SafeWork NSW

Working safely when cutting, drilling and grinding concrete and masonry products

Code of practice

May 2026

Editorial note

This Code of practice has been developed by SafeWork NSW and has been approved under section 274 of the *NSW Work Health and Safety Act 2011*. Notice of that approval was published in the NSW Government Gazette referring to this Code of practice as Working safely when cutting, drilling and grinding concrete and masonry products on Friday 22 May 2026. This Code of practice commenced on 22 May 2026. It replaces the 1997 Cutting and drilling concrete and other masonry products Code of practice.

This Code of practice (this Code) should be read in its entirety.

When reading this Code, please be aware that any reference to:

- the 'Work Health and Safety Act' refers to the *Work Health and Safety Act 2011* (NSW), or any successor legislation,
- the 'Work Health and Safety Regulation' refers to the *Work Health and Safety Regulation 2025* (NSW) (the NSW WHS Regulation), or any successor regulation,
- a code of practice refers to the relevant NSW Code of practice, or any successor Code of Practice.

This Code of Practice may contain references to relevant withdrawn or superseded Australian Standards or Australian/New Zealand Standards.

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Acknowledgment

Safe Work NSW wishes to acknowledge the contribution and collaboration of industry and social partners through the public comment period and technical development of this code.

Additionally, the cooperation of other WHS regulators and Safe Work Australia is acknowledged for aligning materials where appropriate.

Contents

Foreword

This Code of Practice on how to manage work health and safety risks of modifying concrete and masonry products is an approved code of practice under section 274 of the *Work Health and Safety Act 2011* (the WHS Act).

An approved code of practice provides practical guidance on how to achieve the standards of work health and safety required under the WHS Act and the *Work Health and Safety Regulation* (the WHS Regulation) and effective ways to identify and manage risks.

A code of practice can assist anyone who has a duty of care in the circumstances described in the code of practice. Following an approved code of practice will assist the duty holder to achieve compliance with the health and safety duties in the WHS Act and WHS Regulation, in relation to the subject matter of the code of practice. Like regulations, codes of practice deal with particular issues and may not cover all relevant hazards or risks. The health and safety duties require duty holders to consider all risks associated with work, not only those for which regulations and codes of practice exist.

Codes of practice are admissible in court proceedings under the WHS Act and WHS Regulation. Courts may regard a code of practice as evidence of what is known about a hazard, risk, risk assessment or risk control and may rely on the code in determining what is reasonably practicable in the circumstances to which the code of practice relates. For further information see Safe Work Australia's *Interpretive Guideline: The meaning of 'reasonably practicable'*.

Compliance with the WHS Act and WHS Regulation may be achieved by following another method if it provides an equivalent or higher standard of work health and safety than the code.

An inspector may refer to an approved code of practice when issuing an improvement or prohibition notice.

Scope and application

This Code is intended to be read by a person conducting a business or undertaking (PCBU). It provides practical guidance to PCBUs on how to manage risks to health and safety associated with modifying concrete and masonry products. Other approved codes of practice should be referenced for guidance on managing the risk of specific hazards.

This Code may be a useful reference for other persons interested in the duties under the WHS Act and WHS Regulation.

This Code applies to all types of work and all workplaces covered by the WHS Act where the modifying of concrete and masonry products is carried out. It should be read in conjunction with the *Code of practice: Managing the risks of respirable crystalline silica in the workplace*.

This code does not cover working with concrete and masonry products that contain asbestos. Refer to the *Code of practice: How to safely remove asbestos*.

How to use this Code of Practice

This Code includes various references to the legal requirements under the WHS Act and WHS Regulation. These references are included for convenience only and should not be relied on in the place of the full text of the WHS Act or WHS Regulation. The words 'must', 'requires' or 'mandatory' indicate a legal requirement exists that must be complied with.

The word 'should' is used in this Code to indicate a recommended course of action, while 'may' is used to indicate an optional course of action.

1. Introduction

1.1 What is cutting, drilling and grinding concrete and masonry products?

Concrete and masonry products are modified using cutting, drilling and grinding processes, utilising specialised techniques, tools and equipment.

Modifications to concrete and masonry products can be required for a number of reasons, including:

- during construction work,
- creating openings for doors, windows, or other structural features,
- removing damaged sections for repair or replacement,
- cutting concrete driveways and slabs, e.g. expansion cuts,
- preparing surfaces for other construction processes, such as installing new materials,
- installing anchors, bolts or other fixtures,
- creating pathways for electrical wiring, plumbing and HVAC systems,
- extracting samples for testing and analysis,
- levelling, smoothing or restoring a concrete surface.

The tools and equipment used for cutting, drilling and grinding present a wide range of hazards that need to be safely managed, such as dust (e.g. respirable crystalline silica), toxic exhaust fumes, saw kick-back, blade fracture, damage to structures or services, electrocution, vibration, noise, slips, falls and manual handling.

The main tools and equipment used for cutting, drilling and grinding covered in this Code includes:

- diamond-blade and water-cooled circular saws,
- surface preparation equipment,
- saws powered by electricity, petrol engines, compressed air (pneumatic) or hydraulics,
- saws that are either hand-held or fixed to tracks on surfaces to be cut and propelled by a motor,
- power drills and core drills.

1.2 Who has health and safety duties?

There are a number of duty holders who have a role in managing the risks of modifying concrete and masonry products in the workplace, including those listed below.

A person can have more than one duty and more than one person can have the same duty at the same time.

The main duty holders and key legislative provisions have been referenced in the table below, however the list is not exhaustive.

Duty holder	Application
Person conducting a business or undertaking (PCBU) WHS Act sections 19, 46 and 47 WHS Regulation section 55C	A PCBU must eliminate risks to health and safety arising from modifying concrete and masonry products, or if that is not reasonably practicable, minimise the risks so far as is reasonably practicable. This includes: • the provision and maintenance of a work environment without risks to health and safety, • the provision and maintenance of safe plant and structures, • the provision and maintenance of safe systems of work, • the safe use, handling, and storage of plant, structures and substances, • the provision of information, training, instruction and supervision necessary to protect people from risks to health and safety, • the provision of adequate facilities for the welfare at work of workers, • monitoring the health and conditions of the workplace to prevent illness and injury, • managing psychosocial hazards. PCBUs also have duties to: • consult workers about work health and safety, • consult, cooperate and coordinate with other duty holders, • ensure that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.
PCBU with management or control of a workplace WHS Act section 20	Must ensure, so far as is reasonably practicable, that the workplace, the means of entering and exiting the workplace and anything arising from the workplace are without risks to the health and safety of any person.
Designers, manufacturers, importers, installers and suppliers of plant, substances or structures WHS Act sections 22-26	Must ensure, so far as is reasonably practicable, the plant / substances / structures they design, manufacture, import, supply or install are, so far as is reasonably practicable, without risks to health and safety including carrying out testing and analysis and providing adequate information about the risks posed to users of the plant, substances or structures.
Persons with management or control of fixtures, fittings and plant at a workplace WHS Act section 21	Must ensure, so far as is reasonably practicable, that the fixtures, fittings and plant are without risks to the health and safety of any person.

Duty holder	Application
Officers WHS Act section 27	Officers of the PCBU must exercise due diligence to ensure the PCBU complies with the WHS Act and WHS Regulation. This includes maintaining up to date WHS knowledge and taking reasonable steps to ensure the business or undertaking has and uses appropriate resources and processes to eliminate or minimise risks to health and safety from modifying concrete and masonry products. Further information on who is an officer and their duties is available in Safe Work Australia's *Interpretive Guideline: The health and safety duty of an officer*.
Workers WHS Act section 28 WHS Regulation section 46	While at work, workers must: • take reasonable care for their own health and safety, • take reasonable care that their actions or omissions do not adversely affect the health and safety of other persons, • comply with any reasonable instructions given by the PCBU, as far as they are reasonably able, • cooperate with any reasonable health and safety policies or procedures of the PCBU. If personal protective equipment (PPE) is provided by the PCBU, the worker must, so far as they are reasonably able, use or wear it in accordance with the information, instruction and training provided.
Other persons at the workplace WHS Act section 29	A person at a workplace must: • take reasonable care for their own health and safety, • take reasonable care that their acts or omissions do not adversely affect other people's health and safety, • comply, so far as they are reasonably able, with reasonable instructions given by the PCBU to allow the PCBU to comply with the WHS Act.

Duty holder	Application
Principal contractors on construction projects WHS Act section 20 WHS Regulation sections 293, 299, 301 and 307-315	Principal contractors are a PCBU who commissions a construction project or is engaged to be a principal contractor by the person who commissioned the project. Principal contractors hold additional duties under the WHS Regulation, including that they must: • prepare a written WHS management plan for the workplace, • ensure, so far as is reasonably practicable, that each worker is made aware of the content of the WHS management plan before they start work, • review and as necessary revise the WHS management plan to ensure that it remains up to date, • establish and maintain consultation arrangements with other PCBUs, contractors, subcontractors and workers, • manage risks associated with the construction project, • ensure a Safe Work Method Statement (SWMS) is prepared for high risk construction work, • take all reasonable steps to obtain a copy of the SWMS and ensure it is followed when conducting high risk construction work, • put in place arrangements for ensuring that PCBUs and other duty holders comply with their obligations under the WHS Regulation. When engaging specialist businesses and / or workers to deliver specific works, a Principal Contractor should: • verify that mobile plant supplied is suited to task and maintained, • ensure there are processes for the verification of worker competency in the operation of mobile plant, • ensure workers are inducted to the site requirements.
PCBUs working on construction projects, including principal contractors and subcontractors WHS Act section 19	Subcontractors must: • work within the requirements of the WHS management plan, • develop SWMS for the high risk construction work that they control, • verify that works are being completed in accordance with SWMS, • verify that any mobile plant used or supplied is suited to work and maintained, • ensure workers are provided with suitable and adequate information, training and instruction in completing the required work.

1.3 Consultation

This table includes recommendations in how to comply with the WHS legislative requirements.

Duty/ Provisions	Application
Consulting workers WHS Act section 47 - 49	• PCBUs have a duty to consult with workers, so far as reasonably practicable, on WHS matters which affect them. • Consultation is a two-way process with workers to identify WHS issues, share information, give workers a reasonable opportunity to express views and take those views into account before making decisions about health and safety matters. • While consultation may not always result in agreement, agreement should be the objective as it will make it more likely the decisions are effective and actively supported. • Workers should be encouraged to report hazards and health and safety problems immediately so the risks can be managed before an incident occurs. • If workers are represented by a health and safety representative, the consultation must involve that representative. • Workers must be advised of consultation outcomes in a timely manner. • PCBUs must have effective mechanisms to consult with workers, including when: — identifying hazards and assessing risks, — making decisions about ways to eliminate or control risks, — changing or updating workplace facilities, — proposing changes that may affect the health and safety of workers, — making decisions about consultation procedures, resolving safety issues, monitoring workers' health and conditions, and providing information and training, — selecting new equipment, — introducing new tasks, changing existing tasks or carrying out work in new environments.
Consulting, cooperating and coordinating activities with other duty holders WHS Act section 46	• PCBUs must, as far as reasonably practicable, consult, cooperate and coordinate activities with all other persons who have a WHS duty in relation to the same matter. • Duty holders should exchange information about who is doing what to ensure effective coordination of works and management of risks, this includes: — the PCBU engages workers to carry out work, — the PCBU directs or influences workers in carrying out work, — other persons may be put at risk from work carried out in their business or undertaking, — the PCBU manages or controls a workplace or the fixtures, fittings or plant at a workplace, — the PCBUs business or undertaking involves designing, manufacturing, importing or supplying plant, substances or structures for use at a workplace, — the PCBUs business or undertaking involves installing, constructing or commissioning plant or structures at a workplace.

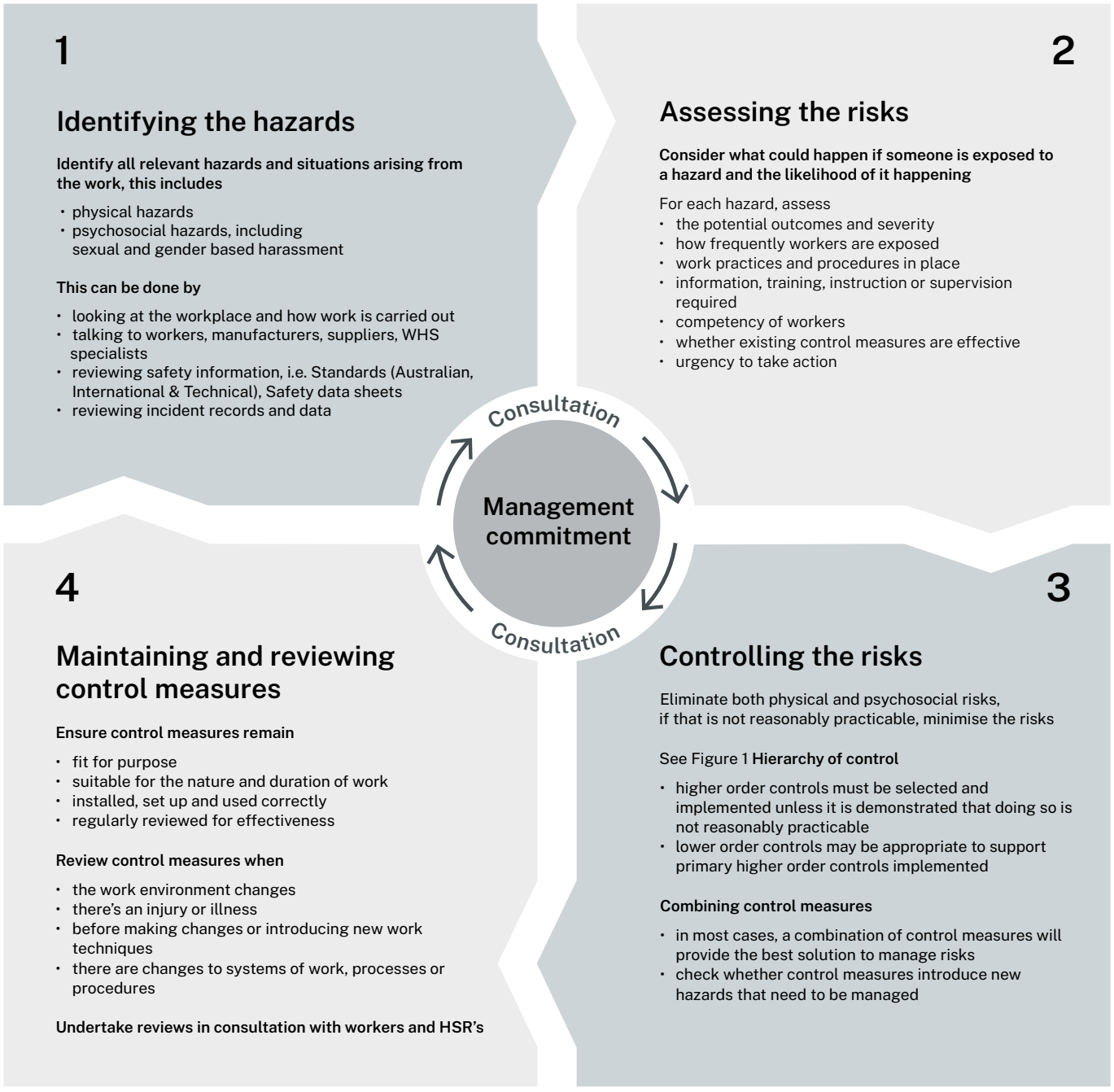
Further guidance on consultation requirements is available in the *Code of practice: Work health and safety consultation, cooperation and coordination*.

1.4 Information, training, instruction, and supervision

Duty/ Provisions	Application
Information, training, instruction or supervision WHS Act section 19 WHS Regulation section 39	PCBUs must provide any information, training, instruction, or supervision necessary to protect all persons from health and safety risks, including when using plant. The information, training and instruction: • must be suitable and adequate for the nature of the works, risks and control measures implemented, • must be readily understandable to the person it is being provided to, so far as is reasonably practicable, • should be supported by relevant safe work procedures, i.e.. emergency procedures, traffic rules, PPE, • training should be provided to workers by a competent person, • training programs should be practical and 'hands on' and take into account the particular needs of workers.

2. Risk management process

Risk management is the systematic process to eliminate or minimise the potential harm to people.



2.1 Hierarchy of control

The hierarchy of control measures set out in Part 3.1 of the WHS Regulation can be applied in relation to any risk.

The WHS Regulation makes it mandatory for duty holders to work through this hierarchy when managing certain risks. The sections that require the process in Part 3.1 to be followed are set out below.

WHS Regulation reference
Chapter 3 General risk and workplace management, Part 3.2 General workplace management
Division 6 Remote or isolated work, Section 48 Remote or isolated work
Division 8 Hazardous atmospheres, Section 51 Managing risks to health and safety
Division 8 Hazardous atmospheres, Section 52 Ignition sources
Division 10 Falling objects, Section 54 Management of risk of falling objects
Division 11 Psychosocial risks, Section 55C Managing psychosocial risks
Chapter 4 Hazardous work, Part 4.1 Noise
Section 57 Managing risk of hearing loss from noise
Chapter 4 Hazardous work, Part 4.2 Hazardous manual tasks
Section 60 Managing risks to health and safety
Chapter 4 Hazardous work, Part 4.3 Confined spaces
Division 3 Duties of person conducting business or undertaking, Section 66 Managing risks to health and safety
Chapter 4 Hazardous work, Part 4.4 Falls
Section 78 Management of risk of fall
Chapter 4 Hazardous work, Part 4.7 General electrical safety in workplaces and energised electrical work
Division 2 General risk management, Section 147 Risk management
Chapter 4 Hazardous work, Part 4.8 Diving work
Division 3 Managing risks-general diving work, Section 176 Management of risks to health and safety
Chapter 5 Plant and structures, Part 5.1 General duties for plant and structures
Division 7 General duties of a person conducting a business or undertaking involving the management or control of plant, Section 203 Management of risks to health and safety
Division 7 General duties of a person conducting a business or undertaking involving the management or control of plant, Section 214 Powered mobile plant — general control of risk
Chapter 6 Construction work, Part 6.3 Duties of person conducting business or undertaking
Division 1 General, Section 297 Management of risks to health and safety
Division 3 Excavation work, Section 305 Management of risks to health and safety associated with excavation work
Chapter 6 Construction work, Part 6.4 Additional duties of principal contractor
Section 315 Further health and safety duties — specific risks
Chapter 7 Hazardous chemicals, Part 7.1 Hazardous chemicals
Division 5 Control of risk-obligations of persons conducting businesses or undertakings, Section 351 Management of risks to health or safety
Division 9 Pipelines, Section 391 Management of risks to health and safety by pipeline operator
Chapter 8 Asbestos, Part 8.4 Management of naturally occurring asbestos
Section 431 Naturally occurring asbestos

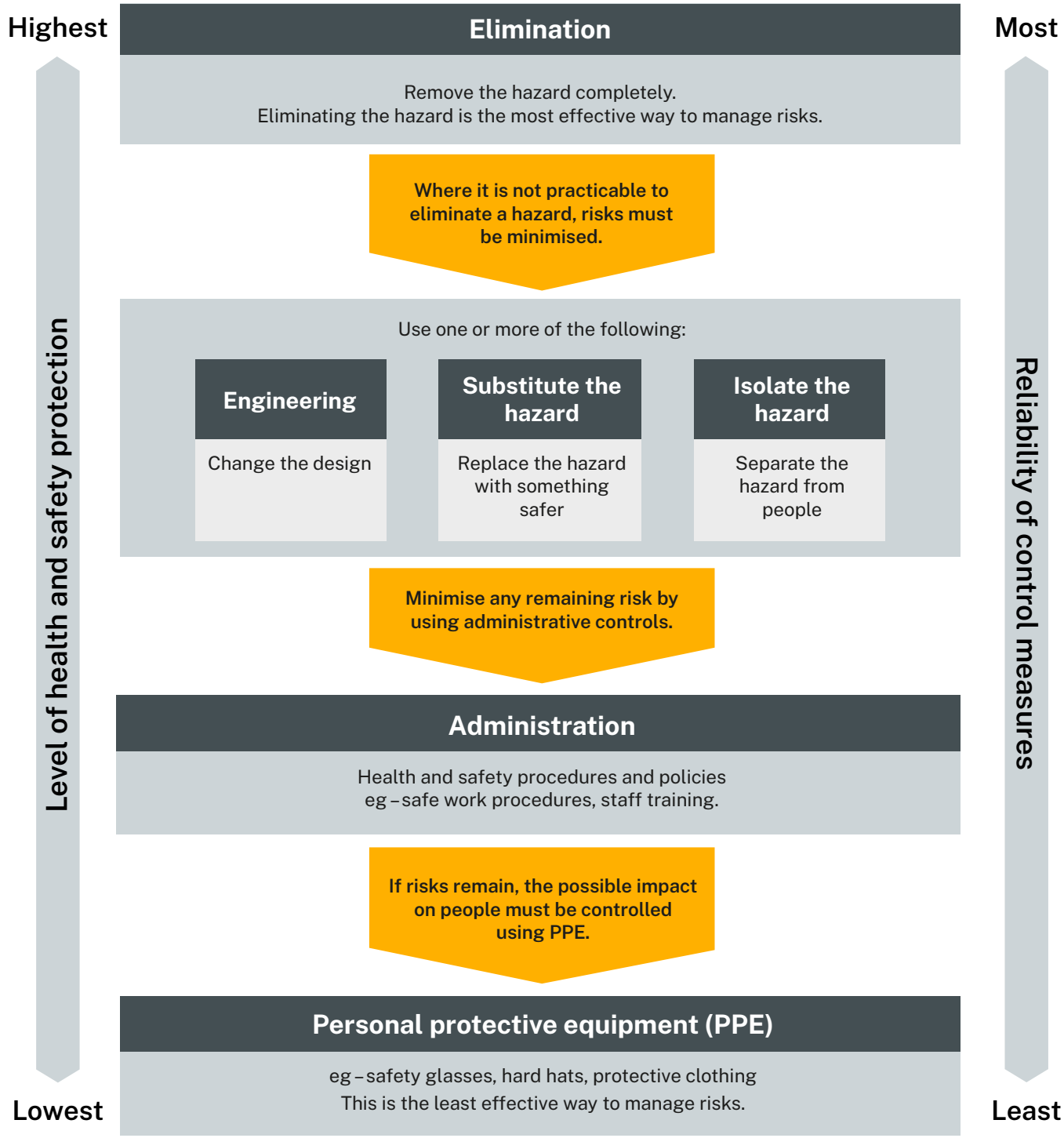


Figure 1: An overview of the hierarchy of control measures

Further risk management guidance is available in the:

- *Code of practice: How to manage work health and safety risks*
- *Code of practice: Managing psychosocial hazards at work*
- *Code of practice: Sexual and gender-based harassment*

3. Silica

WHS Regulation Chapter 8A Crystalline silica

Crystalline silica is a naturally occurring mineral that forms a major component of most rocks, soil, sand and clay. It is found in natural stones like granite and sandstone and is used to create manufactured products like bricks, pavers, concrete and tiles. It is also found in manmade products like engineered stone. The manufacture, supply and installation of engineered stone benchtops, slabs and panels containing at least 1% silica was banned on 1 July 2024.

PCBUs should be aware that some concrete and masonry products contain crystalline silica. To manage the risks, refer to the *Code of practice: Managing risks of respirable crystalline silica in the workplace*.

Processing of crystalline silica substance (CSS)

Under the WHS Regulation, processing of CSS includes:

- use of power tools or mechanical plant to carry out an activity involving the crushing, cutting, grinding, trimming, sanding, abrasive polishing or drilling of a CSS,
- a process that exposes, or is reasonably likely to expose, a person to respirable crystalline silica (RCS) during the manufacture or handling of a CSS.

A PCBU must not carry out, or direct or allow a worker to carry out, processing of a CSS unless the processing is controlled.

If a PCBU has identified that processing of a CSS is carried out at its workplace, then it must determine whether the processing is high risk or not. This assessment occurs after the PCBU has identified the process and determined all reasonably practicable control measures that will be implemented, but before work commences.

If a PCBU is unable to determine if the processing is high risk, then it must assume the processing is high risk, until the PCBU is able to determine that it is not high risk through a subsequent assessment.

PCBUs who are undertaking high-risk CSS are required to:

- Prepare a silica risk control plan or Safe work method statement (SWMS) for high risk construction work.
- Ensure workers are appropriately trained.
- Report exceedances of the RCS workplace exposure standard (WES).
- Provide health monitoring.
- Register each relevant worker within 28 days of them commencing high-risk CSS processing work. Only workers undertaking high-risk CSS processing on or after 1 October 2025 need to be registered. PCBUs only need to notify each worker to the register once during their employment with the business (PCBU).

PCBUs are referred to the *Code of practice: Managing risks of respirable crystalline silica in the workplace* for further information.

4. Planning and preparation to manage the hazards

Planning and preparation are essential to ensure that work is done safely. It must involve consultation with other duty holders and workers and should adopt a risk management approach to identify, assess, control hazards and the risks present.

4.1 Developing safe work practices

In order to develop, implement and maintain control measures for each job, hazard identification and a risk assessment should be carried out for each concrete or masonry cutting, drilling or grinding work activity, and the tools / equipment being used.

Control measures, which include safe work procedures, should be developed in consultation with all people at the workplace, including PCBUs, workers, supervisors, persons with management or control of plant at the workplace, and health and safety representatives (HSRs).

A PCBU that carries out high risk construction work must, before high risk construction work commences, ensure that a SWMS for the proposed work is prepared, or has already been prepared by another person. Refer to the *Code of practice: Construction work* for further information.

Control measures should be regularly reviewed through methods such as:

- communication and consultation with workers and their representatives,
- health and safety committee meetings,
- regular tool / equipment and work safety checks and audits,
- incident, accident and near-miss records,
- injury and lost time records,
- repair and maintenance reports.

4.2 How is work organised?

To effectively manage the work planning phase, consideration should be given to:

- *Shift patterns:* Are workers rotating frequently and provided scheduled recovery breaks to minimise being exposed to hazards for long periods?
- *Workload:* Are workers given adequate time to complete tasks to minimise pressure to complete tasks quickly which can potentially lead to shortcuts or ignored safety procedures?
- *Task scheduling:* Are hazardous tasks scheduled during times when fewer people are present to minimise exposure?
- *Task rotation:* Are workers rotated through tasks to avoid prolonged repetition of high-force actions or awkward postures?
- *Strain sequencing:* Is work planned to avoid consecutive high-strain tasks back-to-back?
- *Coordination with other trades:* Is there effective communication and planning to avoid interference and increased risks from simultaneous operations?
- *Supervision levels:* Are experienced supervisors present to monitor and enforce safety protocols?
- *Work allocated to workers:* Have workers been trained in the safe use of specialised tools / equipment they are required to operate?
- *Maintenance schedules:* Are regular maintenance and safety checks planned to ensure tools / equipment is in good condition and fit for purpose?

4.3 Site safety

The risk assessment process should identify the requirements for site preparation prior to cutting, drilling or grinding activities.

PCBUs should consider:

- weather and environmental conditions likely to affect safety,
- safe access to and from the site and work area,
- establishing exclusion zones around the work area – an exclusion zone can minimise the risk of harm to other workers and can be achieved by:
  - using barricades with appropriate signage and/or spotters,
  - keeping barricades and signage in place until completion of the work,
  - regularly inspecting and maintaining barricades as required,
  - ensuring spotters are competent,
  - sharing information with workers and others about the exclusion zone,
  - implementing procedures to stop work immediately if unauthorised people enter the exclusion zone,
- ensuring workers assisting operators can be located where they will not be exposed to danger from sudden saw movement, ejection of material, a dropped machine or falling off cuts,
- ensuring any floor penetrations that are cut or drilled are covered to prevent falls,
- the provision of residual current devices (RCDs) for electrical equipment,
- ensuring adequate supplies of appropriate PPE / respiratory protective equipment (RPE) at the workplace,
- keeping the work areas free from hazards, such as electrical extension leads, loose items and debris, to prevent slips, trips and falls incidents,
- ensuring any electrical leads are safely suspended in/or above the work area on temporary stands or fixed to a structure so they cannot be cut or lay in wet slurry,
- developing and implementing appropriate clean up procedures, including processes for the safe removal and disposal of waste material such as concrete dust, concrete pieces and cores,
- placing a bund dam beneath the cut area to contain coolant water and slurry to prevent surfaces becoming slippery until it can be removed by a wet and dry vacuum cleaner or contained in a slurry bin,
- checking service asset locations via the original drawings and ‘as-constructed’ drawings (if they exist), as well as the site, for enclosed cables, wiring, plumbing, steel reinforcing and structural stress components,
- where suspended slabs are being cut, a competent person signing off on the design of supports and slabs cut into block sizes that can be lifted by a crane or a lifting device approved by an engineer.

4.4 Site responsibility

PCBUs should ensure:

- work areas or platforms are suitable and safe,
- locations of all services are clearly marked and services disconnected for the work area,
- exact locations of cut lines or drill holes are clearly marked,
- cutting, drilling and grinding tools / equipment is the correct type and in good working condition,

- appropriate barriers, barricades and warning signs are erected and legible,
- adequate local exhaust ventilation (LEV) is in place (if fuel driven machinery is used in an enclosed area),
- adequate lighting is provided,
- specific site hazards have been identified and safe systems of work are in place,
- when cutting, drilling or grinding activities are taking place on a larger site, relocating nearby workers to other location on site if required,
- wet residues and cut pieces are collected and removed.

4.5 Public safety

If cutting, drilling or grinding is to be carried out on a road or in a public place, PCBUs must manage risks arising from the workplace and consideration needs to be given to both vehicular and pedestrian traffic as part of a safe system of work.

Consideration to be given to public safety from flying debris including particles and fragments of cement, masonry and broken tool / equipment components that can be projected into the air at high speed. Refer to chapter 7.4 Flying debris.

When work involves directing traffic on a public road, a work zone traffic management plan needs to be developed and PCBUs must ensure that traffic control work training is provided to workers engaged by the PCBU who will carry out traffic control work.

Additionally, the relevant government department (i.e. Transport for NSW) and/or local government authority (Council) may be required to approve traffic management controls submitted by the PCBU.

Considerations for developing work zone traffic management plans to manage vehicle and pedestrian traffic should include:

- closing roads or footpaths,
- controlling the flow of vehicles through or around the worksite,
- barricading or screening the work area to protect pedestrians and prevent vehicle entry,
- displaying warning signs and caution lighting where necessary,
- lighting the area, but ensuring there is no glare or shadowing, for example if floodlighting is used, position it to not impede workers or motorists,
- ensuring safe access for pedestrians around the area, including consideration for wheelchairs, prams, bikes, etc.

5. Tools / equipment safety

The hazards that may be caused by the tools and equipment used to cut, drill and grind concrete and masonry products must be identified and managed following the hierarchy of control.

This chapter provides guidance on the safe use of tools / equipment used for cutting, drilling and grinding.

PCBUs should ensure:

- that appropriate checks, tests and inspections are carried out as necessary to ensure the tools / equipment are in safe working order before and after use, this includes fittings, safety features, RCDs, guarding and warning devices,
- records of inspection, repair, maintenance, alteration and cleaning by a competent person are accessible and demonstrate that the tools / equipment are in safe working order,
- the manufacturer's instruction manual is available, provided to workers and followed when operating the tools / equipment,
- the tools / equipment:
  - are fit for purpose for the work to be undertaken,
  - are only used for the purpose they were designed and within their rated capacity,
  - has fittings, e.g. blades, that are free from damage, installed correctly and compatible as per the manufacturer's instruction manual,
- tool mounted dust extraction (M or H class rated) is in place when dry cutting or a water suppression system is used to control the dust when wet cutting,
- bunds are placed around the cut area to contain excess water and slurry when cutting and drilling,
- an M or H class rated vacuum cleaner is used to clean dry dust from tools / equipment, floors, walls and other surfaces,
- low pressure water or wet sweeping is used to clean up wet slurry,
- safety decals are correctly located and legible,
- workers are trained and/or competent to use the tools / equipment,
- any damaged tools / equipment are taken out of service and tagged appropriately until repaired,
- safety features, guarding and warning devices are used as intended and not made inoperative,
- required PPE / RPE is worn,
- tools / equipment are operated in well-ventilated areas,
- adequate ventilation when using petrol-driven combustion engines, e.g. extraction systems,
- exclusion zones are established around the work area,
- work is immediately stopped if unauthorised people enter the exclusion zone or if any tools / equipment or blade fault is detected,
- workers are informed about entanglement risks, such as loose clothing, long hair and beards, when operating tools / equipment with rotating parts,
- before any cutting or drilling tools / equipment are passed from one operator to another, the motor should be shut off in case the throttle is accidentally activated,
- service asset locations, the original drawings and 'as-constructed' drawings (if they exist) as well as the site for enclosed cables, wiring, plumbing, steel reinforcing and structural stress components are checked before work commences.

For further guidance refer to the *Code of practice: Managing the risks of plant in the workplace*.

5.1 Electrical hazards

There are significant risks when using electrical tools / equipment, especially in wet conditions.

Control measures to manage electrical hazards include:

- wet cutting being done by waterproof (Ingress Protection (IP) code rating 67 or higher) hydraulic or pneumatic tools / equipment, or petrol-driven tools / equipment,
- any existing electrical or other services (such as gas, water, and sewerage) to be identified and located and a diagram (or 'as constructed' drawing) drawn to show their location before work begins,
- protecting users of portable electrical tools / equipment against earth leakage shock by a RCD,
- ensuring all electrical tools / equipment have been inspected, tested and tagged by a competent person,
- ensuring all electrical cables and extension leads are suspended or elevated where possible or provided with mechanical protection (cover or enclosed), particularly across access and egress points to the work area,
- have waterproof connectors where water is present,
- ensuring electrical cutting or drilling tools / equipment are not used for inverted cutting.

For further guidance refer to Australian/New Zealand Standard *AS/NZS 3012:2019 Electrical installations – Construction and demolition sites*.

5.2 Hazardous manual tasks

Strains and sprains can occur from lifting and manoeuvring heavy tools / equipment and materials.

Concrete and masonry cutting, drilling and grinding involves a variety of hazardous manual tasks that can cause strains or other injuries.

A hazardous manual task is any activity requiring force by a person to lift, lever, push, pull, carry or move, hold or restrain a person, or thing, that may increase the risk of injury or harm.

The *Code of practice: Hazardous manual tasks* provides guidance on hazard identification, risk assessment and risk control where the weights of loads handled or the forces required to move or restrain them are of concern.

Manual task hazards in concrete and masonry cutting, drilling and grinding operations include:

- awkward or static working positions repeated or maintained for long periods,
- holding handheld tools / equipment over extended periods,
- lifting, pushing, levering, holding or carrying tools / equipment and cut sections of concrete or masonry,
- slip and trip hazards while handling tools / equipment or materials,
- exposure to vibration,
- kick-back, push-back or pull-in by a saw when the blade strikes a hidden object or resistance or is pinched or jams in the cut.

Control measures to manage manual tasks include:

- suspending or supporting cutting or drilling tools / equipment in a frame to reduce the forces and the awkward and static working positions needed to position it,
- select tools / equipment based on ergonomic design, including balanced weight distribution, neutral wrist handles, and trigger locks to reduce sustained grip force,

- reducing the range of movement of the tools / equipment to minimise the effect or forces needed to guide or control it,
- selecting a fit for purpose work platform to avoid chasing / cutting above shoulder height,
- training operators in safe systems of work for handling the tools / equipment and materials involved,
- avoiding kick-back, push-back and pull-in situations by pre-checking blades and other saw components for wear and tear, assessing materials to be cut and locating hidden steel reinforcing and other obstructions,
- avoiding hazardous cutting situations,
- selecting tools / equipment with any required features built in, e.g. anti-vibration hand grips,
- using mechanical aids for moving heavy saws, drill rigs, and concrete cores (e.g. trolleys, dollies, lifting frames).

5.3 Noise

Concrete and masonry cutting, drilling and grinding tools / equipment have the potential to create excessive noise in the workplace which needs to be assessed and controlled. In a normal working day, noise from concrete and masonry cutting, drilling and grinding tools / equipment will result in exposure to excessive noise for the operator and others nearby. The hearing of operators and workers will be at risk if no control measures are implemented.

Control measures to manage noise include:

- obtaining information on the noise output of different models from manufacturers and suppliers, prior to purchase or hire,
- assessing the suitability of using noise-reduced saw blades for a particular job,
- selecting the quietest suitable model and blade available,
- keeping people not directly involved in cutting, drilling or grinding away from excessive noise areas,
- erecting temporary acoustic barriers around cutting, drilling and grinding areas to further reduce the spread of noise,
- providing training and instruction about noise, its effects, noise control measures and the proper use and maintenance of hearing protectors,
- selecting and maintaining personal hearing protectors in accordance with Australian/New Zealand Standard *AS/NZS 1269.3:2005 Occupational noise management, Hearing protector program*.

For further guidance refer to *Code of practice: Managing noise and preventing hearing loss at work*.

5.4 Tools / equipment malfunctions

Failure or improper use of tools / equipment, using incorrect or damaged tools / equipment, removal of manufacturer provided handles, and a lack of guarding can lead to accidents and injuries.

Tools / equipment malfunctions can occur due to a variety of reasons including wear and tear, improper or inadequate maintenance, operator error, manufacturing defects, incorrect usage, environmental factors, and damage from impact.

Control measures to manage tools / equipment malfunction include:

- conducting regular inspections and maintenance,
- properly storing tools / equipment,
- ensuring operators are trained,

- following manufacturer guidelines,
- implementing processes to report defects,
- addressing immediate concerns and performing necessary repairs when needed.

5.5 Vibration

Prolonged use of vibrating tools / equipment can result in conditions such as hand-arm vibration syndrome (HAVS).

Vibration transmitted from concrete and masonry cutting, drilling and grinding tools / equipment can affect the operator's whole body or parts of the body, such as the hands and arms.

Whole body effects are generally musculoskeletal, especially affecting the lower spine region. Other effects include fatigue, headaches, gastrointestinal problems and reduced job efficiency.

Hand and arm vibrations may cause disturbances in the peripheral nerve and vascular systems of the hands, resulting in Raynaud's Phenomenon (white finger), causing loss of senses of touch, heat, numbness and loss of grip strength. Other effects can include damage to tendons, bones and joints in the hands, wrists, arms, elbows and shoulders, and carpal tunnel syndrome.

Control measures to manage vibration include purchasing or hiring tools / equipment that:

- vibrates less or does not have to be held or manually supported,
- is well-balanced, as light as possible and capable of being held in either hand (and different sized hands),
- has vibration-absorbing handles, or with an even surface on the handles to distribute gripping force.

When using hand-held jack hammers, give consideration to regular breaks or worker rotation to reduce vibration risks.

5.6 Refuelling safety

Refuelling petrol operated tools / equipment can create significant risk of fire or explosion if not done safely.

Control measures to manage the risks associated with tools / equipment refuelling include:

- ensuring any heat from hot surfaces and possible ignition sources in refuelling areas is eliminated,
- prior to refuelling, ensure the tools / equipment are not in use, the engine and all electrical equipment is turned off and the engine is allowed to cool as per the manufacturer's instruction manual,
- only using approved fuel containers and funnels to reduce the risk of it becoming dislodged while refuelling,
- establishing a designated refuelling area on firm ground in a well-ventilated location,
- having suitable firefighting equipment that is easily accessible, and all workers trained in use of firefighting equipment,
- following the manufacturers recommendations and manufacturer's instruction manual,
- wearing appropriate PPE,
- providing instruction, training and supervision to workers on the safe use, storage and handling of hazardous chemicals.

6. Cutting, drilling and grinding safety

In addition to the control measures outlined in this chapter, also refer to

- Tools / equipment safety in chapter 5.
- Common hazards in chapter 7.

6.1 Cutting safety

Cutting can involve cutting expansion cuts, chasing out block work for electrical or plumbing work and trimming concrete or masonry products. Some of the tools / equipment used for cutting are:

- track mounted wall saws,
- floor-cut concrete saws / flat saw / road saw / walk-behind saw,
- hand held saws.

To manage risks associated with the use of saws PCBUs should:

- ensure when starting the machine, the operator and others stand away from the path of the blade, and that the blade is not touching any object,
- ensure correct manual handling techniques and appropriate lifting equipment are used when lifting wall saws onto the rails,
- remove, secure or anchor any concrete blocks cut loose to avoid unintentional movement,
- cordon off the area at the back of the wall, where the blade comes out when cutting through, to avoid injury to other people and damage to materials,
- keep the area around the hydraulic hoses clean at all times,
- ensure safe ventilation procedures are in place when petrol-driven saws are used indoors,
- for wet cutting, ensure adequate coolant water is available to keep the blade cool,
- keep water running continuously on the blade when using a wet process to suppress the dust generated,
- ensure any pipes being cut are properly supported and chocked,
- ensure no cutting is done above shoulder height with hand-held saws, anything higher should be done from a platform or scaffold,
- undertake cutting away from combustible material, fumes and electric equipment.

Inverted cutting

Inverted cutting (cutting the underside of a slab, floor or overhang) should never be done with a hand-held saw, because the operator has little control of a cutting machine held above shoulder height.

Usually, inverted cutting is not necessary because it should be possible to make the cut from on top of the slab.

Standard appropriate IP rated water-cooled saws for inverted cutting should not be electric powered and should never be used in inverted cutting (if the saw is turned upside down, water can flood into the motor and cause the electricity to earth through the operator).

Where inverted cutting is required, control measures include:

- equipment is operated as per the manufacturer's instruction manual,
- ensuring the work is performed by a competent person,

- attaching the track-mounted wall saw to guide tracks bolted to the slab,
- using RPE where required, particulate filter respirators will protect workers against dust, fibres and the toxic effects of fumes or dust,
- cleaning up dust (including slurry) using a safe method after the work activity / task is complete.

Hand-held saws

The sudden and violent movement of a hand-held saw away from the cutting surface or its jamming inside a cut places the operator at risk of serious and potentially fatal injury from the forces generated by kick-back, push back, pull in and pinched cuts.

This can occur when:

- slewing the saw to change direction of the cut without removing it from the cut,
- encountering embedded objects such as wires and pipes,
- sawing on an unstable surface,
- cutting above shoulder height.

Considerations to minimise risks include:

- following written safe work procedures,
- selecting tools / equipment specifically designed for the task,
- ensuring operators are safely positioned away from the direction of the cut,
- using a fit for purpose work platform or scaffold so the tools / equipment can be used in a safe working range,
- carefully consulting builder's plans to avoid embedded objects,
- ensuring bystanders are at a safe distance from your work area,
- never removing or circumventing safety guards.

6.2 Core drilling safety

Concrete core drilling involves cutting circular holes and removing cores to allow for services such as electrical, plumbing, heating, sewer and sprinkler installations.

Core drilling involves the use of a core drill which can be mounted on a drilling mast, or using a handheld drill.

During drilling with a circular drill bit, water from a connected hose is flushed down the hole to suppress dust, remove cut material, and keep the drill bit cool.

To manage risks associated when concrete core drilling:

- secure the core drill (stand) with anchor bolts using a hammer drill as per the manufacturer's instruction manual,
- ensure the drill machine is securely fixed, with no movement of the mast,
- make sure all drill areas have been clearly marked and scanned for electric cables / service assets,
- ensure adequate water supply to irrigate cut material from the core hole and to ensure no dust is created,
- ensure when leaving the work area, the exposed penetrations are covered with fixed covers,
- remove concrete cores to prevent slip and trip hazards.

Loss of vacuum pressure

Operators using a vacuum assembly to anchor a core drill stand to a surface may risk injury if the vacuum pump fills with slurry. This can cause loss of vacuum, which can result in the drill stand breaking free and rotating round the drill.

When a vacuum system is used to secure a drill stand to concrete, the vacuum pump should have a receiver tank to ensure the operator has time to take action (if power is cut to the vacuum pump) before the drill loses its hold.

Control measures to manage loss of vacuum pressure include:

- ensuring the surface where the drill stand is affixed is level, dry and solid,
- if a vacuum attachment is used, an operator should monitor the tools / equipment to ensure that vacuum pressure and seal is maintained.

Where practical use bolt down stands rather than vacuum pressure stands.

6.3 Grinding safety

Concrete grinding tools / equipment can be mobile or handheld and is used to remove coatings, glues and/or paints and partial removal of the concrete substrate for preparation or finishing purposes such as polishing.

Concrete grinding can be performed by either a dry, using local ventilation on the tools / equipment, or wet process depending on the required outcome and environmental factors.

Control measures to ensure grinding safety include:

- selecting tools / equipment, whether handheld or mobile (ride-on), to be electric with built in dust extraction,
- ensuring workers take regular breaks to reduce fatigue and exposure to vibration,
- provision of adequate LEV,
- use of RPE,
- establishing exclusion zones to keep workers and others outside the work area as required.

7. Common hazards

There are a range of common hazards that arise from cutting, drilling and grinding processes. The common hazards and the ways they can be managed are listed below.

7.1 Dust

Dust generated from cutting, drilling and grinding concrete and masonry products can lead to serious respiratory diseases.

Control measures to manage dust include:

- on-tool dust capture, which is an effective way to eliminate or reduce exposure to dust,
- electric saws fitted with vacuum bag ventilation systems, however as the bag fills efficiency may reduce and an appropriate particulate filter respirator is generally required for longer periods of use,
- using water to control dust while cutting materials such as concrete or brick, which is a very effective way to eliminate and reduce exposure to hazardous dust. Compliant wet electric saws protected by a RCD may be used,
- ensuring the operator is responsible for cleanup, removal and disposal of dust (including slurry) using a safe method after the work activity / task,
- use of RPE used in conjunction with higher level controls mentioned above.

PCBUs are referred to the *Code of practice: Managing risks of respirable crystalline silica in the workplace* for information on how to work safely with concrete and masonry products containing crystalline silica.

Also refer to the SafeWork NSW *Safety Checklist – Silica safety in construction* (excluding tunnelling work) for further information.

7.2 Poorly ventilated work areas

Using cutting, drilling and grinding tools / equipment in enclosed areas with poor ventilation, e.g. basement carparks, can expose workers to toxic or hazardous atmospheric contaminants reducing oxygen levels.

The most dangerous of these gases is carbon monoxide, an invisible, odourless chemical asphyxiant that can cause rapid loss of coordination, unconsciousness and death.

Control measures include:

- installing LEV to remove any toxic or hazardous atmospheric contaminants,
- use of RPE as a secondary control for the workers,
- following the relevant safety data sheet (SDS) where chemicals or other hazardous substances are added as aids in the cutting or drilling operations.

Respirators should comply with Australian/New Zealand Standard, *AS/NZS 1716:2012 Respiratory protective devices* and be selected in accordance with Australian/New Zealand Standard *AS/NZS 1715:2009 Selection, use and maintenance of respiratory protective equipment*.

7.3 Damage to services and structures

Workers and others are at risk of serious injury or death from cutting through gas, electricity, water or communication assets.

PCBUs must identify and locate services which can be done by:

- consulting the original drawings of the services and conducting a search for any 'as constructed' drawings, in the event of a change of location of services during installation,
- using specialist equipment to accurately determine the location of services that have been moved, prior to any cuts being made,
- consulting with Before You Dig Australia (BYDA), energy providers, or the local government authority.

PCBUs must manage risks arising from damage to services. Control measures include:

- ensuring the services in proximity to where the work activity is occurring are disconnected, isolated and tagged out by a competent person,
- at the conclusion of the work, a competent person should reconnect the service and, when safe, remove the tags.

Workers and others can be at serious risk if stressed components or components affecting the integrity of a building are damaged during cutting or drilling.

PCBUs must manage the risks of damage to structures.

Control measures include:

- identifying and marking components that will affect the strength of a structure if cut,
- consulting with a structural engineer to obtain appropriate advice in relation to the cutting of structural components.

7.4 Flying debris

Particles and fragments such as cement, masonry and broken tool components can be projected into the air at high speed causing impact, laceration and penetration injuries to workers and others.

Key measures to control flying debris include:

- engineering controls such as solid barriers and screens to contain flying debris,
- designated exclusion zones external to the work area,
- the use of PPE and RPE, e.g. safety glasses, hearing protection, hard hats, safety boots and leg protection.

7.5 Slips, trips and falls

Wet surfaces and debris can create hazardous conditions and cause slips, trips and falls.

Control measures to manage slips, trips and falls include:

- wearing appropriate work footwear,
- cleaning floors properly to ensure that:
  - water, slurry or contaminants are effectively removed,
  - a build-up of building waste product residue is avoided,
  - the floor does not become too slippery.

- removing trip hazards by:
  - maintaining good housekeeping practices,
  - ensuring the floor surface is in good order such as being free from holes and uneven surfaces,
  - avoiding any changes in floor surface level, or if this is not possible, highlighting these changes.

For further guidance, see the *Code of practice: Managing the risk of falls at workplaces*.

7.6 Working at heights

Cutting, drilling and grinding at heights increases the risk of falls from one level to another. Temporary work platforms are often used to eliminate the need to work above shoulder height. Any temporary work platforms used need to be suitably designed and secured to enable the work to be done safely.

For further guidance, refer to the *Code of practice: Managing the risk of falls at workplaces*.

8. Respiratory protective equipment (RPE) and personal protective equipment (PPE)

Higher level controls, such as engineering, in some circumstances must (such as construction work), and otherwise should, be used to control dust and fumes. Where engineering controls do not adequately control the hazard, RPE can be used to minimise exposure to residual dust and fumes. Correct information on the selection, fit and use of RPE is crucial to its effectiveness as a control measure.

The type of RPE / PPE selected for cutting, drilling and grinding activities will depend on identified hazards associated with particular sites, conditions, materials, tasks and the tools / equipment used.

Selecting and providing RPE / PPE is the responsibility of the PCBU and can be determined by a risk assessment. If working with hazardous chemicals, the SDS must be considered.

Standard RPE / PPE for concrete or masonry cutting, drilling or grinding includes respirators, safety helmet, eye and hearing protection, footwear, and sun protection.

Fit testing

Fit testing detects air leaks around the seal between the respirator facepiece and the face of the worker. If there isn't a good face seal, contaminated air will leak into the respirator and the wearer may not get the level of protection that is needed.

Fit testing should occur for all types of close-fitting half and full facepiece respirators. Workers who are not clean shaven above the cheeks, neck and jaw should not be provided with close fitting RPE as it prevents a good seal. Powered air-purifying respirators (PAPR) may be a suitable control in these circumstances. If wearing spectacles, fit testing should be conducted whilst wearing the spectacles.

Fit testing may not be necessary for positive pressure loose fitting head tops, or hoods connected to PAPR or a compressed airline hose.

For further information on respiratory protective equipment and requirements for fit testing workers see the SafeWork NSW website.

Equipment and storage

Storage arrangements should ensure the equipment is safe from interference, contaminants and damage, and is easily accessible and ready to use when needed.

Items of RPE / PPE should be inspected regularly, as specified by the manufacturer or supplier, to ensure they remain serviceable.

Damaged or defective RPE / PPE items must be replaced, repaired or discarded.

If shared, items of RPE /PPE equipment are to be decontaminated after each use.

Other PPE

All clothing should be comfortable and suitable for the work and weather conditions.

If direct or reflected sunlight cannot be avoided by restricting outdoor work to low-sunlight hours or using temporary sun shelters, sun protection should include a broad-brim hat, sunglasses, long sleeve shirt and long trousers, as well as SPF50+ sunscreen.

If working in cold weather, workers should wear warm clothing and/or waterproof gear and boots.

9. Incident notification

Part 3 of the WHS Act

WHS Act section 35
What is a "notifiable incident"

WHS Act section 38
Duty to notify of notifible incidents

A 'notifiable incident' is:

- the death of a person,
- a 'serious injury or illness', or
- a 'dangerous incident' that exposes someone to a serious risk (even if no one is injured)

arising out of the conduct of a business or undertaking at a workplace.

'Notifiable incidents' may relate to any person — whether an employee, contractor or member of the public.

A PCBU must ensure that SafeWork NSW is notified immediately after becoming aware that a notifiable incident has occurred. Notifications can be made by contacting SafeWork NSW on 13 10 50 or via the SafeWork NSW website: Notify SafeWork.

When a PCBU is made aware that a notifiable incident has occurred, the PCBU must:

- report it to SafeWork NSW immediately, and
- preserve the incident site so far as is reasonably practicable until an inspector arrives or directs otherwise. This doesn't prevent help being provided to an injured person, removing a deceased person, making the site safe to minimise the risk of a further notifiable incident, or to facilitate a police investigation.

Incidents involving multiple businesses or undertakings

If a 'notifiable incident' arises out of more than one business or undertaking then each must ensure that the incident has been notified to SafeWork NSW.

There is no need for all duty holders to notify — only one needs to. However, all duty holders retain their responsibility to ensure SafeWork NSW is notified, regardless of any agreement between them.

In these circumstances the duty holders must, so far as is reasonably practicable, consult, cooperate and coordinate to put appropriate reporting and notification arrangements in place.

Examples of these incidents are available in Safe Work Australia's *Incident notification fact sheet*.

Enforcement action may be taken and penalties may be applied for not notifying notifiable incidents to SafeWork NSW. For more information see the SafeWork NSW website.

10. Appendices

10.1 Appendix A: Glossary

Terms used throughout this Code that require definitions or descriptions.

Term	Description
Competent person	A person who has acquired through training, qualification or experience the knowledge and skills to carry out the task.
Concrete saws	Power saws with diamond-tipped blades designed for cutting through concrete and masonry materials.
Construction project	A project that involves construction work where the cost of the construction work is $250,000 or more.
Construction work	Any work carried out in connection with the construction, alteration, conversion, fitting-out, commissioning, renovation, repair, maintenance, refurbishment, demolition, decommissioning, or dismantling of a structure.
Core drills	Cylindrical drills used to create precise circular holes in concrete and masonry.
Crystalline silica	The crystalline form of the abundant naturally occurring mineral silica or silicon dioxide (SiO_2). It includes cristobalite, quartz, tridymite and Tripoli and is present in almost all types of rocks, sand, clay, shale and gravel and in construction materials such as concrete, tiles and bricks.
Crystalline silica substance (CSS)	Material that contains at least 1% crystalline silica, determined as a weight/weight (w/w) concentration.
Dangerous incident	An incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to — (a) an uncontrolled escape, spillage or leakage of a substance, or (b) an uncontrolled implosion, explosion or fire, or (c) an uncontrolled escape of gas or steam, or (d) an uncontrolled escape of a pressurised substance, or (e) electric shock, or (f) the fall or release from a height of any plant, substance or thing, or (g) the collapse, overturning, failure or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulations, or (h) the collapse or partial collapse of a structure, or (i) the collapse or failure of an excavation or of any shoring supporting an excavation, or (j) the inrush of water, mud or gas in workings, in an underground excavation or tunnel, or (k) the interruption of the main system of ventilation in an underground excavation or tunnel, or (l) any other event prescribed by the regulations, but does not include an incident of a prescribed kind.

Term	Description
Duty holder	Any person who owes a work health and safety duty under the WHS Act including a PCBU, a designer, manufacturer, importer, supplier, installer of products or plant used at work (upstream duty holder), officer or a worker.
Engineered stone	(a) is an artificial product that: (i) contains 1% or more crystalline silica determined as a weight/weight (w/w) concentration, and (ii) is created by combining natural stone materials with other chemical constituents such as water, resins or pigments, and (iii) becomes hardened, but (b) does not include the following — (i) concrete and cement products, (ii) bricks, pavers and other similar blocks, (iii) ceramic wall and floor tiles, (iv) grout, mortar and render, (v) plasterboard, (vi) porcelain products, where it does not contain resin, (vii) sintered stone, where it does not contain resin, (viii) roof tiles.
HAVS (Hand-Arm Vibration Syndrome)	A medical condition caused by prolonged use of vibrating plant, leading to numbness, tingling, and loss of grip strength.
Hazard	A situation or thing that has the potential to harm a person. Hazards at work may include: noisy machinery, a moving forklift, chemicals, electricity, working at heights, a repetitive job, bullying and violence at the workplace.
Hazardous manual task	A task requiring a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing involving one or more of the following — (a) repetitive or sustained force, (b) high or sudden force, (c) repetitive movement, (d) sustained or awkward posture, or (e) exposure to vibration. These hazards directly stress the body and can lead to an injury.
Health and safety committee	A consultative body established under the WHS Act. The committee's functions include facilitating cooperation between workers and the person conducting a business or undertaking to ensure workers' health and safety at work, and assisting to develop work health and safety standards, rules and procedures for the workplace.
Health and safety representative	A worker who has been elected by their work group under the WHS Act to represent them on health and safety matters.

Term	Description
High risk construction work	Construction work that — (a) involves a risk of a person falling more than 2 metres, or (b) is carried out on a telecommunication tower, or (c) involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure, or (d) involves, or is likely to involve, the disturbance of asbestos, or (e) involves structural alterations or repairs that require temporary support to prevent collapse, or (f) is carried out in or near a confined space, or (g) is carried out in or near — i. a shaft or trench with an excavated depth greater than 1.5 metres, or ii. a tunnel, or (h) involves the use of explosives, or (i) is carried out on or near pressurised gas distribution mains or piping, or (j) is carried out on or near chemical, fuel or refrigerant lines, or (k) is carried out on or near energised electrical installations or services, or (l) is carried out in an area that may have a contaminated or flammable atmosphere, or (m) involves tilt-up or precast concrete, or (n) is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians, or (o) is carried out in an area at a workplace in which there is any movement of powered mobile plant, or (p) is carried out in an area in which there are artificial extremes of temperature, or (q) is carried out in or near water or other liquid that involves a risk of drowning, or (r) involves diving work
Kick-back	Where the tip of the saw blade suddenly and forcefully moves backwards and upward.
LEV (Local Exhaust Ventilation)	Ventilation systems designed to capture and remove airborne contaminants at their source.
May	‘May’ indicates an optional course of action.
Must	‘Must’ indicates a legal requirement exists that must be complied with.
Officer	An officer under the WHS Act is: • an officer under section 9 of the Corporations Act 2001 (Cth) • an officer of the Crown within the meaning of section 247 of the WHS Act, and • an officer of a public authority within the meaning of section 252 of the WHS Act. An elected member of a local authority while acting in that capacity, is not an ‘officer’. A partner in a partnership is also not an officer, as each partner would be considered to be a PCBU.

Term	Description
Person conducting a business or undertaking (PCBU)	A PCBU is an umbrella concept which intends to capture all types of working arrangements or relationships. A PCBU includes a: — company — unincorporated body or association — sole trader or self-employed person. Individuals who are in a partnership that is conducting a business will individually and collectively be a PCBU. A volunteer association (defined under the WHS Act) or elected members of a local authority will not be a PCBU. *Note –* A person may be both a PCBU, within the meaning of section 5 of the WHS Act, and a worker within the meaning of section 7 of the WHS Act.
Pinched-cut	When the saw blade gets stuck or jammed in the cut often due to the material moving or the cut closing up which can cause the saw to kick back.
Plant	Includes — (a) any machinery, equipment, appliance, container, implement and tool, and (b) any component of any of those things, and (c) anything fitted or connected to any of those things. Plant that relies exclusively on manual power for its operation and is designed to be primarily supported by hand, for example a screwdriver, is not covered by the WHS Regulations. The general duty of care under the WHS Act applies to this type of plant.
PPE (Personal protective equipment)	Anything used or worn by a person to minimise risk to the person's health and safety.
Psychosocial hazard	A psychosocial hazard is a hazard that — (a) arises from, or relates to — (i) the design or management of work, or (ii) a work environment, or (iii) plant at a workplace, or (iv) workplace interactions or behaviours, and (b) may cause psychological harm, whether or not it may also cause physical harm.
Psychosocial risk	A risk to the health or safety of a worker or other person arising from a psychosocial hazard.
Pull-in	Where the saw is pulled into the cut by the blades rotation when the saw blade gets pinched or the cut is not aligned properly.
Push-back	When the saw cannot run freely through the concrete and the saw thrusts straight back toward the operator.
Residual current device (RCD)	RCDs are electrical safety devices designed to immediately switch off the supply of electricity when electricity leaking to earth is detected at harmful levels. They offer high levels of personal protection from electric shock.

Term	Description
Respiratory protective equipment (RPE)	A form of PPE that is designed to prevent a person wearing the equipment from inhaling airborne contaminants.
Risk	The possibility harm (death, injury or illness) might occur when exposed to a hazard.
Serious injury or illness	An injury or illness requiring the person to have – (a) immediate treatment as an in-patient in a hospital, or (b) immediate treatment for — (i) the amputation of any part of his or her body, or (ii) a serious head injury, or (iii) a serious eye injury, or (iv) a serious burn, or (v) the separation of his or her skin from an underlying tissue (such as degloving or scalping), or (vi) a spinal injury, or (vii) the loss of a bodily function, or (viii) serious lacerations, or (c) medical treatment within 48 hours of exposure to a substance, and includes any other injury or illness prescribed by the regulations but does not include an illness or injury of a prescribed kind.
Should	'Should' indicates a recommended course of action.
Work group	A group of workers established to facilitate the representation of workers by one or more health and safety representatives. A work group may be all workers at a workplace but it may also be appropriate to split a workplace into multiple work groups where workers share similar work conditions or are exposed to similar risks and hazards. For example all workers on night shift.
Worker	Any person who carries out work for a person conducting a business or undertaking, including work as an employee, contractor or subcontractor (or their employee), self-employed person, outworker, apprentice or trainee, work experience student, employee of a labour hire company placed with a 'host employer' or a volunteer. *Note –* A person may be both a worker, within the meaning of section 7 of the WHS Act, and a PCBU within the meaning of section 5 of the WHS Act.
Workplace	Any place where work is carried out for a business or undertaking and includes any place where a worker goes, or is likely to be, while at work. This may include offices, factories, shops, construction sites, vehicles, ships, aircraft or other mobile structures on land or water.

Disclaimer

This publication may contain information about the regulation and enforcement of work health and safety in NSW. It may include some of your obligations under some of the legislation that SafeWork NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website www.legislation.nsw.gov.au

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

Catalogue No. SWNSW_40382_25

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