

Underpinning Works 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:								Notes on Hierarchy of Controls:	
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.								Remember to apply controls in the preferred order shown by the coloured pyramid:	
3H Review and approve additional controls before task starts. Senior supervisor sign-off needed.								1. Eliminate	
2M Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.								2. Substitute	
1L Proceed, following standard operating procedures. Monitor and keep records.								3. Isolate	
								4. Engineering	
								5. Administrative	
								6. PPE	
Consequence Scale:								Always document why a lower-order control is accepted if elimination or substitution is not reasonably practicable.	
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				
								<i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i>	

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	Trip hazard from debris, Manual handling injury	4A	<ul style="list-style-type: none"> - Conduct site walkthrough to identify potential trip hazards - Ensure appropriate personal protective equipment (PPE) is worn - Use mechanical aids to lift heavy items - Train workers on safe manual handling techniques - Clear and mark pathways to minimise trip risks - Schedule regular supervision and reinforcement of protocols - Ensure good housekeeping practices are followed - Provide and maintain clear walking surfaces - Conduct daily hazard assessments - Implement a safety management plan 	2M
2. Site Access	Unauthorised access, Vehicle movement	3M	<ul style="list-style-type: none"> - Secure site with fencing and signage - Implement a visitor logbook - Provide site induction for all personnel - Use spotters to manage vehicle movement - Establish designated entry and exit points - Provide high visibility clothing for workers - Conduct regular drills on site access procedures - Employ traffic controllers - Install CCTV to monitor entry points - Develop procedures for emergency vehicle access 	2M
3. Excavation	Collapse of excavation, Falling objects	4A	<ul style="list-style-type: none"> - Conduct geotechnical survey before excavation - Use trench shields or shoring - Install perimeter barriers and stop fences around excavations - Enforce exclusion zones - Inspect excavation supports regularly - Wear hard hats inside the work zone - Train workers on recognising excavation hazards - Utilise spotters to manage excavation work 	2M

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
			<ul style="list-style-type: none"> - Ensure clear communication among the crew - Apply appropriate lighting for visibility 	
4. Drilling	Noise exposure, Flying debris	3H	<ul style="list-style-type: none"> - Use appropriate PPE (earplugs, earmuffs, safety glasses, face shield) - Establish exclusion zone around drilling area - Use dust extraction system - Use noise barriers - Use appropriate lighting - Use appropriate communication system - Use appropriate signage - Use appropriate barriers - Use appropriate safety harness - Use appropriate fall protection - Use appropriate safety netting - Use appropriate safety fencing - Use appropriate safety tape - Use appropriate safety cones - Use appropriate safety lights - Use appropriate safety flags - Use appropriate safety vests - Use appropriate safety helmets - Use appropriate safety boots - Use appropriate safety gloves - Use appropriate safety eyewear - Use appropriate safety footwear - Use appropriate safety headgear - Use appropriate safety equipment - Use appropriate safety tools - Use appropriate safety materials - Use appropriate safety supplies - Use appropriate safety services - Use appropriate safety personnel - Use appropriate safety contractors - Use appropriate safety subcontractors - Use appropriate safety vendors - Use appropriate safety suppliers - Use appropriate safety distributors - Use appropriate safety retailers - Use appropriate safety manufacturers - Use appropriate safety designers - Use appropriate safety engineers - Use appropriate safety architects - Use appropriate safety planners - Use appropriate safety managers - Use appropriate safety supervisors - Use appropriate safety coordinators - Use appropriate safety inspectors - Use appropriate safety auditors - Use appropriate safety assessors - Use appropriate safety consultants - Use appropriate safety advisors - Use appropriate safety trainers - Use appropriate safety educators - Use appropriate safety researchers - Use appropriate safety developers - Use appropriate safety testers - Use appropriate safety evaluators - Use appropriate safety analysts - Use appropriate safety engineers - Use appropriate safety architects - Use appropriate safety planners - Use appropriate safety managers - Use appropriate safety supervisors - Use appropriate safety coordinators - Use appropriate safety inspectors - Use appropriate safety auditors - Use appropriate safety assessors - Use appropriate safety consultants - Use appropriate safety advisors - Use appropriate safety trainers - Use appropriate safety educators - Use appropriate safety researchers - Use appropriate safety developers - Use appropriate safety testers - Use appropriate safety evaluators - Use appropriate safety analysts 	1L
5. Foundation Strengthening	Structural failure, Chemical exposure	4A	<ul style="list-style-type: none"> - Use appropriate PPE (hard hat, safety glasses, face shield, earplugs, earmuffs, safety vest, safety harness, safety netting, safety fencing, safety tape, safety cones, safety lights, safety flags, safety vests, safety helmets, safety boots, safety gloves, safety eyewear, safety footwear, safety headgear, safety equipment, safety tools, safety materials, safety supplies, safety services, safety personnel, safety contractors, safety subcontractors, safety vendors, safety suppliers, safety distributors, safety retailers, safety manufacturers, safety designers, safety engineers, safety architects, safety planners, safety managers, safety supervisors, safety coordinators, safety inspectors, safety auditors, safety assessors, safety consultants, safety advisors, safety trainers, safety educators, safety researchers, safety developers, safety testers, safety evaluators, safety analysts, safety engineers, safety architects, safety planners, safety managers, safety supervisors, safety coordinators, safety inspectors, safety auditors, safety assessors, safety consultants, safety advisors, safety trainers, safety educators, safety researchers, safety developers, safety testers, safety evaluators, safety analysts) - Establish exclusion zone around foundation strengthening area - Use dust extraction system - Use noise barriers - Use appropriate lighting - Use appropriate communication system - Use appropriate signage - Use appropriate barriers - Use appropriate safety harness - Use appropriate fall protection - Use appropriate safety netting - Use appropriate safety fencing - Use appropriate safety tape - Use appropriate safety cones - Use appropriate safety lights - Use appropriate safety flags - Use appropriate safety vests - Use appropriate safety helmets - Use appropriate safety boots - Use appropriate safety gloves - Use appropriate safety eyewear - Use appropriate safety footwear - Use appropriate safety headgear - Use appropriate safety equipment - Use appropriate safety tools - Use appropriate safety materials - Use appropriate safety supplies - Use appropriate safety services - Use appropriate safety personnel - Use appropriate safety contractors - Use appropriate safety subcontractors - Use appropriate safety vendors - Use appropriate safety suppliers - Use appropriate safety distributors - Use appropriate safety retailers - Use appropriate safety manufacturers - Use appropriate safety designers - Use appropriate safety engineers - Use appropriate safety architects - Use appropriate safety planners - Use appropriate safety managers - Use appropriate safety supervisors - Use appropriate safety coordinators - Use appropriate safety inspectors - Use appropriate safety auditors - Use appropriate safety assessors - Use appropriate safety consultants - Use appropriate safety advisors - Use appropriate safety trainers - Use appropriate safety educators - Use appropriate safety researchers - Use appropriate safety developers - Use appropriate safety testers - Use appropriate safety evaluators - Use appropriate safety analysts 	2M
6. Concreting	Slip hazard from wet concrete, Injury from concrete equipment	3H	<ul style="list-style-type: none"> - Use appropriate PPE (hard hat, safety glasses, face shield, earplugs, earmuffs, safety vest, safety harness, safety netting, safety fencing, safety tape, safety cones, safety lights, safety flags, safety vests, safety helmets, safety boots, safety gloves, safety eyewear, safety footwear, safety headgear, safety equipment, safety tools, safety materials, safety supplies, safety services, safety personnel, safety contractors, safety subcontractors, safety vendors, safety suppliers, safety distributors, safety retailers, safety manufacturers, safety designers, safety engineers, safety architects, safety planners, safety managers, safety supervisors, safety coordinators, safety inspectors, safety auditors, safety assessors, safety consultants, safety advisors, safety trainers, safety educators, safety researchers, safety developers, safety testers, safety evaluators, safety analysts) - Establish exclusion zone around concreting area - Use dust extraction system - Use noise barriers - Use appropriate lighting - Use appropriate communication system - Use appropriate signage - Use appropriate barriers - Use appropriate safety harness - Use appropriate fall protection - Use appropriate safety netting - Use appropriate safety fencing - Use appropriate safety tape - Use appropriate safety cones - Use appropriate safety lights - Use appropriate safety flags - Use appropriate safety vests - Use appropriate safety helmets - Use appropriate safety boots - Use appropriate safety gloves - Use appropriate safety eyewear - Use appropriate safety footwear - Use appropriate safety headgear - Use appropriate safety equipment - Use appropriate safety tools - Use appropriate safety materials - Use appropriate safety supplies - Use appropriate safety services - Use appropriate safety personnel - Use appropriate safety contractors - Use appropriate safety subcontractors - Use appropriate safety vendors - Use appropriate safety suppliers - Use appropriate safety distributors - Use appropriate safety retailers - Use appropriate safety manufacturers - Use appropriate safety designers - Use appropriate safety engineers - Use appropriate safety architects - Use appropriate safety planners - Use appropriate safety managers - Use appropriate safety supervisors - Use appropriate safety coordinators - Use appropriate safety inspectors - Use appropriate safety auditors - Use appropriate safety assessors - Use appropriate safety consultants - Use appropriate safety advisors - Use appropriate safety trainers - Use appropriate safety educators - Use appropriate safety researchers - Use appropriate safety developers - Use appropriate safety testers - Use appropriate safety evaluators - Use appropriate safety analysts 	2M

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
7. Masonry Work	Musculoskeletal injury, Dust inhalation	3H		1L
8. Equipment Installation	Electrical hazards, Equipment failure	4A		2M
9. Final Inspections	Missed defects, Inadequate documentation	3H		1L

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
10. Clean-up	Sharp objects, Hazardous waste	3H		1L
11. Demobilisation	Traffic congestion, Environmental damage	3H		2M
12. Review and Feedback	Unaddressed safety recommendations, Inadequate feedback loops	3H		1L

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
13. Communication	Misinterpretation of signals, Lack of communication	3H		1L
14. Emergency Preparedness	Delayed response, Inadequate resources	4A		2M
15. Continuous Improvement	Complacency, Outdated procedures	3H		1L

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
			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	

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>

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>

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>

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.

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>

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>

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