

Circular Saw

Business Name:		ABN:	
Business Address:			
Contact Person:	Phone:	Email:	

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	



RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	Administrative Change	
								PPE	

  

Risk Rating & Required Action:	
<b>4A</b>	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

  

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	No injury	no schedule impact	Deviation caught and corrected on site

  

**Notes on Hierarchy of Controls:**  
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. **Substitute**
3. **Isolate**
4. **Engineering**
5. **Administrative**
6. **PPE**

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

*aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. WHS Governance, Policies and Legal Compliance	<ul style="list-style-type: none"> <li>Lack of a documented WHS management system covering portable and fixed circular saws (including chop saws and docking saws)</li> <li>No clear allocation of WHS responsibilities for saw purchase, set-up, use, inspection and maintenance</li> <li>Inadequate consultation with workers and Health and Safety Representatives on circular saw risks and controls</li> <li>Failure to align internal procedures with WHS Act 2011, WHS Regulation and relevant Australian Standards (e.g. AS/NZS 4024 series, AS/NZS 2161 for hand protection, AS/NZS 1337 for eye protection, AS/NZS 1270 for hearing protection, AS/NZS 3012 for electrical installations on construction sites)</li> <li>No formal process to review and update circular saw risk assessments following incidents, near misses or equipment changes</li> <li>Poor integration of circular saw management into the company WHS system for activities involving aluminium saws, rotary saws and portable electric hand saws</li> </ul>	High	<ul style="list-style-type: none"> <li>Establish and maintain a documented WHS management system that specifically addresses the use of circular saws, chop saws, docking saws, rotary saws and portable electric hand saws across all worksites</li> <li>Develop a circular saw safety policy endorsed by senior management that defines expectations for guarding, isolation, personal protective equipment (PPE), maintenance, supervision and incident reporting</li> <li>Assign clear WHS roles and responsibilities for officers, managers, supervisors and workers in relation to saw procurement, operation, inspection, maintenance and decommissioning</li> <li>Ensure policies and procedures are aligned with the WHS Act 2011, WHS Regulation and relevant Codes of Practice (e.g. Managing Risks of Injuries in the Workplace, Managing Noise and Preventing Hearing Loss at Work)</li> <li>Implement a formal WHS consultation framework that includes regular toolbox talks and meetings with workers and HSRs to discuss saw-related risks, including kickback incidents, contact with blades and projectiles when cutting aluminium and other materials</li> <li>Introduce a scheduled review cycle (e.g. annually or after any notifiable incident) for all circular saw risk assessments, procedures and training programs</li> <li>Integrate contractor management procedures that require contractors to comply with the organisation's circular saw policies, provide evidence of training/competency, and use equipment that meets the same standards as company-owned plant</li> <li>Maintain documented WHS objectives and key performance indicators related to saw safety (e.g. reduction in kickback incidents, improvement in pre-use inspection compliance)</li> </ul>	Medium
2. Procurement and Design of Circular Saw Equipment	<ul style="list-style-type: none"> <li>Purchase of circular saws (including aluminium chop saws, docking saws and portable rotary saws) that do not meet relevant Australian Standards or manufacturer safety specifications</li> <li>Selection of equipment without adequate blade guards, riving knives, anti-kickback features, braking systems or dust extraction provisions</li> <li>Procurement of saws with incompatible guards or clamps for the types of materials to be cut (e.g. aluminium extrusion, timber, steel sections, sheet goods)</li> <li>Acquisition of equipment without appropriate noise and vibration</li> </ul>	High	<ul style="list-style-type: none"> <li>Develop and implement a standardised circular saw procurement specification that requires compliance with relevant Australian Standards and manufacturer safety requirements, including guarding and emergency stops</li> <li>Mandate the inclusion of key safety features in all new circular saw purchases, such as fixed and adjustable blade guards, riving knives, anti-kickback devices, rapid blade braking and lock-off switches on portable hand saws</li> <li>Specify that saws intended for aluminium cutting are designed and rated for that purpose, with appropriate blade speed, clamp systems and chip/dust collection provisions</li> <li>Require pre-purchase WHS review of all circular saw equipment by a competent person (e.g. WHS advisor or plant engineer) before orders are placed</li> <li>Standardise brands and models where practicable to simplify training, spare parts management and consistent controls across sites</li> </ul>	Low

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	<p>performance data, increasing the risk of long-term health effects</p> <ul style="list-style-type: none"> <li>• Use of imported or second-hand circular saws that lack compliant emergency stop devices, two-handed controls or lock-off triggers</li> <li>• No standardised specification across the business, leading to multiple saw types and models that require different procedures and training</li> </ul>		<ul style="list-style-type: none"> <li>• Include whole-of-life costs and safety performance (maintenance requirements, availability of guards, noise/vibration levels, dust extraction compatibility) as selection criteria in procurement processes</li> <li>• Ensure supplier contracts and purchase orders comply with state safety requirements, including provision of manuals, test certificates and training materials for all saws purchased</li> </ul>	
3. Blade, Accessory and Material Management	<ul style="list-style-type: none"> <li>• Use of incorrect or incompatible blades for the material being cut (e.g. wood-only blades on aluminium, damaged abrasive wheels on rotary saws)</li> <li>• Lack of system controls for inspection, storage and replacement of blades, leading to cracked, dull or unbalanced blades that increase kickback and breakage risk</li> <li>• No formal process for approving and tracking third-party accessories (e.g. clamps, jigs, aftermarket guards, depth stops) used on circular saws</li> <li>• Inadequate controls over maximum blade size and speed ratings for saw capability, resulting in overspeed and structural failure risk</li> <li>• Poor segregation and labelling of blades for timber, aluminium and other materials, increasing the likelihood of misuse</li> <li>• Uncontrolled re-use of blades after contact with foreign objects (e.g. nails, screws, steel reinforcing) that may cause hidden damage</li> </ul>	High	<ul style="list-style-type: none"> <li>• Implement a documented blade management procedure covering selection, inspection, storage, use and disposal for all circular saw and chop saw blades</li> <li>• Mandate use approved blade types and brands for each saw model and material type (timber, aluminium, steel, masonry), with clear signage and reference charts available at each workstation</li> <li>• Introduce a blade inspection checklist and tagging or logging system to ensure damaged, dull or out-of-specification blades are removed from service promptly</li> <li>• Control the issue of blades through a centralised store or nominated responsible person to prevent unauthorised purchase and use of non-approved products</li> <li>• Label and physically separate blade storage locations by material type and saw type to minimise risk of incorrect blade selection</li> <li>• Define criteria and procedures for mandatory blade replacement after certain incidents (e.g. severe kickback, impact with embedded metal, visible cracks or missing teeth)</li> <li>• Include accessory and aftermarket component approval within plant modification and change management procedures to ensure compatibility and safety</li> </ul>	Medium
4. Site Layout, Power Supply and Environmental Conditions	<ul style="list-style-type: none"> <li>• Inadequate layout and segregation of circular saw work areas, leading to other workers entering exclusion zones and being exposed to contact, projectiles or noise</li> <li>• Poor management of power supply and leads for portable electric hand saws,</li> </ul>	High	<p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<p>creating trip hazards, cable damage and electric shock risk</p> <ul style="list-style-type: none"> <li>• Insufficient lighting in fixed docking saw and chop saw stations, impairing visibility and increasing the likelihood of mis-alignment and accidental contact</li> <li>• Inadequate control of airborne dust and chips when cutting timber or aluminium, increasing the risk of respiratory issues, reduced visibility and slip hazards on floors</li> <li>• Environmental factors (wet ground, clutter, confined spaces, external weather) affecting safe operation of portable circular saws and rotary saws</li> <li>• No designated, well-ventilated area for cutting aluminium and other materials that may generate fine particulates or hot chips</li> </ul>		[REDACTED]	
5. Training, Competency and Authorisation	<ul style="list-style-type: none"> <li>• Workers operating aluminium saws, large chop saws, rotary saws and portable circular saws without formal competency assessment or verification</li> <li>• Reliance on informal buddy systems or on-the-job learning without structured training in kickback mechanics, guarding requirements and correct setup</li> <li>• No differentiation between competency requirements for simple back cutting and more complex operations (e.g. compound mitre cuts, non-standard materials, on-site portable work)</li> <li>• Supervisors unable to recognise unsafe practices or non-compliance with procedures due to limited training in circular saw risk factors</li> <li>• No system for recording, tracking and refreshing operator competencies and licences where required</li> <li>• Inadequate induction for contractors, labour hire workers or visitors who may be exposed to circular saw operations</li> </ul>	High	[REDACTED]	Medium

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6. Procedures for Setup, Operation and Supervision (System Level)	<ul style="list-style-type: none"> <li>Absence of standard operating procedures (SOPs) for different saw types and materials, resulting in inconsistent setup and control methods</li> <li>Procedures focusing only on task sequences rather than underlying system controls such as authorisation, supervision and verification processes</li> <li>Inadequate arrangements to ensure guards and safety devices remain in place and functional (e.g. workers bypassing guards to increase speed of cutting)</li> <li>No formal supervision or verification regime to confirm that saws are being set up and used in accordance with procedures and manufacturer instructions</li> <li>Insufficient guidance on handling non-standard jobs (e.g. awkwardly shaped aluminium profiles, long stock on-site cutting) leading to ad hoc solutions and increased risk</li> <li>Lack of integration between circular saw procedures and broader site systems such as isolation/lock-out, hot work permits, noise management and housekeeping</li> </ul>	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium
7. Inspection, Maintenance and Testing of Saws	<ul style="list-style-type: none"> <li>Irregular or undocumented inspection and maintenance of circular saws leading to undetected defects in guards, triggers, fences, clamps and electrical systems</li> <li>No preventive maintenance schedule for fixed chop saws, docking saws or rotary saw stations, increasing the risk of component failure during operation</li> <li>Failure to maintain or test braking systems, resulting in extended run-down times and greater exposure to moving blades</li> <li>Poorly controlled repairs or modifications performed by unqualified personnel, potentially compromising</li> </ul>	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<p>safety features and compliance with standards</p> <ul style="list-style-type: none"> <li>• Lack of systematic testing and tagging of portable electric hand saws in accordance with electrical safety requirements</li> <li>• Absence of records making it difficult to demonstrate compliance or identify problematic equipment with recurring faults</li> </ul>		[REDACTED]	
8. Kickback, Entanglement and Contact Risk Management (System Level)	<ul style="list-style-type: none"> <li>• Inadequate system controls to address kickback mechanisms across various saw types, particularly when cutting aluminium, long stock or warped material</li> <li>• Lack of documented requirements for the use of hold-down devices, clamps, fences and supports, resulting in inconsistent control of workpieces</li> <li>• No engineering or administrative controls to prevent hands entering exclusion zones near blades during routine operations</li> <li>• Insufficient design and enforcement of exclusion zones to protect adjacent workers from projectiles and uncontrolled workpieces</li> <li>• Failure to standardise mitigation measures for common high-risk scenarios such as cross-cutting, short off-cuts, cutting narrow rips or using saws overhead</li> <li>• No systematic review of kickback and contact incidents to identify patterns and implement system improvements</li> </ul>	High	[REDACTED]	Medium
9. PPE, Health Monitoring and Exposure Management	<ul style="list-style-type: none"> <li>• Reliance on PPE as a primary control rather than as part of a broader hierarchy of controls for circular saw risks</li> <li>• Inadequate specification, provision or enforcement of PPE for eye, face, hearing, respiratory and hand protection when cutting various materials</li> </ul>	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> <li>Workers experiencing prolonged exposure to noise and vibration from continuous use of large chop saws, rotary saws and portable circular saws without monitoring or rotation systems</li> <li>No systematic approach to managing dust exposure when using saws on engineered stone, MDF or aluminium, leading to potential long-term respiratory issues</li> <li>Failure to consider individual health conditions (e.g. pre-existing hearing loss, respiratory illness, hand-arm vibration concerns) within job placement and monitoring processes</li> </ul>		[REDACTED]	
10. Emergency Preparedness and Incident Response	<ul style="list-style-type: none"> <li>Inadequate planning for severe lacerations, amputations, eye injuries or foreign body incidents arising from circular saw use</li> <li>Lack of accessible and appropriately stocked first aid kits near saw work areas, particularly where large chop saws and rotary saws are operated</li> <li>Workers and supervisors not trained in immediate response to saw-related injuries (e.g. bleeding control, safe isolation of plant, preservation of evidence for investigation)</li> <li>Poor communication systems for summoning assistance to remote or noisy work areas where portable saws are used</li> <li>Absence of a defined process for ceasing work, isolating equipment and conducting incident investigations following serious or recurring saw incidents</li> </ul>	High	[REDACTED]	Medium
11. Contractor, Labour Hire and Visitor Management	<ul style="list-style-type: none"> <li>Contractors bringing non-compliant circular saws, blades or accessories onto site without verification of safety features and maintenance status</li> </ul>	Medium	[REDACTED]	Low

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	<ul style="list-style-type: none"> <li>Labour hire workers being allocated to circular saw tasks without confirmation of prior training or competency</li> <li>Visitors and non-operational staff entering circular saw work areas without awareness of hazards or PPE requirements</li> <li>Inconsistent enforcement of site rules for external parties, leading to variations in risk control standards</li> <li>Lack of clarity regarding which party (host PCBU, contractor, labour hire agency) is responsible for certain aspects of circular saw risk control and supervision</li> </ul>		[REDACTED]	
12. Change Management and Continuous Improvement	<ul style="list-style-type: none"> <li>Introduction of new saw types (e.g. larger docking saws, different aluminium saws, battery-powered circular saws) without formal risk assessment or update of controls</li> <li>Process or layout changes that affect material flow, supervision or interaction between saws and other plant without re-assessing risks</li> <li>Incremental modifications to saws (e.g. removal of guards, replacement of fences, addition of jigs) occurring over time without holistic review</li> <li>Failure to capture lessons from incidents, near misses and worker feedback into systematic improvements to saw safety management</li> <li>No structured performance monitoring of circular saw safety indicators, making it difficult to verify effectiveness of implemented controls</li> </ul>	Medium	[REDACTED]	Low

**EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES**

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

**LEGISLATIVE REFERENCES**

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

**Queensland & Australian Capital Territory**

Work Health and Safety Act 2011  
 Work Health and Safety Regulations 2011  
 Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>  
 Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>  
 Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>  
 Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

**Victoria**

Occupational Health and Safety Act 2004  
 Occupational Health and Safety Regulations 2017  
 Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>  
 Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

**New South Wales**

Work Health and Safety Act 2011  
 Work Health and Safety Regulations 2025  
 Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>  
 Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

**Western Australia**

Work Health and Safety Act 2020  
 Work Health and Safety Regulations 2022  
 Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>  
 Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

**Northern Territory**

Work Health and Safety (National Uniform Legislation) Act 2011  
 Work Health and Safety (National Uniform Legislation) Regulation 2011  
 Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>  
 Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

**Safe Work Australia Links**

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>  
 Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

**South Australia**

Work Health and Safety Act 2012 (SA)  
 Work Health and Safety Regulations 2012 (SA)  
 Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>  
 Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

**Model Codes of Practice**

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

**Tasmania**

Work Health and Safety Act 2012  
 Work Health and Safety (Transitional and Consequential Provisions) Act 2012  
 Work Health and Safety Regulations 2012  
 Work Health and Safety (Transitional) Regulations 2012  
 Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>  
 Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.