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

DR 24026 CP

DRAFT

COMBINED POSTAL BALLOT/ AUSTRALIAN / NEW ZEALAND STANDARD FOR COMMENT

LIABLE TO ALTERATION DO NOT USE AS A STANDARD

DATE OF ISSUE: CLOSING DATE FOR COMMENT: 21 October 2024 16 December 2024

DR 24026 CP

AS/NZS 60335.2.6:2025

Household and similar electrical appliances – Safety –

Part 2.6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances





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 2.6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

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.

Comment on the proposal is invited from persons and organizations concerned with this subject.

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.

COMMENTATORS ARE ADVISED TO CAREFULLY CONSIDER THE TEXT IN THE NATIONAL VARIATIONS.

THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH IEC 60335-2-6 ED 7, COPIES OF WHICH MAY BE VIEWED BY CONTACTING enquiries@standards.govt.nz.

AS/NZS 60335.2.6:2025

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.

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

WorkSafe, New Zealand

Keeping Standards up-to-date

Standards are living documents, which reflect progress in science, technology and systems. To maintain their currency, all standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current standard, which should include any amendments which may have been published since the standard was purchased.

For more information about joint standards, visit www.standards.govt.nz or 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.

This standard was issued in draft form for comment as DR 24026.

AS/NZS 60335.2.6:2025 (IEC 60335-2-6 ED 7, MOD)

Australian/New Zealand Standard™

Household and similar electrical appliances – Safety –

Part 2.6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

(IEC 60335-2-6 ED 7, MOD)

Originated in Australia in part as C102 -1937 Final Australian edition AS 3172 – 1990 Originated in New Zealand as NZSS 1910:1965 Previous edition AS/NZS 3172: 1996 Jointly revised and redesignated AS/NZS 3350.2.6:1998 Second edition AS/NZS 3350.2.6:2001 Jointly revised and redesignated AS/NZS 60335.2.6:2002 Second edition AS/NZS 60336.2.6:2008 Jointly revised and redesignated AS/NZS 60335.2.6:2014 Jointly revised and redesignated AS/NZS 60335.2.6:2014

COPYRIGHT

 $\ensuremath{\mathbb{C}}$ Standards Australia/The Crown in right of New Zealand, administered by the New Zealand Standards Executive

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Published jointly by: Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 Australia, and Standards New Zealand PO Box 1473 Wellington 6140.

ISBN (Print) xxxxxxxxxxxxxx ISBN (PDF) xxxxxxxxxxxxxx

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 60335.2.6:2025

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2.6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances

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 60335.2.6:2014 three years from the date of publication of this Standard. During this period AS/NZS 60335.2.6:2014 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 60335-2-6 ED 7, prepared by IEC Technical TC 61, 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 2014 edition of AS/NZS 60335.2.6 are as follows (minor changes are not listed):

- a) alignment with AS/NZS 60335.1:2022;
- b) b) deletion of notes (15.2) and conversion of notes to normative text (Clause 1, 3.1.9.101, 7.103, 11.7, 15.2, 16.2, 22.109, 22.120, 22.132, 22.124, Figure 103);
- c) application of test probe 19 (8.1.1, 20.2);
- d) alignment of limits on the temperature rise of external accessible surfaces (Clause 11);
- e) addition of requirements for automatic regulation systems and remote automatic regulation systems for induction hobs (3.7.103, 3.11.4, 3.11.5, 3.11.101, 7.12, 19.102, 22.40, 22.62, Annex AA);
- f) addition of requirements for remote operation of ovens (22.51).

This Standard is an adoption with national modifications of the seventh edition of IEC 60335-2-6, Household and similar electrical appliances – Safety – Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances. 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 stationary cooking ranges, hobs, ovens and similar appliances.

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 3820¹ that could be applicable to requirements for stationary cooking ranges, hobs, ovens and similar appliances are covered by this standard.

The national variations to IEC 60335-2-6 ED 7 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).

¹ AS/NZS 3820 Essential safety requirements for electrical equipment

The text of the International Standard IEC 60335-2-6 ED 7 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

AUSTRALIAN NATIONAL VARIATIONS

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2022.

2 Normative references

Insert the following variation:

Approval and test specification— Residual current devices (current operated earth-leakage devices) 3190

3 Terms and definitions

p **3.1.12** Add the following variation:

Note AZ 101 to entry: The outlet load that can be connected to socket-outlets accessible to the user is 10 A

7 Marking and instructions

p 7.1 Insert the following variations:

Appliance socket-outlets accessible to the user need not be marked with the outlet load.

Built-in hobs that require a board in order to meet the temperature limits of 11.8 shall be marked with the substance of the following caution.

CAUTION: The surface temperature exceeds 95 °C. To avoid a hazard, under bench access must be restricted. Refer to the installation instructions.

p **7.15** After the second paragraph *insert* the following variation:

The caution specified in Clause 7.1 for **built-in hobs** shall be marked adjacent to the supply entry on the underside of the **hob**.

11 Heating

p **11.1** *Insert* the following variation as a second paragraph to the addition:

For **hobs** compliance is also checked by the test of 11.301.

p **11.101** *Replace* the paragraph immediately before Table 102 with the following variation:

During the test, the temperature rise of surfaces shall not exceed the values specified in Table 103.

p **11.301** After clause 11.101 *insert* the following variation:

11.301 Hob elements other than induction hob elements are operated under conditions of normal operation except that:

- the vessel is not covered with a lid;
- the water in the vessel is maintained at a depth between 50 mm and 65 mm by the addition of boiling water if necessary;
- thermal controls are adjusted to the highest setting.

If the appliance contains more than one **hob element**, the test is carried out with the **hob element** resulting in the most unfavourable conditions.

The **hob element** is supplied at 1,15 times its power input measured at **rated voltage**. The test is continued for a period of 1 h or until steady conditions are established whichever is shorter.

During the test the temperature rises shall not exceed the values specified in 11.8.

22 Construction

p 22.61 Add the following variation:

The socket-outlet

- shall have a current rating of 10 A;
- if the appliance is intended to be permanently connected to the fixed wiring be protected by a Type II/Type AC RCD complying with AS/NZS 3190.

Compliance is checked by inspection and the appropriate tests.

NEW ZEALAND NATIONAL VARIATIONS

The following national variations to this Part 2 are additional to those listed in the national variations of AS/NZS 60335.1:2022.

3 Terms and definitions

p **3.1.12** Add the following variation:

Note AZ 101 to entry: The outlet load that can be connected to socket-outlets accessible to the user is 10 A

7 Marking and instructions

p 7.1 *Insert* the following variations:

Appliance socket-outlets accessible to the user need not be marked with the outlet load.

Built-in hobs that require a board in order to meet the temperature limits of 11.8 shall be marked with the substance of the following caution.

CAUTION: The surface temperature exceeds 95 °C. To avoid a hazard, under bench access must be restricted. Refer to the installation instructions.

p 7.12.3 Insert the following variation as a second paragraph to the addition:

If the **cooking range** is not provided with a **supply cord** fitted with a plug or an installation male connector, the instructions shall state the size of the **supply cord** that has to be used and shall include the substance of the following.

If this cooking range is to be connected to a new or upgraded electrical installation, then it must be connected to the supply by a supply cord fitted with:

- an appropriately rated plug that is compatible with the socket-outlet fitted to the final subcircuit in the fixed wiring that supplies this cooking range; or

- an appropriately rated installation male connector that is compatible with the installation female connector fitted to the final sub-circuit in the fixed wiring that supplies this cooking range.

This information need not be provided for **cooking ranges** that are intended to be fixed in position other than those that are fixed only by a stabilizing means in order to comply with the test of 20.101.

p 7.15 After the second paragraph *insert* the following variation:

The caution specified in Clause 7.1 for **built-in hobs** shall be marked adjacent to the supply entry on the underside of the **hob**.

11 Heating

p **11.1** *Insert* the following variation as a second paragraph to the addition:

For **hobs** compliance is also checked by the test of 11.301.

p **11.101** *Replace* the paragraph immediately before Table 102 with the following variation:

During the test, the temperature rise of surfaces shall not exceed the values specified in Table 103.

p **11.301** After clause 11.101 *insert* the following variation:

11.301 Hob elements other than induction hob elements are operated under conditions of normal operation except that:

- the vessel is not covered with a lid;
- the water in the vessel is maintained at a depth between 50 mm and 65 mm by the addition of boiling water if necessary;
- thermal controls are adjusted to the highest setting.

If the appliance contains more than one **hob element**, the test is carried out with the **hob element** resulting in the most unfavourable conditions.

The **hob element** is supplied at 1,15 times its power input measured at **rated voltage**. The test is continued for a period of 1 h or until steady conditions are established whichever is shorter.

During the test the temperature rises shall not exceed the values specified in 11.8.

22 Construction

p 22.61 Add the following variation:

The socket-outlet shall have a current rating of 10 A;

25 Supply connections and external flexible cords

p 25 After the first paragraph, *insert* the following variation:

25.1 Addition:

Cooking ranges shall be provided with a **supply cord** fitted with a plug or an installation male connector, unless the instructions for installation make reference to the type and size of the **supply cord** and the rating of the plug or installation male connector, to be used for connecting the appliance to the supply mains.

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 publications 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

Publication	<u>Year</u>	<u>Title</u>	AS/NZS	<u>Year</u>
IEC 60068-2-6		Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)		
IEC 60068-2-27		Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock		
IEC 60068-2-52		Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)		
IEC 60584-1		Thermocouples – Part 1: EMF specifications and tolerances		