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

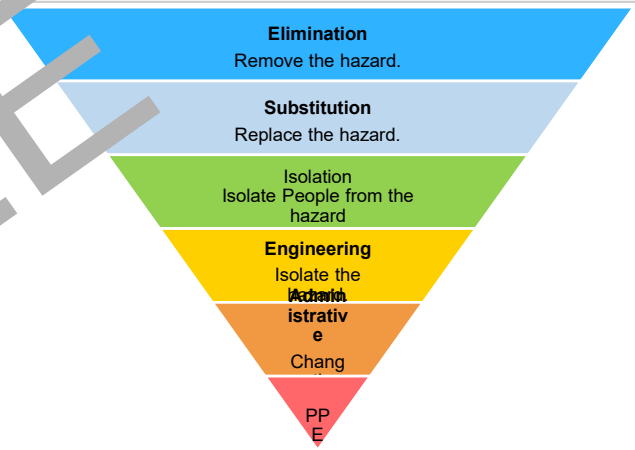
THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT		
Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.		
Full Name:		
Signature:	Title:	Date:

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, Roles and Consultation for Waterproofing Activities	• Lack of a documented WHS management framework for waterproofing activities leading to inconsistent risk controls across projects • Unclear allocation of WHS responsibilities between PCBU, principal contractor, waterproofing subcontractor, supervisors and workers • Insufficient consultation with workers and Health and Safety Representatives (HSRs) on specific waterproofing hazards (e.g. torch-on membrane, solvent use, work at height, confined floor spaces) • Failure to integrate waterproofing-specific risks into the overall construction Project WHS Management Plan • Inadequate processes for reporting, investigating and learning from waterproofing-related incidents, near misses and defects (e.g. water ingress, membrane failures, chemical exposure) • No formal review of WHS performance of waterproofing subcontractors, leading to repeated system issues	High	• Establish and maintain a documented WHS Management System (WHSMS) that explicitly addresses waterproofing works, aligned with the WHS Act 2011, WHS Regulation and relevant Codes of Practice (e.g. Construction Work, Managing Risks of Hazardous Chemicals) • Define and document WHS roles and responsibilities for all parties involved in waterproofing works (PCBU, principal contractor, design team, waterproofing contractors, supervisors, labour hire and workers) • Embed waterproofing activities (e.g. wet area waterproofing, roof waterproofing for commercial construction, torch-on membrane systems, silicon application, penetrating damp treatment) into the Project WHS Management Plan and site-specific risk registers • Implement formal consultation mechanisms (toolbox talks, pre-starts, HSR forums) specifically addressing system and management risks relevant to waterproofing such as management of water ingress, high surface risk, vapour barriers and chemical handling • Develop and enforce procedures for reporting, recording and investigating waterproofing incidents, including water ingress events, barrier failures, membrane delamination and chemical exposure events, with root cause analysis and corrective actions • Introduce a structured WHS performance review process for waterproofing subcontractors, including audits, KPI monitoring (e.g. incident rates, quality defects, rework due to leaks) and pre-qualification criteria • Ensure integration between waterproofing quality management and WHS systems so that quality defects (e.g. failed seals, inadequate vapour barriers) trigger WHS reviews and system improvements • Schedule periodic management reviews of waterproofing-related WHS performance, including consultation feedback, audit results and legislative or standards changes	Medium
2. Design, Specification and Procurement of Waterproofing Systems	• Inadequate or ambiguous design documentation for waterproofing leading to inappropriate selection of systems, substrates and materials • Failure to consider compatibility between waterproofing products and different substrates when creating isolation barriers (e.g. between concrete, masonry, metal, timber and existing membranes) • Under-specification or omission of vapour barriers, sealing layers or elastomeric systems in design for roofs, wet areas and lower wall portions • Selection of products that do not meet Australian Standards, manufacturer's	High	• Implement a formal design review and verification process for all waterproofing scopes (wet area works, commercial roof waterproofing, below-grade and façade sealing) involving designers, principal contractor, waterproofing specialist and WHS advisor • Specify waterproofing systems in accordance with relevant Australian Standards and NCC requirements (e.g. AS 3740 wet areas, AS 4654 external above-ground waterproofing, AS 4858 membrane classifications) and manufacturer system manuals • Require designers to identify and document all interfaces where isolation barriers are needed between different substrates, and to nominate compatible primers, membranes and sealants for those interfaces • Ensure design documentation clearly details vapour barrier locations, thickness, laps, continuity and integration with other sealing layers for roofs, walls and floors • Adopt a controlled procurement process where only pre-approved, tested and certified waterproofing products (membranes, silicon, glues, elastomeric coatings, penetrating damp treatments) can be purchased, including verification of compliance certificates and SDS	Medium

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	requirements or NCC/BCA performance provisions for waterproofing • Procurement of cheaper, untested or counterfeit materials (membranes, sealants, primers, elastomerics, vapour barriers) that degrade prematurely or emit higher levels of hazardous vapours • Lack of design coordination between architectural, structural and services disciplines resulting in unplanned penetrations and junctions that compromise waterproofing and increase rework risk • No systematic design assessment of penetrations, joints, interfaces at walls and floors, high surfaces and parapets for water ingress pathways • Inadequate specification of torch-on membrane systems (e.g. base sheet, cap sheet, fire protection measures, substrate preparation requirements)		• Mandate design coordination workshops to review all penetrations (services, fixings, balustrades, plant equipment) and high-risk water ingress points, ensuring buildable and safe waterproofing solutions are documented prior to construction • Include torch-on membrane design requirements in the specification covering compatible substrates, fire management controls, protection boards, terminations, edge details and safe access provisions • Maintain a central register of approved waterproofing systems and suppliers, including restrictions on mixing systems and guidance on compatible isolating layers between substrates and membranes • Require design risk assessments to document WHS implications of selected waterproofing systems (e.g. need for working at height controls on roofs, hazardous chemical controls, fire risk from torch-on) and communicate these to the construction team	
3. Contractor Selection, Competency and Training for Waterproofing Works	• Engagement of waterproofing contractors without verification of competency, licensing and experience with specified systems (e.g. torch-on, large scale elastomeric, vapour barriers, wet area waterproofing) • Insufficient training of workers in safe handling of waterproofing chemicals (solvents, primers, adhesives, curing agents, penetrating damp treatments) • Lack of competency in installation practices that ensure long-term water tightness (e.g. correct laps, sealing at joins adjacent to walls, detailing high surfaces, floor-to-wall junctions) • Inadequate training in fire risk and emergency response for torch-on membrane systems and heat-based curing systems • Supervisors not adequately trained in identifying systemic waterproofing quality issues that may translate into	High	• Implement a formal pre-qualification and selection process for waterproofing contractors that includes verification of licences, trade qualifications, demonstrated experience with relevant systems and reference projects • Require waterproofing supervisors and key installers to hold recognised qualifications or manufacturer accreditation for specific systems (e.g. torch-on membranes, liquid-applied membranes, elastomeric coatings, wet area systems) • Develop and deliver project-specific waterproofing WHS inductions covering handling of waterproofing chemicals, work at height on roofs, working in wet or confined areas and management of water ingress during construction • Provide competency-based training and refresher training for workers on safe use of glues, primers, sealants, silicon application, penetrating damp treatments and other hazardous substances in accordance with SDS and Codes of Practice • Ensure all personnel involved in torch-on or heat-applied membrane systems receive training in hot work permits, fire watch responsibilities, fire extinguisher use and emergency procedures • Train supervisors and leading hands to conduct systematic checks of waterproofing works focusing on risk factors such as incomplete isolation barriers between substrates, missing vapour barriers, poor joins and inadequate sealing of high surfaces • Maintain training and competency records for all workers performing waterproofing tasks, with verification prior to commencing work and periodic review	Medium

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	WHS risks (e.g. mould growth, structural damage from water ingress) • No formal induction on project-specific waterproofing hazards such as working on high roofs, slippery surfaces, confined floor areas or restricted access wet areas		• Incorporate lessons learned from past waterproofing defects and incidents into ongoing training and toolbox talks to prevent recurrence of systemic issues	
4. Hazardous Chemicals and Materials Management for Waterproofing Systems	• Use of hazardous waterproofing chemicals (solvent-based primers, adhesives, sealants, elastomeric coatings, penetrating damp treatments) without a structured management system • Incomplete or outdated Safety Data Sheets (SDS) for products used in sealing, gluing rubber seals, silicon application and membrane installation • Inappropriate storage, labelling or segregation of flammable and corrosive chemicals used in waterproofing, increasing risk of fire, explosion or harmful reactions • Lack of formal risk assessments and safe systems of work f…ling, mixing and disposin… of waterproofing chemicals • Inadequate ventila… …s when applying products in wet areas, encl…ed roof spaces or areas with limited ai…ow leading to inhalation expo…ure • No consistent process for PPE selection, issue and enforcement across different waterproofing chemical products • Inappropriate or environmentally unsafe disposal of waste chemicals, containers and contaminated materials leading to regulatory non-compliance and environmental incidents	Hi…	[redacted]	Medium
5. Planning and Coordination of Waterproofing	• Poor coordination of trades leading to damage or compromise of installed waterproofing membranes, seals and vapour barriers	High	[redacted]	Medium

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Interfaces and Sequencing	• Inadequate planning for penetrations and fixings after waterproofing is installed, requiring ad hoc cutting and patching with increased leak risk • Lack of a system for protecting finished waterproofing (e.g. floor membranes, roof membranes, isolation barriers) from subsequent construction activities and weather • Insufficient planning for weather exposure during critical stages such as implementing sealing layers, laying waterproofing membranes or applying elastomeric coatings • No systematic approach to managing interfaces at walls, joins, high surfaces, parapets and floor-to-wall junctions, resulting in inconsistent detailing and water ingress paths • Failure to sequence wet area works with sufficient curing times, inspection windows and testing before covering membranes with finishes • Uncontrolled variation[redacted]uct substitutions impact[redacted]g the compatibility and integrity of the[redacted]verall waterproofing system		[redacted]	
6. Work at Height, Access and Egress for Roof and Elevated Waterproofing	• Inadequate systems for manag[redacted] work at height risks during wate[redacted]oofing for commercial construction on roofs and other high surfaces • Poorly planned access and egress routes for transporting waterproofing materials, membranes and equipment to elevated work areas • Absence of engineered fall protection systems (edge protection, guardrails, anchor points) integrated with the roof waterproofing design and installation • Use of temporary access equipment (ladders, scaffolds, EWP) without	High	[redacted]	Medium

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	consistent inspection, tagging or competence verification processes • Slips and trips on wet, partially waterproofed or uneven surfaces, particularly where water ingress or ponding occurs during works • Insufficient control over weather conditions (wind, rain, heat) affecting safety of workers on exposed roofs during application of torch-on membranes, elastomerics and sealing layers		[redacted]	
7. Water Ingress, Moisture Management and Building Health	• Systemic failure to manage water ingress during and after construction leading to structural damage, mould growth and unhealthy work environments • Lack of monitoring and verification processes to confirm performance of isolation barriers, vapour barriers, sealing layers and membranes • Inadequate planning for temporary water management duri[redacted]struction (e.g. unsealed roof p[redacted]etrations, incomplete parape[redacted]etailing, open joints adjacent to walls) • Failure to integrate p[redacted]etrating dan treatments and weatherproofing strategies into an overall moistur[redacted] management plan, resulti[redacted]apped moisture or condensation • No clear process to respond to, investigate and rectify leaks identified during the construction phase or defect liability period • Incomplete documentation of as-built waterproofing systems, complicating future maintenance and increasing the risk of uncoordinated penetrations and modifications	High	[redacted]	Medium
8. Quality Assurance, Inspection and Testing of Waterproofing Works	• Absence of a structured quality assurance (QA) system for	High		Low

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	waterproofing leading to inconsistent installation and undetected defects • Insufficient inspection hold points for critical stages such as substrate preparation, isolation barrier installation, vapour barrier placement, membrane laps and sealing of joints • Reliance on visual checks only without functional testing of wet area waterproofing or roofs where appropriate and practicable • Poor documentation of inspections, test results and non-conformances, limiting traceability and continuous improvement • Inadequate supervision ratios for complex waterproofing works such as large scale elastomeric layers, torch-on membrane systems and multi-layer roofing assemblies • Lack of integration between QA findings and WHS management, resulting in missed opportunities to address systemic risks		[redacted]	
9. Emergency Preparedness, Incident Response and Fire Safety	• Lack of emergen[redacted] to torch-on membrane[redacted] and oth[redacted] hot work associated with waterproof[redacted] • Inadequate preparedness for ch[redacted]ical spills, fumes or acute exp[redacted] related to waterproofing products in wet areas, roofs and confined zones • No clear process for responding to sudden water ingress events during construction (e.g. storm damage to partially waterproofed roofs, failed temporary seals) • Poor communication and training on emergency procedures for subcontractors and short-term workers involved in waterproofing activities • Insufficient emergency equipment (spill kits, fire extinguishers, respiratory	High	[redacted]	Medium

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	protection) at or near waterproofing work fronts • Failure to investigate and learn from waterproofing-related emergencies, leading to repeated incidents		[redacted]	
10. Ongoing Maintenance, Handover and Lifecycle Management of Waterproofing	• Insufficient information provided to building owners and facility managers on the maintenance needs and limitations of installed waterproofing systems • Lack of documented procedures for safe inspection and maintenance of roofs, high surfaces, wet areas and lower wall portions, leading to ad hoc and unsafe practices • Uncontrolled penetrations, fixings or repairs carried out post-handover that compromise waterproofing and introduce water ingress risks • Failure to conduct routine inspection of high-risk areas (roofs, balconies, we areas) resulting in gradual deteriorati leaks and building health issues • No systematic pro s for recording and assessing rec ng leaks or damp issues over the bu ing life li he ability to address ro • Use of incompatible repair materia during lifecycle works that react adversely with existing m es, isolation layers or vapour barriers	Medium	[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