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NON-METALLIC CONDUITS AND FITTINGS



STANDARDS ASSOCIATION OF AUSTRALIA

Incorporated by Royal Charter



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Australian Electrical and Electronics Manufacturers Association
Confederation of Australian Industry
Department of Construction
Department of Productivity
Department of Public Works, N.S.W.
Electrical Contractors Association of Australia
Electricity Supply Association of Australia
Plastics Institute of Australia, Inc.
Railways of Australia Committee
Telecom Australia

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AUSTRALIAN STANDARD

NON-METALLIC CONDUITS AND FITTINGS

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P R E F A C E

This standard was prepared by the Association's Committee on Electrical Accessories as a revision of AS 2053—1977.

AS 2053—1977 superseded the approval and test specifications AS C154, AS C173, AS C175 and AS C183 on 1 February 1979. It also introduced two new classes of non-metallic conduit, viz light duty and heavy duty. These two new classes were replacements for the previous classifications, i.e. Class A, Class B and Category A.

This edition introduces additional requirements for the protection of conduit intended for use in direct sunlight. These requirements have been introduced as a result of reports that light duty conduit suffered premature failure in locations where it was exposed to constant direct sunlight. At the same time, the dimensions for oval conduits have been amended and the sizes extended, in order to facilitate their use with metric cables. Some editorial updating has also been carried out.

This standard may require reference to the following standards:

- AS 1014 Gauging of Metric Screw Threads
- AS 1199 Sampling Procedures and Tables for Inspection by Attributes
- AS 1315 Specification and Methods of Test for Portland Cement
- AS 1342 Precast Concrete Drainage Pipes
- AS 1345 Rules for the Identification of Piping, Conduits and Ducts
- AS 1392 Precast Concrete Pressure Pipes
- AS 1399 Guide to the Use of AS 1199, Sampling Procedures and Tables for Inspection by Attributes
- AS 1433 Paint Colours for Building Purposes
- AS 1477 Unplasticized PVC (UPVC) Pipes and Fittings for Pressure Applications
- AS 1711 Asbestos Cement Pressure Pipes
- AS 1721 General Purpose Metric Screw Threads
- AS 1852 International Electrotechnical Vocabulary

AS 1997 Plain Limit Gauges

AS 3000, Part 1 SAA Wiring Rules

AS C100 Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment

AS K185 Colours for Specific Purposes

BS 2537 Ethanediol (Ethylene Glycol)

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard for NON-METALLIC CONDUITS AND FITTINGS

SECTION 1. SCOPE AND GENERAL REQUIREMENTS

1.1 SCOPE. This standard specifies requirements for non-metallic conduits and fittings, as defined below, intended for the protection of cables in an electrical installation, in accordance with AS 3000, Part 1.

1.2 APPLICATION.

1.2.1 Compliance with this Standard. Except where noted in Clause 1.2.2 below, conduits and fittings shall be deemed to comply with this standard only if they comply with all the relevant requirements of this Section and with the relevant requirements and tests of the following Sections, as applicable:

Section 2—Rigid UPVC Conduit and Fittings

Section 3—Asbestos Cement Enclosures

Section 4—Flexible PVC Conduits and Fittings.

1.2.2 Pipes Complying with Other Standards.

1.2.2.1 Concrete pipes. Precast concrete pipes complying with AS 1342 or AS 1392 shall be deemed to comply with this standard provided that they are marked in accordance with Clause 1.9 herein.

1.2.2.2 UPVC pipes. Unplasticized PVC (UPVC) pipes of nominal size 65 mm and above complying with the requirements of Class 9 and Class 12 pipes of AS 1477 shall be deemed to comply with requirements for light duty conduits and heavy duty conduits, respectively, of this standard, provided that—

- (a) they are marked in accordance with Clause 1.9 herein; and
- (b) they pass the tests of Section 2.

1.2.2.3 Asbestos cement pipes. Asbestos cement pipes complying with AS 1711 shall be deemed to comply with this standard provided that—

- (a) they are marked in accordance with Clause 1.9 herein; and
- (b) they pass the tests of Section 3.