

RCD Testing

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			Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution 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.	Engineering 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:	
4A	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.
3H	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures. Monitor and keep records.

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	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. Governance, WHS Duties and Legislative Compliance	<ul style="list-style-type: none"> Lack of clear allocation of WHS and electrical safety duties relating to RCD testing under the WHS Act 2011 and WHS Regulations Absence of a documented electrical safety management plan that includes RCD testing requirements Failure to identify and apply relevant Australian Standards (e.g. AS/NZS 3760, AS/NZS 3000) and jurisdictional electrical safety regulations Inadequate consultation with workers, health and safety representatives and PCBUS sharing the workplace about RCD testing requirements and schedules No process to verify that external electrical contractors or test-and-tag providers comply with WHS and electrical licensing requirements Poor integration of RCD testing controls into the organisation's overall WHS management system or risk register 	High	<ul style="list-style-type: none"> Develop and endorse a formal Electrical Safety Management Procedure that specifically incorporates RCD installation, inspection, testing, tagging and defect management in line with WHS Act 2011 and WHS Regulations Assign and document clear PCBU, officer and manager responsibilities for RCD testing, including due diligence obligations and resourcing Reference and apply relevant Australian Standards (including AS/NZS 3760 and AS/NZS 3000) and jurisdiction-specific electrical safety codes of practice within the WHS management system Establish a documented process for consultation, cooperation and coordination with workers, health and safety representatives and other PCBUS (e.g. landlords, tenants, contractors) regarding RCD requirements and testing schedules Implement a contractor management procedure requiring verification of electrical licences, qualifications, insurances and safe work procedures for any party engaged to perform RCD testing Include RCD testing governance and responsibilities in the corporate WHS risk register, reviewed at least annually by senior management or the WHS committee Conduct periodic compliance audits against WHS legislation, regulations and internal procedures specific to electrical and RCD management 	Medium
2. Asset Management, Design and Installation of RCD Systems	<ul style="list-style-type: none"> Incomplete or inaccurate register of electrical distribution boards, circuits and RCD-protected outlets RCDs not installed on all required circuits (e.g. socket outlets, portable equipment, hostile environments) as per WHS and electrical safety requirements Legacy or non-compliant switchboards and RCD configurations that are difficult to test or isolate safely Poorly documented single line diagrams and circuit labelling, creating uncertainty about which outlets and plant are RCD protected Inadequate specification or procurement of RCD devices (e.g. wrong type, rating, or application) 	High	<ul style="list-style-type: none"> Develop and maintain a centralised, version-controlled asset register of all switchboards, RCDs, protected circuits and outlets, including location, type, rating and installation date Engage a qualified electrical engineer or licensed electrician to review existing installations and identify gaps against AS/NZS 3000 and relevant regulatory requirements for RCD coverage Standardise RCD specifications (e.g. type, rating, sensitivity) for procurement to suit the environment and plant connected, and include these standards in purchasing procedures and design briefs Ensure up-to-date single line diagrams and circuit schedules are created, verified and stored, and that switchboards and outlets are clearly labelled to indicate RCD protection and circuit identification Incorporate accessibility and safe testing requirements into electrical design standards so new RCD installations are located and arranged to facilitate safe inspection and testing Include RCD asset information in the organisation's Computerised Maintenance Management System (CMMS) or equivalent to link design data with ongoing testing schedules Conduct periodic engineering reviews of RCD system design following major refurbishments, new installations or significant changes to electrical loads 	Medium

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	<ul style="list-style-type: none"> leading to nuisance tripping or insufficient protection RCDs installed in inaccessible locations, limiting ability to test, reset or inspect safely 			
3. RCD Testing Program, Scheduling and Planning	<ul style="list-style-type: none"> No formal RCD testing program or test schedule, leading to missed tests or extended intervals between tests Testing intervals not aligned with risk level, equipment use, environment (e.g. hostile vs non-hostile) or relevant standards and regulatory requirements Ad hoc or reactive testing following incidents rather than a proactive, planned approach Insufficient planning for operational impacts of testing, including power interruptions, plant shutdown and business continuity Testing activities overlapping with critical operations, increasing risk of uncontrolled shutdowns or process failures Failure to integrate RCD testing with broader electrical inspection and test-and-tag programs, creating overlaps or gaps 	High	<ul style="list-style-type: none"> Develop a documented RCD Testing Program and schedule that defines frequency, scope, method and responsible personnel in accordance with AS/NZS 3760, AS/NZS 3000 and regulatory guidance Use a CMMS or central scheduling tool to generate, track and close out RCD testing work orders, including retest dates, priorities and planned impacts Apply risk-based approach to set testing intervals, considering environmental conditions, equipment criticality, usage patterns and history of faults or trip events Coordinate testing with production, facilities management and IT to plan isolation and power interruptions, ensuring safe shutdown and restart procedures are included in the planning process Align RCD testing schedules with broader electrical inspection, maintenance and test-and-tag regimes to optimize downtime and prevent overlooked devices Establish a formal change management process for rescheduling or deferring RCD testing, requiring risk assessment and approval from a competent manager Report program status and overdue tests to senior management via regular WHS or maintenance performance reports 	Medium
4. Competency, Training and Supervision	<ul style="list-style-type: none"> RCD testing planned or overseen by personnel without appropriate electrical competence or understanding of residual current protection Inadequate training in WHS duties, electrical hazards, lock-out/tag-out principles and safe systems of work related to RCD testing Supervision arrangements that do not ensure complex or higher-risk electrical work is overseen by a competent person Limited understanding by managers and schedulers of the constraints and safety requirements associated with RCD testing 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> Lack of refresher training or competency reassessment for workers and contractors carrying out or coordinating testing Failure to provide information to general workers on the purpose of RCDs, implications of testing and what to do if circuits trip 		[REDACTED]	
5. Procedures, Safe Systems of Work and Documentation	<ul style="list-style-type: none"> Lack of a documented procedure for planning and managing RCD testing within the organisation's WHS management system Procedures that are overly generic and do not reflect site-specific switchboard layouts, plant criticality or operational constraints Outdated or uncontrolled versions of procedures, forms and checklists used by staff and contractors Inadequate documentation for the escalation and isolation of defective RCDs identified during testing No clear criteria in procedures for removing equipment from service or implementing interim controls when RCD testing fails Inconsistent documentation of test outcomes, including date, device identification, test type, results and corrective actions 	High	[REDACTED]	Medium
6. Contractor and Vendor Management	<ul style="list-style-type: none"> Engagement of external contractors to perform RCD testing without adequate verification of competence, licensing or WHS performance Contractual arrangements that focus on lowest cost rather than safety, quality of testing and compliance with standards Poor communication of site-specific hazards, access restrictions and isolation procedures to contractors Lack of clarity over roles and responsibilities when multiple PCBUs 	High	[REDACTED]	Medium

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	<p>share the workplace (e.g. building owner, tenants, maintenance provider)</p> <ul style="list-style-type: none"> • Inadequate verification of contractor test equipment calibration, procedures and reporting formats • Limited oversight of contractor performance, resulting in incomplete testing or poor quality data being entered into the organisation's records 		[REDACTED]	
7. Information, Communication and Consultation	<ul style="list-style-type: none"> • Workers not informed of upcoming RCD testing activities, leading to confusion, disrupted work and potential unsafe improvisations during power interruptions • Insufficient consultation with affected departments when scheduling shutdowns for testing, creating conflict and last-minute changes • Limited communication to workers about the function of RCDs, limitation of protection and the importance of reporting trips and faults • Lack of clear communication channels for raising concerns about electrical safety or test outcomes • Failure to provide information to visitors, contractors and other PCBU about RCD coverage and any residual electrical risks during testing periods 	Medium	[REDACTED]	Low
8. Data Management, Records and Traceability	<ul style="list-style-type: none"> • Incomplete or inconsistent records of RCD testing outcomes, preventing trend analysis and verification of compliance • Paper-based records that are easily lost, damaged or not entered into a central system • Lack of unique identifiers for RCDs and boards, making it difficult to link test results to specific devices and locations • Unclear retention periods and storage arrangements for electrical safety records, leading to premature disposal of critical information 	High	[REDACTED]	Medium

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	<ul style="list-style-type: none"> Inability to produce evidence of testing and defect rectification during regulatory inspections or investigations No systematic review of testing data to identify recurring faults, nuisance tripping or underperforming circuits 		[REDACTED]	
9. Defect Management, Corrective Actions and Change Control	<ul style="list-style-type: none"> RCD defects identified during testing not being escalated, prioritised or rectified in a timely manner Continued operation of circuits with failed or missing RCD protection due to production pressure or lack of awareness Ad hoc modifications to electrical installations or loads after testing, invalidating previous test results Poor coordination between testing personnel and maintenance teams, delaying isolation and repair of defective equipment Lack of formal risk assessment when temporary workarounds are used following RCD failures (e.g. moving loads to non-RCD circuits) Inadequate verification testing after repairs or upgrades to ensure RCD compliance 	High	[REDACTED]	Medium
10. Emergency Preparedness, Incident Response and Continuous Improvement	<ul style="list-style-type: none"> Inadequate planning for potential electrical incidents associated with RCD failure, nuisance tripping or testing activities Lack of integration between RCD management and broader emergency response procedures (e.g. power loss to critical systems, evacuation requirements) Electrical incidents and near misses involving RCD-protected circuits not being reported, investigated or linked back to system improvements No systematic review of test results and incident data to refine the RCD 	Medium	[REDACTED]	Low

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	Testing Program and electrical safety controls • First aiders and emergency personnel not trained or equipped to respond to electrical shock incidents potentially involving RCDs		[REDACTED] [REDACTED]	

SAMPLE

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.