

Using Pneumatic Air Tools Risk Assessment

| | | |
|-------------------|--------|--------|
| Business Name: | ABN: | |
| Business Address: | | |
| Contact Person: | Phone: | Email: |

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON 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 | HIERARCHY OF CONTROLS |
|----------------|---------------|---------------|---------------|------------|--------------|----------------|-----------------------------------|--|
| ALMOST CERTAIN | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4 ACUTE | | | Elimination Remove the hazard. |
| LIKELY | 2 MODERATE | 3 HIGH | 3 HIGH | 4 ACUTE | 4 ACUTE | 4A ACUTE | DO NOT PROCEED | Substitution Replace the hazard. |
| POSSIBLE | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | 4 ACUTE | 3H HIGH | Review before work starts. | Isolation Isolate People from the hazard |
| UNLIKELY | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 4 ACUTE | 2M MODERATE | Ensure control measures in place. | Engineering Isolate the hazard |
| RARE | 1 LOW | 1 LOW | 2 MODERATE | 3 HIGH | 3 HIGH | 1L LOW | Monitor and keep records. | Administrative Change PPE |

Risk Rating & Required Action:

| | |
|-----------|---|
| 4A | Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required. |
| 3H | Review and approve additional controls before task starts. Senior supervisor sign-off needed. |
| 2M | Ensure all nominated controls are in place and effective. 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. Preparation | incorrect tool selection, lack of PPE | 3H | <ul style="list-style-type: none"> - Conduct a toolbox talk to ensure correct tool selection. - Provide training on the operation of pneumatic tools. - Ensure all workers are wearing appropriate PPE including safety goggles and gloves. - Check tools for damage or excessive wear before use. - Maintain an inventory of suitable pneumatic tools for different tasks. - Use a checklist to verify pre-operational checks are completed. - Ensure safety data sheets are accessible and understood. - Implement rotation system for PPE supplies to ensure availability. - Monitor compliance with PPE requirements regularly. - Display hazard signage prominently in work areas relevant to the task. | 2M |
| 2. Tool Inspection | damage to equipment, incorrect pressure | 3H | <ul style="list-style-type: none"> - Regularly inspect all pneumatic tools before use. - Ensure pressure gauges are working correctly and calibrated. - Use only compressors with proper safety valves and relief systems. - Verify hoses are free from defects and are of the necessary length. - Maintain and record a log of inspections performed on tools. - Remove damaged tools from service immediately for repair or replacement. - Train workers on recognising signs of tool damage or wear. - Keep the workspace organized to prevent accidental tool damage. - Perform functional tests on tools before commencing work. - Store tools properly when not in use to prevent accidental damage. | 1L |
| 3. Connecting Tools | hose detachment, improper connections | 3H | <ul style="list-style-type: none"> - Ensure quick release connectors are functioning properly and securely attached. - Train employees on correct hose linking procedures. - Utilise hose restraints and whip checks where necessary. - Label air lines for direction and application clarity. - Inspect air hoses for cuts or abrasion before connecting. - Implement a tagging system to indicate hose serviceability. - Ensure work areas are clear of obstructions before connecting air lines. - Perform routine checks of connection fittings and couplings for wear. | 1L |

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| | | | <ul style="list-style-type: none"> - Provide shadow boards for hose and fitting storage. - Review safety briefing materials for connecting tools case-by-case. | |
| 4. Operating Tools | operator error, inappropriate pressure settings | 4A | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 2M |
| 5. Storing Tools | poor storage, unauthorised access | 3H | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 1L |
| 6. Tool Maintenance | tool malfunction, unplanned downtime | 4A | <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> | 2M |

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| | | | | |
| 7. Emergency Response | injury during use, tool failure | 4A | | 1L |
| 8. Training and Competency | lack of knowledge, inadequate skills | 4A | | 1L |
| 9. Environmental Considerations | noise pollution, energy consumption | 3H | | 2M |

[illegible]

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| 12. Remote Work Considerations | communication breakdown, limited supervision | 4A | <ul style="list-style-type: none"> Establish clear communication protocols and channels for remote workers. Provide training on remote work expectations and safety procedures. Implement regular check-ins and supervision mechanisms. Ensure remote workers have access to necessary resources and equipment. Develop contingency plans for communication failures. Encourage remote workers to report safety concerns immediately. Provide mental health support for remote workers. Establish a clear chain of command for remote workers. Implement a system for tracking remote worker activities. Provide remote workers with access to safety training and resources. Establish a system for remote worker self-reporting of safety concerns. Implement a system for remote worker self-monitoring of safety. Provide remote workers with access to safety equipment and PPE. Establish a system for remote worker self-reporting of safety concerns. Implement a system for remote worker self-monitoring of safety. | 2M |
| 13. Manual Handling | back injury, tool dropping | 3H | <ul style="list-style-type: none"> Use proper lifting techniques (bend knees, lift with legs). Use mechanical aids (dollies, pallet jacks) to move heavy loads. Limit the weight and frequency of lifts. Use proper tool handling techniques (two-handed grip, secure footing). Inspect tools regularly for damage and wear. Use safety equipment (gloves, eye protection) when handling tools. Establish clear communication protocols for tool use. Implement a system for tool storage and organization. Provide training on safe manual handling practices. Encourage workers to report safety concerns immediately. Implement a system for monitoring worker fatigue and stress. Provide workers with access to safety training and resources. Establish a system for worker self-reporting of safety concerns. Implement a system for worker self-monitoring of safety. Provide workers with access to safety equipment and PPE. Establish a system for worker self-reporting of safety concerns. Implement a system for worker self-monitoring of safety. | 1L |
| 14. Weather Conditions | rain exposure, extreme temperatures | 4A | <ul style="list-style-type: none"> Monitor weather forecasts and conditions. Implement a system for weather-related safety alerts. Provide workers with appropriate clothing and PPE for weather conditions. Establish a system for worker self-reporting of weather-related safety concerns. Implement a system for worker self-monitoring of weather-related safety. Provide workers with access to safety training and resources. Establish a system for worker self-reporting of safety concerns. Implement a system for worker self-monitoring of safety. Provide workers with access to safety equipment and PPE. Establish a system for worker self-reporting of safety concerns. Implement a system for worker self-monitoring of safety. Provide workers with access to safety training and resources. Establish a system for worker self-reporting of safety concerns. Implement a system for worker self-monitoring of safety. Provide workers with access to safety equipment and PPE. Establish a system for worker self-reporting of safety concerns. Implement a system for worker self-monitoring of safety. | 2M |

cluttered workspace

3H

SAMPLE

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 IF 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>

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>

New South Wales

Work Health and Safety Act 2011

Work Health and Safety Regulations 2017

Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-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>

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/laws-and-compliance/codes-of-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

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.