

Australian/New Zealand Standard™

**Essential safety requirements for low
voltage electrical equipment**

AS/NZS 3820:1998

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee QR-012, Conformance Marking to Regulatory Requirements. It was approved on behalf of the Council of Standards Australia on 2 September 1998 and on behalf of the Council of Standards New Zealand on 14 September 1998. It was published on 5 October 1998..

The following are represented on Committee QR-012:

Association of Certification Bodies (Australia)
Australian Chamber of Commerce and Industry
Australian Communications Authority
Australian Electrical and Electronic Manufacturers Association
Australian Information Industry Association
Australian Telecommunications Industry Association
Committee for Plumbing Products Authorization (Australia)
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Department of Health and Family Services, Medical Devices Section,
Therapeutic Goods Administration (Australia)
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee QR/012, Conformance Systems for Electrical and Plumbing Products, in response to a proposal from the Electrical Regulatory Authorities Coordinating Committee.

This Standard incorporates Amendment No. 1 (January 2004). 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 this Standard is to provide a set of outcomes-oriented criteria for the safety of electrical equipment, primarily for use by electrical regulators in relation to products for which regulatory approval before sale is not required (non-declared articles). For electrical equipment that is required to be approved by regulators before being placed on the market (declared articles), there are specific regulatory requirements additional to the general requirements given in this Standard.

The Standard is intended to be consistent with the criteria of the European Union low voltage directive.

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

European Union low voltage directive.

IEC Guide 104, The preparation of safety publications and the use of basic safety publications and group safety publications.

NZECP3, New Zealand Electrical Code of Practice for Electrical Safety of Fittings and Electrical Appliances

This Standard is not a substitute for Standards that set out objective safety requirements based on testing. Rather it provides a high-level generic description of the safety outcomes to be achieved and is intended to assist in providing a basis for regulatory uniformity. Specific product Standards provide measurable criteria that are regarded as ensuring that the outcomes described in this Standard will be met.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Essential safety requirements for low voltage electrical equipment****1 SCOPE**

This Standard sets out requirements for low voltage electrical equipment, to ensure that electrical equipment is constructed in accordance with good engineering practice in regard to safety such that it does not endanger the safety of persons (particularly children, the elderly and people with disabilities), domestic animals or property, when properly installed and maintained and used in applications for which it was made.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

3100 Approval and test specification—General requirements for electrical equipment

3112 Approval and test specification—Plugs and socket-outlets

4417 Marking of electrical products to indicate compliance with regulations

4417.1 Part 1: General rules for the use of the mark

4417.2 Part 2: Specific requirements for electrical safety regulatory applications

3350 Safety of household and similar electrical appliances

3350.1 Part 1: General requirements

3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

3.1 Certificate of approval

A certificate that is issued by electrical regulators indicating approval for sale, based on testing to safety standards of an electrical product that is a declared article.

3.2 Certificate of suitability

A certificate that provides a presumption of compliance with safety requirements based on testing of a non-declared article for conformance to relevant Standards.

In Australia, certificates of suitability are issued by electrical regulators indicating that the product is suitable for connection.

In New Zealand, certificates of suitability are not issued and this function is provided by a safety report.

3.3 Declared article

An electrical product that is required by electrical regulators to be approved before being placed on the market (also known as a prescribed article).

3.4 Direct contact

Contact of persons or animals with a conductor that in normal circumstances is live.

3.5 Electric toy

A toy having at least one function dependent on electricity.



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