

AS 3495—1997  
Reconfirmed 2018

Australian Standard®

---

**Stainless steel non-pressure pipes  
and fittings**

---

This Australian Standard was prepared by Committee WS/2, Sanitary Plumbing Fittings. It was approved on behalf of the Council of Standards Australia on 25 July 1997 and published on 5 November 1997.

---

The following interests are represented on Committee WS/2:

Australian Chamber of Commerce and Industry  
Australian Stainless Steel Development Association (ASSDA)  
Brisbane Water  
Department of Land and Water Conservation, N.S.W.  
Department of Urban Services, A.C.T.  
Metal Trades Industry Association of Australia  
Queensland Department of Housing Local Government and Planning  
South Australian Water Corporation  
Water Corporation Western Australia

---

**Review of Australian Standards.** To keep abreast of progress in industry, Australian 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 Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

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

---

This Standard was issued in draft form for comment as DR 96412.

STANDARDS AUSTRALIA

---

**RECONFIRMATION**

**OF**

**AS 3495–1997**

**Stainless steel non-pressure pipes and fittings**

---

**RECONFIRMATION NOTICE**

Major stakeholders of this publication have reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 29 August 2018.

NOTES

Currently in preview, click buy full vers.

AS 3495—1997

Australian Standard<sup>®</sup>

---

**Stainless steel non-pressure pipes  
and fittings**

---

First published as AS 3495—1997.

PUBLISHED BY STANDARDS AUSTRALIA  
(STANDARDS ASSOCIATION OF AUSTRALIA)  
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7337 1365 3

## PREFACE

This Standard was prepared by the Standards Australia Committee WS/2, Sanitary Plumbing Fittings.

The pipes and fittings covered by this Standard are intended primarily for use in sanitary plumbing which includes soil and waste discharges and ventilation systems operating under negligible internal working pressure, except when accidental surcharge occurs. This does not, however, exclude it from being used in other applications for the conveyance of liquids or free running materials in a non-pressure state within the performance criteria of this Standard or by agreement with the manufacturer.

Selection of the appropriate pipe material and joints to be used depends on the type of discharge to be conveyed, its temperature and site conditions.

The stainless steel pipes and fittings referred to in this Standard are austenitic and are resistant to external weathering, high temperature and a range of corrosive waste discharges.

Compliance with AS 1528 may also be required in food industry applications.

Manufacturing processes, peculiar to the production of stainless steel pipe and fittings, either during or after manufacture are not specified in 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.

## © Copyright — STANDARDS AUSTRALIA

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

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

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no 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 at any time.

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE . . . . .	4
1.2 APPLICATION . . . . .	4
1.3 REFERENCE DOCUMENTS . . . . .	4
1.4 DEFINITIONS . . . . .	4
1.5 MARKING . . . . .	4
<b>SECTION 2 MATERIALS</b>	
2.1 SCOPE OF SECTION . . . . .	5
2.2 STAINLESS STEEL . . . . .	5
2.3 ELASTOMERIC SEALS . . . . .	5
<b>SECTION 3 DESIGN AND MANUFACTURE</b>	
3.1 SCOPE OF SECTION . . . . .	6
3.2 CONNECTION ENDS . . . . .	6
3.3 THREAD FORMS . . . . .	6
3.4 DIMENSIONS OF PIPES AND FITTINGS . . . . .	6
3.5 DISCONNECTOR AND FLOOR WASTE GULCH TRAPS (GENERAL) . .	7
3.6 ALTERNATIVE DESIGNS . . . . .	7
<b>SECTION 4 PERFORMANCE REQUIREMENT</b>	
4.1 SCOPE OF SECTION . . . . .	8
4.2 STRENGTH AND LEAKAGE TEST . . . . .	8
4.3 ENDURANCE TEST . . . . .	8
4.4 PRESSURE TEST OF DIAPHRAGM JOINTS (PAN CONNECTOR AND WASTE FITTINGS) . . . . .	8
4.5 TORQUE TEST . . . . .	8
<b>APPENDICES</b>	
A LIST OF REFERENCE DOCUMENTS . . . . .	9
B STRENGTH AND LEAKAGE TEST . . . . .	10
C ENDURANCE TEST—FLEXIBLE JOINTS AND EXPANSION JOINTS . . . .	11
D PRESSURE TEST OF DIAPHRAGM JOINTS (PAN CONNECTOR AND WASTE FITTINGS) . . . . .	13
E TORQUE TEST . . . . .	15
F PREFERRED DESIGNS OF STAINLESS STEEL LOW-PRESSURE PIPE FITTINGS . . . . .	17

## STANDARDS AUSTRALIA

## Australian Standard

## Stainless steel non-pressure pipes and fittings

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard specifies the requirements for pipes and fittings, for above and below ground non-pressure applications in the operating temperature range from  $-40^{\circ}\text{C}$  to  $100^{\circ}\text{C}$ .

NOTE: Illustrations used in this Standard are diagrammatic only and are used without prejudice.

**1.2 APPLICATION** Stainless steel non-pressure pipes and fittings shall comply with this Section and Sections 2 to 4 as follows:

- (a) Section 2 Materials.
- (b) Section 3 Design and manufacture.
- (c) Section 4 Performance requirements.

**1.3 REFERENCE DOCUMENTS** A list of the documents referred to in this Standard is given in Appendix A.

**1.4 DEFINITIONS** For the purpose of this Standard, the definitions given in AS/NZS 3500.0 and those below apply.

**1.4.1 Collar**—flared end of pipe or fitting housing an elastomeric joint.

**1.4.2 Compatible material**—materials which do not adversely interact with other materials with which they are in contact (see AS 4036 to determine compatibility).

**1.4.3 Component**—a part or a subassembly of parts that contributes to the construction of a total assembly by choice or design and which may offer variations of fitment for the application to the major element of the product, whether produced by the same manufacturer or not. The component is deemed a vital part of the total assembly and does not inhibit the product from complying with the relevant Australian Standard, or the appropriate specification when submitted for type testing.

**1.4.4 Distortion**—that which is obvious to the eye without resorting to dimensional checking.

**1.4.5 Left-hand or right-hand fitting**—a bend or junction such that, when the body of the fitting is viewed with the direction of flow downward and with the inspection or testing opening facing the observer, the socket of the bend or the branch of the junction projects to the left or right respectively.

**1.5 MARKING** All pipes and fittings shall be legibly and durably marked with at least the following information:

- (a) Manufacturer's name or trademark.
- (b) The mark of the certifying body.
- (c) Nominal size in the form of DN as appropriate.
- (d) Grade of the material.

NOTE: Manufacturers making a statement of compliance with this Australian Standard on a product, packaging or promotional material related to that product are advised to ensure that such compliance is capable of being verified.