Aluminium Window Door Frame Installation

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:

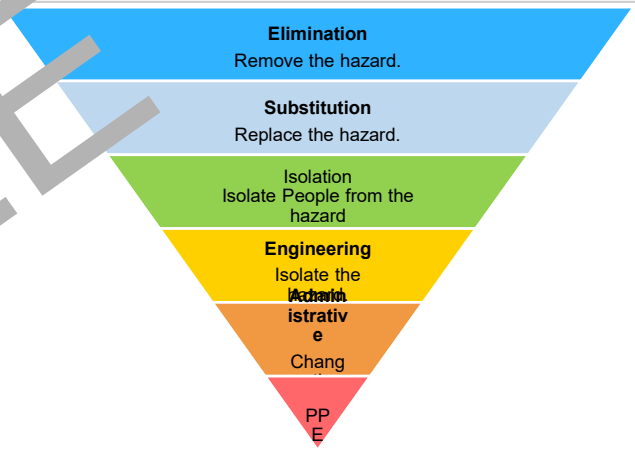
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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. WHS Governance, Duties and Consultation	• Lack of clear allocation of WHS duties under the WHS Act 2011 for aluminium window and door frame installation activities • Inadequate consultation with workers and subcontractors about specific hazards of cutting and handling architecture-grade extruded aluminium and pelmets • Absence of a documented WHS management plan for façade and glazing works, leading to ad-hoc decision-making • Poor integration of principal contractor and subcontractor WHS systems, resulting in gaps in supervision, reporting and risk controls • Inadequate worker participation in WHS discussions, leading to unreported hazards and near misses with aluminium cutting and handling • Failure to review and update WHS arrangements when work methods or equipment for aluminium cutting and mitre operations change	High	• Establish and document a WHS management system that clearly sets out roles, responsibilities and consultation arrangements for aluminium window and door frame installation in line with WHS Act 2011 and WHS Regulation requirements • Develop a project-specific WHS management plan for façade and aluminium framing works, including governance structure, communication pathways, escalation processes and review timeframes • Implement a formal consultation procedure requiring regular toolbox talks, pre-start meetings and safety committees with specific agenda items on aluminium cutting, pelmet handling and installation hazards • Ensure written agreements between principal contractor and subcontractors define WHS responsibilities, supervision expectations and reporting obligations for high-risk construction work involving aluminium frames • Introduce a requirement that any change to cutting methods, materials, mitre saws or handling equipment triggers a documented risk review and consultation with affected workers and HSRs • Establish a process for regular senior management review of WHS performance for aluminium installations (e.g. quarterly), using leading indicators such as inspections, training completion and corrective actions closed out • Maintain accessible WHS policies and procedures on site (digital or hard copy), and verify during audits that workers understand how to access and apply them • Integrate WHS objectives and responsibilities into supervisor and project manager position descriptions and performance reviews, with specific KPIs linked to managing aluminium cutting and handling risks	Medium
2. Design, Engineering and Procurement of Aluminium Systems	• Aluminium window, door or pelmet systems procured without consideration of safe installation methods, leading to excessive manual handling hazards from heavy weights and complex assemblies • Design of architecture-grade aluminium sections, pelmets and frames that necessitate extensive on-site cutting, mitre cutting and modification, increasing exposure to cutting, noise and airborne contaminants • Lack of early design coordination between architect, structural engineer, façade engineer and installer regarding fixings, tolerances and access for safe installation • Procurement of aluminium extrusions and pelmets without adequate material	High	• Implement a formal design review and constructability process for aluminium framing and pelmet systems, including WHS representation to ensure installability, access and minimisation of on-site cutting • Specify in procurement documentation that aluminium window, door and pelmet systems must be capable of being pre-cut, pre-drilled and factory-finished to reduce on-site mitre cutting and modification • Require designers and suppliers to provide engineering documentation, load tables and installation manuals that clearly describe safe fixing points, tolerances, sequencing and access requirements • Include WHS performance and documentation (e.g. safety data sheets, cutting guidance, handling recommendations) as evaluation criteria when selecting aluminium suppliers and systems • Standardise on a limited range of aluminium profiles and pelmet designs across projects to reduce unfamiliarity and the need for improvised cutting and joining arrangements • Ensure design documentation identifies maximum frame and pelmet section sizes and weights suitable for mechanical handling and team lifts, with consideration of access routes and work platforms • Incorporate engineered lifting lugs or gripping features into large or heavy aluminium assemblies at the design stage to support safe mechanical handling on site	Medium

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	certifications or data sheets regarding hazards, coatings, sharpness and compatibility with cutting equipment • Use of bespoke or non-standard extruded aluminium pelmets with insufficient design documentation, creating uncertainty about structural adequacy and fixing methods • Failure to specify engineered lifting points or handling features on large aluminium frames and pelmet assemblies, increasing reliance on manual handling or improvised solutions		• Establish a change-management procedure for any late design or procurement changes affecting aluminium profiles, requiring reassessment of installation and cutting risks before implementation	
3. Contractor Selection, Competency and Licensing	• Engagement of contractors to undertake aluminium window, door frame and pelmet installation without verification of competency, licences or experience • Inadequate assessment of subcontractors' WHS management systems, particularly regarding metal cutting, mitre saw use, and manageme of airborne contaminants and noise • Reliance on labour-hi ers or short-term subcont tors with little familiarity with the ecific aluminium systems and profil used ct • Failure to verify training and competency in the operation of po ed cutting equipment (e.g. m , drop saws, track saws) used for architecture-grade aluminium • Poor communication of expectations for supervision, safe systems of work and reporting lines to subcontractor supervisors and leading hands • Lack of clear criteria for removal or suspension of contractors who consistently fail to meet WHS performance expectations related to aluminium cutting and installation	High	• lem t a fo al prequalification process for glazing and aluminium installation contractors that inclu sessment of technical capability, WHS systems and relevant licences • equire contractors to submit evidence of training and competency for workers operating aluminium c ng equipment, including mitre saws, and verify during mobilisation • Assess contractor SWMS, procedures and risk assessments specific to cutting architecture-grade aluminium, handling extrusions and installing pelmets prior to site commencement • Include contractual clauses requiring compliance with the WHS Act 2011, WHS Regulation, relevant Australian Standards and project-specific WHS procedures for aluminium works • Define minimum supervision requirements for aluminium installation activities (e.g. ratio of supervisors to workers, experience thresholds) and verify during site inspections • Establish a formal contractor performance monitoring system, including WHS audits, observation reports and non-conformance notices linked to clear corrective action timeframes • Develop and apply a documented escalation pathway for poor WHS performance (verbal warning, written notice, suspension, removal from site) that is communicated to all contractors at induction • Maintain an up-to-date contractor register capturing licences, competencies, insurance and WHS performance history for all businesses involved in aluminium cutting and installation	Medium

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4. Training, Competency and Supervision Systems	• Workers performing aluminium cutting, mitre operations and handling of extruded pelmets without adequate task-specific training • Supervisors lacking competency to identify poor practices in mitre cutting, clamping, guarding and dust control for aluminium sections • Insufficient training on the specific behaviour of architecture-grade aluminium (e.g. sharp edges, burrs, kickback potential, swarf generation, heat) when cut • No formal verification of worker competency with specialised aluminium cutting equipment, such as double mitre saws or precision extrusion saws • Lack of training in manual handling techniques for long, flexible or awkward aluminium extrusions and pelmet lengths • Inadequate supervision of new or young workers, increasing the risk of unsafe shortcuts or ex[redacted]tation with cutting setups • Limited training i[redacted]ecognisin[redacted] reporting early sign[redacted]sis-type[redacted] respiratory risk from mixed dusts and aluminium particulates where cuttin[redacted] occurs near masonry or o[redacted]erials	High	[redacted]	Medium
5. Plant, Tools and Equipment Management (Cutting and Handling)	• Use of inappropriate or poorly maintained cutting plant (e.g. worn blades, incorrect blade type for aluminium, missing guards) for mitre cutting and sectioning of extrusions • Lack of engineered dust and swarf extraction systems on aluminium cutting equipment, leading to airborne particles, slips and fire risk • Inadequate systems to ensure regular inspection, tagging and maintenance of saws, grinders and portable cutting tools used on aluminium frames and pelmets	High	[redacted]	Medium

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	• Uncontrolled introduction of non-compliant or homemade jigs, clamps or supports for mitre cutting long aluminium sections • Absence of standardised supports, roller stands or infeed/outfeed systems, leading to instability of long or heavy extrusions during cutting • Insufficient control of noise emissions from cutting equipment, increasing the risk of hearing damage to operators and others nearby • Inadequate provision and maintenance of mechanical handling equipment (e.g. trolleys, A-frames, glass and frame lifters) for long and heavy aluminium assemblies		[redacted]	
6. Work Environment and Site Planning for Aluminium Works	• Inadequate planning of dedicated areas for aluminium cutting, resulting in cutting occurring in congested work zones or shared access paths • Poor layout of material storage for extruded aluminium sections and pelmets, increasing manual handling distances and risk of impact or collapse of stored materials • Insufficient lighting in cutting and installation areas, contributing to inaccurate cuts, rework and potential contact with saw blades or sharp edges • Uncontrolled interaction between aluminium installation works and other trades, leading to interference, distraction and increased risk of collision or dropped objects • Inadequate planning of access and egress for long aluminium frames and pelmets in stairwells, lifts, scaffolds and through doorways, leading to crush or strike hazards • Failure to plan for weather and environmental conditions where aluminium cutting and handling occurs	High	[redacted]	Medium

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	outdoors (e.g. wind affecting long sections, rain affecting electrical tools)			
7. Manual Handling, Ergonomics and Material Handling Systems	• Excessive manual handling of long or heavy aluminium window and door frames and pelmet extrusions without appropriate aids or team lifting arrangements • Poor ergonomic design of cutting benches and workstations, leading to awkward postures, overreach and musculoskeletal disorders • Lack of systems to control the stacking height and orientation of aluminium sections, causing instability and crush hazards • Inadequate procedures for team lifting coordination when manoeuvring large frames through tight spaces or onto work platforms • Failure to manage repetitive handling of small aluminium components, fixings and offcuts, contributing to cumulative strain injuries • Insufficient consideration of manual handling load when specifying pre-glazed versus unglazed aluminium frames and pre-assembled versus loose pelmet components	High	[redacted]	Medium
8. Hazardous Substances, Airborne Contaminants and Housekeeping	• Generation of fine aluminium swarf and particulates during cutting and mitre operations without effective capture or control • Potential exposure to mixed dusts where aluminium cutting occurs in proximity to masonry, fibre-cement or other hazardous materials • Accumulation of aluminium offcuts, swarf and shavings on floors and benches, increasing slip, trip and fire hazards • Use of lubricants, coolants or cutting compounds during aluminium machining	High	[redacted]	Medium

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	without appropriate storage, labelling or safety data sheets • Inadequate systems for the collection, segregation and disposal or recycling of aluminium waste and offcuts • Lack of routine housekeeping inspections focused on cutting areas, leading to progressive build-up of debris and contamination		[redacted]	
9. Working at Height, Access and Edge Protection for Frame Installation	• Installation of aluminium window and door frames and pelmets at height without adequate edge protection or fall prevention systems • Use of inappropriate access equipment (e.g. ladders instead of work platforms) for fitting frames into openings at elevation • Poor planning of how long aluminium extrusions and pelmets will be manoeuvred on scaffolds, EWPs or incomplete floor edges • Insufficient coordination between façade trades and scaffold providers, resulting in access platforms that are not suited to handling large frames and extrusions • Lack of documented procedures for securing frames and pelmets during installation at height to prevent falls of objects • Inadequate controls for interaction between aluminium installation teams and other trades working above or below, increasing risk of struck-by incidents	High	[redacted]	Medium
10. Documentation, SWMS, Procedures and Change Management	• Absence of, or inadequate, Safe Work Method Statements (SWMS) covering aluminium window, door frame and pelmet installation as high risk construction work	High	[redacted]	Low

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	• Procedures for aluminium cutting, mitre operations and handling not documented, inconsistent between crews, or not accessible on site • Failure to review and update documentation when new aluminium profiles, pelmet designs or cutting technologies are introduced • Workers and subcontractors not reading or understanding SWMS and procedures due to overly generic or complex content • Lack of version control and distribution systems, leading to multiple or outdated processes for aluminium installation being followed on different levels or areas • No formal mechanism to capture lessons learned or improvements from incidents, near misses or worker feedback into revised procedures		[redacted]	
11. Incident Reporting, Monitoring and Continuous Improvement	• Under-reporting of incidents, near misses and hazards related to aluminium cutting, mit[illegible] operations and pelmet handling • Inadequate inves[illegible]ation of [illegible] minor injuries such [illegible] laceratio[illegible] and strains associated with aluminiu[illegible] sections • No systematic analysis [illegible]S data specific to aluminium installation, limiting ability to identify trends and systemic issues • Failure to communicate incident learnings and corrective actions to all relevant crews and subcontractors • Lack of leading indicators for monitoring WHS performance (e.g. inspections, training compliance) related to aluminium work • Corrective actions from audits and incident investigations not being tracked to completion	Medium	[redacted]	Low

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			[redacted]	
12. Emergency Preparedness and First Aid for Aluminium-Related Work	• Inadequate emergency response planning for injuries associated with aluminium cutting, including lacerations, eye injuries and amputations • Lack of first aid resources and trained first aiders in proximity to aluminium cutting and installation areas • Insufficient planning for emergency response where aluminium installation occurs at height or in restricted access zones • Poor communication of emergency procedures to subcontractors and labour-hire workers involved in aluminium works • Failure to consider p[redacted] fire or explosion risks ass[redacted]ated with accumulations of a[redacted]minium swarf and interaction with ign[redacted]	Medi[redacted]	[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

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