


LOAN COPY
INFORMATION CENTRE
STANDARDS AUSTRALIA
Under Revision see DA 97361

SUPERSEDED BY: AS/NZS 2280:1995
AS/NZS 2280:1999

Australian/New Zealand Standard

Ductile iron pressure pipes and fittings

STANDARDS AUSTRALIA 

STANDARDS NEW ZEALAND 

AS/NZS 2280:1995

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS/16, Cast Iron Pressure Pipes and Fittings. It was approved on behalf of the Council of Standards Australia on 23 December 1994 and on behalf of the Council of Standards New Zealand on 31 January 1995. It was published on 5 April 1995.

The following interests are represented on Committee WS/16:

A.C.T. Electricity and Water
Australian Chamber of Commerce and Industry
Australian Plumbing and Mechanical Contractors Association
Brisbane City Council
Coliban Region Water Authority, Australia
Department of Primary Industries, Qld
Engineering and Water Supply Department, S.A.
Hunter Water
Institution of Engineers, Australia
Melbourne Water
Metal Trades Industry Association of Australia
N.S.W. Public Works
New Zealand Local Government Association
New Zealand Metal Casting Industry Association
Plastics and Chemicals Industries Association, Australia
Public Works Department, N.S.W.
Water Authority of Western Australia
Water Board, Sydney—Illawarra—Blue Mountains

Review of Standards. To keep abreast of progress in industry, Joint Australian/New Zealand Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Joint Standards and related publications will be found in the Standards Australia and Standards New Zealand Catalogue of Publications; this information is supplemented each month by the magazines 'The Australian Standard' and 'Standards New Zealand', which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS/NZS 2280:1995

Australian/New Zealand Standard

Ductile iron pressure pipes and fittings

PUBLISHED JOINTLY BY:

STANDARDS AUSTRALIA
1 The Crescent,
Homebush NSW 2140 Australia

STANDARDS NEW ZEALAND
Level 10, Standards House,
155 The Terrace,
Wellington 6001 New Zealand

ISBN 0 7262 9594 9

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS/16 on Cast Iron Pressure Pipes and Fittings to supersede AS 2280—1991. This Standard incorporates amendments due to the introduction of new Standard AS 4087, *Metallic flanges for waterworks purposes*, and is issued as a Joint Standard.

The objective of this document is to provide a standard manufacturing specification to be used by manufacturers and purchasers of ductile iron pressure pipes and fittings.

Ductile iron pipes are classified by wall thickness and are designated K9 and K12; these designations are consistent with ISO 2531, *Ductile iron pipes, fittings and accessories for pressure pipelines*, and BS 4772, *Specification for ductile iron pipes and fittings*. Outside diameter designations are consistent with AS 2544, *Grey iron pressure fittings*.

Fittings covered by this Standard are intended primarily for use with water supply pressure pipes. However, the fittings can be used with pressure pipes of alternative outside diameters by adoption of compatible sockets.

This Standard sets out manufacturing requirements and dimensions for pipes and fittings. The works hydrostatic test pressures specified are intended primarily to detect casting flaws and bear no relation to safe working pressures for pipes and fittings.

K9 pipes, generally accepted as the standard product, have a maximum allowable operating pressure as detailed in Appendix B. K12 pipes maintain this maximum capability after the reduction in wall thickness resulting from the machining process required for screwed flanges. It is acknowledged, however, that the allowable site test pressure for a pipeline incorporating any appurtenance should be limited to the equivalent test pressure of the appurtenance.

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 as an 'informative' Appendix is only for information and guidance.

© Copyright – STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Users of Standards are reminded that copyright subsists in all Standards Australia and Standards New Zealand publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia or Standards New Zealand may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia or Standards New Zealand. Permission may be conditional on an appropriate royalty payment. Australian requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia. New Zealand requests should be directed to Standards New Zealand.

Up to 10 percent of the technical content pages of a Standard may be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia or Standards New Zealand.

Inclusion of copyright material in computer software programs is also permitted without royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia or Standards New Zealand at any time.

CONTENTS

	<i>Page</i>
FOREWORD	5
 SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	6
1.2 REFERENCED DOCUMENTS	6
1.3 DEFINITIONS	7
1.4 CLASSIFICATION AND DESIGNATION	8
1.5 MARKING	8
1.6 AUSTRALIAN WATER AUTHORITY REQUIREMENTS	8
 SECTION 2 MANUFACTURE AND FINISH	
2.1 QUALITY OF METAL	9
2.2 MODE OF CASTING	9
2.3 FINISH	9
 SECTION 3 TESTING	
3.1 TENSILE STRENGTH AND ELONGATION	10
3.2 HARDNESS	10
3.3 WORKS HYDROSTATIC PRESSURE TESTS	10
3.4 EFFECT ON WATER	10
 SECTION 4 JOINTS	
4.1 GENERAL	11
4.2 FLANGED JOINTS	11
4.3 SOCKETED JOINTS	11
 SECTION 5 DIMENSIONS AND TOLERANCES OF PIPES	
5.1 SOCKET AND SPIGOT PIPES	13
5.2 PIPES WITH SCREW-ON FLANGES	13
5.3 PIPES WITH BOLT-ON PUDDLE FLANGES	15
 SECTION 6 DIMENSIONS AND TOLERANCES OF FITTINGS	
6.1 DIMENSIONS AND DETAILS OF FITTINGS	17
6.2 TOLERANCE ON DIMENSIONS	17
6.3 FITTING LUGS AND PAD	17
 SECTION 7 COATING AND LINING	
7.1 GENERAL	51
7.2 COATINGS	51
7.3 LININGS	51

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
-