AS 3723—1989

Australian Standard®

Installation and maintenance of plastics pipe systems for gas

This Australian Standard was prepared by Committee PL/25, Plastics Pipe and Fittings For Gas. It was approved on behalf of the Council of Standards Australia on 31 May 1989 and published on 18 August 1989.

The following interests are represented on Committee PL/25:

Australian Gas Association

Confederation of Australian Industry

Department of Labour, Vic.

Department of Mines, Qld

Federated Master Plumbers of Australia

Plastics Institute of Australia

State Energy Commission, 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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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 welcomed. 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 88016.

Australian Standard®

Installation and maintenance of plastics pipe systems for gas

First published as AS 3723–1989.

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

ISBN 0 7262 5803 2

PREFACE

This Standard was prepared by the Standards Australia Committee on Plastics Pipe and Fittings for Gas, under the authority of the Plastics Standards Board.

CONTENTS

Page

STANDARDS AUSTRALIA

Australian Standard

Installation and maintenance of plastics pipe systems for gas

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard sets out methods of installing polyamide, polyethylene and unplasticized PVC (hereinafter referred to as PA, PE, UPVC respectively) gas pipelines below ground for pressure applications. Requirements for the selection, storage and handling of plastics pipe, and procedures for the jointing of plastics materials are specified. Alternative isolation procedures and piping maintenance methods are given.

This Standard is primarily intended for use in association with pipe and fittings complying with AS 1464, Parts 1 and 2, AS 1667, Parts 1 and 2, AS 2718, Parts 1 and 2, and AS 2944, Parts 1 and 2.

1.2 REFERENCED DOCUMENTS. The documents below are referred to in this Standard:

AS

1460	Mechanical jointing fittings for use with polyethylene pressure pipes
1464	Plastics pipes and fittings for gas reticulation - Unplasticized PVC (UPVC).
1464.1	Part 1: Pipes
1464.2	Part 2: Fittings
1667	Plastics pipes and fittings for gas reticulation - Polyethylene - Nominal size series
1667.1	Part 1: Pipes
1667.2	Part 2: Fittings
1697	SAA Gas Pipeline Code
1978	SAA Code for Field Pressure Testing of Pipelines
2032	Installation of UPVC pipe systems
2129	Flanges for pipes, valves and fittings
2566	Plastics pipelaying design
2648	Underground marking tape
2648.1	Part 1: Non-detectable tape
2718	Plastics pipes and fittings for gas reticulation - Polyethylene - Outside Diameter Series
2718.1	Part 1: Pipes
2718.2	Part 2: Fittings
2944	Plastics pipes and fittings for gas reticulation - Polyamide
2944.1	Part 1: Pipes
2944.2	Part 2: Fittings
3100	Approval and test specification - Definition and general requirements
3200	Approval and test specification - General requirements for household and similar electrical appliances

1.3 DEFINITIONS. For the purpose of this Standard, the definitions below apply.

1.3.1 Approved and approval - approved by the Operating Authority which includes obtaining the approval of the relevant Statutory Authority, where this is legally required.

NOTE: Approval requires a conscious act by the Authority and is usually given in writing.

1.3.2 Authority, Operating - organization responsible for the design, construction, testing, inspection, operation and maintenance of facilities within the scope of this Standard.

1.3.3 Authority, Statutory - the Commonwealth or State body empowered by an Act of Parliament to exercise jurisdiction over facilities within the scope of the Standard.

1.3.4 Backfill - material used for filling trenches and excavations after a pipeline has been laid. It is placed on top of pipe bedding material (see Figure 1.1).

1.3.5 Bedding material - material surrounding the pipe, which beds it in position. The bedding comprises three zones, viz the pipe underlay, the pipe overlay, and the pipe side support (see Figure 1.1).

1.3.5.1 *Pipe underlay* - bedding on which a pipe is laid (see Figure 1.1).

1.3.5.2 *Pipe overlay* - layer of bedding material between the pipe side-support material and the backfill to protect the pipe from damage, and to provide a means of distributing superimposed loads (see Figure 1.1).

1.3.5.3 *Pipe side support* - layer of bedding material between the pipe underlay and pipe overlay material to provide side support to the pipe and to assist the load-carrying ability of the pipeline (see Figure 1.1).

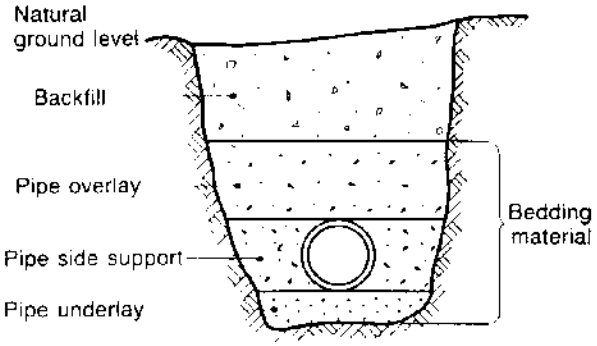

FIGURE 1.1 LAYERS IN A TRENCH INSTALLATION

1.3.6 Electrofusion fittings - fittings in which the heating device to effect fusion jointing remains within the finished joints. These heating devices may be metallic coils inserted into sockets, moulded-in metallic coils or specialized electrically conductive polymers.