AS/NZS 62841.2.4:2015
IEC 612841-2-4 Ed 1
(Incorporating Amendment No. 1)

AS/NZS 62841.2.4:2015

Australian/New Zealand Standard™

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery—Safety

Part 2.4: Particular requirements for hand-held sanders and polishers other than disc type

STANDARDS Australia

STANDARDS® NEW ZEALAND
PAEREWA AOTEAROA

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

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 the Council of Standards Australia on 27 April 2015 and on behalf of the Council of Standards New Zealand on 18 June 2015.
This Standard was published on 30 June 2015.

The following are represented on Committee EL-002:

Australian Industry Group
National Retailers Association (Australia)
Business New Zealand
Consumer Electronic Suppliers Association, Australia
Consumers' Federation of Australia
Electrical Regulatory Authorities, Australia
Electrical consultants
Engineers Australia
JAS-ANZ
Testing Interests New Zealand
WorkSafe, New Zealand
New Zealand Electric Fence Energizer Manufacturers' Standards Group

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 Standards may also be withdrawn.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 14914.

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

Australian/New Zealand Standard™

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery—Safety

Part 2.4: Particular requirements for hand-held sanders and polishers other than disc type

Originated in Australia as AS C160—1959.
Previous edition AS/NZS 3160:1996.
Jointly revised and redesignated, in part, as AS/NZS 60745.2.4:2003.
Jointly revised and redesignated as AS/NZS 60745.2.4:2009.
Jointly revised and redesignated AS/NZS 62841.2.4:2015.
Reissued incorporating Amendment No. 1 (December 2016).

COPYRIGHT

© Standards Australia Limited/Standards New Zealand

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 6011.

AVA Documents
Document Sharing Hub

ISBN 978 1 76035 097 0

Full document details: AS NZS 62841.2.4-2015 (2016)

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 62841.2.4:2015

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 2.4: Particular requirements for hand-held sanders and polishers other than disc type

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 60745.2.4:2009 three years from the date of publication.

A1

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 62841-2-4 Ed 1, prepared by IEC Technical Committee TC 116, 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.

A1 This Standard incorporates Amendment No. 1 (December 2016) part of which applies to Clause 18 of the IEC text in the “including IEC text” version only. The change is not indicated by a marginal bar.

This Standard is an adoption with national modifications of the first edition of IEC 62841-2-4, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-4: Particular requirements for hand-held sanders and polishers other than disc type.* 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 62841.1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements and its Amendments. It was established on the basis of AS/NZS 62841.1:2015.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 62841.1 so as to convert it into the Australian/New Zealand Standard: Safety requirements for appliances for hand-held sanders and polishers other than disc type.

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*;

COPYRIGHT

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

– 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 3820[1] that could be applicable to requirements for hand-held sanders and polishers other than disc type are covered by this standard.

The national variations to IEC 62841-2-4 Ed 1 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*

COPYRIGHT

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

The text of the International Standard IEC 62841-2-4 Ed 1 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 62841.1:2015.

NEW ZEALAND NATIONAL VARIATIONS

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 62841.1:2015.

COPYRIGHT

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

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.

Publication	Year	Title	AS/NZS	Year

COPYRIGHT

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

NOTES

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)

CONTENTS

FOREWORD 4
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 General requirements 7
5 General conditions for the tests 7
6 Radiation, toxicity and similar hazards 7
7 Classification 7
8 Marking and instructions 7
9 Protection against access to live parts 8
10 Starting 8
11 Input and current 8
12 Heating 8
13 Resistance to heat and fire 8
14 Moisture resistance 8
15 Resistance to rusting 8
16 Overload protection of transformers and associated circuits 8
17 Endurance 8
18 Abnormal operation 9
19 Mechanical hazards 9
20 Mechanical strength 10
21 Construction 10
22 Internal wiring 11
23 Components 11
24 Supply connection and external flexible cords 11
25 Terminals for external conductors 11
26 Provision for earthing 11
27 Screws and connections 11
28 Creepage distances, clearances and distances through insulation 11
Annexes 14
Annex I (informative) Measurement of noise and vibration emissions 14
Annex K (normative) Battery tools and battery packs 16
Bibliography 17

Figure 101 – Rod test for the in-feed nip between the belt and roller 12
Figure 102 – Steel ball test for the in-feed nip between the belt housing enclosure and roller 13
Figure I.101 – Position of transducers for sanders and polishers 15

Documents
Document Sharing Hub

Full document details: AS NZS 62841.2.4-2015 (2016)