

AS/NZS 4026:2001

AS/NZS 4026

Australian/New Zealand Standard™

**Electric cables—For underground  
residential distribution systems**



**S t a n d a r d s** Australia



**STANDARDS**  
NEW ZEALAND  
*Pūranga Aotearoa*

## **AS/NZS 4026:2001**

---

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-003, Electric Wires and Cables. It was approved on behalf of the Council of Standards Australia on 18 April 2001 and on behalf of the Council of Standards New Zealand on 27 April 2001. It was published on 28 May 2001.

---

The following interests are represented on Committee EL-003:

Australasian Railway Association  
Australian Electrical and Electronic Manufacturers Association  
Australian Industry Group  
Department of Defence, Australia  
Department of Mineral Resources, N.S.W.  
Electrical Contractors Association of New Zealand  
Electricity Supply Association of Australia  
Institution of Engineers, Australia  
Ministry of Commerce, New Zealand  
National Electrical & Communications Association  
New Zealand Manufacturers Federation  
Regulatory Authorities (Electrical)  
Testing Interests (Australia)

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at [www.standards.com.au](http://www.standards.com.au) or Standards New Zealand web site at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

---

AS/NZS 4026:2001

Australian/New Zealand Standard™

## **Electric cables—For underground residential distribution systems**

First published as AS 4026—1992.  
Jointly revised and designated AS/NZS 4026:2001.

### **COPYRIGHT**

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 3900 8

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables, to supersede AS 4026—1992 and NZS/AS 4026-1992, *Electric cables—For underground residential distribution systems*. The Standard applies to a range of cables recommended for use by electricity distributors in underground residential distribution (URD) systems at working voltages of 0.6/1 (1.2) kV, 6.35/11 (12) kV and 12.7/22 (24) kV.

For reasons of standardization and rationalization, this Standard provides for the construction, dimensions and test requirements of only a limited range of cables.

The requirements of this Standard are compatible with and complementary to those for the range of cables covered in AS/NZS 1429.1, AS 1026 and AS/NZS 5000.1.

This Standard differs from the previous edition in the following significant ways:

- (a) This Standard has been published as a Joint Australian/New Zealand Standard.
- (b) For 6.35/11 (12) kV distribution network cables an additional 300 mm<sup>2</sup> conductor size has been included in the rationalized range.
- (c) The terms 'light duty' and 'heavy duty' in reference to metallic screens for cables complying with AS/NZS 1429.1 have been replaced by nominal short circuit ratings of 3 kA and 10 kA respectively.
- (d) For XLPE insulated 0.6/1 (1.2) kV distribution cables, separate rationalized ranges of conductor sizes have been included for Australia and New Zealand.
- (e) For XLPE insulated 0.6/1 (1.2) kV service cables, an additional 50 mm<sup>2</sup> conductor size has been included in the rationalized range.
- (f) An additional high voltage Type Test on the XLPE insulated cores of the 0.6/1 (1.2) kV service cables has been introduced.
- (g) Additional maximum continuous current rating data has been included to provide for installation at different soil temperatures.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE.....	5
1.2 APPLICATION .....	5
1.3 REFERENCED DOCUMENTS.....	5
<b>SECTION 2 XLPE INSULATED 6.35/11(12)kV AND 12.7/22(24)kV DISTRIBUTION NETWORK CABLES</b>	
2.1 SCOPE OF SECTION .....	7
2.2 CONSTRUCTION.....	7
2.3 CONDUCTORS .....	7
2.4 CONDUCTOR SCREEN.....	7
2.5 INSULATION .....	7
2.6 INSULATION SCREEN .....	7
2.7 METALLIC SCREEN .....	7
2.8 FILLERS AND BINDER TAPES.....	8
2.9 NON-METALLIC SHEATH.....	8
2.10 MARKING OF CABLE.....	9
2.11 PREPARATION FOR DELIVERY .....	9
2.12 TESTS .....	9
<b>SECTION 3 PAPER INSULATED 6.35/11(12)kV AND 12.7/22(24)kV DISTRIBUTION NETWORK CABLES</b>	
3.1 SCOPE OF SECTION .....	10
3.2 CONSTRUCTION.....	10
3.3 CONDUCTORS .....	10
3.4 IMPREGNATION .....	10
3.5 METAL SHEATH.....	10
3.6 NON-METALLIC SHEATH .....	11
3.7 MARKING OF CABLE.....	11
3.8 MARKING OF DRUMS .....	11
3.9 PREPARATION FOR DELIVERY .....	12
3.10 TESTS .....	12
<b>SECTION 4 XLPE INSULATED 0.6/1(1.2)kV DISTRIBUTION CABLES</b>	
4.1 SCOPE OF SECTION .....	13
4.2 CONSTRUCTION.....	13
4.3 CONDUCTORS .....	13
4.4 INSULATION .....	13
4.5 LAY-UP OF CORES .....	13
4.6 FILLERS AND BINDER TAPES.....	13
4.7 NON-METALLIC SHEATH .....	14
4.8 MARKING OF CABLE.....	14
4.9 PREPARATION FOR DELIVERY .....	14
4.10 TESTS .....	14

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-