

Australian/New Zealand Standard™

**Household and similar electrical
appliances—Safety**

**Part 2.43: Particular requirements for
clothes dryers and towel rails**



AS/NZS 60335.2.43:2018

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL- 2, Safety of Household and Similar Electrical Appliances and Small Power Transformers. It was approved on behalf of the Council of Standards Australia on 24 October 2 18 and by the New Zealand Standards Approval Board on 6 November 2 18.

This Standard was published on 3 November 2 18.

The following are represented on Committee EL- 2:

Association of Accredited Certification Bodies
Australian Industry Group
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 Standards may also be withdrawn.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.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com or Standards New Zealand web site at www.standards.govt.nz and looking up the relevant Standard in the on-line catalogue.

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 organization.

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 comments to the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 18901.

Australian/New Zealand Standard™

Household and similar electrical appliances—Safety

Part 2.43: Particular requirements for clothes dryers and towel rails

Originated in Australia as AS 3196—1975.
Previous Australian edition AS 3196—1995.
Originated in New Zealand as NZS 6343:1994.
AS 3196—1995 and NZS 6343:1994 jointly revised, amalgamated and redesignated AS/NZS 3350.2.43:1996.
Second edition AS/NZS 3350.2.43:2001.
Jointly revised and redesignated AS/NZS 60335.2.43:2005.
Jointly revised and redesignated AS/NZS 60335.2.43:2018.

COPYRIGHT

© Standards Australia Limited

© 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).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, PO Box 1473, Wellington 6140.

ISBN 978 1 76072 232 6

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 60335.2.43:2018

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2.43: Particular requirements for clothes dryers and towel rails****Foreword**

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 60335.2.43:2005 three years from the date of publication. During this period AS/NZS 60335.2.43:2005 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 60335-2-43 Ed 4, 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 2005 edition of AS/NZS 60335.2.43 are as follows (minor changes are not listed):

- the text has been aligned with the 2011 Edition of Part 1;
- requirements for clothes dryers intended for drying footwear or gloves have been introduced (1, 3.1.9, 6.2, 11.8, 19.1, 19.13, 19.101, 19.102, 22.40, 23.3).

This Standard is an adoption with national modifications of the fourth edition of IEC 60335-2-43, *Household and similar electrical appliances – Safety – Part 2-43: Particular requirements for clothes dryers and towel rails*. 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. It was established on the basis of AS/NZS 60335.1:2011.

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 clothes dryers and towel rails.

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.

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 clothes dryers and towel rails are covered by this standard.

The national variations to IEC 60335-2-43 Ed 4 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 60335-2-43 Ed 4 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 60335.1:2011.

NEW ZEALAND NATIONAL VARIATIONS

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 60335.1:2011.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>AS/NZS</u>	<u>Year</u>
--------------------	-------------	--------------	---------------	-------------

NOTES

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 General requirement.....	7
5 General conditions for the tests	7
6 Classification	7
7 Marking and instructions.....	8
8 Protection against access to live parts.....	8
9 Starting of motor-operated appliances	8
10 Power input and current.....	8
11 Heating.....	8
12 Void.....	9
13 Leakage current and electric strength at operating temperature.....	9
14 Transient overvoltages	9
15 Moisture resistance	9
16 Leakage current and electric strength	10
17 Overload protection of transformers and associated circuits	10
18 Endurance	10
19 Abnormal operation	10
20 Stability and mechanical hazards.....	12
21 Mechanical strength	12
22 Construction	12
23 Internal wiring.....	13
24 Components	13
25 Supply connection and external flexible cords	13
26 Terminals for external conductors.....	13
27 Provision for earthing	13
28 Screws and connections	13
29 Clearances, creepage distances and solid insulation	13
30 Resistance to heat and fire	13
31 Resistance to rusting	14
32 Radiation, toxicity and similar hazards.....	14
Annexes	15
Bibliography.....	16