

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
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RECONFIRMATION

OF

AS 3495–1997

Stainless steel non-pressure pipes and fittings

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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.

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STANDARDS AUSTRALIA

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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°C to 100°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 a 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.

S E C T I O N 2 M A T E R I A L S

2.1 SCOPE OF SECTION This Section specifies requirements for the materials for pipes and fittings.

2.2 STAINLESS STEEL Stainless steel shall be Grade 304 or 316 complying with AS 1449.

2.3 ELASTOMERIC SEALS Elastomerics shall comply with AS 1646, ASTM D 3187 or ASTM D 3848. Diaphragms manufactured from EPDM rubbers shall be evaluated according to ASTM D 3568 or BS 6063.

NOTE: Materials for use in food related industries are covered by requirements designated by the appropriate authority.