

COMMITTEE: EL-002  
Safety of Household and Similar Electrical Appliances  
and Small Power Transformers

DR 24031 CP

**DRAFT**

# **COMBINED POSTAL BALLOT/ AUSTRALIAN / NEW ZEALAND STANDARD FOR COMMENT**

LIABLE TO ALTERATION DO NOT USE AS A STANDARD

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DR 24031 CP

**AS/NZS 60335.2.90:2025**

**Household and similar electrical appliances – Safety –  
Part 2.90: Particular requirements for commercial  
microwave ovens**

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**COMBINED DRAFT FOR COMMENT/POSTAL BALLOT  
STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND**

Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers

**DRAFT  
Australian/New Zealand Standard**

**Household and similar electrical appliances – Safety –**

**Part 2.90: Particular requirements for commercial microwave ovens**

Please note that this document is currently being voted by the committee and the results of the postal ballot will be contingent on public comment received.

Attention is drawn to the fact that this document is a draft only and is liable to alteration in the light of comment received. It is not to be regarded as an Australian/New Zealand Standard until finally issued as such by Standards Australia and Standards New Zealand.

**NOTES OF THE SECRETARY:**

THE INTRODUCTION OF ANY NATIONAL VARIATIONS TO BE INCLUDED IN THIS STANDARD WILL OCCUR AFTER THE PUBLIC COMMENT HAS BEEN CONSIDERED AND PRIOR TO THE PUBLICATION OF THE STANDARD.

THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH IEC 60335-2-90 ED 5, COPIES OF WHICH MAY BE VIEWED BY CONTACTING [enquiries@standards.govt.nz](mailto:enquiries@standards.govt.nz).

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 Standards Australia's Standards Development and Accreditation Committee on xxxxxxxx and by the New Zealand Standards Approvals Board on xxxxxxxx. It was published on xxxxxxxx.

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The following interests are represented on Committee EL-002

Association of Accredited Certification Bodies

Australian Industry Group

Australian Retailers Association

Better Regulation Division (Fair Trading, Safework NSW, TestSafe)

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers' Federation of Australia

Electrical Regulatory Authorities, Australia

Electrical consultants

Engineers Australia

JAS-ANZ

National Retailers Association (Australia)

New Zealand Electric Fence Energizer Manufacturers' Standards Group

Testing Interests New Zealand

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For more information about joint standards, visit [www.standards.govt.nz](http://www.standards.govt.nz) or [www.standards.org.au](http://www.standards.org.au).

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national standards organisation.

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 comment to either the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the title page.

AS/NZS 60335.2.90:2025  
(IEC 60335-2-90 ED 5, IDT)

Australian/New Zealand Standard™

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**Household and similar electrical  
appliances – Safety –**

**Part 2.90: Particular requirements  
for commercial microwave ovens**

(IEC 60335-2-90 ED 5, IDT)

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Originated as AS/NZS 60335.2.90:2006 Jointly revised and redesignated AS/NZS 60335.2.90:2015 Jointly revised and redesignated AS/NZS 60335.2.90:2017 Jointly revised and designated AS/NZS 60335.2.90:2025
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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## AS/NZS 60335.2.90:2025

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –  
SAFETY –****Part 2.90: Particular requirements for commercial microwave ovens****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 60335.2.90:2017 three years from the date of publication of this Standard. During this period AS/NZS 60335.2.90:2017 and its amendments will also remain current. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand.

The text of IEC 60335-2-90 ED 5, prepared by IEC Technical SC 61B, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

The principal changes in this edition as compared with the 2017 edition of AS/NZS 60335.2.90 are as follows (minor changes are not listed):

- a) alignment with AS/NZS 60335.1:2022;
- b) the appliance used in area open to the public has been introduced in Clause 1, 3.8.107, 7.12, 8.1.1, 11.8, 20.2, 22.103.2, 22.105 and 22.117;
- c) Subclauses 5.5, 7.12.1, 11.2, 11.7, 20.1 and 20.101 have been modified to add for stacking installation;
- d) Subclauses 7.1, 11.7 and 22.61 have been modified for the appliance outlets and socket outlets;
- e) Subclause 7.12 has been improved in clarity;
- f) maximum temperature rises of external accessible surfaces have been added in Subclause 11.8;
- g) test criterion has been modified in Subclause 15.101;
- h) Subclause 16.101 has been modified to move the content of 16.101.1, 16.101.2 directly under 16.101.
- i) Subclauses 19.11.2, 19.13, Clause 21, Subclauses 22.105, 22.111 and Annex AA have been improved in clarity;
- j) Annex BB and Annex EE have been modified to add screw requirements

This Standard is an adoption with national modifications of the fifth edition of IEC 60335-2-90, *Household and similar electrical appliances – Safety – Part 2-90: Particular requirements for commercial microwave ovens*. It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 60335.1 *Household and similar electrical appliances – Safety – Part 1: General requirements* and its Amendments, unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of AS/NZS 60335.1:2022.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 60335.1 so as to convert it into the Australian/New Zealand Standard: Safety requirements for commercial microwave ovens.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 2 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and associated noun are also in bold.

p NOTE 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

The essential safety requirements in AS/NZS 3820<sup>1</sup> that could be applicable to requirements for commercial microwave ovens are covered by this standard.

The national variations to IEC 60335-2-90 ED 5 form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

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<sup>1</sup> AS/NZS 3820 *Essential safety requirements for electrical equipment*

The text of the International Standard IEC 60335-2-90 ED 5 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

**AUSTRALIAN NATIONAL VARIATIONS**

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 60335.1:2022

**NEW ZEALAND NATIONAL VARIATIONS**

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 60335.1:2022

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## Annex ANZ (normative)

### Normative references to international publications with their corresponding joint Australia/New Zealand publications

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

NOTE When an international publication has been modified by national variations the relevant joint Australia/New Zealand publication applies if the national variations are needed to ensure the safety of the appliance for Australia/New Zealand conditions. These international publications are indicated by (mod). If an international publication is not so indicated, then either it or the listed Australia/New Zealand publication may be used. Where there is no equivalent international publication listed to a listed Australia/New Zealand publication, then the Australia/New Zealand publication applies

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>AS/NZS</u>	<u>Year</u>
IEC 60068-2-6		<i>Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)</i>		
IEC 60068-2-27		<i>Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock</i>		
IEC 60068-2-52		<i>Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)</i>		
IEC 60335-2-36		<i>Household and similar electrical appliances – Safety – Part 2-36: Particular requirements for commercial electric cooking ranges, ovens, hobs and hob elements</i>		
IEC 60335-2-42		<i>Household and similar electrical appliances – Safety – Part 2-42: Particular requirements for commercial electric forced convection ovens, steam cookers and steam convection ovens</i>		
IEC 60335-2-49		<i>Household and similar electrical appliances – Safety – Part 2-49: Particular requirements for commercial electric appliances for keeping food and crockery warm</i>		
IEC 60335-2-75		<i>Household and similar electrical appliances – Safety – Part 2-75: Particular requirements for commercial dispensing appliances and vending machines</i>		



IEC 60436:2015 IEC 60436:2015 /AMD1:2020	<i>Electric dishwashers for household use – Methods for measuring the performance</i>
IEC 60584-1	<i>Thermocouples – Part 1: EMF specifications and tolerances</i>
ISO 898-1,	<i>Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs with specified property classes – Coarse thread and fine pitch thread</i>
ISO 3506-1	<i>Fasteners – Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs with specified grades and property classes</i>
ISO 3506-2	<i>Fasteners – Mechanical properties of corrosion-resistant stainless steel fasteners – Part 2: Nuts with specified grades and property classes</i>
ISO 3506-3	<i>Mechanical properties of corrosion- resistant stainless steel fasteners – Part 3: Set screws and similar fasteners not under tensile stress</i>
ISO 3506-4	<i>Mechanical properties of corrosion- resistant stainless steel fasteners – Part 4: Tapping screws</i>