

## Bulkhead Construction 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			<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.	<b>Isolation</b> 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.	<b>Administrative</b> Change
								<b>PPE</b>

### 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. Preparation	Manual handling injury, Slips and trips	3H	<ul style="list-style-type: none"> <li>- Conduct site induction for all workers</li> <li>- Use mechanical aids for lifting</li> <li>- Ensure walking surfaces are clean and dry</li> <li>- Implement proper housekeeping procedures</li> <li>- Provide slip-resistant footwear</li> <li>- Train staff in manual handling techniques</li> <li>- Set up signage to warn of slip hazards</li> <li>- Maintain a clear work area</li> <li>- Schedule regular breaks to reduce fatigue</li> <li>- Ensure adequate lighting in work areas</li> </ul>	2M
2. Site Setup	Falling objects, Exposure to hazardous materials	4H	<ul style="list-style-type: none"> <li>- Erect barriers to prevent access to high-risk areas</li> <li>- Use PPE such as helmets and gloves where necessary</li> <li>- Conduct risk assessments for hazardous materials</li> <li>- Implement proper storage protocols for materials</li> <li>- Train workers in the safe handling of materials</li> <li>- Ensure proper signage is displayed</li> <li>- Conduct regular site inspections</li> <li>- Provide first-aid kits on site</li> <li>- Limit site access to authorised personnel</li> <li>- Store materials at safe heights</li> </ul>	3H
3. Excavation	Collapsing trench, Underground utility damage	4A	<ul style="list-style-type: none"> <li>- Use appropriate shoring systems</li> <li>- Conduct a Dial Before You Dig (DBYD) search</li> <li>- Train workers in trench safety</li> <li>- Keep heavy machinery away from trench edges</li> <li>- Monitor weather conditions</li> <li>- Use barricades around excavation site</li> <li>- Regularly inspect shoring equipment</li> <li>- Ensure communication between workers and operators</li> </ul>	3H

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"> <li>- Have an emergency plan in place</li> <li>- Limit time workers spend in trenches</li> </ul>	
4. Formwork Installation	Falls from height, Pinching from moving parts	3H	<ul style="list-style-type: none"> <li>- Erect formwork in accordance with the manufacturer's instructions</li> <li>- Ensure that all formwork is properly braced and supported</li> <li>- Use proper tie-off techniques when working at heights</li> <li>- Avoid overloading formwork with materials or equipment</li> <li>- Use fall protection (harness, lifelines) when working at heights</li> <li>- Keep work area clear of debris and obstructions</li> <li>- Use proper lifting techniques to avoid pinching or crushing injuries</li> <li>- Inspect formwork for damage or wear before use</li> <li>- Ensure that all workers are trained and qualified to work with formwork</li> <li>- Use safety barriers to prevent workers from falling off the edge of the formwork</li> <li>- Avoid working in adverse weather conditions (wind, rain, snow)</li> </ul>	2M
5. Reinforcement Placement	Cut injuries from steel, Repetitive strain injuries	3H	<ul style="list-style-type: none"> <li>- Use proper cutting techniques (cutting tools, gloves)</li> <li>- Avoid using hands to guide or support reinforcement bars</li> <li>- Use proper lifting techniques to avoid repetitive strain injuries</li> <li>- Keep work area clear of debris and obstructions</li> <li>- Use proper tie-off techniques when working at heights</li> <li>- Avoid overloading reinforcement with materials or equipment</li> <li>- Inspect reinforcement for damage or wear before use</li> <li>- Ensure that all workers are trained and qualified to work with reinforcement</li> <li>- Use safety barriers to prevent workers from falling off the edge of the formwork</li> <li>- Avoid working in adverse weather conditions (wind, rain, snow)</li> </ul>	2M
6. Concrete Pouring	Concrete burns, Equipment malfunction	4A	<ul style="list-style-type: none"> <li>- Use proper pouring techniques (pump, chute)</li> <li>- Avoid using hands to guide or support concrete</li> <li>- Use proper lifting techniques to avoid repetitive strain injuries</li> <li>- Keep work area clear of debris and obstructions</li> <li>- Use proper tie-off techniques when working at heights</li> <li>- Avoid overloading equipment with materials or equipment</li> <li>- Inspect equipment for damage or wear before use</li> <li>- Ensure that all workers are trained and qualified to work with equipment</li> <li>- Use safety barriers to prevent workers from falling off the edge of the formwork</li> <li>- Avoid working in adverse weather conditions (wind, rain, snow)</li> </ul>	3H

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7. Curing and Setting	Chemical exposure, Unauthorised access	3H		2M
8. Formwork Removal	Formwork collapse, Falling debris	4A		3H
9. Clean-up	Slips and trips, Cut injuries	3H		2M

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10. Inspection and Handover	Missed defects, Unauthorised access	3H		2M
11. Final Landscaping	Machinery hazards, Slips and trips	3H		2M
12. Demobilisation	Traffic accidents, Manual handling injuries	4A		3H

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13. Waste Management	Chemical exposure, Incorrect disposal	3H		2M
14. Final Site Inspection	Missed documentation, Unidentified hazards	3H		2M
15. Handover to Client	Miscommunication, Compliance issues	3H		2M

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			<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	
16. Post-Completion Review	Unresolved issues, Delayed responses	2M	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	1L



## 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.