

AS/NZS 60670.1:2021



Australian/New Zealand Standard™

Boxes and enclosures for electrical accessories for household and similar fixed electrical installations

Part 1: General requirements (IEC 60670-1:2015 (ED.2.0) MOD)



AS/NZS 60670.1:2021

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Better Regulation Division (Fair Trading, Safework NSW, TestSafe)
Consumer Electronics Suppliers Association
Consumers Federation of Australia
Electrical Regulatory Authorities Council, Australia
Engineers Australia
International Accreditation New Zealand
Joint Accreditation System of Australia & New Zealand
National Electrical Communications Association
Plastics Industry Pipe Association of Australia
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Australian/New Zealand Standard™

Boxes and enclosures for electrical accessories for household and similar fixed electrical installations

**Part 1: General requirements (IEC 60670-1:2015
(ED.2.0) MOD)**

Originated as AS/NZS IEC 60670.1:2012.
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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories, to supersede AS/NZS IEC 60670.1:2012, *Boxes and enclosures for electrical accessories for household and similar fixed electrical installations, Part 1: General requirements*.

The objective of this document is to specify requirements for boxes, enclosures and parts of enclosures (hereafter called “boxes” and “enclosures”) for electrical accessories with a rated voltage not exceeding 1 000 V a.c. and 1 500 V d.c. intended for household or similar fixed electrical installations, either indoors or outdoors.

Boxes and enclosures conforming to this standard are suitable for use at ambient temperature, not normally exceeding +40 °C, but their average over a period of 24 h does not exceed +35 °C, with a lower limit of the ambient air temperature of –5 °C.

During the installation the temperature may be outside the above temperature range according to the classification of the boxes and the enclosures.

This document is intended to apply to boxes and enclosures for electrical accessories within the scope of EL-004 committee.

This document may be used as a reference document for other electrical technical committees and subcommittees.

A box or an enclosure which is an integral part of an electrical accessory and provides protection for that accessory against external influences (for example mechanical impact, ingress of solid objects or water, etc.) is covered by the relevant standard for such an accessory.

This document does not apply to —

- (a) ceiling roses;
- (b) luminaire supporting couplers; and
- (c) boxes, enclosures and parts of enclosure specifically designed to be used for cable trunking and ducting systems conforming to IEC 610 24 and which are not intended to be installed outside of these systems.

This document is an adoption with national modifications, and has been reproduced from, IEC 60670-1:2015, *Boxes and enclosures for electrical accessories for household and similar fixed electrical installations – Part 1: General requirements*. The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text. [Appendix ZZ](#) lists the modifications to IEC 60670-1:2015, for the application of this document in Australia and New Zealand.

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NOTES

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**BOXES AND ENCLOSURES FOR ELECTRICAL ACCESSORIES FOR
HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –****Part 1: General requirements**

FOREWORD

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International Standard IEC 60670-1 has been prepared by subcommittee SC 23B: Plugs, socket-outlets and switches, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 2002 and its Amendment 1:2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: Review of classification Table 1.

The text of this standard is based on the following documents:

FDIS	Report on voting
23B/1176/FDIS	23B/1184/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this publication, the following print types are used:

In this standard, the following print types are used:

- requirements proper: in roman type;
- *test specifications: in italic type;*
- explanatory matter: in smaller roman type.

A list of all parts in the IEC 60670 series, published under the general title *Boxes and enclosures for electrical accessories for household and similar fixed electrical installations* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under <http://www.iec.ch> in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

BOXES AND ENCLOSURES FOR ELECTRICAL ACCESSORIES FOR HOUSEHOLD AND SIMILAR FIXED ELECTRICAL INSTALLATIONS –

Part 1: General requirements

1 Scope

This part of IEC 60670 applies to boxes, enclosures and parts of enclosures (hereafter called “boxes” and “enclosures”) for electrical accessories with a rated voltage not exceeding 1 000 V a.c. and 1 500 V d.c. intended for household or similar fixed electrical installations, either indoors or outdoors.

Boxes and enclosures complying with this standard are suitable for use at ambient temperatures not normally exceeding +40 °C, but their average over a period of 24 h does not exceed +35 °C, with a lower limit of the ambient air temperature of –5 °C.

During the installation the temperature may be outside the above temperature range according to the classification of the boxes and the enclosures.

This International Standard is intended to apply to boxes and enclosures for electrical accessories within the scope of IEC technical committee 23.

This standard may be used as a reference document for other IEC technical committees and subcommittees.

A box or an enclosure which is an integral part of an electrical accessory and provides protection for that accessory against external influences (for example mechanical impact, ingress of solid objects or water, etc.) is covered by the relevant standard for such an accessory.

This standard does not apply to

- ceiling roses;
- luminaire supporting couplers;
- boxes, enclosures and parts of enclosures specifically designed to be used for cable trunking and ducting systems complying with IEC 61084 and which are not intended to be installed outside of these systems.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-75:1997¹, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

¹ First edition. This edition has been replaced in 2014 by IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*