Roof Trusses and Battens

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF 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:

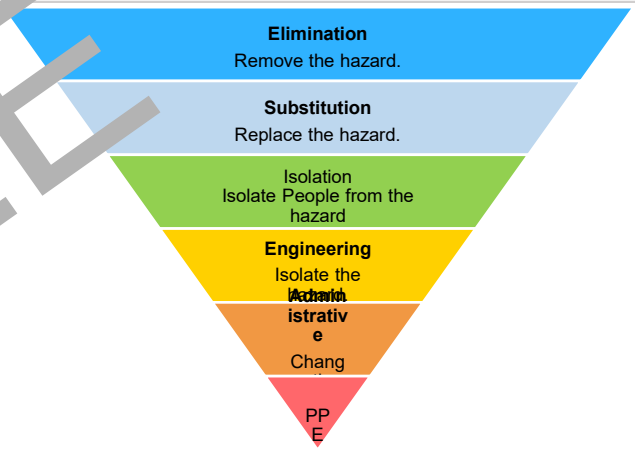
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. 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. Design, Engineering and Documentation Management	• Incomplete or inaccurate structural design information for roof trusses and battens leading to unsafe loads and connections • Lack of engineering certification or use of non-compliant designs not aligned with NCC and relevant Australian Standards (e.g. AS 1684, AS 1720, AS 4440) • Unclear or conflicting documentation between architectural, engineering and truss manufacturer drawings • Changes to design not formally reviewed or approved by a competent structural engineer • Failure to communicate critical design assumptions (e.g. bracing requirements, temporary propping, load paths) to the principal contractor and installers • Use of generic or overseas design details that do not meet Australian conditions or codes	High	• Establish and enforce a design management procedure requiring all roof truss and batten systems to be designed and certified by a suitably qualified and registered structural engineer in accordance with NCC and relevant Australian Standards • Implement a document control system that ensures only current, approved drawings and specifications are issued for construction, with clear version control and revision history • Require formal design coordination workshops (design reviews) including the structural engineer, truss manufacturer, architect and builder to resolve clashes and inconsistencies before manufacture or installation • Mandate written engineer's sign-off for any design changes, including site-driven variations, with updated drawings promptly issued and superseded versions withdrawn from use • Include in contracts clear technical requirements for wind classification, imposed loads, truss bracing layout, fixing details and batten spacing, referencing relevant Australian Standards • Develop a design assumption register that captures key structural assumptions (temporary bracing needs, fixing points, deflection limits) and communicate this to site supervision and installers • Undertake periodic independent design audits on a sample of truss and batten projects to verify compliance with legislative and code requirements • Specify minimum documentation standards for fabricators (layout plans, bracing details, fixing schedules, installation manuals) and verify compliance during pre-qualification and procurement	Medium
2. Procurement and Supply Chain Control	• Selection of truss and batten suppliers who do not comply with Australian Standards or who have inadequate WHS and quality systems • Use of sub-standard or non-conforming materials (timber grade, metal battens, connectors and fasteners) • Inadequate lead times leading to rushed manufacture, reduced quality checks and increased likelihood of defects • Poor communication of project-specific requirements (wind region, terrain category, design loading) to suppliers • Lack of traceability of supplied components, making it difficult to identify and quarantine defective batches	High	• Implement a formal supplier pre-qualification process that assesses compliance with WHS Act 2011 duties for PCBUs, quality management systems, and certification to relevant Australian Standards • Embed technical and WHS requirements for roof trusses and battens into procurement contracts, including material grades, engineering certification, and provision of installation documentation and safe handling instructions • Require suppliers to provide certificates of compliance and material test reports where relevant, and retain these within the project WHS and quality records • Develop a standardised purchasing specification for roof trusses and battens that clearly outlines design parameters, loading conditions and Australian Standard references to be used for each project • Establish delivery scheduling protocols that avoid just-in-time practices creating unreasonable time pressure and ensure deliveries are planned during safe working hours and forecast suitable weather where practicable • Introduce a goods receiving and inspection procedure for trusses and battens that includes documentation checks, visual quality checks and a process to isolate and report non-conforming materials • Maintain a supplier performance register tracking non-conformances, delivery issues and WHS incidents to inform ongoing procurement decisions and improvement actions	Medium

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	• Inconsistent delivery times that increase pressure on site teams to work in unsuitable weather or extend hours		• Consult with installers and site supervision during procurement planning to ensure that truss and batten sizes, configurations and packaging support safe handling and sequencing on site	
3. WHS Governance, Roles and Responsibilities	• Unclear allocation of WHS responsibilities between principal contractor, builder, truss manufacturer and installers • Lack of a documented WHS management plan for projects involving roof trusses and battens • Inadequate consultation, cooperation and coordination between multiple PCBUs as required under the WHS Act 2011 • Supervisors not competent to oversee high-risk construction work associated with working at height and structural components • Absence of defined escalation paths for WHS issues related to truss design, handling or installation	High	• Establish a project-specific WHS management plan that clearly defines duties, roles and responsibilities for all PCBUs involved with roof trusses and battens, aligned to WHS Act 2011 and WHS Regulations • Formalise consultation, cooperation and coordination arrangements between principal contractor, truss manufacturer, transport provider and installer via WHS coordination meetings and documented communication protocols • Develop position descriptions and delegation instruments that incorporate WHS responsibilities for project managers, site supervisors and leading hands overseeing truss and batten work • Ensure supervisors responsible for roof structure works have verifiable competence and training in structural awareness, working at heights, risk management and the specific systems being used • Implement a WHS governance schedule (e.g. monthly management reviews) that includes review of roof truss and batten risk, incidents, and compliance with high-risk construction work requirements • Provide a clear WHS issue escalation procedure, including stop-work authority for supervisors and workers where truss or batten safety is in doubt • Maintain up-to-date organisational WHS policies that reference design, procurement, construction and maintenance of structural roof systems, with regular communication to workers and subcontractors	Medium
4. Competency, Training and Supervision	• Installers and supervisors lacking competency in roof truss and batten systems, leading to unsafe decisions and practices • Insufficient training on reading truss layouts, bracing diagrams and engineering details • Inadequate understanding of the WHS legislative requirements, including high-risk construction work and working at heights provisions • Lack of awareness of manufacturer instructions and limitations for proprietary truss and batten systems • Poor quality supervision and mentoring of apprentices and new workers on roof structure work	High	[redacted]	Medium

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5. Planning, Scheduling and Work Coordination	• Poor sequencing of trades leading to congestion on site, increased work at height exposure and time pressure around roof truss installation • Installation scheduled during high wind seasons or adverse weather windows without contingency plans • Inadequate time allowed in programs for safe erection, bracing and inspection of trusses and battens • Overlapping high-risk activities (e.g. crane lifts, electrical work, roofing) without coordinated control measures • Unplanned changes to roof layouts or truss designs not reflected in updated construction programs and risk controls	High	[redacted]	Medium
6. Safe Systems for Working at Heights and Fall Prevention	• Inadequate organisational procedures for managing work at height associated with roof truss and batten installation • Reliance on informal practices instead of engineered fall prevention, edge protection and access systems • Lack of standardised approach to selection, inspection and maintenance of fall prevention and fall-arrest equipment • Poor integration of working at heights controls with roof truss design (e.g. absence of suitable anchor points or access pathways) • Insufficient planning for rescue and emergency retrieval of workers using fall-arrest systems	High	[redacted]	Medium

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			[redacted]	
7. Manual Handling, Ergonomics and Load Management Systems	• Systemic reliance on manual handling of large or awkward truss and batten components without engineered solutions • Inadequate planning for crane use, load distribution and lifting configurations at the management level • Lack of standardised procedures for assessing manual handling risks associated with truss sizes, weights and delivery methods • Insufficient organisational controls to prevent overloading of partially completed structures during storage or staging of materials on roofs • No formal process to review and improve manual handling risks based on incident and injury data	High	[redacted]	Medium
8. Plant, Equipment and Lifting Management	• Use of cranes, telehandlers, EWPs and other plant without adequate organisational controls for verification of competence • Inadequate maintenance and inspection systems for lifting equipment, attachments and spreader bars used for truss lifts • Poorly defined responsibilities between crane provider, dogman/rigger, principal contractor and installer regarding lift planning and exclusion zones • Insufficient systems to control interaction between mobile plant, workers and structures during truss and batten activities • Lack of standard procedures for out-of-service tagging and fault reporting on lifting equipment	High	[redacted]	Medium

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			[redacted]	
9. Structural Integrity, Temporary Works and Bracing Controls	• Inadequate management of temporary bracing requirements during and after installation of roof trusses and battens • Systemic lack of verification that trusses and battens are installed in accordance with engineering and manufacturer requirements before loading the roof • Poor controls around modification or removal of structural elements or bracing by other trades • Failure to manage risks related to progressive loading of partially completed roof structures (e.g. roofing material storage, plant on roof) • Absence of documented criteria for when engineering advice must be sought due to site deviations from design	High	[redacted]	Medium
10. Site Access, Housekeeping and Environmental Conditions Management	• Systemic poor housekeeping and access arrangements including slip, trip and fall risks around areas where roof trusses and battens are handled and installed • Inadequate planning for safe material laydown, stacking and waste management specific to long or bulky roof components • Failure to account for environmental conditions such as high winds, rain, heat and UV exposure that affect truss handling and roof work safety • Insufficient lighting and visibility affecting work on and around roof	Medium	[redacted]	Low

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	structures in early mornings, late afternoons or during poor weather • Access routes to roof work areas not adequately designed or controlled, leading to unsafe informal climbing or ladder use		[redacted]	
11. Contractor and Subcontractor Management	• Engagement of roof truss installers or roofing contractors without adequate WHS systems or relevant experience • Inconsistent safety standards and procedures between principal contractor and subcontractors • Lack of clarity in contracts regarding WHS expectations, reporting, and compliance monitoring for truss and batten activities • Insufficient oversight of subcontractor performance, leading to drift from agreed safe systems of work • Inadequate onboarding and induction of subcontractors to project-specific roof truss and batten risks	High	[redacted]	Medium
12. Incident Reporting, Emergency Response and Rescue	• Lack of a structured system to report, investigate and learn from incidents and near misses involving roof trusses and battens • Inadequate emergency response planning for falls from height, structural failures or plant incidents on or near roofs • Insufficient communication of emergency procedures to all relevant workers and subcontractors • Emergency equipment (e.g. rescue kits, first aid, communication devices)	High	[redacted]	Medium

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	not planned, located or maintained appropriately for roof work • Failure to comply with notifiable incident reporting obligations under WHS legislation for serious roof-related incidents		[redacted]	
13. Inspection, Audit and Continuous Improvement	• Absence of systematic inspections and audits focusing on management and system controls for roof truss and batten activities • Failure to detect recurring non-conformances or unsafe trends in planning, procurement [redacted]vision • Paper-based WH[redacted]systems not effectively implem[redacted]ted in the f[redacted] resulting in a gap b[redacted]cumen[redacted]d and actual practice • Lack of management review of W[redacted]S performance specific to s[redacted]l roof work across multiple projects	[redacted]edium	[redacted]	Low
14. Documentation, Records and Information Management	• Critical WHS and engineering documentation for roof trusses and battens not readily available on site or not current • Poor record-keeping of design certifications, inspections, training and plant maintenance related to roof works	Medium	[redacted]	Low

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	• Inconsistent storage and retrieval of records making it difficult to demonstrate due diligence under the WHS Act 2011 • Loss of key information during handover between design, construction and maintenance phases		[redacted]	

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

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-of-codes-of-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/forms-and-resources/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

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.

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

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

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