AS/NZS 3100:2017
(Incorporating Amendment No. 1)

AS/NZS 3100:2017

Australian/New Zealand Standard™

Approval and test specification—General requirements for electrical equipment

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-002, Safety of Household and Similar Electrical Appliances and Small Power Transformers. It was approved on behalf of the Council of Standards Australia on 6 December 2016 and by the New Zealand Standards Approval Board on 9 December 2016.
This Standard was published on 13 January 2017.

The following are represented on Committee EL-002:

Australian Industry Group
National Retailers Association (Australia)
Business New Zealand
Consumer Electronic Suppliers Association, Australia
Consumers' Federation of Australia
Electrical Regulatory Authorities, Australia
Electrical consultants
Engineers Australia
JAS-ANZ
Testing Interests New Zealand
WorkSafe, New Zealand
New Zealand Electric Fence Energizer Manufacturers' Standards Group

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CONTENTS

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002 - Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 3100:2009 and its amendments two years from the date of publication.

This Standard is one of a series of Approval and test specifications issued by Standards Australia and Standards New Zealand, whose objective is to provide manufacturers and regulatory bodies with minimum safety requirements for equipment not covered by other standards. This standard is designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the equipment, and which may be used as the basis for approval for sale or for connection to supply in Australia and New Zealand.

This Standard contains general requirements for electrical equipment and can be applied to equipment for which no particular Approval and test specification exists. It also forms the basis of general requirements where an Approval and test specification exists for a piece of equipment. Only safety matters and related conditions are covered.

This Standard was revised to introduce editorial changes and the following technical change:

(a) Requirements for equipment incorporating batteries added;

(b) Referenced documents and associated text updated.

A1
DOA
30/11/19

This Standard incorporates Amendment No. 1 (November 2017). 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. Where an application date other than immediate is applicable to an amendment the date of application (DOA) and the date of withdrawal (DOW) if relevant, is indicated by the marginal bar.

For appliances, where conflict or uncertainty arises between the requirements detailed in this Standard and those detailed in AS/NZS 60335.1, those in AS/NZS 60335.1 shall take precedence. Where an interpretation of the requirements in AS/NZS 3100 is needed, the interpretation made shall be based upon the requirements detailed in AS/NZS 60335.1.

Annex A of this Standard contains fire hazard test requirements for equipment that is not designated as 'attended' or 'unattended'.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the Annex to which they apply. A 'normative' Annex is an integral part of a Standard, whereas an 'informative' Annex is only for information and guidance

Standards Australia/Standards New Zealand

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Approval and test specification – General requirements for electrical equipment

SECTION 1: SCOPE, APPLICATION AND REFERENCED DOCUMENTS

1.1 Scope

This Standard specifies the general safety requirements for, or with respect to, equipment (including fittings, accessories, appliances and apparatus) of classes and types that are used in, or intended for use in, or in connection with, electrical installations in buildings, structures, and premises. It is not applicable to an appliance within the scope of AS/NZS 60335.1 or a part 2 of this standard, except where an approval and test specification makes reference to this standard.

Guidelines covering design and testing of electrical equipment to ensure safety and protection against electric shock, including the principles and application of double insulation, are contained in Annex D. Users of this Standard may find it helpful to study Annex D before reading the main body of this Standard.

1.2 Application

As and when an individual Standard dealing with specific features of the design and construction, and the testing, of any particular class or type of equipment is issued, it shall supersede those general requirements of this Standard that are specifically dealt with in those individual Standards.

Any material, fitting, cable, accessory, appliance or apparatus used in, or in connection with, an electrical installation shall comply with the appropriate individual Standard. In the absence of any such Standard, the appropriate provisions of this Standard shall apply.

NOTE Where an individual Standard makes reference to the appropriate clauses of this Standard, it is taken to mean that Clauses 3, 4, 5, 6.1, 6.2, 6.3, 7 and 8.15.8 of this Standard are applicable to the individual Standard. The remaining tests of Clause 8 are only applicable if referred to by Clauses 3, 4, 5, 6.1, 6.2, 6.3 or 7 of this Standard or if directly referred to in the individual Standard.

Should any requirement of an individual Standard differ from any of the general requirements of this Standard, the requirement of the individual standard shall prevail.

Where the words 'National Wiring Rules' have been used throughout the text of this Standard, it shall be taken to mean AS/NZS 3000.

1.3 Referenced documents

The following documents are referred to in this Standard:

NOTE Where no relevant joint Australia/New Zealand Standard is listed, the referenced Australian Standard is deemed to be appropriate for the purpose of this Standard. For undated references, the latest edition of the referenced document (including any amendments) applies.

Standards

AS

1834.1 Material for soldering – Solder alloys