

Australian/New Zealand Standard™

**Hand-held motor-operated electric
tools—Safety**

**Part 2.5: Particular requirements for
circular saws**



AS/NZS 60745.2.5:2007

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 3 May 2007 and on behalf of the Council of Standards New Zealand on 30 March 2007.

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Business New Zealand
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Australian/New Zealand Standard™

Hand-held motor-operated electric tools—Safety

Part 2.5: Particular requirements for circular saws

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS –
SAFETY –**
Part 2.5: Particular requirements for circular 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 to supersede AS/NZS 60745.2.5:2003, *Hand-held motor-operated electric tools – Safety – Part 2.5: Particular requirements for circular saws*, 2 years from publication. During this period it is anticipated that regulatory authorities will approve circular saws to either standard.

The main changes between this edition and the previous edition include: Clause 19: Mechanical hazards, clarifications in respect to the guarding and the addition of Annex M: Safety of working stands for operation with hand-held motor-operated electric tools

This Standard incorporates Amendment No. 1 (May 2009). The changes required by the amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected. Where an application date other than immediate is applicable to an amendment the date of application (DOA) is indicated by the marginal bar against the part affected.

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 tool 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

This Standard is an adoption with national modifications and contains the full text of the fourth edition of IEC 60745-2-5, *Hand-held motor-operated electric tools – Safety – Part 2-5: Particular requirements for circular saws* and has been varied as indicated to take account of Australian and New Zealand conditions.

A1 | This part is to be used in conjunction with AS/NZS 60745.1:2009 and its amendments. The Parts 2 contain clauses to supplement or modify the corresponding clauses in this part to provide the relevant requirements for each type of tool.

NOTE 1 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

A1 | The numbering of clauses, subclauses, notes, tables, figures and annexes follows that of IEC 60745-2-5 Ed 4.0. To allow for the introduction of additional material by the IEC, the numbers 101 to 300 have been reserved. To allow for additional material to be introduced by Australia and New Zealand, the numbers 301 to 400 are used to number further clauses, subclauses, notes, tables and figures in part 1. The numbers 401 to 500 are used to number further clauses, subclauses, notes, tables and figures in this part 2. Additional annexes are lettered ZA, ZB and so on.

This scheme has been introduced to reduce the likelihood of the IEC and Australia and New Zealand using the same identifier for different purposes.

The use of the word VOID indicates that the IEC text is not used in Australia or New Zealand. The use of this word also avoids the need to renumber, clauses, notes, tables and figure if an earlier clause, note, table or figure is not used.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown on the cover and title page only.
- (b) In the source text "this International Standard" should read "this Australian/New Zealand Standard".
- (c) A full point substitutes for a comma when referring to a decimal marker.

Variations to IEC 60745-2-5 Ed 4.0 are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand standard are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (~~example~~). Added figures are not themselves shaded, but are identified by a shaded border.

A1 | Variations made to IEC 60745-2-5 Ed 4.0 form the New Zealand variations for the purposes of the IECEE scheme for recognition of testing to standards for safety of electrical equipment (the CB scheme). These variations have been incorporated in the body of the standard. They are listed in Annex ZZ for easy reference.

The essential safety requirements in AS/NZS 3820 that could be applicable to circular saws are covered by this standard.

HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

Part 2.5: Particular requirements for circular saws

1 Scope

This clause of Part 1 is applicable, except as follows:

Addition:

This standard applies to all types of circular saws. Circular saws hereinafter will be referred to as saws. This standard does not apply to saws used with abrasive wheels.

2 Normative references

This clause of Part 1 is applicable.

3 Terms and definitions

This clause of Part 1 is applicable, except as follows:

Additional definitions:

3.101

circular saw

tool intended for cutting various materials with a rotating toothed blade

3.102

cutting edge zone

the outer 20 % of the blade's radius

3.103

guide plate

the part of the saw resting on the material to be cut (see Figure 113)

3.104

lower guard

movable blade-covering device which, in the closed or rest position, is generally situated below the guide plate

3.105

upper guard

fixed and/or movable cover of the blade situated above the guide plate

3.106

riving knife

metal part placed in the plane of the saw blade with the intent of preventing the workpiece from closing on the rear part of the saw blade