Australian Standard®

Telecommunication cables—Insulation, sheath and jacket

Part 2: Test methods

This Australian Standard® was prepared by Committee CT-001, Communications Cabling. It was approved on behalf of the Council of Standards Australia on 14 August 2008.
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- Australian Chamber of Commerce and Industry
- Australian Communications and Media Authority
- Australian Industry Group
- Australian Information Industry Association
- Australian Subscription Television and Radio Association
- Broadcast Australia
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- ACE Technical Consulting
- Australian Vinyls
- General Cable Australia
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- International Testing and Certification Services
- Panduit (Australia)
- Ponga Donga
- Prysmian Power Cables & Systems Australia

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Part 2: Test methods

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee CT-001, Communications Cabling, to supersede, in part, AS 1049—2003, *Telecommunication cables—Insulation, sheath and jacket*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian rather than an Australian/New Zealand Standard.

This Standard incorporates Amendment No. 1 (July 2010). 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.

In the revision of AS 1049—2003, the Committee decided to issue the new edition in two parts, as follows:

AS	
1049	Telecommunication cables—Insulation, sheath and jacket
1049.1	Part 1: Materials
1049.2	Part 2: Test methods (this Standard)

Part 1 of the Standard specifies the requirements for the composition of various materials, insulation, sheath and jacket.

Part 2 provides a set of reference test methods for determining compliance with the requirements of this Standard.

The objective of this Standard is to specify test methods to evaluate the properties of materials used to manufacture telecommunication cables. This Standard is intended for use by polymer manufacturers, communication cable manufacturers and end-users.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the Appendix to which they apply. A 'normative' Appendix is an integral part of a Standard, whereas an 'informative' Appendix is only for information and guidance. Informative sections are included also in the main body of this Standard.

The meanings of terms used in this Standard are as follows:

Shall—indicates that a statement is mandatory.

Should—indicates a recommendation.

May—indicates the existence of an option.

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

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STANDARDS AUSTRALIA

Australian Standard
Telecommunication cables—Insulation, sheath and jacket

Part 2: Test methods

1 SCOPE

This Standard specifies test methods to evaluate the properties of materials used to manufacture telecommunication cables.

The scope of this Standard does not include the following:

(a) Cables using materials that are semi-conductive.

(b) Aspects of telecommunication cables such as spacers or cores in coaxial cables.

(c) Dimensions or electrical requirements of completed cables.

(d) Cables used to conduct electrical power.

Table 1.1 provides a summary of the material tests that are set out in the Appendices of this Standard.

2 APPLICATION

This Standard is intended for use by the following:

(a) Polymer manufacturers, to form the basis of the raw material quality control procedures for the manufacture of polymer compounds.

(b) Cable manufacturers, to form the basis of the cable material quality control procedures for the manufacture of a range of insulation, sheath and jacket of different materials.

(c) Cable end-users, to form the basis of the cable acceptance procedures for the completed cable.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS		
1049	Telecommunication cables—Insulation, sheath and jacket	
1049.1	Part 1:	Materials
2700	Colour Standards for general purposes	
4004	Lighting booths for visual assessment of colour and colour matching	
AS/NZS		
1580	Paints and related materials—Methods of test	
1580.601.3	Method 601.3:	Colour—Methods of colour measurement
1660	Test methods for electric cables, cords and conductors	
1660.2.1	Part 2.1:	Insulation, extruded semi-conductive screens and non-metallic sheaths—Methods for general application
1660.2.2	Part 2.2:	Insulation, extruded semi-conductive screens and non-metallic sheaths—Methods specific to elastomeric, XLPE and XLPVC materials