

Earth Retaining Structures 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				
								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. Site Inspection	Uneven terrain, Slips and trips	3H	<ul style="list-style-type: none"> - Conduct thorough site inspection before starting work - Use appropriate footwear with non-slip soles - Mark and barricade hazardous areas - Brief workers on site conditions - Implement inspection checklists for daily evaluations - Ensure adequate lighting in all work areas - Monitor weather conditions - Establish controlled access zones - Keep walkways clear of obstructions - Regular removal of debris and waste from site 	2M
2. Excavation	Cave-ins, Falling objects	4H	<ul style="list-style-type: none"> - Use excavation certificates and permits - Trenches shored or battered - Train workers in trench safety - Keep spoil piles at a safe distance - Install guardrails or barriers - Inspect excavation supports regularly - Use spotters for equipment movements - Wear hard hats at all times - Monitor excavation sites for water accumulation - Maintain communication amongst team 	3H
3. Setting Up Formwork	Formwork collapse, Falling from height	4A	<ul style="list-style-type: none"> - Follow manufacturer's instructions for formwork setup - Use appropriate fall protection measures such as harnesses - Train workers on correct formwork installation - Inspect formwork before and during use - Establish exclusion zones during lifting operations - Ensure supports can handle anticipated loads - Erect scaffolding with adequate guardrails - Regular communication with crane operators 	2M

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			<ul style="list-style-type: none"> - Monitor wind conditions - Appoint a competent supervisor 	
4. Pouring Concrete	Spillage, Chemical exposure	3H	<ul style="list-style-type: none"> - Wear appropriate PPE - Use correct lifting technique - Avoid contact with skin and clothing - Clean up spills immediately - Use spill kits - Store materials properly - Use secondary containment - Label all containers - Read SDS - Use proper disposal methods - Keep work area clean and clutter-free - Use proper ventilation - Avoid eating, drinking or smoking - Wash hands thoroughly after work - Report any incidents or injuries - Keep first aid kit accessible - Have emergency procedures in place - Train workers on proper handling - Use appropriate tools and equipment - Follow manufacturer's instructions - Use proper storage and handling - Avoid contact with eyes - Use eye protection - Use proper disposal methods - Keep work area clean and clutter-free - Use proper ventilation - Avoid eating, drinking or smoking - Wash hands thoroughly after work - Report any incidents or injuries - Keep first aid kit accessible - Have emergency procedures in place - Train workers on proper handling - Use appropriate tools and equipment - Follow manufacturer's instructions - Use proper storage and handling - Avoid contact with eyes - Use eye protection 	2M
5. Curing and Stripping Formwork	Structural instability, Manual handling injuries	3H	<ul style="list-style-type: none"> - Use proper lifting technique - Avoid contact with skin and clothing - Clean up spills immediately - Use spill kits - Store materials properly - Use secondary containment - Label all containers - Read SDS - Use proper disposal methods - Keep work area clean and clutter-free - Use proper ventilation - Avoid eating, drinking or smoking - Wash hands thoroughly after work - Report any incidents or injuries - Keep first aid kit accessible - Have emergency procedures in place - Train workers on proper handling - Use appropriate tools and equipment - Follow manufacturer's instructions - Use proper storage and handling - Avoid contact with eyes - Use eye protection - Use proper disposal methods - Keep work area clean and clutter-free - Use proper ventilation - Avoid eating, drinking or smoking - Wash hands thoroughly after work - Report any incidents or injuries - Keep first aid kit accessible - Have emergency procedures in place - Train workers on proper handling - Use appropriate tools and equipment - Follow manufacturer's instructions - Use proper storage and handling - Avoid contact with eyes - Use eye protection 	1L
6. Backfilling	Machinery accidents, Dust inhalation	3H	<ul style="list-style-type: none"> - Wear appropriate PPE - Use correct lifting technique - Avoid contact with skin and clothing - Clean up spills immediately - Use spill kits - Store materials properly - Use secondary containment - Label all containers - Read SDS - Use proper disposal methods - Keep work area clean and clutter-free - Use proper ventilation - Avoid eating, drinking or smoking - Wash hands thoroughly after work - Report any incidents or injuries - Keep first aid kit accessible - Have emergency procedures in place - Train workers on proper handling - Use appropriate tools and equipment - Follow manufacturer's instructions - Use proper storage and handling - Avoid contact with eyes - Use eye protection - Use proper disposal methods - Keep work area clean and clutter-free - Use proper ventilation - Avoid eating, drinking or smoking - Wash hands thoroughly after work - Report any incidents or injuries - Keep first aid kit accessible - Have emergency procedures in place - Train workers on proper handling - Use appropriate tools and equipment - Follow manufacturer's instructions - Use proper storage and handling - Avoid contact with eyes - Use eye protection 	2M

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7. Site Cleanup	Trip hazards, Exposure to sharp objects	2M		1L
8. Removal of Temporary Structures	Structural collapse, Manual handling injuries	3H		1L
9. Landscaping and Finalization	Soil erosion, Uneven ground access	3H		2M

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10. Site Inspection and Approval	Missed hazards, Non-compliance with specifications	3H		1L
11. Staff Training and Induction	Inadequate safety knowledge, Miscommunication	2M		1L
12. Machinery and Equipment Maintenance	Equipment failure, Outdated machinery	3H		1L

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13. Access and Egress Safety	Blocked exits, Inadequate evacuation plans	3H		1L
14. Emergency Preparedness	Inadequate response, Panic during emergencies	3H		1L
15. Quality Assurance and Control	Non-conformance with standards, Material failures	3H		2M

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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.