Plumbing Rough-ins And Fitouts

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:

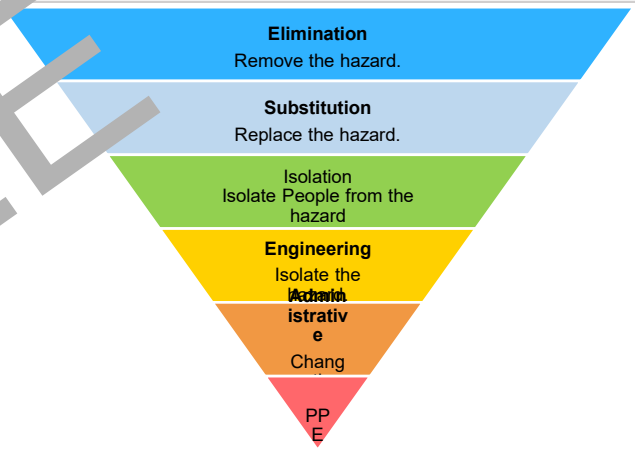
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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, PCBU Duties And Due Diligence	• Lack of clearly defined WHS responsibilities for directors, managers, supervisors and leading hands overseeing plumbing rough-ins and fitouts • Inadequate demonstration of officer due diligence under WHS Act 2011 (e.g. poor resourcing, weak monitoring of WHS performance) • Absence of a documented WHS management system specific to construction plumbing activities (rough-in and final fit-out) • Fragmented or informal safety decision-making, with commercial pressures overriding WHS considerations • Poor integration of WHS obligations into contracts, tenders and project planning for plumbing works	High	• Establish and document a WHS management system (WHSMS) aligned with WHS Act 2011 and relevant Codes of Practice, specifically addressing plumbing rough-ins and fitouts on construction sites • Define and document WHS roles, responsibilities and accountabilities for PCBUs, officers, project managers, site supervisors and subcontractor supervisors involved with plumbing activities • Implement a due diligence framework for officers including regular WHS reporting, review of incident trends, audit outcomes and corrective actions related to plumbing works • Embed WHS requirements for plumbing into company policies, project execution plans and site-specific WHS management plans, ensuring they are communicated and periodically reviewed • Include explicit WHS performance expectations, consultation requirements, and right-to-stop-work clauses in contracts with plumbing subcontractors and labour hire providers • Schedule periodic WHS governance reviews (e.g. quarterly) to evaluate the effectiveness of the WHSMS for plumbing work and to allocate sufficient resources for improvement • Maintain documented evidence of leadership commitment (e.g. WHS objectives and targets, site walks, toolbox attendance, management review minutes) specifically referencing plumbing risk areas • Ensure WHS legal updates are monitored and system changes made where legislation, standards or codes relevant to plumbing rough-ins and fitouts are amended	Medium
2. Planning, Design And Coordination Of Plumbing Works	• Poor coordination between plumber, builder, electricians, HVAC and structural trades leading to clashes, rework and unsafe work sequencing • Designs that do not adequately consider constructability, access, confined spaces, or the location of services during rough-in and fitout • Inadequate review of building plans and service layouts resulting in unplanned penetrations, cutting, or changes on site • Lack of early identification of high-risk elements (e.g. deep trenching, connection to live services, working in shafts or risers) • Insufficient allowance in programme for safe methods of work (e.g. time pressure causing shortcuts in isolation, testing or housekeeping) • Failure to plan for testing, commissioning and flushing activities,	High	• Implement a formal pre-construction planning process for plumbing rough-in and fitout that includes WHS risk review of design drawings, specifications and services coordination models • Use coordinated services drawings/BIM where available to identify clashes and plan penetrations so that cutting, drilling and rework are minimised and controlled • Conduct multidisciplinary planning meetings with builder, plumbing contractor, electrical, HVAC and structural teams to agree on safe work sequencing, access arrangements and shared controls • Identify high-risk activities for plumbing (e.g. work in shafts/risers, confined spaces, excavation for drainage, work at height for stack work) and ensure they trigger more detailed risk assessments and documented procedures • Build realistic timeframes and resourcing into the project programme that allow for safe rough-in, pressure testing, disinfection, commissioning and rectification, avoiding excessive overtime and compressions • Document specific planning controls for management of discharges during testing, flushing and cleaning of systems so they do not create slip hazards or environmental harm • Establish an engineering/technical design review process for plumbing layouts that considers maintenance access, isolation points and future inspection requirements • Ensure changes to design or scope for plumbing are managed under a documented change management procedure, including WHS impact assessment and communication to relevant workers	Medium

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	including management of water discharge and effluent			
3. Contractor And Subcontractor Management	• Engagement of plumbing subcontractors without adequate WHS competence, licences or systems • Inconsistent WHS standards between principal contractor and plumbing subcontractor leading to confusion and non-compliance • Inadequate verification of safe systems of work, insurance, and worker capability prior to commencing rough-in or fitout • Poor supervision of subcontracted plumbers and apprentices, particularly on multi-storey or complex projects • Lack of clarity over who controls specific areas, plant and interfaces where multiple PCBUs share duties • Failure to manage labour hire workers or short-term contractors to the same WHS standards as permanent staff	High	• Implement a formal pre-qualification system f plumbing subcontractors that assesses WHS management capability, licences, incident ory and trai g systems • Include explicit WHS performance criteria, r rting bligations and consultation processes in subcontract agreements, aligned with the princ contractor's W S plan • Require plumbing subcontra rs to provide and intain ject-specific WHS documentation (e.g. risk assessments, procedures, train records) for roug d fitout activities • Establish a clea e sup vision ucture, including designated plumbing supervisors or leading hands responsible fo ay-to-day s ety ov ight an ordination • Conduct join e induct s and coo tion meetings involving all PCBUs to clarify control of work areas nt and are responsibilities under WHS Act 2011 • Use a fo al appr al process before new subcontractors, labour hire workers or additional crews start on site, ncl g ver ation of licences, tickets and inductions • Monito subc tractor performance through regular inspections, audits and toolbox talks, with d ment d non conformance and rectification processes • Ensu ntractual mechanisms exist to suspend or remove subcontractors who repeatedly fail to meet HS requirements for plumbing works	Medium
4. Competency, Licensing And Training	• Unlicenced or inadequately licenced personnel performing gulated plumbing work • Insufficient traini of plum apprentices and trac stants in s specific WHS procedures, including rough-in and fitout risks • Poor competency in use power tools, elevated work platforms, pipe threading equipment and testing equipment • Lack of awareness of underground services, live systems, asbestos and other hidden hazards during rough-in • Supervisors not trained in risk management, incident investigation and legal obligations under the WHS Act 2011 • Inadequate training for handling hazardous substances (e.g. PVC glues,	High	[redacted]	Medium

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	primers, cleaning chemicals and sealants)		[redacted]	
5. Consultation, Communication And Worker Engagement	• Limited consultation with plumbers and apprentices about practical WHS issues arising during rough-ins and fitouts • Language, literacy or cultural barriers causing misunderstandings of safety instructions or signage • Inadequate communication of changes to work methods, sequencing or site conditions (e.g. new penetrations, isolation of services, restricted access) • Failure to involve workers in the development and review of WHS procedures and risk assessments for plumbing tasks • Workers not feeling safe to raise concerns, stop work or report near misses due to fear of reprisal or production pressure	Medium	[redacted]	Low
6. Procurement Of Materials, Plant And Equipment	• Procurement of inappropriate, non-compliant or poor-quality plumbing materials, fixtures and fittings that may fail during installation or service • Selection of tools, access equipment and temporary supports that are not suited to the site conditions or loads encountered during rough-in and fitout • Inadequate consideration of manual handling risks when ordering long, heavy or awkward items such as pipe	High	[redacted]	Medium

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	bundles, hot water units or sanitary fixtures • Lack of verification that hired equipment (e.g. scissor lifts, pipe threading machines, testing pumps) meets Australian Standards and is maintained • Procurement focused on lowest price without considering WHS performance or design-for-safety aspects of products		[redacted]	
7. Site Induction, Access And Permit-To-Work Systems	• Plumbing workers commencing rough-in or fitout without understanding site-specific hazards, emergency procedures or restricted areas • Uncontrolled access to high-risk locations such as risers, shafts, plant rooms, roofs, excavati… …onfined spaces • Work on or near …ergised … (electrical, gas, wat… … appropriate permits, isolation verifica…n or coordination • Inconsistent application … …its for hot works, confined spaces, excavations and work at height involving plumbing activities • Inadequate management of visitors, inspectors or delivery drivers entering active plumbing work areas	High	[redacted]	Medium
8. Plant, Tools And Equipment Management	• Use of damaged, untested or poorly maintained hand tools, power tools and specialist plumbing equipment	High	[redacted]	Medium

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	• Lack of systems to ensure inspection and tagging of portable electrical equipment and RCDs used in wet areas • Improvised or unsuitable lifting, supporting or bracing methods for pipes, fixtures and equipment during rough-in and fitout • Inadequate guarding or controls on rotating or cutting equipment such as pipe threaders, grinders and cut-off saws • Failure to take defective equipment out of service promptly and track repairs or replacement		[redacted]	
9. Hazardous Substances And Environmental Health Management	• Exposure to hazardous chemicals use in plumbing (e.g. PVC p glues, sealants, cleaning a nts, fluxes) without adequate c ntrols • Poor ventilation w volati chemicals in enclosed spaces such a bathrooms, risers and plant rooms during fitout • Contact with sewage, contaminated water, biohazards or stagnant water during testing, maintenance tie-ins or drainage works • Inadequate management of wastewater, slurry, chemical residues and offcuts resulting in environmental contamination or slip hazards • Insufficient systems for asbestos and silica risk management when penetrating walls, floors or existing structures	High	[redacted]	Medium

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			[redacted]	
10. Manual Handling, Ergonomics And Work Organisation	• Repetitive and awkward manual handling of long pipe lengths, fixtures, hot water units and fittings during rough-in and fitout • Poor work planning leading to excessive carrying of materials over long distances or between levels • Inadequate systems for use of trolleys, mechanical aids or team lifts, resulting in musculoskeletal injuries • Workstations for pre-fabrication, cutting and assembly set up at inappropriate heights or layouts • Fatigue and strain due to extended shifts, high workloads or poor sequencing of physically demanding tasks	High	[redacted]	Medium
11. Work At Height, Access Systems And Fall Protection	• Inadequate mana[illegible]ment systems for working at heights [illegible]uring insta[illegible] of stacks, risers, roof [illegible] and high-level services • Use of unsuitable or poorly main[illegible]ned ladders, temporary platfo[illegible] scaffolds by plumbing workers • Lack of coordination between plumbing work and scaffold design/alteration, leading to gaps, missing handrails or unsafe access • Insufficient oversight of EWP use, including pre-start checks, operator competency and exclusion zones • Poor planning of penetrations and openings, resulting in unprotected edges or floor voids during rough-in	High	[redacted]	Medium

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			[redacted]	
12. Electrical, Service Isolation And Energisation Management	• Uncontrolled work on or near live electrical components associated with pumps, hot water units, control panels or building services • Inadequate isolation of water, gas or hydraulic services during tie-ins, cut-ins, pressure testing or commissioning • Confusion over responsibilities for isolations between plumber, electrician and principal contractor • Lack of reliable labelling, drawings or records of service locations leading to accidental damage to li[redacted]ices during rough-in • Re-energisation [redacted]systems [redacted] plumbing work is co[redacted]ue to pu[redacted] communication or handover process	High	[redacted]	Medium
13. Traffic Management, Deliveries And Material Storage	• Unmanaged interaction between site vehicles, delivery trucks and plumbing workers moving materials to rough-in or fitout areas • Poorly planned delivery and unloading of heavy or long plumbing materials creating crush, struck-by or fall-from-truck risks • Inadequate storage systems for pipes, fittings and fixtures leading to trip hazards, unstable stacks or falling objects	High	[redacted]	Medium

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	• Congested access routes and stairwells used for moving plumbing materials without traffic controls • Insufficient separation between public access areas and construction zones where plumbing works are occurring in operational facilities		[redacted]	
14. Emergency Preparedness, Incident Management And First Aid	• Inadequate preparedness for plumbing-specific emergencies such as major leaks, bursts, gas releases or sewage spills during rough-in and fitou • Lack of clear procedures for responding to injuries i[redacted] cutting tools, falls, chemica[redacted]xposure or biohazard contact • Poor incident repo[redacted]re lea[redacted] to under-reporting of near misses an[redacted] minor injuries among plumbing wor[redacted]s • Insufficient availability o[redacted]d equipment and trained first aiders in proximity to plumbing work areas • Delayed or ineffective response to water damage events impacting electrical systems, building fabric or other trades	Medium	[redacted]	Low
15. Monitoring, Audit, Review And Continuous Improvement	• Failure to detect emerging WHS issues in plumbing rough-in and fitout activities due to weak monitoring and auditing	Medium		Low

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	• Repetition of similar incidents or near misses because root causes are not properly analysed or addressed at a system level • Outdated procedures, risk assessments and training that do not reflect current methods, equipment or legislative requirements • Over-reliance on informal supervision, with minimal documented verification of compliance with WHS controls • Lack of performance indicators specific to plumbing safety, leading to poor visibility of risk trends for management		[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 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