

Steel Fixing

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. Governance, WHS Leadership and Legal Compliance	<ul style="list-style-type: none"> Lack of clear WHS governance structure specific to steel fixing activities under the WHS Act 2011 and WHS Regulation Failure to identify and discharge primary duty of care by the PCBU and due diligence duties by officers in relation to high-risk construction work Inadequate consultation, cooperation and coordination between PCBUs on multi-contractor construction sites involving steel fixers, crane operators, formworkers and concrete crews Absence of a documented WHS management system (WHSMS) that addresses steel fixing risks (e.g. falls, plant interaction, musculoskeletal disorders, structural collapse) Inadequate monitoring and review of WHS performance and incident trends specific to steel fixing operations No clear allocation of WHS roles, responsibilities and authority of supervisors and leading hands overseeing steel fixing Inadequate consideration of WHS requirements in commercial contract resulting in cost and schedule pressures that undermine safety 	High	<ul style="list-style-type: none"> Establish and document a WHS management system aligned with AS/NZS ISO 45001, explicitly referencing the WHS Act 2011, WHS Regulation and applicable Codes of Practice for construction work and prevention of falls Define and communicate WHS responsibilities, accountabilities and authorities for officers, managers, supervisors and workers engaged in steel fixing, including due diligence expectations Embed WHS requirements specific to steel fixing (e.g. high-risk construction work, fall prevention, plant interaction controls) into governance documents and project execution plans Implement a formal consultation framework with health and safety representatives (HSRs), steel fixing crews and sub-contractors, including regular toolbox talks that focus on systemic issues rather than task-by-task instruction Set WHS performance indicators for steel fixing (e.g. near-miss reporting rates, corrective action closure times, compliance with engineering controls) and review them at management meetings Ensure contractual arrangements with clients, head contractors and subcontractors clearly state WHS obligations, information-sharing expectations and escalation processes for safety concerns Conduct periodic management reviews and external audits of the WHSMS to verify legal compliance and effectiveness of steel fixing risk controls, documenting findings and improvement actions 	Medium
2. Planning, Design Integration and Engineering Controls	<ul style="list-style-type: none"> Steel fixing methodology not considered early in design, leading to reinforcement layouts that are difficult to install safely Lack of engineering verification for temporary works supporting reinforcement (e.g. formwork, propping, working platforms and falsework) Inadequate planning for sequencing of trades, causing congestion and unsafe interfaces between steel fixers, formworkers and concrete placement crews 	High	<ul style="list-style-type: none"> Integrate WHS requirements into design reviews so designers, engineers and construction planners consider steel fixing methods, access and handling when detailing reinforcement Require engineering certification and documented design for temporary works and supports associated with reinforcement, including maximum loading, bracing requirements and inspection regimes Develop project-specific steel fixing methodologies and construction staging plans that minimise work at height, reduce manual handling and avoid trade congestion Specify standardised bar lengths, prefabricated reinforcement modules and lifting points where practicable to reduce manual handling and support mechanical lifting strategies Incorporate fall-prevention systems and access solutions (e.g. permanent cast-in anchors, edge protection fixing points, walkways) into the design and project planning documents 	Medium

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"> • Insufficient consideration of manual handling loads, bar sizes, prefabricated cage weights and lifting points in design and planning • No systematic assessment of falls from height, edge protection requirements or access provisions at planning stage • Failure to plan for safe craneage and material delivery locations, causing plant-person interaction risks • Inadequate consideration of environmental factors such as wind, heat and wet weather impacts on steel fixing systems 		<ul style="list-style-type: none"> • Include craneage, loading zones, laydown areas and exclusion zones for reinforcement deliveries in traffic management and site logistics plans • Embed triggers in planning processes to review steel fixing methods in response to seasonal or forecast adverse weather and update work methods and schedules accordingly 	
3. Contractor Selection, Procurement and Supply Chain Management	<ul style="list-style-type: none"> • Engagement of steel fixing subcontractors without adequate WHS capability or experience in high-risk construction work • Procurement processes focused on lowest price rather than demonstrated safety management systems and performance • Use of suppliers and subcontractors without quality controls for reinforcement fabrication, leading to rework and unsafe manual handling of cutting • Insufficient verification that subcontractors hold required insurances, licences and high-risk work licences for associated tasks (e.g. dogging, rigging, crane operation) • Lack of WHS specification in purchase orders and contracts for reinforcement, lifting gear, mesh and accessories • Inconsistent provision of safety documentation (e.g. product data, load charts, certificates of compliance) for reinforcement components and lifting equipment 	High	<ul style="list-style-type: none"> • Implement a pre-qualification process for steel fixing subcontractors that assesses WHS management systems, incident history, competency management and capacity to comply with WHS legislation • Include explicit WHS performance and reporting requirements in contracts, including obligation to provide SWMS, training records, inspection reports and participation in site safety committees • Specify quality and certification requirements for reinforcement materials and prefabricated cages, including compliance with relevant Australian Standards and traceability of batches • Verify that all subcontractors using cranes, EWP's and rigging for steel fixing have appropriate high-risk work licences and competency documentation prior to engagement • Include WHS specifications in procurement documents for lifting equipment, mesh handling systems, fall-prevention devices and access equipment, ensuring suppliers provide required compliance documentation • Implement a vendor performance review process that incorporates WHS performance metrics for steel fixers, material suppliers and equipment hire companies, with the ability to suspend poor performers 	Medium
4. Training, Competency and Supervision Systems	<ul style="list-style-type: none"> • Steel fixers and supervisors lacking formal competency in reading reinforcement drawings, bar schedules and installation specifications 	High		Medium

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"> Inadequate training on WHS legislative requirements, high-risk construction work and site-specific procedures relating to steel fixing Reliance on informal, on-the-job training with no verification of skills for high-risk activities such as working at height, using power tools or operating mechanical handling aids Supervisors not trained in hazard identification, risk assessment, and effective safety leadership specific to steel fixing operations Inadequate induction processes that fail to address specific steel fixing hazards such as trip hazards, protruding bar impalement and musculoskeletal strain Lack of refresher training and competency reassessment when methods, equipment or regulations change 		<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	
5. Safe Work Systems, SWMS and Procedures Management	<ul style="list-style-type: none"> Absence of documented Safe Work Method Statements (SWMS) for high-risk construction work associated with steel fixing as required under the WHS Regulation Generic SWMS and procedures that do not reflect actual site conditions, equipment or sequencing Failure to implement, communicate and review steel fixing procedures, leading to inconsistent work practices between crews and sites Outdated or conflicting procedures for plant use, working at height, manual handling and hot works associated with reinforcement cutting and bending Inadequate processes for worker consultation in the development and review of steel fixing SWMS and procedures 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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"> Lack of systematic verification that controls described in SWMS (e.g. exclusion zones, edge protection, lifting plans) are implemented in the field 			
6. Plant, Equipment and Tool Management	<ul style="list-style-type: none"> Inadequate selection and management of cranes, hoists, forklifts, EWPs and mechanical aids used to handle reinforcement Lack of inspection, maintenance and tagging systems for lifting gear, slings, spreader bars, wire ropes and hooks used in steel fixing operations Use of unsuitable or poorly maintained hand tools and power tools (e.g. nips, tying guns, grinders, cut-off saws) leading to increased risk of injury No formal process for assessing new plant and technology for steel fixing, including ergonomic and safety benefits or new hazards Inconsistent management of plant isolation, lock-out and defect reporting processes on multi-PCRU construction sites Inadequate management of hire plant, including missing logbooks, inspection records and compliance documentation 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium
7. Site Layout, Access, Traffic and Material Handling Systems	<ul style="list-style-type: none"> Poor site layout causing conflicts between steel fixing work areas, vehicle or plant movements Inadequate systems for designated laydown areas, leading to reinforcement stored in unstable stacks or in pedestrian routes Insufficient planning for access routes, stairs, ladders and temporary platforms to steel fixing work zones, increasing fall and trip risks Lack of documented traffic management plans addressing interaction between steel fixers and delivery trucks, cranes and mobile plant 	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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"> Absence of systems to control overcrowding of work decks with reinforcement, formwork materials and other construction items Inadequate lighting and signage systems in steel fixing areas, particularly for early morning or night-shift operations 		[REDACTED]	
8. Health, Ergonomics and Fatigue Management	<ul style="list-style-type: none"> Systemic underestimation of musculoskeletal disorder risks from repetitive tying, bending, twisting and carrying heavy reinforcement Lack of organisational controls to manage heat stress, dehydration and UV exposure for steel fixers working outdoors No structured fatigue-management system for extended shifts, night work or compressed schedules to meet concrete pour dates Insufficient processes to manage exposure to noise, vibration, dust and fumes from cutting, grinding and using power tools near reinforcement Inadequate monitoring of health impacts from chronic strain leading to under-reporting and lack of early intervention Poor job design and lack of task rotation for steel fixers leading to prolonged static postures and cumulative trauma 	High	[REDACTED]	Medium
9. Communication, Consultation and Change Management	<ul style="list-style-type: none"> Ineffective communication channels between management, supervisors and steel fixing crews regarding WHS expectations and changes Limited involvement of steel fixers and HSRs in risk assessments and development of steel fixing procedures No structured process to manage changes in design, scope, method or schedule that impact steel fixing risks 	Medium	[REDACTED]	Low

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"> Language barriers and literacy issues among workers leading to misunderstanding of WHS requirements and SWMS content Inconsistent communication between multiple PCBUs when sharing workspaces, particularly regarding simultaneous operations and overlapping risks Failure to provide timely information to workers about incidents, near misses and lessons learned related to steel fixing 		[REDACTED]	
10. Incident Reporting, Monitoring and Continuous Improvement	<ul style="list-style-type: none"> Under-reporting of near misses, hazards and minor injuries by steel fixers due to cultural or contractual pressures Lack of systematic incident investigation focusing on underlying organisational and system failures rather than individual blame Inadequate data collection and trend analysis specific to steel fixing incidents and hazards Failure to implement and track corrective and preventive actions arising from incidents, inspections and audits No formal feedback loop to ensure lessons learned from incidents are incorporated into planning, training and procedures for steel fixing Inconsistent processes for notifying regulators of notifiable incidents in accordance with WHS legislative requirements 	Medium	[REDACTED]	Low

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.