

**Steel Handling Cutting and Manual Tasks**

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			<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.	Isolation 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.	Administrative Change	
								PPE	

  

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. WHS Governance, Roles and Legislative Compliance	<ul style="list-style-type: none"> <li>Lack of clear WHS roles, responsibilities and accountabilities for steel handling, cutting and manual tasks</li> <li>Failure to integrate WHS Act 2011 and WHS Regulation requirements into company policies and procedures</li> <li>Inadequate consultation with workers and Health and Safety Representatives (HSRs) on steel handling and cutting risks</li> <li>No formal WHS objectives, targets or KPIs related to manual tasks and steel handling injuries</li> <li>Inadequate review of compliance against relevant Australian Standards and Codes of Practice (e.g. Hazardous Manual Tasks, Managing Risks of Plant)</li> <li>Poor integration of WHS requirements into contracts, tenders and subcontractor agreements for reinforcement and steel-fixing work</li> </ul>	4A	<ul style="list-style-type: none"> <li>Establish a documented WHS management system aligned with WHS Act 2011, WHS Regulation and relevant Australian Standards, specifically addressing steel handling, cutting and manual tasks</li> <li>Define and communicate clear WHS roles, responsibilities and authorities for officers, managers, supervisors, leading hands and workers involved in reinforcing steel work</li> <li>Implement a competency procedure requiring regular toolbox talks, pre-start meetings and HSR engagement focused on steel cutting, bending and manual handling risks</li> <li>Embed WHS obligations including safety systems for reinforcement bar handling and cutting, into position descriptions, performance reviews and contractor agreements</li> <li>Develop a WHS legal register and compliance calendar that includes scheduled reviews of legislation, Codes of Practice and Standards relevant to manual tasks and metal fabrication</li> <li>Require subcontractors and labour hire providers to demonstrate a compatible WHS management system and risk assessments specific to reinforcement steel work before engagement</li> </ul>	3H
2. Design, Planning and Layout of Steel Handling Operations	<ul style="list-style-type: none"> <li>Poorly planned site layout leading to long carry distances for rebar and steel trusses</li> <li>Lack of integration of manual handling and cutting risks into project planning and constructability reviews</li> <li>Congested work areas increasing risk of trips, crush injuries and uncontrolled steel movement</li> <li>Inadequate provision for mechanical aids (e.g. cranes, trolleys, rebar benders) in planning and budgeting</li> <li>Insufficient planning for safe storage, stacking and sequencing of different grades and lengths of steel</li> <li>Last-minute design changes resulting in unplanned manual rework, bending and cutting on site</li> </ul>	4A	<ul style="list-style-type: none"> <li>Undertake a formal WHS risk review during project planning to address handling, storage, bending and cutting of reinforcement and structural steel</li> <li>Develop site layout plans that minimise manual transport distances, avoid double handling and allow direct crane or forklift delivery to work zones</li> <li>Plan designated steel processing zones for bending and cutting with adequate space, lighting, guarding and traffic separation from general work areas</li> <li>Include mechanical aids (e.g. powered rebar benders, shears, roller tables, trolleys) and lifting equipment in project budgets and procurement plans</li> <li>Implement a steel delivery and sequencing plan to ensure bundles and trusses are supplied in install order, reducing onsite re-handling and ad-hoc cutting</li> <li>Require engineering and design reviews to consider prefabrication of cages and trusses offsite where reasonably practicable to reduce manual bending on site</li> </ul>	2M

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3. Procurement, Specification and Supply Chain Management	<ul style="list-style-type: none"> <li>• Procurement of reinforcement steel and cutting equipment without WHS performance criteria</li> <li>• Inconsistent quality or incorrect grades of steel leading to unexpected difficulty in bending or cutting and increased manual force</li> <li>• Supply of rusted or heavily scaled reinforcement bars without pre-treatment requirements</li> <li>• Purchase of cutting discs, abrasive wheels and power tools that do not meet Australian Standards</li> <li>• Lack of traceability and labelling of different grades and diameters of rebar, leading to misuse and rework</li> <li>• Inadequate supplier verification regarding safe loading, bundling and securing methods for steel deliveries</li> </ul>	3H	<ul style="list-style-type: none"> <li>• Establish procurement specifications that require reinforcement, steel trusses, cutting equipment and tools to meet relevant Australian Standards and WHS criteria</li> <li>• Implement supplier prequalification processes that include evidence of safe bundling, securing, labelling and transport practices for steel products</li> <li>• Specify surface condition requirements (e.g. limit on corrosion, rust and scale) and agreed treatment methods for rusted reinforcement bars</li> <li>• Mandate provision of manufacturer instructions, test certificates and safety information for all cutting, bending and forming equipment</li> <li>• Introduce a quality assurance procedure for verifying steel grades, diameters and heat numbers on delivery with clear labelling systems to avoid rework</li> <li>• Include contractual requirements for suppliers to use mechanical loading and unloading systems that reduce manual handling risks where practicable</li> </ul>	2M
4. Plant, Tools and Engineering Controls for Cutting and Bending	<ul style="list-style-type: none"> <li>• Inadequate guarding, interlocks or emergency stops on bending and cutting machinery</li> <li>• Use of inappropriate poorly maintained cutting tools for reinforcement bars (e.g. worn abrasive wheels, damaged discs)</li> <li>• Lack of fixed rebar bending equipment leading to excessive manual bending and high force exertion</li> <li>• Uncontrolled movement or ejection of off-cuts from cutting equipment</li> <li>• Insufficient dust, fume and noise control from cutting operations</li> <li>• Inadequate design of workstations, jigs and fixtures to safely manipulate long rebar, trusses and cages</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
5. Manual Tasks and Ergonomic Risk Management System	<ul style="list-style-type: none"> <li>• Lack of systematic assessment of hazardous manual tasks associated with bending and cutting rebar</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<ul style="list-style-type: none"> <li>High force exertion when bending rods manually or handling heavy bundles of steel</li> <li>Sustained or repetitive awkward postures when manipulating steel trusses and reinforcement cages</li> <li>Inadequate controls for handling long, flexible or unstable loads (e.g. long rebar and trusses)</li> <li>No formal limits or guidelines on manual lift weights or team-lifting requirements</li> <li>Failure to integrate manual task risks into design and planning decisions</li> </ul>		[REDACTED]	
6. Storage, Stacking and Securing of Steel Bundles	<ul style="list-style-type: none"> <li>Unstable stacking of steel bundles leading to collapse or uncontrolled movement</li> <li>Inadequate systems for segregating different grades, diameters and lengths of reinforcement bars</li> <li>Failure to inspect and maintain dunnage, racks and restraints used for stacking and storage</li> <li>Poorly designed storage areas causing congestion, trip hazards and restricted access to bundles</li> <li>Lack of formal procedures for securing bundles during handling, transport and temporary storage</li> <li>Inadequate controls for rusted or corroded reinforcement bars which may be weakened or have sharp edges</li> </ul>	4A	[REDACTED]	2M
7. Lifting, Transport and Mechanical Handling Systems	<ul style="list-style-type: none"> <li>Inadequate lifting plans and load assessments for steel bundles, trusses and cages</li> <li>Use of inappropriate lifting gear (slings, chains, hooks) or damaged lifting accessories</li> <li>No formal traffic management system for interaction between people, forklifts, cranes and steel bundles</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Uncontrolled swinging or rotation of long reinforcement bars or trusses during lifting</li> <li>Inadequate controls for delivery trucks, cranes and unloading activities on congested sites</li> <li>Reliance on manual handling where mechanical lifting aids are reasonably practicable</li> </ul>		[REDACTED]	
8. Worker Competency, Training and Supervision	<ul style="list-style-type: none"> <li>Workers not trained in safe systems of work for bending, cutting and handling reinforcement steel</li> <li>Insufficient competency in the use of cutting and bending machinery, leading to misuse or bypassing of safety features</li> <li>Lack of understanding of manual handling principles and risks associated with long, unstable loads</li> <li>Inadequate supervision of new or inexperienced workers undertaking reinforcement tasks</li> <li>Poor communication and coordination between riggers, crane operators, steel fixers and general labourers</li> <li>Failure to provide refresher training following incidents, changes in equipment or new procedures</li> </ul>	3H	[REDACTED]	2M
9. Procedures, Work Instructions and Safe Systems of Work	<ul style="list-style-type: none"> <li>Absence of documented procedures for safe handling, cutting, bending and stacking of steel</li> <li>Inconsistent work practices between crews and shifts due to lack of standardisation</li> <li>Safe Work Method Statements (SWMS) not integrated with higher-level WHS management controls</li> <li>Failure to account for handling of different grades, diameters and conditions (e.g. rusted, coated) of reinforcement</li> </ul>	3H	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>• Procedures not reflecting actual site conditions, leading to workarounds and unsafe practices</li> <li>• Outdated or inaccessible documentation for workers and supervisors</li> </ul>		[REDACTED]	
10. Hazard Identification, Reporting and Incident Management	<ul style="list-style-type: none"> <li>• Under-reporting of near misses and minor injuries involving manual handling of steel</li> <li>• Lack of structured inspections focusing on steel storage, cutting stations and manual task risks</li> <li>• Inadequate investigation of incidents, leading to repeated musculoskeletal and crush injuries</li> <li>• No systematic trend analysis to identify recurring issues with steel handling and cutting</li> <li>• Workers unaware of how to report hazards such as unstable bundles, rusted bars or damaged plant</li> <li>• Slow response to reported hazards, reducing trust in the reporting system</li> </ul>	3H	[REDACTED]	2M
11. Health Monitoring, Fatigue and Fitness for Work	<ul style="list-style-type: none"> <li>• Undetected musculoskeletal disorders arising from repetitive bending and manual handling of steel</li> <li>• Fatigue from extended hours or high physical load tasks, increasing risk of errors and injuries</li> <li>• Workers performing heavy manual tasks involving steel despite pre-existing injuries or fitness limitations</li> <li>• Lack of systems to rotate tasks and manage cumulative physical strain from manual bending and cutting</li> <li>• Insufficient consideration of environmental factors (heat, cold, wet) that increase physical effort and risk</li> <li>• No access to early intervention or physiotherapy support for workers reporting discomfort</li> </ul>	3H	[REDACTED]	2M

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12. PPE, Housekeeping and Site Conditions Management	<ul style="list-style-type: none"> <li>Reliance on PPE instead of higher-order controls for steel handling and cutting</li> <li>Inadequate glove, footwear and eye protection selection for handling rusted bars and cutting operations</li> <li>Poor housekeeping around cutting and bending stations leading to trip hazards and puncture injuries from off-cuts</li> <li>Accumulation of rust, metal swarf and off-cuts on walking and working surfaces</li> <li>Inadequate lighting in storage yards and bending/cutting areas affecting visibility and judgement</li> <li>Lack of systematic waste and off-cut management for reinforcement bars and trusses</li> </ul>	3H	[REDACTED]	1L
13. Change Management and Temporary Works Controls	<ul style="list-style-type: none"> <li>Uncontrolled changes to steel specifications, bar schedules or truss designs leading to unforeseen manual handling and cutting demands</li> <li>Introduction of new bending or cutting equipment without risk assessment or training</li> <li>Temporary storage or stacking arrangements for steel trusses and cages not subject to engineering review</li> <li>Rush work or schedule compression resulting in shortcuts in handling and stacking practices</li> <li>Inadequate communication of changes in work sequence affecting steel deliveries and handling routes</li> <li>Failure to reassess risks when new grades or coatings of reinforcement are introduced</li> </ul>	3H	[REDACTED]	2M
14. Emergency Preparedness and Response for Steel Handling Areas	<ul style="list-style-type: none"> <li>Delayed response to crush, laceration or eye injuries arising from steel cutting and manual handling</li> <li>Emergency procedures not tailored to incidents involving heavy steel,</li> </ul>	3H	[REDACTED]	2M

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	entrapment or structural instability of trusses and cages • Inadequate access and egress routes for emergency services in steel storage and cutting zones • Workers unaware of how to respond to incidents involving dropped or collapsed steel bundles • Lack of appropriate first aid equipment for puncture wounds, lacerations and eye injuries common in steel work • Poor coordination between site emergency plans and crane, forklift or truck operations		[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	

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.