Insulation Installation Glass Wool and Batts

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:

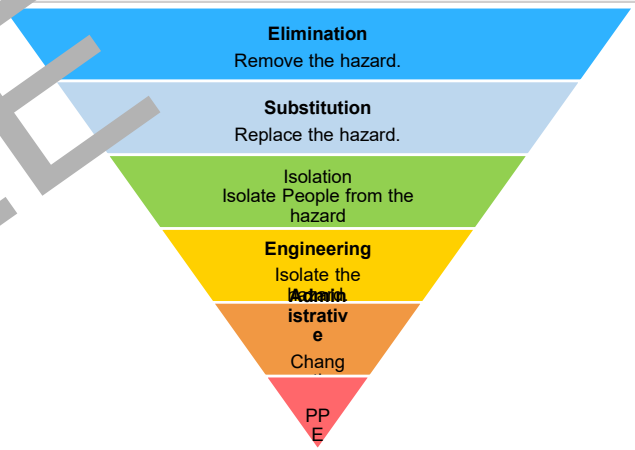
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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, Legal Compliance and PCBU Duties	• Incomplete understanding of WHS Act 2011 and WHS Regulations as they apply to insulation works (construction, hazardous substances, confined spaces, working at height, plant) • Lack of clearly assigned WHS responsibilities between PCBU, principal contractor, supervisors and subcontractors • Failure to consult, cooperate and coordinate with other duty holders on multi-PCBU sites (e.g. builders, electricians, HVAC contractors) • No documented WHS management plan for insulation activities on construction projects • Inadequate review of legislative changes, codes of practice and standards relevant to glass wool and batt insulation • Poor records management for risk assessments, inductions, health monitoring, and incider[illegible]vestigations	4A	• Establish and maintain a documented WH[illegible]Manageme[illegible]System aligned with WHS Act 2011, WHS Regulations, and relevant Codes of Practice[illegible]onstru[illegible]n Work, Hazardous Chemicals, Managing the Work Environment and Facilities) • Define and document WHS[illegible]les, responsibilitie[illegible]nd repor[illegible]g lines for officers, managers, supervisors and workers involved in insula[illegible] works • Implement a form[illegible]s for[illegible]sultation, cooperation and coordination with other PCBUs, including WHS interface[illegible]eements[illegible]nd pre[illegible]art coordi[illegible]ion meetings • Develop pro[illegible]t-specific W[illegible]S Manag[illegible]t Plans for construction sites that include insulation scope, key ri[illegible](fibreg[illegible]s, loft[illegible]sulation, ceili[illegible]g spaces, plant) and control strategies • Sche[illegible]periodi[illegible]gal and standards compliance reviews (e.g. AS/NZS 4859, AS/NZS 1715/1716, electric[illegible]s[illegible]ty, wo[illegible]g at heights) with documented action plans • Maint[illegible]co[illegible]lled W[illegible]S documentation and records (risk assessments, SWMS, SDS, health monitoring [illegible]orts, [illegible]ining[illegible]cords, audits) with version control and retention periods • Ens[illegible]officers exercise due diligence via regular WHS performance reporting, site visits, and review of [illegible]sk cont[illegible]for insulation installation activities	2M
2. Design, Planning and Integration with Building Services	• Inadequate consi[illegible]ration of insulation types (glass wool,[illegible]tts, sisal[illegible] sound isolation pro[illegible]ning des[illegible]n leading to poor installability or safety • Insulation design that obstructs[illegible]ess to electrical wiring, junctio[illegible]es, downlights, skylights or mechanical plant • Failure to plan for safe access/egress into roof spaces and lofts for rafter insulation installation and ceiling panel installation • Insufficient allowance for ventilation requirements, leading to condensation, mould growth and degradation of insulation performance • Lack of design provisions to separate insulation from hot surfaces, recessed luminaires and other ignition sources	3H	• Integrate WHS considerations into design and estimating processes, including safe installability, access routes, working space and material handling requirements • Specify insulation products and systems that are compatible with electrical and mechanical designs and comply with relevant fire and thermal performance standards • Require designers to identify and document no-go zones, services locations, skylights, fragile roof materials and restricted access areas on construction drawings • Mandate design details and installation instructions for clearances from downlights, transformers, flues and other heat sources in line with AS/NZS and manufacturer requirements • Include provisions for safe access into ceiling spaces and lofts (e.g. permanent access hatches, walkways, lighting, fall prevention measures) • Implement a design review and constructability process with installer and supervisor input before works commence, focusing on high-risk areas such as skylight insulation and confined roof cavities	2M

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
	• Poor planning for insulation around skylights, roof hatches and fragile roof sections increasing fall and break-through risks			
3. Procurement and Selection of Insulation Products and Materials	• Procurement of glass wool, fibreglass batts or blown insulation without verifying compliance with Australian standards and SDS requirements • Selection of insulation with higher fibre shedding or irritant binders increasing risk of respiratory damage from fibreglass insulation exposure and skin/eye irritation • Purchase of incompatible systems (e.g. sisalation with incorrect fire performance when used near heat sources) • Inconsistent product labelling and packaging, leading to confusion over R-values, thickness, and installation methods • Use of non-conforming or counterfeit products for sound isolation installation and thermal insulation • Failure to specify l dust, low-VOC alternatives where asonably practicable	3H	• Implement a formal procurem procedure requir cation of compliance certificates, SDS, and performance data (R , fire ing, acoustic ratin for all insulation products • Standardise proved ins tion p uct lists lass wool batts, blown insulation, sisalation, sound isolation mat ls) with cle WHS ar mance criteria • Req suppli to p ide up-to-date SDS and installation instructions in Australian format and ensure they a cessib workers and supervisors • Speci lo ritant, -dust fibreglass and glass wool products where practicable to minimise respirat y ar dermal posure sure l insu on products are appropriately labelled with thickness, R-value, and installation orie io to reduce on-site decision errors Conduct supplier performance reviews including WHS issues (e.g. incidence of fibre shedding c plaints, packaging integrity, SDS accuracy)	1L
4. Contractor Management, Competency and Supervision	• Use of subcontractors for insulation works without adequate WHS prequalification or competency verification • Inadequate training on hazards specific to handling of fibreglass insulation panels, glass wool insulation and blown insulation equipment • Lack of supervision for new or young workers undertaking insulation batt installation and loft insulation work • Poor understanding of risk controls for respiratory damage from fibreglass insulation exposure and unsafe handling of glasswool insulation • No system for verifying licences/competencies for plant such as	4A	[redacted]	2M

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
	insulation blower machines, EWPs or forklifts used to move insulation • Failure to enforce SWMS implementation on construction sites, leading to drift from agreed controls		[redacted]	
5. Induction, Training and Worker Information	• Workers unaware of specific hazards associated with glass wool, fibreglass batts, dust, and loft insulation risks • Inadequate training on safe systems for measuring and cutting insulation material and fixing insulation panels • Lack of awareness of symptoms and reporting pathways for respiratory irritation or skin/eye reactions • Poor understanding of safe work methods in roof spaces, around rafters, skylights and fragile ceiling linings • No competency-based assessment of workers operating insulation blower machines • Language or literacy barriers leading misunderstanding of WHS procedures and PPE requirement	3H	[redacted]	2M
6. Hazardous Substances, Dust and Respiratory Health Management	• Respiratory dam e from fib insulation exposure iation o airborne glass wool fibres and dust • Inadequate control of dust duri batt cutting, measuring and c sulation material, and insulation blower machine operation • Lack of consideration of existing contaminants in roof spaces (rodent droppings, mould, asbestos-containing materials in older buildings) • Incorrect or inconsistent use of respiratory protection and protective clothing • Poor housekeeping leading to accumulation of fibrous dust on surfaces and in air	4A	[redacted]	2M

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
	• No health monitoring or baseline respiratory assessments for workers with significant ongoing exposure			
7. Manual Handling, Ergonomics and Material Logistics	• Musculoskeletal strain from loading and unloading insulation rolls or batts, and moving bulky glass fibre insulation panels • Awkward postures during laying insulation in confined lofts, rafter spaces and ceiling cavities • Unplanned single-person lifting of large insulation packs due to poor resourcing or time pressure • Inadequate planning of material staging causing excessive carrying distances and repeated handling • Use of makeshift methods to move insulation to high levels or roof areas (e.g. manual haul instead of mechanical aids)	3H	[redacted]	2M
8. Working at Heights, Roof Spaces and Skylight/Loft Risks	• Falls through fragile ceilings or plasterboard while installing ceiling insulation batts or ceilin[redacted]s • Falls from height [redacted]ile accessing roofs, rafters or loft spac[redacted] for insulatio[redacted]works • Skylight insulation [redacted]ncluding stepping onto or tripping over unprotected skylights or light shaft[redacted] • Inadequate edge protectio[redacted] fall prevention systems when installing sisalation or roof insulation • Limited visibility and lighting in roof cavities contributing to slips, trips, missteps and contact with electrical or structural hazards • Unsuitable access equipment (ladders, temporary platforms) or unsafe ladder use practices	4A	[redacted]	2M
9. Electrical, Fire and Thermal Risk Management	• Contact with live electrical wiring or unprotected junction boxes while laying insulation in ceilings and rafters	4A		2M

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
	• Overheating of downlights, transformers or other electrical components due to insulation contact or coverage • Insulation installed too close to flues, chimneys or other hot surfaces increasing fire risk • Inadequate procedures to isolate or identify electrical hazards before starting insulation works • Use of portable electrical equipment (lights, blowers, cutting tools) in confined roof spaces without appropriate testing and tagging or RCD protection		[redacted]	
10. Plant, Equipment and Insulation Blower Machine Management	• Inadequate guarding, maintenance c inspection of insulation blower machin and associated hoses • Uncontrolled dust em ...rom blower machine op...tion affecting both workers and other ...e personnel • Noise exposure fr... mach...s and cutting equipment without contr... • Untrained or unsupervised oper...n of blower machines or cutti... for batt cutting • Poor selection or maintenance of cutting tools leading to increased force, repetitive strain or slips with sharp blades	3H	[redacted]	1L
11. Environmental Conditions, Heat Stress and Work Environment	• Heat stress and dehydration for workers installing insulation in roof spaces, lofts and ceilings during hot weather	3H	[redacted]	2M

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
	• Poor ventilation in roof cavities leading to build-up of dust, heat and possible fumes from adjacent works • Inadequate lighting contributing to slips, trips and contact with hidden hazards • Adverse weather (rain, wind) affecting roof-level insulation works and increasing slip and fall risks • Noise and vibration from nearby construction activities impacting concentration and communication		[redacted]	
12. Site Traffic, Material Storage and Housekeeping	• Vehicle and mobile plant interactions during delivery and loading/unloading of insulation rolls or batts • Obstructed access/egress due to poorly stored insulation packs and offcuts in work areas and access route • Trip hazards from batt packaging, strapping, offcuts and tools left in ceiling spaces, lofts and walkway • Damage to insulation materials from poor storage practices, leading to rework and increased handling • Fire load increase due to accumulation of packaging waste and scrap insulation	3H	[redacted]	1L
13. Health Surveillance, Incident Management and Worker Wellbeing	• Unreported or unmanaged respiratory and skin issues resulting from prolonged exposure to glass wool and fibreglass insulation • Inadequate incident and near-miss reporting culture leading to repeated insulation-related events (e.g. ceiling breakthroughs, loft falls, minor electrical contacts) • Psychological stress from working in hot, confined spaces or under tight time pressures for insulation works	3H	[redacted]	2M

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
	• Insufficient access to first aid and appropriate decontamination facilities (eye wash, washing facilities) after handling fibres • Failure to learn from incidents and audit findings, resulting in control measures not being improved over time		[redacted]	
14. Documentation, Review and Continuous Improvement of Insulation WHS Controls	• Outdated risk assessments and procedures for insulation installation not reflecting current methods, materials or equipment • Inconsistent application of WHS controls between different projects and crews • Limited worker consultation in developing or reviewing insulation-related procedures leading to impractical controls • Failure to capture lessons learned from loft insulation risks, skylight incidents [redacted] unsafe handling of glasswool insulation • Over-reliance on SWMS alone without higher-level system [redacted] insulation risk controls	3H	[redacted]	1L

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