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Standards

Association of

Australia



Australian Standard[®] 2977.2—1988

**UNPLASTICIZED PVC (UPVC) PIPES FOR
PRESSURE APPLICATIONS—
COMPATIBLE WITH CAST IRON OUTSIDE
DIAMETERS**

Part 2—POST-FORMED BENDS



This Australian Standard was prepared by Committee PL/21, Unplasticized PVC (UPVC) Pipe. It was approved on behalf of the Council of the Standards Association of Australia on 12 May 1988 and published on 8 August 1988.

The following interests are represented on Committee PL/21:

CSIRO, Division of Building Research
Department of Local Government, Qld
Engineering and Water Supply Department, S.A.
Federated Master Plumbers of Australia
Hunter District Water Board
Melbourne & Metropolitan Board of Works
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The Plastics Institute of Australia Inc.
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AUSTRALIAN STANDARD

**UNPLASTICIZED PVC (UPVC) PIPES
FOR PRESSURE APPLICATIONS—
COMPATIBLE WITH CAST IRON
OUTSIDE DIAMETERS**

**Part 2
POST-FORMED BENDS**

AS 2977.2—1988

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PREFACE

This Standard was prepared by the Association's Committee PL/21, Unplasticized PVC Pipe, under the Authority of the Plastics Standards Board.

The Standard specifies requirements for unplasticized PVC post-formed bends for use with pipes complying with AS 2977.1, *Unplasticized PVC (UPVC) pipes for pressure applications—Compatible with cast iron outside diameters, Part 1: Pipes.*

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

UNPLASTICIZED PVC (UPVC) PIPES FOR PRESSURE APPLICATIONS—
COMPATIBLE WITH CAST IRON PIPE OUTSIDE DIAMETERS

PART 2: POST-FORMED BENDS

1 SCOPE. This Standard specifies requirements for unplasticized PVC (UPVC) post-formed bends for pressure applications for use with pipes complying with AS 2977.1.

2 REFERENCED DOCUMENT. The document below is referred to in this Standard:

AS

2977 Unplasticized PVC (UPVC) pipes for pressure applications—Compatible with cast iron outside diameters
Part 1: Pipes (AS 2977.1)

3 DEFINITIONS. For the purpose of this Standard the definitions below apply:

3.1 Post-formed bend—a bend produced from pipe conforming to AS 2977.1.

3.2 Working pressure—the maximum pressure that can be sustained by the type and class of pipe or fitting for its estimated useful life under the expected working conditions.

4 MATERIAL. The pipe from which the bend is formed shall comply with the requirements of AS 2977.1.

5 CLASSIFICATION. Post-formed bends shall be classified by their static working pressure. The wall thickness, when thinned down by bending, shall be not less than the minimum wall thickness required for the rated working pressure of the pipeline.

6 DIMENSIONS. A tolerance of $\pm 2^\circ$ shall apply to the specified bend angle.

7 FREEDOM FROM DEFECTS.

NOTE: The defects described in Clauses 7.1 and 7.2 cannot be completely quantified. Where the presence, size or frequency of any of these are considered to be of concern, arrangements should be made between purchaser/Statutory Authority/certifying body (as appropriate), and the manufacturer. This may be achieved by the provision of acceptable type samples.

Where defects are present and the product is submitted for acceptance, the manufacturer should be able to demonstrate fitness for purpose.

7.1 General. Defects shall not affect the performance or function of the pipe in service.

Pipes shall not have any blisters and heat marks. When grooves, wrinkles, rippling, dents or projections are present, the pipe shall comply with the dimensional requirements of Table 2.1 of AS 2977.1.

7.2 Pipe ends. Pipe ends shall not have any chips and rough edges and shall have sharp edges removed. Jointing surfaces shall be smooth.

8 MARKING. All post-formed bends shall be durably marked or moulded, using lettering of 5 mm minimum height, with the following information:

- The manufacturer's name or registered trademark.
- Nominal size in the form '100', as appropriate.
- The letters 'CIOD'.
- The letters 'UPVC'.
- Classification in accordance with Clause 5.
- Angle of bend.
- Date of manufacture, using the ISO system giving the year, the month of the year and the day of the month, in the form 880219 (i.e., the 19th of February, 1988), as appropriate.
- Identification of place of manufacture. The manufacturer's code is acceptable, e.g., P1.

EXAMPLE: The following is a complete example of the mandatory marking and the order required.

TRADE NAME 100 CIOD UPVC CLASS 12 10° 880219 P1.

NOTE: Manufacturers who place the number of this Australian Standard on products, or on packaging or literature related thereto, should ensure that the products are manufactured to comply with the Standard.

Attention is particularly drawn to the scheme for independent assurance provided by the StandardsMark which is a registered certification trademark owned by the Standards Association of Australia and which is available for use with suitable Australian Standards.

The presence of the StandardsMark on or in relation to a product is an assurance that the goods have been produced under a system of supervision, control and testing applied during manufacture and including periodical inspections at the manufacturer's works in accordance with the certification mark scheme of the SAA.

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