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

DR 25012 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: 2 June 2025 28 July 2025

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## AS/NZS 60335.2.80:202x

Household and similar electrical appliances – Safety

Part 2.80: Particular requirements for appliances for fans





#### 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 2.80: Particular requirements for appliances for fans

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

Comments on the proposal are invited from persons and organisations 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 comments received. It is not to be regarded as an Australian/New Zealand standard until it is 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 PUBLIC COMMENTS HAVE BEEN CONSIDERED AND PRIOR TO THE PUBLICATION OF THE STANDARD. THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH IEC 60335-2-80, ED. 4.0, COPIES OF WHICH MAY BE VIEWED BY CONTACTING 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 xxx and by the New Zealand Standards Approval Board on xxx.

It was published on xxx.

The following interests are represented on Committee EL-002:

Association of Accredited Certification Bodies

Australian Industry Group

Australian Retailers Association

**Building Commission NSW** 

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers' Federation of Australia

Electrical consultants

Electrical Regulatory Authorities, Australia

**Engineers** Australia

International Accreditation New Zealand

JAS-ANZ

National Retailers Association (Australia)

New Zealand Electric Fence Energizer Manufacturers' Standards Group

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 25012.

## Australian/New Zealand Standard

# Household and similar electrical appliances – Safety

# Part 2.80: Particular requirements for appliances for fans

Superseding AS/NZS 60335.2.80:2016 on xx xxxx 20xx

Originated in Australia as AS 3302-1980. Final Australian edition AS 3302-1990. Originated in New Zealand as NZS 6301:1973. AS 3302-1990 and NZS 6301:1973 jointly revised, amalgamated, and designated AS/NZS 3302:1992. Jointly revised and redesignated AS/NZS 3350.2.80:1998. Jointly revised and redesignated AS/NZS 60335.2.80:2004. Jointly revised and redesignated AS/NZS 60335.2.80:2016. Jointly revised and redesignated AS/NZS 60335.2.80:202x.

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## AS/NZS 60335.2.80:202x HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY

#### Part 2.80: Particular requirements for appliances for fans

## 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 60335.2.80:2016 3 years from the date of publication of this standard. During this period, AS/NZS 60335.2.80:2016 and its amendments will remain current. Regulatory authorities that reference this standard in regulation may apply these requirements at a different time. Users of this standard should consult these authorities to confirm their requirements.

The objective of this standard is to provide manufacturers, designers, regulatory authorities, testing laboratories, and similar organisations 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 60335-2-80, Ed. 4.0, prepared by IEC Technical Committee 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 2016 edition of AS/NZS 60335.2.80 are as follows (minor changes are not listed):

- (a) Alignment with AS/NZS 60335.1:2022;
- (b) Conversion of some notes to normative text (clause 1);
- (c) Introduction of requirements for infant fans (subclauses 7.12, 7.12.1, 8.1.1, 11.8, 20.2, 20.101, 21.103, 22.44, 22.54, 22.102, B.22.3, and B.22.4);
- (d) Introduction of the use of test probe 19 (subclauses 8.1.1, 20.2, B.22.3, and B.22.4);
- (e) Introduction of surface temperature limits (clause 11);
- (f) Clarification of testing of fans for use in a tropical climate (subclause 5.7 and Annex P 11.8);
- (g) Clarification of requirements for remote operation of fans (subclauses 22.40, 22.49, and 22.51).

This standard is an adoption with national modifications of the fourth edition of IEC 60335-2-80, Household and similar electrical appliances – Safety – Part 2.80: Particular requirements for appliances for fans. 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 appliances for fans.

When a particular subclause of AS/NZS 60335.1 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 AS/NZS 60335.1 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 AS/NZS 60335.1;
- unless notes are in a new subclause or involve notes in AS/NZS 60335.1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, and so on;
- 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 fans are covered by this standard.

Where national variations listed in AS/NZS 60335.1 (adopting IEC 60335-1) affect IEC 60335-2-80, Ed. 4.0, these, along with the variations listed below, 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).

<sup>&</sup>lt;sup>1</sup> AS/NZS 3820, Essential safety requirements for electrical equipment.

The text of the international standard IEC 60335-2-80, Ed. 4.0 was approved as a joint Australian/New Zealand standard, noting the effect of national variations in AS/NZS 60335.1:2022.

## 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.

## 6 Classification

p **6.101** *Replace* the requirement *with* the following variation:

Fans shall be classified as fans for tropical climates.

## 7 Marking and instructions

p **7.12** The instructions for partition fans and **duct fans** shall include the substance of the following:

Exhaust fans may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of an exhaust fan such as a partition fan or a duct fan the operation of flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur.

- p **7.12.1** *Replace* the third dashed item in the first paragraph of the addition *with* the following variation:
  - that the fan is to be installed so that the blades are more than 2.1 m above the floor;
- p *Replace* the second dashed item in the second paragraph of the addition *with* the following variation:
  - that the fan is to be installed so that the blades are more than 2.1 m above the floor (for fans intended to be mounted at high level);

## 20 Stability and mechanical hazards

p **20.101** In the requirement, *replace* the text 'fans for mounting at high level' *with* the words 'ceiling fans'.

## 25 Supply connection and external flexible cords

p **25.5** Add to the Addition the following variation:

**Type Z attachment** is allowed for partition fans intended to be installed in or upon the aperture of a partition in order to displace air from one side of the partition to the other side, both the sides being non-ducted free spaces.

## **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.

## 6 Classification

p 6.101 *Replace* the requirement *with* the following variation:

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Fans shall be classified as fans for tropical climates or as fans for temperate climates.

## 7 Marking and instructions

p **7.12** The instructions for partition fans and **duct fans** shall include the substance of the following:

Exhaust fans may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of an exhaust fan such as a partition fan or a duct fan, the operation of open-flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur.

- p **7.12.1** *Replace* the third dashed item in the first paragraph of the addition *with* the following variation:
  - that the fan is to be installed so that the blades are more than 2.1 m above the floor;
- p *Replace* the second dashed item in the second paragraph of the addition *with* the following variation:
  - that the fan is to be installed so that the blades are more than 2.1 m above the floor (for fans intended to be mounted at high level);

## 20 Stability and mechanical hazards

p **20.101** In the requirement, *replace* the text 'fans for mounting at high level' *with* the words 'ceiling fans'.

## 25 Supply connection and external flexible cords

p **25.5** Add to the Addition the following variation:

**Type Z attachment** is allowed for partition fans intended to be installed in or upon the aperture of a partition in order to displace air from one side of the partition to the other side, both the sides being non-ducted free spaces.

Healthy homes regulations require that for kitchens and bathrooms, the displaced air is ventilated outdoors.

## 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, then the Australian/New Zealand publication applies.

Publication	Year	Title	AS/NZS	Year
IEC 60584-1		Thermocouples – Part 1: EMF specifications and tolerances		
IEC 60811-504	2012	Electric and optical fibre cables – Test methods for non-metallic materials – Part 504: Mechanical tests – Bending tests at low temperature for insulation and sheaths		
IEC 60811-505	2012	Electric and optical fibre cables – Test methods for non-metallic materials – Part 505: Mechanical tests – Elongation at low temperature for insulations and sheaths		