AS/NZS 3018:2001
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Electrical installations—Domestic installations

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-001, Wiring Rules. It was approved on behalf of the Council of Standards Australia on 30 July 2001 and on behalf of the Council of Standards New Zealand on 1 August 2001. It was published on 25 September 2001.

The following interests are represented on Committee EL-001:

The Association of Consulting Engineers Australia
Australian Building Codes Board
Australian Electrical and Electronic Manufacturers Association
Communications, Electrical Plumbing Union
Electrical Contractors Association of New Zealand
Electrical Contractors Association Qld
Electrical Safety Organisation (New Zealand)
Electricity Supply Association of Australia
Institute of Electrical Inspectors
Institution of Engineers Australia
Insurance Council of Australia Limited
Ministry of Economic Development New Zealand
National Electrical and Communications Association
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Regulatory authorities (electrical)
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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.

This Standard was issued in draft form for comment as DR 00409.

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(Incorporating Amendment No. 1)

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Electrical installations—Domestic installations

Originated as AS/NZS 3018:1997.
Second edition 2001.
Reissued incorporating Amendment No. 1 (July 2003).

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 4086 3

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-001 on Wiring Rules.

This Standard incorporates Amendment No. 1 (July 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 purpose of this Standard is to provide requirements and outline acceptable methods for installing electrical equipment in single domestic premises including alterations, additions and repairs. Sufficient information has been included to allow the completion of an electrical installation in a single domestic installation without reference to AS/NZS 3000.

The preparation of this Standard was undertaken following requests from a broad cross-section of the electricity industry for a simplified set of requirements applicable to domestic premises without the need for further reference to AS/NZS 3000 except for alternative methods.

It must be emphasized that this Standard does not attempt to include every installation method outlined in AS/NZS 3000. It contains simplified installation methods which are consistent with AS/NZS 3000 and are considered by the electrical industry to be the most common used for domestic installations. Therefore an installation carried out in accordance with this Standard should be considered as complying with AS/NZS 3000.

The simplified requirements include the following:

(a) The use of circuit-breakers only.

(b) The use of self-contained switchboards.

(c) A recommendation that the switchboard be installed inside the dwelling.

(d) Drawings of switchboards and circuit diagrams showing examples of arrangements including the use of Residual Current Devices (RCDs).

(e) Tables providing information on voltage drop calculations based on the size of the consumers mains relevant to the determined demand and the length of the consumers mains and associated final subcircuits.

(f) Tables providing guidance on the maximum number of points that may be connected to final subcircuits including mixed final subcircuits.

(g) Drawings showing examples of various supply and metering arrangements.

Any requirements which may be applicable only in Australia or New Zealand are indicated by the symbol **A** or **NZ** in the right margin.

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 are deemed to be requirements of this Standard.

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S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard sets out acceptable methods for electrical installations in single domestic premises, based on the requirements of AS/NZS 3000.

The requirements of AS/NZS 3000 are intended to protect persons, livestock and property from electric shock, fire and physical injury hazards that may arise from a domestic electrical installation that is used with reasonable care and with due regard to the intended purpose of the electrical installation.

1.2 APPLICATION

This Standard applies only to electrical installations in single domestic premises including alterations, additions and repairs. The requirements and methods outlined are intended to reflect common installation practices for domestic electrical installations connected to a multiple earthed neutral (MEN) system of earthing. This Standard is consistent with AS/NZS 3000 and includes sufficient definitions, information and illustrations to allow an electrical installation to be carried out without reference to AS/NZS 3000 except for alternative methods.

The requirements in this Standard are modelled on electrical installations with a maximum demand limit of 80 A single phase or 50 A per phase for multiphase, however they do not prohibit application for higher maximum demands.

NOTE: The connection of an electrical installation with a maximum demand in excess of 80 A to a single phase supply may depend on the requirements of the appropriate electricity distributor as they may have limitations on the maximum demand which may be connected to single phase supply.

Electricity distributors and regulatory authorities may have particular requirements which are normally contained in service rules and other documents.

NOTES: The particular requirements may be contained in —

1 electricity distributors Service Rules (e.g. matters related to supply and metering); and

2 AUSTEL TS 009 (e.g. the segregation of telecommunication cables from other wiring systems);

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