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**1660.2—1986**

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**METHODS OF TEST FOR ELECTRIC  
CABLES, CORDS AND CONDUCTORS**

**Part 2—INSULATION,  
EXTRUDED  
SEMI-CONDUCTIVE  
SCREENS AND  
NON-METALLIC  
SHEATHS**



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This Australian standard was prepared by Committee EL/3, Electric Wires and Cables. It was approved on behalf of the Council of the Standards Association of Australia on 22 July 1986 and published on 5 September 1986.

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The following interests are represented on Committee EL/3:

Australian Electrical and Electronic Manufacturers Association  
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Department of Aviation  
Department of Defence  
Department of Industrial Relations (New South Wales)  
Electrical Contractors Association of Australia  
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AUSTRALIAN STANDARD

**METHODS OF TEST FOR ELECTRIC  
CABLES, CORDS AND CONDUCTORS**

**Part 2**

**INSULATION, EXTRUDED  
SEMI-CONDUCTIVE SCREENS  
AND NON-METALLIC SHEATHS**

**AS 1660.2—1986**

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## PREFACE

This standard was prepared by the Association's Committee on Electric Wires and Cables and is based closely on IEC 540, Test Methods for Insulation and Sheaths of Electric Cables and Cords (Elastomeric and Thermoplastic Compounds), and acknowledgement is given to the assistance received therefrom.

This standard is Part 2 of a four-part standard and is published concurrently with Parts 1, 3 and 4. Overall, all four standards constitute a revision of and proposed replacement for—

AS 1660 Methods of Test For Electric Cables and Flexible Cords (including Conductors, Insulation and Sheath)  
Part 1—1974 Test Methods for Conductors  
Part 2—1974 Test Methods for Insulation, Sheath and Braid  
Part 3—1974 Test Methods for Complete Cable  
Part 4—1974 Test Methods for Complete Flexible Cords

It should be noted that the four Parts of this edition of AS 1660 are not directly equivalent to the four Parts of the 1974 edition.

The four Parts of this new edition of AS 1660 are—

Part 1—Conductors and Metallic Components

Part 2—Insulation, Extruded Semi-conductive Screens and Non-metallic Sheaths

Part 3—Electrical Tests

Part 4—Complete Cable and Flexible Cord

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## STANDARDS ASSOCIATION OF AUSTRALIA

## Australian Standard

## METHODS OF TEST FOR ELECTRIC CABLES, CORDS AND CONDUCTORS

PART 2—INSULATION, EXTRUDED SEMI-CONDUCTIVE SCREENS AND  
NON-METALLIC SHEATHS

## SECTION 1. SCOPE, AND GENERAL REQUIREMENTS

**1.1 SCOPE.** This standard sets out the methods of testing insulation, extruded semi-conductive screens and non-metallic sheaths for insulated electric cables.

**1.2 APPLICATION.** The various individual specifications for particular types of cables or cord prescribe the tests from the range herein which are applicable and also specify the category of and criteria for such tests.

**1.3 REFERENCED DOCUMENTS.** The following documents are referred to in this standard:

AS 1301	Methods of Test for Pulp and Paper
AS 2103	Dial Gauges and Dial Test Indicators (Metric Series)
AS 2409	Interchangeable Conical Ground Glass Joints
AS 2752	Preferred Numbers and Their Use
ASTM D471	Method of Test for Change in Properties of Elastomeric Vulcanizates Resulting from Immersion in Liquids
BS 2782	Part 7—Rheological properties Method 720A Determination of melt flow rate of thermoplastics

BS 3433 Method for the Determination of Moisture Content of Paper and Board by the Oven-drying Method

**1.4 TESTING TEMPERATURE.** Unless otherwise specified, all tests shall be carried out in an ambient temperature of  $23 \pm 2^\circ\text{C}$ .

**1.5 SELECTION OF SPECIMENS.** All specimens used for testing shall be taken at least 300 mm from the end of a factory length of finished cable, flexible cable or flexible cord.

**1.6 DEFINITIONS.** For the purpose of this standard, the definitions given in the relevant cable standard and the following apply.

**1.6.1 Median value**—value obtained from a succession of test results as follows:

- Even number of results ..... average value of the two middle results.
- Odd number of results ..... value of middle result.