

AS 1631—1994
Reconfirmed 2018

Australian Standard®

**Cast grey and ductile iron
non-pressure pipes and fittings**

This Australian Standard was prepared by Committee WS/5, Cast Iron Pipes and Fittings (Non-pressure Type). It was approved on behalf of the Council of Standards Australia on 28 March 1994 and published on 14 June 1994.

The following interests are represented on Committee WS/5:

A.C.T. Electricity and Water
Australian Chamber of Commerce and Industry
Brisbane City Council
Engineering and Water Supply Department, S.A.
Melbourne Water
Metal Trades Industry Association of Australia
Public Works Department, N.S.W.
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 1631–1994

**Cast grey and ductile iron non-pressure
pipes and fittings**

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NOTES

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Revised and redesignated in part as AS A88.1—1970 and
AS A88.2—1970.
AS A88.1—1970 and AS A88.2—1970 revised,
amalgamated and redesignated AS 1631—1974.
Second edition 1994.

PREFACE

This Standard was prepared by the Standards Australia Committee on Cast Iron Pipes and Fittings (Non-pressure Type) to supersede AS 1631—1974.

The pipes and fittings covered by this Standard are intended primarily for use in sanitary plumbing, including sewerage, drainage and ventilating systems operating under negligible internal working pressure, except when accidental surcharge occurs.

This edition differs from the 1974 edition in the following respects:

- (a) Ductile iron has been included as an acceptable material for these products. However, it may be necessary to provide suitable protective coating internally and externally on ductile iron pipes and fittings in order that an acceptable working life can be assured. The Section on coating and lining has been expanded to cover this requirement.
- (b) The requirements concerning manufacture and finish have been modified to correspond with the approach of AS 2280, *Ductile iron pressure pipes and fittings*.
- (c) Minimum pressures and durations have been introduced to the hydrostatic test requirements.
- (d) Where elastomers are chosen as a material for seating rings and gaskets, this edition requires that reference be made to AS 1646, *Elastomeric seals for waterworks purposes*.
- (e) The requirements concerning test openings and inspection openings have been modified to correspond with the approach of other Standards for non-pressure pipes and fittings.
- (f) Requirements for prefabricated fittings, such as reflux valves and saddles, have been included within the Standard.
- (g) The text has been editorially updated to comply with current Standards Australia style.

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

Australian Standard

Cast grey and ductile iron non-pressure pipes and fittings

1 SCOPE This Standard specifies requirements for cast grey iron (flake graphite) and ductile iron non-pressure pipes and fittings up to nominal size DN 300, and intended to be used where the internal working pressure is negligible.

Where resistance to internal pressure is of prime importance, reference should be made to AS 2280, AS 2544 and AS 1724.

NOTE: Guidelines on information that should be provided by the purchaser or agreed upon at the time of enquiry or order are given in Appendix A. Typical designs of fittings are given in Appendix B.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

| | |
|--------|---|
| AS | |
| 1199 | Sampling procedures and tables for inspection by attributes |
| 1349 | Bourdon tube pressure and vacuum gauges |
| 1399 | Guide to AS 1199—Sampling procedures and tables for inspection by attributes |
| 1646 | Elastomeric seals for waterworks purposes |
| 1650 | Hot-dipped galvanized coatings on ferrous articles |
| 1722 | Pipe threads of Whitworth form |
| 1722.2 | Part 2: Fastening pipe thread |
| 1724 | Cast grey iron pressure pipes and fittings with bolted gland joints |
| 1789 | Electroplated coatings—Zinc on iron or steel |
| 1790 | Electroplated coatings—Cadmium on iron or steel |
| 1830 | Iron castings—Grey cast iron |
| 1831 | Iron casting—Spheroidal or nodular graphite cast iron |
| 2280 | Ductile iron pressure pipes and fittings |
| 2345 | Dezincification resistance of copper alloys |
| 2544 | Grey iron pressure pipes and fittings |
| 2758 | Aggregates and rock for engineering purposes |
| 2758.1 | Part 1: Concrete aggregates |
| 3500 | National Plumbing and Drainage Code |
| 3500.0 | Part 0: Glossary of terms |
| 3501 | Parallel screw threads of Whitworth form (BSW and BSF) and associated gauges and gauging practice |
| 3855* | Suitability of plumbing products for contact with potable water |

* First published as an Interim Standard.