AS 3680—2008

Australian Standard®

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.
This Standard was published on 31 October 2008.

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

This Standard was issued in draft form for comment as DR 4149.

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.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Polyethylene sleeving for ductile iron piping

Originally as AS 3680—1989.
Second edition 2008.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8943 9

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.

CONTENTS

Page

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 pyknometer 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