

Formwork

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. WHS Governance, Legislative Compliance and PCBU Duties	<ul style="list-style-type: none"> Failure to clearly allocate WHS duties between PCBU, principal contractor, formwork designer, temporary works engineer, formwork contractor and labour hire providers Inadequate understanding or application of WHS Act 2011 and WHS Regulation (particularly provisions relating to construction work, high risk construction work, temporary structures and plant) Lack of documented WHS management plan covering all formwork and falsework activities including Acrow props, temporary supports, climbing bracket platforms and post-tensioning interfaces Poor integration of formwork risk controls with principal contractor site rules, traffic management plans and emergency procedures Failure to ensure consultation, cooperation and coordination between multiple PCBUs involved in formwork, post-tensioning, concrete placement and stripping operations Insufficient verification that designers have provided information about design assumptions, load paths, maximum capacities and limitations of formwork, falsework and propping systems No formal process to review incidents, near misses or design non-conformances involving temporary supports, decks, columns, stairs and round column formwork 	High	<ul style="list-style-type: none"> Develop and implement a project-specific WHS management plan that explicitly addresses all formwork, falsework, propping, temporary supports, climbing brackets, stair and round column systems, aligned with WHS Act 2011 and WHS Regulation requirements Define and document roles, responsibilities and accountability for all duty holders (PCBU, principal contractor, formwork contractor, designer, engineer, supervisors, labour hire agencies) including sign-off responsibilities for installation, modification and stripping of formwork and falsework Implement formal consultation and coordination procedure between PCBUs to manage interface risks between formwork, concrete placement, post-tensioning operations, crane activities and other trades working above, below and adjacent to temporary structures Ensure all formwork related contracts, scopes of work and purchase orders explicitly reference compliance with relevant Australian Standards (e.g. AS/NZS 1576 and AS 3610 series), Codes of Practice, engineering specifications and the project WHS management plan Require designers and temporary works engineers to provide written design documentation including load assumptions, allowable capacities for Acrow props and similar systems, propping layouts, back-propping requirements, tie and brace layouts, and stripping criteria and sequences Establish a documented change management procedure for any deviation from the approved design (e.g. different prop types, altered deck heights, modified stair or column formwork layouts, different stripping sequence, changes to post-tensioning stressing stages), requiring engineer review and written approval Introduce a periodic WHS governance review (e.g. monthly) by senior management to confirm that formwork and falsework risks are being managed, including review of inspection records, non-conformances, near misses and corrective actions Embed requirements for safe formwork and temporary works management into tenders and subcontractor selection criteria, including evidence of WHS systems, competency and past performance Maintain a compliance matrix mapping project formwork activities to legislative and standards requirements and use it as an audit tool throughout the project lifecycle 	Medium
2. Design, Engineering and Temporary Works Management	<ul style="list-style-type: none"> Inadequate engineering design for formwork decks, falsework and temporary supports leading to structural instability or progressive collapse Lack of engineering verification for Acrow props, modular falsework frames, climbing bracket form platforms and 	High	<ul style="list-style-type: none"> Engage a suitably qualified and experienced structural or temporary works engineer to design all formwork, falsework, propping and temporary support systems, including specific designs for decks, stairs, columns (including round columns), climbing bracket platforms and special access arrangements Require formal engineering design documentation including drawings, design calculations, load assumptions, maximum permissible leg/prop loads, tie and brace requirements, and limitations on changes to geometry, heights and spacing 	Medium

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	<p>round column formwork in site-specific configurations</p> <ul style="list-style-type: none"> Design assumptions not reflecting actual site conditions, loads from post-tensioning, concrete placement methods, construction loads and sequencing for stripping operations Insufficient back-propping and temporary support consideration when stripping slabs, beams, stairs and columns Unclear or undocumented stripping procedures and sequences for complex formwork systems including climbing brackets and stair flights No system to control unauthorised changes to layout and installation of forms and props during construction Inadequate interface design between formwork/falsework and permanent structure, especially where integrated with post-tensioning ducts, anchors and stressing points 		<ul style="list-style-type: none"> Implement a temporary works management procedure that covers design approval, document control, installation sign-off, load application, monitoring, modification and dismantling of formwork and falsework systems Ensure the design specifically considers construction loads, wet concrete pressure, concrete placement rates, vibration equipment, stacking of materials, access platforms and post-tensioning stages and forces Include clearly documented propping and back-propping layouts for all stages: initial pour, secondary pours, construction loads, post-tensioning stresses, deflection control and final stripping sequence Develop engineering-approved stripping procedures for each formwork system, including trigger criteria (e.g. concrete strength, sequence of prop removal, identification of key supports and re-shoring requirements) Use a formal design review process (e.g. design review meetings, independent verification when required) for complex or high risk elements such as high falsework towers, significant back-propping, and climbing bracket arrangements Implement a written permit or approval system for any site change to formwork layout, prop spacing or temporary supports requiring review and sign-off by the temporary works engineer or authorised delegate Ensure all relevant design and stripping information is communicated to supervisors and workers through toolbox talks, training and readily accessible drawings at the workface, including clear diagrams of no-go modifications Maintain and control current revision drawings and calculations on-site, with obsolete revisions clearly removed from circulation to prevent use of superseded designs 	
3. Procurement, Selection and Hire of Formwork and Falsework Systems	<ul style="list-style-type: none"> Procurement of incompatible, mixed or non-engineered formwork, falsework and propping components from multiple suppliers without system compatibility checks Use of non-compliant, uncertified or counterfeit Acrow props and similar adjustable props lacking verifiable load ratings Insufficient consideration of required capacities, heights, exposure conditions and access when selecting systems for decks, columns, stairs and round column formwork Lack of documented acceptance criteria for hired formwork and falsework equipment arriving on site Procurement decisions driven solely by cost and availability rather than engineering and WHS requirements 	High	<ul style="list-style-type: none"> Develop a formal procurement procedure for formwork, falsework, Acrow props and temporary supports that includes minimum technical, engineering and WHS requirements aligned with design documents and Australian Standards Specify in purchase orders and hire agreements that only compatible components from the same system or engineer-approved mixed systems may be supplied, including required capacities, allowable heights, base and head types, and bracing arrangements Require suppliers to provide certificates of compliance, load rating tables, user manuals and inspection criteria for all proprietary systems including climbing bracket platforms, stair form systems and round column formwork Implement a receiving inspection checklist for incoming formwork equipment to verify type, condition, compliance markings, system compatibility and presence of documentation before acceptance into use Maintain a register of approved suppliers and systems based on technical evaluation, previous performance, and demonstrable WHS and quality systems Consult with the temporary works engineer before procuring any alternative systems or substituting components to ensure compatibility with the approved design Include contractual requirements for suppliers to provide technical support, training materials and updates to instructions where systems or standards change 	Medium

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	<ul style="list-style-type: none"> Inadequate specification of required documentation from suppliers such as load tables, inspection recommendations and instructions for safe installation and stripping 		<ul style="list-style-type: none"> Prohibit procurement or site use of props or falsework components without clearly legible identification and load rating information 	
4. Inspection, Maintenance and Asset Management of Formwork Equipment	<ul style="list-style-type: none"> Use of damaged, bent, corroded or modified props, frames, ledgers, braces and formwork panels compromising structural capacity Absence of a formal inspection and maintenance regime for reusable formwork and falsework components including Acrow props and temporary supports Untracked life cycle of critical components leading to use beyond safe service life Inadequate storage and handling practices causing degradation or undetected damage to climbing brackets, stair formwork and round column forms Failure to remove defective systems from service resulting in ongoing risk across multiple projects No system to ensure that equipment is inspected and fit-for-purpose on each project 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium
5. Competency, Licensing and Training for Formwork and Falsework	<ul style="list-style-type: none"> Inadequate competency of supervisors and workers involved in layout and installation of forms, placement and removal of props, and management of temporary supports Lack of specific training in engineered systems such as climbing brackets, stair formwork, round column formwork and complex falsework arrangements Supervisors unable to interpret engineering drawings, load tables, propping layouts and stripping sequences 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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	<ul style="list-style-type: none"> Inconsistent understanding of legal obligations, including duties relating to high risk construction work, working at height and plant use Poor knowledge of risks associated with post-tensioning works, including restrictions on formwork stripping and temporary support removal around tendons and anchors No process to verify qualifications, high risk work licences or previous experience of key formwork personnel 		[REDACTED]	
6. Planning, Sequencing and Integration with Other Trades	<ul style="list-style-type: none"> Poor planning of formwork decks, columns, stairs and temporary supports leading to congestion, overloading and clashes with other trades Uncoordinated timing between formwork erection, reinforcement placement, concrete pours, post-tensioning stressing, and stripping operations Failure to plan for sufficient time to safely install, inspect and certify falsework before loading with concrete or construction materials Ad hoc changes to layout and installation of forms without re-evaluation of load paths and impacts on other activities Inadequate planning for simultaneous operations above, below or adjacent to formwork decks and climbing bracket form platforms Lack of structured planning for progressive stripping, re-shoring and relocation of props and temporary supports over multiple levels 	High	[REDACTED]	Medium
7. Supervision, Monitoring and Verification of Compliance	<ul style="list-style-type: none"> Insufficient on-site supervision during installation and removal of formworks and propping systems Failure to detect unsafe adjustments to props, braces and temporary supports 	High	[REDACTED]	Medium

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	<p>made to gain access or fit other trades' work</p> <ul style="list-style-type: none"> • Inadequate verification that formwork is built in accordance with the engineered design and manufacturer's instructions • No systematic monitoring of deflections, movement or distress signs in formwork decks, columns, stairs and falsework towers • Supervisors under time pressure prioritising production over compliance with WHS controls and design requirements • Lack of documented sign-off prior to loading formwork with wet concrete or commencing stripping operations 		[REDACTED]	
8. Documentation, Procedures and Work Instructions	<ul style="list-style-type: none"> • Absence of clear written procedures covering installation and removal of falsework, formwork stripping procedures and management of temporary support • Reliance on informal practices and undocumented 'standard' methods that may conflict with current engineered designs and supplier instructions • Workers not having access to up-to-date drawings, propping layouts and stripping sequences at the point of work • Inadequate documentation of formwork design changes, approvals, inspections and sign-offs, making it difficult to verify compliance or investigate incidents • Confusing or inconsistent terminology between engineering documents, supplier manuals and site procedures 	High	[REDACTED]	Low
9. Interface Management with Post-	<ul style="list-style-type: none"> • Lack of coordination between formwork stripping procedures and post-tensioning 	High	[REDACTED]	Medium

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Tensioning and Structural Works	<p>stressing sequences leading to premature removal of temporary supports</p> <ul style="list-style-type: none"> Inadequate understanding of structural requirements for minimum concrete strength, tendon stressing stages and load transfer before stripping Uncontrolled cutting or modification of formwork or temporary supports near post-tensioning anchors, ducts or stressing areas No clear responsibility for confirming structural adequacy before removal of falsework and props Insufficient communication of no-go zones for drilling, fixing or cutting around post-tensioning tendons when formwork is in place or being stripped 		[REDACTED]	
10. Access, Egress and Working at Height on Formwork Systems	<ul style="list-style-type: none"> Inadequate access to formwork decks, stair formwork and climbing bucket platforms leading to unsafe climbing on frames, props or temporary supports Insufficient planning for edge protection and fall prevention on temporary decks and around openings in formwork systems Poorly designed or ad hoc access to high falsework structures for inspection and adjustment of props and braces Obstructed emergency egress routes due to placement of formwork components, falsework towers and stored materials Lack of integrated management of working at height risks during erection, modification and stripping of formwork and falsework 	High	[REDACTED]	Medium

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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 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.