN CONTACT WITH DRINKING WATER .....	8
2.3 METALLIC MATERIALS.....	8
2.4 PLASTIC COMPONENT MATERIALS.....	9
2.5 OTHER COMPONENT MATERIALS .....	9
SECTION 3 DESIGN AND DIMENSIONS	
3.1 SCOPE OF SECTION .....	10
3.2 TUBE STOPS.....	10
3.3 SLIP FITTINGS .....	10
3.4 SPIGOTS.....	11
3.5 FIXING DEVICE .....	11
3.6 WATERWAYS .....	11
3.7 THICKNESS OF METAL PARTS OF FITTINGS SPECIFIED BY DIMENSION ..	11
3.8 SCREW THREADS .....	13
3.9 FABRICATED FITTINGS.....	14
3.10 GEOMETRY OF FITTINGS.....	14
3.11 PLATING AND OTHER SURFACE FINISHES .....	14
3.12 FINISH AND WORKMANSHIP .....	14
SECTION 4 PERFORMANCE REQUIREMENTS	
4.1 SCOPE OF SECTION .....	15
4.2 WATERTIGHTNESS PRESSURE TEST .....	15
4.3 STRENGTH OF FABRICATED JOINT (TORQUE TEST).....	15
4.4 STRENGTH OF JOINT ASSEMBLY (PRESSURE CYCLING TEST).....	15
4.5 RESISTANCE TO PULL-OUT OF ASSEMBLED JOINTS .....	15
4.6 STRENGTH OF NUT AND ASSEMBLY (TORQUE TEST).....	15
4.7 THERMAL CYCLING TEST FOR JOINTS CONTAINING NON-METALLIC COMPONENTS .....	15
4.8 WATERTIGHTNESS UNDER INTERNAL HYDROSTATIC PRESSURE WHILST SUBJECTED TO BENDING.....	15
4.9 METHOD FOR DETERMINING COMPATIBILITY OF FITTINGS WITH PIPE ..	16
4.10 ROLL-GROOVED ASSEMBLY (JOINT PRESSURE RESISTANCE TEST) .....	16
SECTION 5 CAPILLARY FITTINGS—COPPER AND COPPER ALLOY	
5.1 SCOPE OF SECTION .....	17
5.2 DESIGN AND DIMENSIONS .....	17
5.3 PERFORMANCE REQUIREMENTS.....	19

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-