

**Steel Framing**

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 Consultation	<ul style="list-style-type: none"> <li>Lack of clearly defined WHS responsibilities for steel framing design, procurement, supervision and contractor management</li> <li>Inadequate consultation with workers, Health and Safety Representatives (HSRs) and contractors regarding steel framing risks and controls</li> <li>Failure to integrate steel framing risks into the organisation's WHS management system and due diligence processes under WHS Act 2011</li> <li>Inadequate escalation and decision-making processes for design changes, structural issues or emerging risks on site</li> </ul>	High	<ul style="list-style-type: none"> <li>Establish and maintain a WHS governance framework that explicitly includes steel framing activities (design, engineering, logistics, erection, inspection, modification and demolition) with documented accountability at officer, manager, supervisor and contractor levels</li> <li>Document and communicate a WHS policy that references legislative duties under the WHS Act 2011 and WHS Regulations in relation to construction of steel structures and high risk work</li> <li>Define, in writing, roles and responsibilities for key positions (e.g. Principal Contractor, Project Manager, Site Supervisor, Engineer, Steel Fabricator, Steel Erector, Crane Contractor) including expectations for risk management, incident reporting, verification of competency and monitoring of controls</li> <li>Implement structured WHS consultation arrangements (toolbox talks, pre-start meetings, safety committees, HSR forums) that specifically address steel framing system and management risks, not only task-level hazards</li> <li>Require officers (company directors and senior executives) to demonstrate due diligence by regularly reviewing steel framing risk information, inspection outcomes, and incident trends, and ensuring appropriate resources are allocated to control these risks</li> <li>Integrate steel framing risk controls and performance indicators into project start-up meetings, safety management plans and subcontractor coordination meetings</li> <li>Establish a formal process for workers and subcontractors to raise steel framing safety concerns (e.g. near miss reporting, safety suggestion system, confidential reporting) and ensure feedback and corrective actions are tracked</li> <li>Ensure overlapping duty holders (client/PCBU, principal contractor, subcontractors, designers, engineers, suppliers) coordinate and cooperate on steel framing risk control through documented interface agreements and regular coordination meetings</li> <li>Include steel framing WHS governance requirements in contract conditions, scopes of work and performance reviews for relevant contractors and suppliers</li> </ul>	Medium
2. Design, Engineering and Structural Integrity Management	<ul style="list-style-type: none"> <li>Inadequate structural design for temporary and permanent stability of steel frames during transport, lifting, staging and erection</li> <li>Lack of engineering verification for non-standard connections, temporary bracing, propping and sequencing of steel installation</li> <li>Insufficient consideration of constructability, access, fall protection and connection methods at the design stage</li> <li>Poor design change management leading to undocumented field modifications that compromise structural integrity</li> </ul>	High	<ul style="list-style-type: none"> <li>Require all steel framing systems to be designed, certified and documented by a suitably qualified engineer in accordance with relevant Australian Standards (e.g. AS/NZS 4100, AS 3990, AS/NZS 4600, AS 1170 series) and the National Construction Code</li> <li>Mandate written engineering documentation for both permanent and temporary conditions (including lifting points, temporary bracing, propping, stability during partial erection, and staged loading scenarios)</li> <li>Implement a formal design review process involving WHS, construction management and key subcontractors to assess constructability, access, manual handling, installation sequence, and opportunities to eliminate or minimise work at height and over live areas</li> <li>Ensure a documented process for design verification and independent checking of critical elements such as primary frames, connections, bolted splices, welded joints and bracing systems</li> <li>Establish a controlled system for design changes and site instructions (e.g. engineering change request forms, revision-controlled drawings, digital document management) ensuring all changes are reviewed, approved and communicated before implementation</li> </ul>	Medium

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	<ul style="list-style-type: none"> <li>Inadequate design documentation and drawings, creating ambiguity for steel fabricators, erectors and supervisors</li> </ul>		<ul style="list-style-type: none"> <li>Prohibit ad-hoc site modifications to steel members or connections (e.g. drilling new holes, cutting, burning, welding additional plates) without formal engineering approval and updated documentation</li> <li>Provide clear, legible, and up-to-date drawings, erection plans and connection details to supervisors and crews, using a centralised document management platform with version control and access logs</li> <li>Specify in contracts that suppliers and fabricators must comply with the engineer's design and must not substitute materials, connection types or member sizes without written engineering approval</li> <li>Integrate design safety in design (SiD) risk assessments specific to steel framing into project governance, and record residual design risks and required site controls in a Safety in Design report accessible to all relevant PCB</li> </ul>	
3. Procurement, Contracting and Supply Chain Management	<ul style="list-style-type: none"> <li>Steel framing materials, components or systems procured from suppliers without adequate quality assurance or compliance with Australian Standards</li> <li>Contracts that prioritise cost and program over safety, leading to inadequate resources or unrealistic timeframes that increase WHS risk</li> <li>Subcontractors engaged without proper prequalification or verification of their WHS management capability for steel framing work</li> <li>Inconsistent specifications and purchasing documents that fail to reflect design and WHS requirements for steel framing</li> <li>Supply chain disruptions leading to last-minute design substitutions or schedule compression that bypass proper risk review</li> </ul>	High	<ul style="list-style-type: none"> <li>Develop and implement a procurement policy that mandates WHS criteria for steel framing, including compliance with relevant Australian Standards, certificates of compliance, traceability of materials and documented quality assurance processes</li> <li>Include explicit WHS obligations in contracts with steel fabricators, transport providers, crane companies and erectors, covering risk assessment, incident reporting, training, supervision, equipment inspection and cooperation between duty holders</li> <li>Use a formal subcontractor prequalification process that evaluates each contractor's WHS management system, steel erection experience, licences, insurances, incident history and references, prior to engagement</li> <li>Ensure project specifications, purchase orders and scopes of work clearly set out steel grade, protective coatings, connection systems, tolerances, lifting points, marking systems, and handling/installation instructions</li> <li>Specify in procurement documentation that any proposed alternative products, connection systems or construction methods must undergo engineering review and WHS risk assessment before approval</li> <li>Require key contractors (e.g. steel fabricators, erectors, crane providers) to submit WHS project plans, including how they will manage high risk construction work related to steel frames, for review before mobilisation</li> <li>Embed schedule and program controls in contracts that discourage unsafe acceleration (e.g. no incentives that reward working excessive hours, skipping inspections or combining incompatible activities under live frames)</li> <li>Implement a change control process for procurement variations that assesses WHS impacts of any material, design or sequencing changes before authorisation</li> <li>Maintain supply chain performance reviews, including audits of selected steel fabricators and erectors to verify compliance with WHS and quality obligations</li> </ul>	Medium
4. Competency, Licensing, Induction and Training	<ul style="list-style-type: none"> <li>Inadequate competency of supervisors, doggers, riggers, crane operators and steel erectors to plan and manage steel framing work safely</li> <li>Lack of training in site-specific steel framing procedures, including</li> </ul>	High	<div style="background-color: black; width: 100%; height: 100%; min-height: 100px;"></div>	Medium

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	sequencing, temporary bracing and engineered lifting arrangements <ul style="list-style-type: none"> <li>• Poor understanding of WHS obligations under the WHS Act 2011, particularly for officers, supervisors and contractors involved in steel framing</li> <li>• Insufficient induction for new workers, visitors and subcontractors on the unique risks associated with steel frames and structural instability</li> <li>• Out-of-date or unverified high risk work licences for rigging, dogging and crane operation</li> </ul>		[REDACTED]	
5. Planning, Sequencing and Construction Methodology	<ul style="list-style-type: none"> <li>• Inadequate planning of erection sequence, temporary stability and interface with other trades increasing the structural instability or collision risks</li> <li>• Lack of documented steel framing erection methodology, leading to inconsistent practices between crews and shifts</li> <li>• Concurrent activities under or adjacent to partially erected steel frames increasing exposure to falling objects or collapse</li> <li>• Inadequate planning for progressive inspections, sign-offs and hold points during steel framing works</li> <li>• Failure to adequately plan for environmental conditions (wind, rain, heat) that can impact steel stability and lifting operations</li> </ul>	High	[REDACTED]	Medium

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			[REDACTED]	
6. Plant, Equipment and Structural Inspection Systems	<ul style="list-style-type: none"> <li>• Use of cranes, lifting gear, EWP's at other plant that are not maintained, inspected or suitable for steel framing applications</li> <li>• Inadequate inspection and verification of steel members, connections and fasteners before and after erection</li> <li>• Failure to detect non-conforming fabrication, damage during transport or incorrect member placement that could compromise structural integrity</li> <li>• Lack of systematic pre-use checks and scheduled inspections for temporary bracing, propping and access systems</li> </ul>	High	[REDACTED]	Medium
7. Contractor and Interface Management	• Multiple PCBU's working on or around steel frames without effective	High	[REDACTED]	Medium

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	<p>coordination leading to conflicting activities and unsafe exposures</p> <ul style="list-style-type: none"> <li>• Unclear interface responsibilities between principal contractor, crane provider, steel erector, transport company and other trades</li> <li>• Inconsistent WHS standards and procedures between contractors undertaking steel framing work</li> <li>• Poor communication of changes in schedule, methodology or design to all affected contractors</li> </ul>		<p>[REDACTED]</p>	
8. Information, Communication and Documentation Control	<ul style="list-style-type: none"> <li>• Outdated or incorrect drawings and erection plans being used on site</li> <li>• Poor communication of critical safety information such as exclusion zones, no-go areas under suspended or partially braced frames, and emergency procedures</li> <li>• Inadequate documentation of decisions, inspections, defects and rectifications related to steel framing</li> <li>• Language barriers and literacy issues leading to misinterpretation of instructions or safety warnings</li> </ul>	High	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	Medium

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			[REDACTED]	
9. Incident, Near Miss and Non-Conformance Management	<ul style="list-style-type: none"> <li>Repeated steel framing-related incidents or near misses due to failure in learning and corrective action processes</li> <li>Under-reporting of steel concerns, misalignments or near-collapse events from fear of blame or program delays</li> <li>Non-conforming materials, fabrication errors or poor-quality workmanship not escalated or assessed by engineering</li> <li>Lack of analysis of steel incidents and trends to inform systemic improvements</li> </ul>	High	[REDACTED]	Medium
10. Fatigue, Workload and Scheduling Management	<ul style="list-style-type: none"> <li>Excessive working hours and inadequate rest breaks for supervisors and steel erection crews leading to errors in judgement and reduced hazard perception</li> </ul>	High	[REDACTED]	Medium

SAMPLE

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	<ul style="list-style-type: none"> <li>Compressed programs and unrealistic deadlines causing risk-taking, skipped inspections and shortcuts in steel erection processes</li> <li>Inadequate resourcing (manpower, cranes, supervision) relative to the scale and complexity of steel framing works</li> <li>Night work or shift work without adjusted controls leading to reduced visibility and supervision</li> </ul>		[REDACTED]	
11. Emergency Preparedness and Structural Collapse Response	<ul style="list-style-type: none"> <li>Inadequate planning for structural instability, partial collapse or dropped steel members during erection or modification</li> <li>Lack of clear emergency roles and procedures specific to steel framing incidents (e.g. rescue from work within steel frames, crane failures)</li> <li>Poor coordination with emergency services for access to and around steel structures</li> <li>Workers and supervisors unsure how to respond to signs of overstress, movement or failure in steel frames</li> </ul>	High	[REDACTED]	Medium

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12. Continuous Improvement and WHS System Review	<ul style="list-style-type: none"> <li>• Static WHS systems that do not adapt to changes in design, technology or methods used in steel framing</li> <li>• Failure to capture lessons learned from previous steel framing projects or industry incidents</li> <li>• Lack of periodic review of policies, procedures and controls specific to structural steel and framing work</li> <li>• Over-reliance on informal practices rather than documented and standardised processes</li> </ul>	Medium	<p>[REDACTED]</p>	Low

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.