

## Drilling Into Glass Material Risk Assessment

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

## THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS 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<br>HIGH     | 3<br>HIGH     | 4<br>ACUTE    | 4<br>ACUTE | 4<br>ACUTE   | 4A<br>ACUTE | DO NOT PROCEED            | Elimination<br>Remove the hazard.           |  |
| LIKELY         | 2<br>MODERATE | 3<br>HIGH     | 3<br>HIGH     | 4<br>ACUTE | 4<br>ACUTE   |             |                           | Substitution<br>Replace the hazard.         |  |
| POSSIBLE       | 1<br>LOW      | 2<br>MODERATE | 3<br>HIGH     | 4<br>ACUTE | 4<br>ACUTE   |             |                           | Isolation<br>Isolate People from the hazard |  |
| UNLIKELY       | 1<br>LOW      | 1<br>LOW      | 2<br>MODERATE | 3<br>HIGH  | 4<br>ACUTE   |             |                           | Engineering<br>Isolate the hazard           |  |
| RARE           | 1<br>LOW      | 1<br>LOW      | 2<br>MODERATE | 3<br>HIGH  | 3<br>HIGH    |             |                           | Administrative<br>Change                    |  |
|                |               |               |               |            |              | 1L<br>LOW   | Monitor and keep records. | 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:

- Eliminate
- Substitute
- Isolate
- Engineering
- Administrative
- 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. Job Briefing     | Inadequate understanding of procedure, Failure to communicate risks | 2M           | <ul style="list-style-type: none"> <li>- Conduct a comprehensive pre-job briefing</li> <li>- Ensure all team members understand the procedure</li> <li>- Highlight specific hazards related to the task</li> <li>- Confirm roles and responsibilities of each team member</li> <li>- Discuss emergency procedures to be followed if needed</li> <li>- Ensure adequate supervision during the job</li> <li>- Distribute a written copy of the briefing</li> <li>- Provide translators if language barriers exist</li> <li>- Schedule a review after briefing to confirm understanding</li> <li>- Encourage questions to clarify any uncertainties</li> </ul> | 1L            |
| 2. Site Preparation | Cluttered work area, Inappropriate location for materials           | 3M           | <ul style="list-style-type: none"> <li>- Clear the work area of unnecessary materials</li> <li>- Ensure all tools and equipment are organised</li> <li>- Mark specific locations for glass handling</li> <li>- Check that emergency exits are unobstructed</li> <li>- Install signage indicating risk areas</li> <li>- Use cones or barriers to isolate the drilling area</li> <li>- Ensure all materials are stored at a safe distance</li> <li>- Assign an area monitor to maintain safety</li> <li>- Confirm adequate lighting at the site</li> <li>- Implement cleaning protocols for spills</li> </ul>   | 2M            |
| 3. Tool Inspection  | Faulty equipment, Inadequate tool maintenance                       | 3H           | <ul style="list-style-type: none"> <li>- Conduct visual inspection of all drilling tools</li> <li>- Check for wear and tear on power tools</li> <li>- Verify electrical safety of equipment</li> <li>- Validate the calibration of measurement devices</li> <li>- Ensure all safety guards are in place</li> <li>- Maintain a log of tool maintenance records</li> <li>- Test the operation of each tool before use</li> <li>- Train workers on proper tool inspection</li> </ul>   | 1L            |

| 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 |
|  |   |              | - Replace or repair faulty equipment immediately<br>- Document the inspection outcomes |               |
| 4. Personal Protective Equipment (PPE) | Inadequate PPE, Non-compliance with PPE use   | 3H           |  | 1L            |
| 5. Glass Handling                      | Cuts from sharp edges, Dropping glass         | 4A           |  | 2M            |
| 6. Drilling Setup                      | Improper tool setup, Unstable working surface | 4A           |  | 2M            |

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|                              |   |              |  |               |
| 7. Drilling Process          | Excessive vibration, Glass fragmentation                      | 4A           |  | 2M            |
| 8. Waste Disposal            | Sharp glass waste made for disposal facilities                | 3H           |  | 1L            |
| 9. Post-Operation Inspection | Overlooked damage or defects, Residual hazards from operation | 3H           |  | 1L            |

| 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 |
|                         |  |              |  |               |
| 10. Review and Feedback | Failure to incorporate learnings, Lack of post-task feedback | 2M           |  | 1L            |
| 11. Emergency Drills    | Unprepared for emergencies, Delayed response times           | 3H           |  | 1L            |
| 12. Health Monitoring   | Exposure to hazardous materials, Undetected health impacts   | 3H           |  | 1L            |

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|-----------------------------|--|--------------|--|---------------|
| SPECIFIC WORK STEPS         | HAZARDS THAT MAY ARISE   | INITIAL RISK | SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS | RESIDUAL RISK |
|                             |  |              |  |               |
| 13. Continuous Improvement  | Stagnant safety practices, Resistance to change                    | 2M           |  | 1L            |
| 14. Administrative Controls | Inadequate policy enforcement, Non-compliance with legal standards | 3H           |  | 1L            |
| 15. Environmental Controls  | Environmental contamination, Ineffective waste management          | 3H           |  | 1L            |

| 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 |
|                            |   |              |  |               |
| 16. Communication Systems  | Communication breakdowns, Inadequate transmission of critical information | 2M           |  | 1L            |
| 17. Training & Competency  | Inadequate worker training, Skill gaps in critical operations             | 3H           |  | 1L            |
| 18. Audit and Verification | Undetected process failures, Lack of accountability                       | 3H           |  | 1L            |



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|                     |                        |              |   |               |
|                     |                        |              |   |               |

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.