Falling Objects and Drop Zone Safety

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:

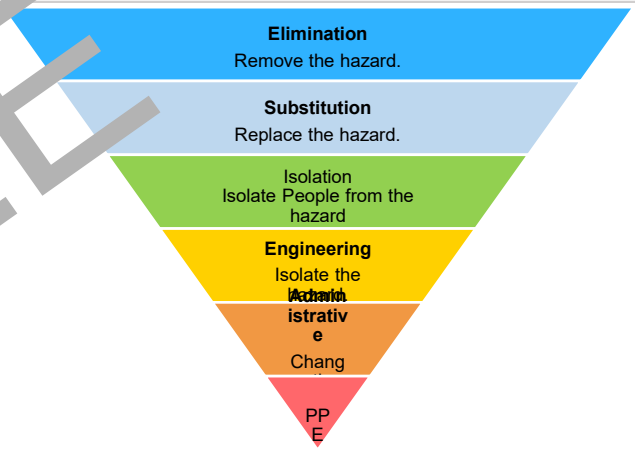
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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. Governance, WHS Duties and Due Diligence for Falling Object Risks	• PCBU and Officers not clearly recognising falling objects as a primary WHS risk under WHS Act 2011 and WHS Regulations • Lack of defined accountability for drop zone safety, leading to fragmented or inconsistent control of work at height • Inadequate WHS policy and risk appetite statements that fail to prioritise struck-by and dropped object prevention • Failure of Officers to exercise due diligence in verifying that systems for falling object prevention are implemented and resourced • Insufficient integration of falling object controls into the overall WHS management system, safety objectives and KPIs • Poor consultation with workers and HSRs on issues relating to falling objects and drop zone design • No formal review of legislative changes, relevant Codes of Practice and Australian Standards relating to work at height and falling objects	4A	• Establish and document an organisation-wide falling object and drop zone safety policy endorsed by senior management and linked to WHS Act 2011 duties • Define clear WHS governance structures assigning specific responsibilities for dropped object risk management to Officers, managers and supervisors • Integrate falling object prevention into WHS objectives, KPIs and performance reviews for senior leaders and line management • Implement a due diligence assurance program requiring regular verification of falling object controls, with findings reported to the Board or WHS Committee • Embed legal and standards monitoring into the WHS management system to track and act on changes to WHS legislation, Codes of Practice and relevant Standards (e.g. working at height, scaffolding, cranes) • Require formal consultation with workers and HSRs on falling object hazards, including input into procedures, risk assessments and selection of control measures • Schedule annual management system reviews that specifically include evaluation of falling object and struck-by incident trends and system effectiveness	3H
2. Organisational Risk Management Framework for Falling Objects	• Absence of a structured, organisation-wide risk management process for dropped objects and struck-by hazards • Inconsistent use of risk assessment tools across projects and sites, leading to gaps in identifying falling object risks • Failure to differentiate between system/management risks and task-level risks, resulting in over-reliance on PPE and procedural controls • No formal requirement to assess cumulative risks from multiple high-risk activities occurring above and below simultaneously • Inadequate consideration of environmental conditions (e.g. wind	4A	• Implement a corporate WHS risk management procedure aligned with ISO 31000 and WHS Regulations, with specific guidance on falling object and drop zone hazards • Mandate formal, documented risk assessments for all work involving elevated areas, overhead lifting or potential for falling debris, prior to work commencement • Require risk assessments to address system-level factors such as permit systems, engineering controls, supervision, training and contractor interfaces • Introduce a requirement for integrated planning reviews where concurrent activities at different levels may increase falling object risks • Incorporate environmental risk criteria (e.g. maximum allowable wind speeds, weather thresholds) into risk assessment templates and checklists • Set triggers for mandatory review of falling object risk assessments, such as design changes, introduction of new plant, or significant incidents and near misses • Establish a central repository for risk assessments to allow cross-project comparison, learning and periodic corporate-level review	2M

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	loading, rain, poor visibility) in risk assessments for loose materials • Risk assessments not reviewed when significant changes occur (e.g. new equipment, modified structures, change in work methods) • Poor documentation and retention of risk assessments, limiting organisational learning and continuous improvement			
3. Design, Engineering Controls and Structural Interfaces	• Design of structures, platforms and scaffolds not incorporating inherent falling object controls (toe boards, mesh, overhead protection) • Poorly designed storage areas at height allowing tools, materials or debris to migrate and fall • Inadequate design review of crane paths, lifting zones and overhead transport routes crossing pedestrian or vehicle areas • Failure to integrate debris netting, overhead canopies or exclusion decks into permanent or tempo works designs • Inappropriate sel tion or specification of securing devices g. or po , tool tethers, edge protection systems • Lack of engineering verification fo temporary works and sup ems subjected to wind loads and vibration • Design changes not communicated effectively to site teams, leading to ad-hoc modifications that increase falling object risk	4A	• Adop a eventio through Design approach requiring designers to consider elimination or minimisation of falli ob t risks all new and modified structures • Specif manc ory ph ical controls for elevated work areas (toe boards, kick plates, mesh infill panels, drails overh d protection) in design standards and specifications • Req rmal engineering design and sign-off for temporary works such as scaffolding, suspended cks, ho dings, debris netting and overhead protection structures • D signate fixed, engineered storage zones at height with edge restraints, barriers and enclosed shelving to prevent items being dislodged • Ensure crane and lifting layout plans are engineered to avoid travelling over occupied areas wherever reasonably practicable, and include dedicated lift paths and no-go zones • Standardise the specification and placement of anchor points, tool tethering systems and secondary retention devices in design documentation • Implement a controlled change management process for design modifications, including WHS impact assessment specifically addressing falling object risks	2M
4. Plant, Equipment and Lifting Systems Management	• Inadequate selection and procurement of cranes, hoists, EWPs and lifting accessories for the intended loads and configurations • Use of damaged or uncertified lifting gear, tool lanyards, nets or attachment systems	4A	[redacted]	2M

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	• Absence of systematic inspection and maintenance programs for load-handling equipment and dropped object prevention devices • Improvised lifting points or attachment methods not designed or rated for the applied loads • Plant modifications, attachments or accessories added without engineering review, increasing the likelihood of component failure and dropped loads • Electronic or mechanical safety features (e.g. load indicators, anti-two-block systems) bypassed or not maintained • No centralised register for lifting equipment, exclusion devices and debris containment systems		[redacted]	
5. Drop Zone Planning, Layout and Physical Exclusion Systems	• No formal process for planning and establishing drop zones around elevat work or lifting operations • Inadequate physical barriers or signage, allowing worke the publi to enter high-risk str -by areas • Drop zones over ping with pedestrian walkwa , ve le routes or public access points • Failure to adjust drop zone size a configuration to account f hape, lifting height, wind and swing potential • Temporary barriers easily moved, bypassed or not maintained, reducing the effectiveness of exclusion • Lack of separate zones for workers involved in the lift and uninvolved personnel • Inadequate management of overhead hazards above site entry points, loading bays and thoroughfares	4A	[redacted]	2M

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6. Material Handling, Storage and Housekeeping at Height	• Loose materials, off-cuts, fixings and debris left near edges or on unprotected surfaces • Inadequate systems for securing bundled materials, formwork, mesh and sheet products against wind uplift • Poor housekeeping standards on scaffolds, platforms and elevated work areas increasing the likelihood of items being knocked off • No defined system for safe delivery, staging and retrieval of materials at height • Uncontrolled accumulation of waste materials and packaging on levels above active work zones • Use of unsuitable storage containers that can tip or break, dropping contents to lower levels • Failure to consider dynamic conditio such as vibration, plant movement or wind gusts in storage arrangements	3H	[redacted]	2M
7. Tools, Equipment Securing and Dropped Object Prevention Devices	• Hand tools and sma equipment used at height without te ers or secondary retention systems • Inconsistent selec use of to lanyards, leading to inappropriate attachment methods or failure und load • Lack of systematic control of consumables and small items (nuts, bolts, washers) that can fall through gaps • Failure to manage portable equipment such as grinders, drills and radios on scaffolds and elevated platforms • Inadequate procedures for securing temporary fixtures, lighting, cameras or surveying devices at height • No standard for securing PPE or personal items (helmets, phones, water bottles) that may be dislodged	3H	[redacted]	2M

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	• Dropped object prevention devices not inspected, maintained or replaced when damaged			
8. Environmental and Weather-Related Drop Risk Management	• High winds dislodging unsecured materials, tools and temporary structures from elevated work areas • Sudden weather changes (storms, squalls) not adequately considered in planning and permitting processes • Rain, ice or condensation reducing friction and increasing the chance of items sliding from surfaces • Poor visibility (fog, dust, low light) impairing operator judgement and increasing the risk of uncontrolled load movement • Inadequate monitoring and communication of weather warnings to site supervisors and crane crews • No defined limits or cessation criteria for lifting operations and exposed elevated work during adverse weather	4A	[redacted]	2M
9. Contractor Management and Interface Control	• Multiple contractors operating above and below each other without coordinated control of dropped object risks • Inconsistent safety standards between principal contractor and subcontractors regarding tool tethering, barricading and drop zones • Failure to communicate overhead work and lifting schedules between work teams, leading to unplanned exposure to falling object hazards • Gaps in contractual requirements for falling object prevention and struck-by hazard management • Inadequate induction of contractors to site-specific drop zone layouts, exclusion rules and emergency procedures	4A	[redacted]	2M

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	• Lack of oversight of specialist contractors (e.g. crane crews, scaffolders) and their systems for preventing falling debris			
10. Training, Competency and Communication on Dropped Object Risks	• Workers and supervisors not adequately trained to recognise and control falling object and struck-by hazards • Inconsistent understanding of drop zone rules, tool tethering requirements and overhead exclusion procedures • Supervisors lacking competency to conduct and review risk assessments for work at height and lifting operations • Poor communication of daily changes to overhead work locations and associated drop zones • Induction programs not tailored to the specific falling object risks of the site or project • Reliance on informal or ad-hoc communication rather than structured pre-start or toolbox proc	3H	[redacted]	2M
11. Permit-to-Work, Isolation and Change Management for Overhead Activities	• High-risk overhe work pr without formal auth verification of controls • Failure to isolate or temporarily se areas below lifting operat d elevated work zones • Unmanaged changes to lifting plans, crane locations or work methods increasing falling object exposure • Concurrent permit activities (e.g. hot work below scaffolds) not coordinated, compounding drop risks • No systematic review of permits to confirm that dropped object controls remain effective during prolonged or staged works	4A	[redacted]	2M

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			[redacted]	
12. Incident Reporting, Investigation and Learning for Dropped Objects	• Dropped object near misses and minor events not reported, leading to missed early warning signs • Inadequate investigation of struck-by and falling object incidents, focusing on immediate causes only • Lack of trend analysis to identify recurring system failures such as poor housekeeping or ineffective drop zone control • Lessons from incidents not communicated across projects or to contractors • No formal mechanism to verify that corrective actions actually reduce falling object risk in practice	3H	[redacted]	2M
13. Monitoring, Inspection and Audit of Falling Object Controls	• Controls such as barriers, tool tethers and housekeeping standards degrading over time without detec • Informal inspectio focusing on general safety but verlooking one and overhead haza • No structured audit program to test compliance with organisational fa g object standards and pro • Inspection findings not recorded or tracked, resulting in repeated non-conformances • Supervisors and HSRs not trained to identify systemic weaknesses in falling object management	3H	[redacted]	1L
14. Emergency Preparedness and Response to Struck-By Incidents	• Inadequate planning for medical and rescue response to workers struck by falling objects within drop zones	3H	[redacted]	2M

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	• Confusion regarding roles, responsibilities and communication during a falling object emergency • Lack of consideration of overhead hazards when planning rescue routes and access for emergency services • Delayed response due to poor visibility of drop zones and access points on site plans • Workers not trained in how to respond safely if a dropped object event occurs (e.g. secondary collapse, unstable loads)		[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