

AS/NZS 62841.3.7:2021  
IEC 62841-3-7:2020



STANDARDS  
Australia



Australian/New Zealand Standard™

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

Part 3.7: Particular requirements for transportable wall saws



AS/NZS 62841.3.7:2021

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 and Power Supplies. It was approved on behalf of the Council of Standards Australia on 6 May 2021 and by the New Zealand Standards Approval Board on 4 May 2021.

This Standard was published on 25 June 2021.

The following are represented on Committee EL-002:

- Association of Accredited Certification Bodies
- 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

This Standard was issued in draft form for comment as DR AS/NZS 62841.3.7:2020.

#### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

[www.standards.org.au](http://www.standards.org.au)

[www.standards.govt.nz](http://www.standards.govt.nz)

ISBN 978 1 76113 343 5

Australian/New Zealand Standard™

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

## Part 3.7: Particular requirements for transportable vial saws

Originated as AS/NZS 62841.3.7:2021.



© IEC Geneva Switzerland 2021 — All rights reserved

© Standards Australia Limited/the Crown in right of New Zealand, administered by the New Zealand Standards Executive 2021

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 either the IEC or the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth) or the Copyright Act 1994 (New Zealand). If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please see the contact details on the back cover or the contact us page of the website for further information.

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## AS/NZS 62841.3.7:2021

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS  
AND LAWN AND GARDEN MACHINERY –  
SAFETY –****Part 3.7: Particular requirements for transportable wall saws****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.

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 62841-3-7 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.

This Standard is an adoption with national modifications of the first edition of IEC 62841-3-7 *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3-7 Particular requirements for transportable wall saws*. 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 transportable wall saws.

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.;
- figures, 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.

COPYRIGHT

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

The national variations to IEC 62841-3-7 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).

Currently in preview, click buy full version

---

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

The text of the International Standard IEC 62841-3-7 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.

Currently in preview, click buy full version

## 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>AS/NZS</u>	<u>Year</u>
IEC 61008-1 /AMD1 /AMD2 (mod)	2010 2012 2013	<i>Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules</i>	61008.1	2015
ISO 3744	2010	<i>Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure Engineering methods for an essentially free field over a reflecting plane</i>		
ISO 11201	2010	<i>Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections</i>		
ISO 6603-1		<i>Plastics – Determination of puncture impact behaviour of rigid plastics – Part 1: Non-instrumented impact testing</i>		

Currently in preview, click buy full version

## CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references .....	6
3 Terms and definitions .....	7
4 General requirements .....	9
5 General conditions for the tests .....	9
6 Radiation, toxicity and similar hazards.....	9
7 Classification.....	9
8 Marking and instructions.....	10
9 Protection against access to live parts.....	12
10 Starting .....	12
11 Input and current .....	12
12 Heating.....	12
13 Resistance to heat and fire.....	12
14 Moisture resistance .....	12
15 Resistance to rusting.....	15
16 Overload protection of transformers and associated circuits.....	15
17 Endurance.....	15
18 Abnormal operation .....	15
19 Mechanical hazards.....	16
20 Mechanical strength .....	18
21 Construction .....	19
22 Internal wiring.....	20
23 Components .....	20
24 Supply connection and external flexible cords .....	21
25 Terminals for external conductors.....	22
26 Provision for earthing .....	22
27 Screws and connections.....	22
28 Creepage distances, clearances and distances through insulation.....	22
Annexes .....	23
Annex C (normative) Leakage current.....	23
Annex I (informative) Measurement of noise and vibration emissions.....	24
Annex K (normative) Battery tools and battery packs .....	28
Bibliography.....	29
Figure 101 – Wall saw .....	8
Figure 102 – Wall saw with wheel guard removed.....	9
Figure 103 – Safety sign illustrating – "WARNING – Always wear eye protection".....	10
Figure I.101 – Wall saw setup for noise measurement (wheel guard not shown) .....	25

Table 4 – Required performance levels .....	16
Table 101 – Material properties and minimum thickness of the wheel guard.....	18
Table 8 – Minimum cross-sectional area and AWG sizes of supply cords .....	21
Table I.101 – Expected uncertainty values .....	27

Currently in preview, click buy full version

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

---

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –**
**Part 3-7: Particular requirements for transportable wall saws****FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62841-3-7 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
116/455/FDIS	116/461/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 3-7 is to be used in conjunction with IEC 62841-1:2014.