

**AS 4087—2004**  
(Incorporating Amendment No. 1)

AS 4087—2004

**Australian Standard™**

**Metallic flanges for waterworks  
purposes**



This Australian Standard was prepared by Committee WS-022, Valves For Water Supply Purposes. It was approved on behalf of the Council of Standards Australia on 30 September 2004. This Standard was published on 26 October 2004.

---

The following are represented on Committee WS-022:

Australian Chamber of Commerce and Industry  
Australian Industry Group  
Certification Interests (Australia)  
Engineers Australia  
Master Plumbers Australia  
Plastics Industry Pipe Association of Australia  
Victorian Employers' Chamber of Commerce  
Water Industry Alliance  
Water Services Association of Australia

---

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

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage 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 the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

*This Standard was issued in draft form for comment as DR 03434.*

AS 4087—2004

Australian Standard™

## **Metallic flanges for waterworks purposes**

Originated as AS 4087—1993.  
Previous edition 1996.  
Third edition 2004.  
Reissued incorporating Amendment No. 1 (August 2005)

### **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 6313 8

## PREFACE

This Standard was prepared by the Standards Australia Committee WS-022, Valves For Water Supply Purposes, to supersede AS 4087—1996.

*This Standard incorporates Amendment No. 1 (August 2005). 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 manufacturers with requirements for metallic flanges for waterworks purposes and installers of flanged components guidance on the most appropriate jointing requirements to achieve a satisfactory long-term watertight joint.

The first flange standard published in Australia was AS B52-1931, which was an endorsement of BS 10, the inch series flange British Standard, *Flanges and bolting for pipes valves and fittings*. Britain metricated in 1970 and adopted European (ISO) dimensions for flanges whilst Australia chose to continue with the same inch series flange dimensions. AS 2129, *Flanges for pipes, valves and fittings*, was published in 1978 to supersede AS B52 but incorporated 'soft metric' dimensions. The AS/NZS 4331 series, *Metallic flanges*, was published in 1995 as an endorsement of ISO hard metric flanges

A1

The most common AS 2129 flange tables used for waterworks purposes were Tables D, C, E, F and H with pressure ratings of 700, 1200, 1400, 2100 and 3500 kPa respectively. Table C flanges were subsequently re-rated to 1400 kPa in AS 2129—1991 to reflect industry experience.

AS 4087 was published in 1993 to provide a dedicated flange Standard for waterworks purposes with a rationalized range of flanges. Table E was eliminated and flanges were designated by Class allowable operating pressure (AOP). The table below indicates bolting compatibility between AS 4087 and AS 2129 flanges.

Bolting compatibility	
AS 4087 Flange classification	AS 2129 Flange classification
PN 14	D, C
PN 16	D, C
PN 21	F, H
PN 35	F, H

The principal changes to this Edition are as follows:

- Replacement of PN 14 with PN 16 for steel flanges.
- Amendments to the allowable operating pressures (AOPs) to align with waterworks practices.
- Deletion of sizes greater than DN 150 for copper alloys.
- Inclusion of additional sizes for ductile cast iron and steel flanges.
- Amendments to the specifications for jointing materials.

For applications outside the limits specified in this Standard the appropriate flange details may be determined from AS 2129, *Flanges for pipes, valves and fittings*, and AS/NZS 4331, *Metallic flanges*.

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

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.

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
-