

Australian Standard<sup>®</sup>

**Polyethylene sleeving for ductile iron  
piping**



This Australian Standard® was prepared by Committee WS-016, Cast Iron Pressure Pipes and Fittings. It was approved on behalf of the Council of Standards Australia on 28 August 2008.

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The following are represented on Committee WS-016:

- Australian Chamber of Commerce and Industry
  - Australian Industry Group
  - Certification bodies (Australia)
  - Plastics Industry Pipe Association of Australia
  - Water Services Association of Australia
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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-016, Cast Iron Pressure Pipes and Fittings, to supersede AS 3680—1989, *Polyethylene sleeving for ductile iron pipelines*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide a standard manufacturing specification to be used by manufacturers and purchasers of polyethylene sleeving for ductile iron piping.

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.

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## FOREWORD

Polyethylene film was first used as a corrosion protection device for buried cast iron pipes in the USA in the early 1950s and subsequently in Australia since the mid 1960s. It has proved to be an effective method of controlling corrosion in aggressive soils and is now used for this purpose throughout the world.

The purpose of the loose polyethylene sleeving is to prevent contact between the pipeline and adjacent soils, thus providing a non-aggressive environment for the pipeline and minimizing corrosion. Free flow of ground water within the sleeving is not acceptable and would not be expected to occur with properly installed sleeving. The effectiveness of the sleeving is not impaired by the presence of condensate or small amounts of water that may be trapped within the sleeve.

# STANDARDS AUSTRALIA

## Australian Standard

### Polyethylene sleeving for ductile iron piping

#### 1 SCOPE

This Standard specifies requirements for materials for loose polyethylene sleeving intended for the corrosion protection of buried ductile iron pipeline systems.

Methods of demonstrating compliance with this Standard are given in Appendix A.

#### NOTES:

- 1 Requirements for the application of polyethylene sleeving to ductile iron pipelines and fittings are given in AS 3681.
- 2 Guidelines for purchasing polyethylene sleeving are given in Appendix B.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

##### AS

- |          |  |
|----------|--|
| 1199     | Sampling procedures for inspection by attributes   |
| 1199.1   | Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection |
| 1599     | Pressure-sensitive and water activated adhesive tape for packaging and office applications   |
| 2313     | Methods of test for single sided and double sided pressure-sensitive adhesive tape           |
| 2313.1.1 | Method 1.1: Adhesion—Peel adhesion   |
| 2313.2.1 | Method 2.1: Physical properties—Breaking strength  |
| 3681     | Application of polyethylene sleeving for ductile iron piping                                 |
| HB 18.28 | Conformity assessment—Guidance on a third-party certification system for products            |

##### AS/NZS

- |        |  |
|--------|--|
| 2280   | Ductile iron pipes and fittings            |
| 4275   | Method of testing underground marking tape |
| 4275.4 | Part 4: Chemical resistance                |
| 4275.5 | Part 5: Background discolouration          |

##### ISO

- |        |   |
|--------|---|
| 527    | Plastics—Determination of tensile properties  |
| 527-3  | Part 3: Test conditions for films and sheets  |
| 1183   | Plastics—Methods for determining the density of non-cellular plastics                         |
| 1183-1 | Part 1: Immersion method, liquid pycnometer method and titration method                       |
| 6383   | Plastics—Film and sheeting—Determination of tear resistance                                   |
| 6383-2 | Part 2: Elmendorf method  |
| 7765   | Plastics film and sheeting—Determination of impact resistance by the free-falling dart method |
| 7765-1 | Part 1: Staircase methods   |