



**Perforated plastics drainage and
effluent pipe and fittings**

**Part 2: Perforated effluent pipe and
associated fittings for sewerage
applications**

STANDARDS
Australia



This Australian Standard® was prepared by Committee PL-021, PVC, ABS and Polyamide Pipe Systems. It was approved on behalf of the Council of Standards Australia on 9 March 2007.

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The following are represented on Committee PL-021:

- Australian Chamber of Commerce and Industry
 - Australian Nuclear Science & Technology Organisation
 - Certification Interests (Australia)
 - CSIRO Manufacturing & Infrastructure Technology
 - Energy Networks Association
 - Engineers Australia
 - Local Government New Zealand
 - Master Plumbers, Gasfitters and Drainlayers New Zealand
 - New Zealand Water & Waste Association
 - Plastics Industry Pipe Association of Australia
 - Plastics New Zealand
 - 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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Australian Standard®

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Originally as AS 2439.2—1983.

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PREFACE

This Standard was prepared by the joint Standards Australia/New Zealand committee PL-021, PVC, ABS and Polyamide Pipe Systems, to supersede AS 2439.2—1983.

This Standard incorporates Amendment No. 1 (November 2018). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

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.

This Standard is part of a series on perforated plastics drainage and effluent pipe and fittings, as follows:

AS

2439

2439.1 Part 1: Perforated drainage pipe and associated fittings

2439.2 Part 2: Perforated effluent pipe and associated fittings for sewerage application
(this Standard)

Information on the installation of perforated plastics effluent pipe is available from the relevant State health authority.

The objective of this revision is to change the classification system for perforated effluent pipes. The former stiffness classes 100, 200 and 400 have been replaced by stiffness classes S2, S4 and S8 respectively. The SN classification is used in a range of Australian and International Standards for flexible pipes and the Committee considered it appropriate to bring this Standard into line with the others.

This is a performance Standard and, therefore, all requirements and tests are related to end-use. It is not the intention of this Standard to establish how strong the product is, but rather to determine if the product is strong enough to fulfil the desired function.

The requirements and tests contained in this Standard relate to field conditions as follows:

Bending—pipe is often bent at temperatures close to 0°C.

Straightening—coils are often unwound in cold conditions.

High-temperature impact resistance—pipe laid out in the hot sun must not be soft to the extent it is damaged during backfilling.

Low-temperature impact resistance—pipe will not fail due to handling, fill material or degradation in service.

Pipe stiffness—pipe must be stiff enough to withstand the design loads after back-filling and settlement.

Elongation—pipe must not excessively elongate during installation.

Joint separation—joints must not separate when subjected to tensile forces induced when laying.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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STANDARDS AUSTRALIA

Australian Standard

Perforated plastics drainage and effluent pipe and fittings

Part 2: Perforated effluent pipe and associated fittings for sewerage applications

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for perforated plastics effluent pipe and associated fittings intended for effluent discharge.

1.2 APPLICATION

Means for demonstrating compliance with this Standard shall be accordance with Appendix A.

1.3 REFERENCED DOCUMENTS

The following standards 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

1327 Plastics—Standard atmosphere for conditioning and testing

AS/NZS

1254 PVC pipes and fittings for storm and surface water applications

1462 Methods of test for plastics pipes and fittings

1462.22 Part 22: Method for the determination of pipe stiffness

HB 18 Conformity assessment

HB 18.28 Guide 18: Guidance on third-party certification system for products

A1

AS ISO/IEC

17025 General requirements for the competence of testing and calibration laboratories

1.4 DEFINITIONS

For the purpose of this Standard, the definitions given in AS/NZS 1254 apply.

1.5 TYPES

Perforated plastics effluent pipe shall be either one of the following:

(a) Type 3—Corrugated pipe.

(b) Type 4—Plain wall pipe.

1.6 CLASSIFICATION

Type 3 and Type 4 pipe shall be classified as SN2, SN4 or SN8.