

Hand Routing Operations Risk Assessment

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THE 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:

- Eliminate**
- Substitute
- Isolate
- Engineering
- Administrative
- 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. Preparation	Inadequate workspace setup, Tool malfunction	3H	<ul style="list-style-type: none"> - Ensure adequate lighting and ventilation in the workspace. - Inspect tools for defects before use. - Securely fasten workpieces to prevent movement during operations. - Review safety procedures with all personnel prior to operations. - Have all Personal Protective Equipment (PPE) available. - Ensure only trained personnel use the equipment. - Maintain a clean and orderly work area to minimise tripping hazards. - Conduct pre-operational checklists prior to commencing work. - Ensure emergency procedures are communicated to all personnel. - Verify all tools are calibrated and operating correctly. 	2M
2. Tool selection	Incorrect tool use, Tool not suitable for material	3H	<ul style="list-style-type: none"> - Select tools appropriate for the specific material and job requirements. - Verify the condition of the tools prior to use. - Conduct regular maintenance checks on all routing tools. - Provide workers with adequate training on tool selection. - Use manufacturer-provided guidelines for tool operation. - Keep a log of tool checks and maintenance for accountability. - Ensure all personnel understand the differences between tools. - Replace any worn or damaged tools immediately. - Establish a tool sign-out system to track usage. - Provide clear instructions for tool selection to all operators. 	2M
3. Material inspection	Defective materials, Hazardous materials	3H	<ul style="list-style-type: none"> - Inspect all materials for defects or inconsistencies before use. - Identify and reject any materials that do not meet safety standards. - Provide Material Safety Data Sheets (MSDS) for all materials used. - Ensure proper handling and storage of hazardous materials. - Label all materials clearly to prevent misuse. - Train operators on recognising defective materials. - Use personal protective equipment when handling hazardous materials. - Segregate defective materials from usable stock immediately. 	1L

Counting, Electrical	4A	
Counting, Mechanical	4B	
Counting, Thermal	4C	
Counting, Chemical	4D	
Counting, Biological	4E	
Counting, Geological	4F	
Counting, Astronomical	4G	
Counting, Meteorological	4H	
Counting, Oceanographic	4I	
Counting, Atmospheric	4J	
Counting, Environmental	4K	
Counting, Agricultural	4L	
Counting, Industrial	4M	
Counting, Commercial	4N	
Counting, Financial	4O	
Counting, Legal	4P	
Counting, Medical	4Q	
Counting, Educational	4R	
Counting, Historical	4S	
Counting, Cultural	4T	
Counting, Linguistic	4U	
Counting, Philosophical	4V	
Counting, Religious	4W	
Counting, Political	4X	
Counting, Social	4Y	
Counting, Psychological	4Z	

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7. Power tool operation	Tool jams, Unexpected starts	3H		2M
8. Debris management	Dust inhalation, Fire hazard from wood dust	4A		2M
9. Post-routing inspection	Defective finish, Inadequate inspection	3H		2M

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10. Clean-up	Slips from spills, Improper disposal of waste material	3H		1L
11. Maintenance	Unplanned breakdowns, Improper repair practices	4A		2M

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12. Emergency response	Inadequate first aid availability, Panic during emergencies	4A	[REDACTED]	2M
13. report writing	Inaccurate information, Failure to document incidents	3H	[REDACTED]	1L
14. Waste management	Environmental damage, Health risks from waste exposure	4A	[REDACTED]	2M

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15. Tool storage	Improper storage, Inventory discrepancies	3H		2M

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 IF 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 2017

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) Regulations 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>

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

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>

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.