

STANDARD INFORMATION

Standard: UL 62841-3-9 / CSA C22.2 No. 62841-3-9

Standard ID:

Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 3-9: Particular Requirements For Transportable Mitre Saws [UL 62841-3-9:2021 Ed.2]

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Previous Standard ID:

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Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 3-9: Particular Requirements for Transportable Mitre Saws [CSA C22.2#62841-3-9:2016 Ed.1+U1]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **November 30, 2023**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- Addition of instructions to avoid uncontrolled release of the saw
- Additional requirements for saw blade guards
- Revised requirements for table tops

Specific details of new/revise requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
8	Info	Marking and instructions
8.14.2		b) 101) Instruction on correct cutting operations, including cross cutting, mitre angle and bevel angle cutting procedures, as applicable; 102) Instruction on simple non-through cutting operations such as grooving/slotting; 103) Information about which materials can be cut. Instructions to avoid overheating the saw blade tips and, if cutting plastics is permitted, to avoid melting the plastic; 104) Instruction for proper use of the workpiece clamping device; 105) If the saw is provided with an interchangeable kerf plate: instructions how to remove and install the kerf plate and how to adjust the kerf plate height with respect to the table top, if applicable. Instruction to replace a worn kerf plate; 106) Instruction and the procedure to cut a slot in a zero clearance kerf plate, if applicable; 107) Instruction where to lift and support the mitre saw during transportation; <u>108) Instruction to avoid uncontrolled release of the saw unit from the fully down position.</u>
19	Info	Mechanical hazards
19.101	Info	Saw blade guards
19.101.7		Mitre saws shall be so constructed that the saw blade cannot be touched from below the table top. Any components located below the kerf plate that are likely to be cut by the saw blade shall be made of a material (e.g. plastic, aluminium) that can easily be cut by the saw blade. However, the saw blade shall not cut through the structure to the bottom so that the saw blade can be touched from below the table top. Compliance is checked by the following test. The mitre saw fitted with a saw blade of diameter D with a thickness corresponding to the maximum recommended kerf width in accordance with 8.14.2 a) 104) is set to 0° mitre angle and 0° bevel angle. The adjustment of the depth-of-cut in accordance 8.14.2 a) 108) is made to produce the fully down position of the saw unit. The saw is then operated, and the saw unit moved to the fully down position. The saw blade may cut into any component below the kerf plate. For saws with a sliding function, the test is conducted with the saw unit in any horizontal position.



CLAUSE	VERDICT	COMMENT
		<p>The saw is then switched off and the saw unit is moved down to its lowest possible position. The test probe of Figure 106, applied with a force not exceeding 5 N in any possible direction from below the table top, shall not touch the periphery of the saw blade. For saws with a sliding function, the test is conducted with the saw unit in any horizontal position.</p> <p>The test is repeated at</p> <ul style="list-style-type: none">– <u>one-half the maximum right and left bevel angle; and</u>– the maximum right and left bevel angle, <p>as applicable.</p>
21	Info	Construction
21.102	Info	Table top
		<p>The table top shall be so designed that it extends in a direction parallel with the fence on each side of the saw blade to provide for an adequate workpiece securing zone and have a sufficient dimension <u>perpendicular to the plane of the fence, for the stability of the workpiece. If workpiece support extension(s) are used to comply with the above requirement, they shall not be removable without the aid of a tool. If they are adjustable, they shall be capable of being fixed during operation. The table top surfaces need not be continuous.</u></p> <p>Compliance is checked by inspection and by the following test.</p> <p><u>The saw blade is set to the maximum mitre angle at 0° bevel angle. The saw unit is at its fully down position and for a mitre saw with a sliding function, the saw unit is at its maximum extended horizontal position from the fence. The mitre saw is fitted with a (2 ± 0,2) mm thick steel disc of diameter D in place of the saw blade.</u></p> <p>21.102.2 <u>A line L1 is established that is the perpendicular projection onto the plane of the fence of the intersect point (key item 3 in Figure 108) of the steel disc periphery in quadrant “C” with the plane of the table top.</u></p> <p><u>The measurement of the total amount of support (dimension “h” in Figure 108) along a line L2 parallel to L1 at least 100 mm (dimension “s” in Figure 108) measured from the plane of the fence shall be at least</u></p> <ul style="list-style-type: none">– <u>80 % of dimension “C” in Figure 108 for a simple pivoting arm mitre saw; or</u>– <u>50 % of dimension “C” in Figure 108 for a mitre saw with a sliding function.</u> <p><u>If applicable, the test is then repeated with the saw unit set to the maximum mitre angle at 0° bevel angle on the opposite side of the mitre saw.</u></p> <p>NOTE Some mitre saw designs have different maximum mitre angles on the left and right mitre side, leading to different minimum table dimensions on either mitre side.</p>