

AS/NZS 2802:2000  
(Incorporating Amendment No. 1)  
Reconfirmed 2020

Australian/New Zealand Standard™

**Electric cables—Reeling and trailing—  
For mining and general use (other than  
underground coal mining)**



## **AS/NZS 2802:2000**

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 28 April 2000 and on behalf of the Council of Standards New Zealand on 24 April 2000. It was published on 19 June 2000.

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The following 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  
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National Electrical and Communications Association  
New Zealand Manufacturers' Federation  
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*This Standard was issued in draft form for comment as DR 98413.*

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**RECONFIRMATION**  
**OF**  
**AS/NZS 2802:2000**  
**Electric cables—Reeling and trailing—**  
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Technical Committee EL-023 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 9 October 2019.

Approved for reconfirmation in New Zealand on behalf of the New Zealand Standards Approval Board on 18 June 2020.

The following are represented on Technical Committee EL-023:

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Aviation and Marine Engineers Association  
Construction Forestry Miners and Energy Union  
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## NOTES

## Australian/New Zealand Standard™

# **Electric cables—Reeling and trailing— For mining and general use (other than underground coal mining)**

Originated in Australia as AS C81-1941.  
Previous edition in Australia AS 2802—1992.  
Previous edition in New Zealand NZS/AS 2802—1992.  
Jointly revised and designated AS/NZS 2802:2000.  
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## PREFACE

This Standard was prepared by the Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables, to supersede AS 2802—1992 and NZS/AS 2802—1992.

*This Standard incorporates Amendment No. 1 (December 2003). 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.*

The objective of the Standard is to specify requirements for construction, dimensions and tests of reeling and trailing cables for mining (other than underground coal mining) and general use for voltages 1.1 kV up to 33 kV.

The Standard specifies two classes of cables for reeling and trailing cables for mining and general use, and defines cable structures developed to satisfy particular industry requirements. For high voltage applications, cables with a rationalized range of conductor sizes are specified to provide an optimum range to meet most applications.

Improvements made in manufacturing techniques and quality control, together with availability of cable materials with improved electrical and mechanical properties, permit the production of a high class of cable.

The cables specified in this Standard have been designed to meet the special requirements of the Australian surface mining industry and also to comply with the requirements of AS 3007, *Electrical installations—Surface mines and associated processing plant* (all parts).

Although surface mining was a significant factor in determining the cables to be incorporated in this Standard, it is recognized that many of these cables will be equally applicable to other installations, e.g. underground metalliferous mines, ship loaders, travelling cranes, reclaimers at loading stations and other large materials handling plant.

A number of cables specified in this Standard might also meet the requirements for underground coal mines; however, reeling and trailing cables for coalmines are the subject of AS/NZS 1802, *Electric cables—Reeling and trailing—For underground coal mining purposes*.

This Standard differs from the 1992 edition as follows:

- (a) It is published as a Joint Australian/New Zealand Standard.
- (b) Two additional Class 1 cables, Types 451 and 455 have been included.
- (c) The tests and criteria for insulation and sheathing materials have been deleted and reference made to AS/NZS 3808.
- (d) A number of test methods have been deleted and reference made to AS/NZS 1660.
- (e) The direction of lay of wires and bunches or strands for power and earth conductors (other than composite earth screens) is no longer specified.
- (f) The definition of voltage designation has been modified.

In the preparation of this Standard consideration was also given to the following publications and acknowledgment is made of the assistance received therefrom:

AEIC No. CS 6, *Ethylene propylene rubber insulated shielded power cables rated 5 through 69 kV*

NEMA No. WC 8 ICEA Publication No. S-68-516, *Ethylene-propylene-rubber-insulated wire and cable for the transmission and distribution of electrical energy*

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.

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