

CONSTRUCTION WORK

Code of Practice

NOVEMBER 2013



safe work australia



Safe Work Australia is an Australian Government statutory agency established in 2009.

Safe Work Australia consists of representatives of the Commonwealth, state and territory governments, the Australian Council of Trade Unions, the Australian Chamber of Commerce and Industry and the Australian Industry Group.

Safe Work Australia works with the Commonwealth, state and territory governments to improve work health and safety and workers' compensation arrangements. Safe Work Australia is a national policy body, not a regulator of work health and safety. The Commonwealth, states and territories have responsibility for regulating and enforcing work health and safety laws in their jurisdiction.

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FOREWORD

This Code of Practice for construction work is an approved code of practice under section 274 of the *Work Health and Safety Act* (the WHS Act).

An approved code of practice is a practical guide to achieving the standards of health, safety and welfare required under the WHS Act and the Work Health and Safety Regulations (the WHS Regulations).

A code of practice applies to anyone who has a duty of care in the circumstances described in the code. In most cases, following an approved code of practice would achieve compliance with the health and safety duties in the WHS Act, in relation to the subject matter of the code. Like regulations, codes of practice deal with particular issues and do not cover all hazards or risks that may arise. 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 Regulations. Courts may regard a code of practice as evidence of what is known about a hazard, risk or control and may rely on the code in determining what is reasonably practicable in the circumstances to which the code relates.

Compliance with the WHS Act and Regulations may be achieved by following another method, such as a technical or an industry standard, 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.

This Code of Practice has been developed by Safe Work Australia as a model code of practice under the Council of Australian Governments' *Inter-Governmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety* for adoption by the Commonwealth, state and territory governments.

SCOPE AND APPLICATION

This Code provides guidance to principal contractors and other persons conducting a business or undertaking who carry out construction work on how to meet the health and safety requirements under the WHS Act and Regulations relating to construction work.

HOUSING CONSTRUCTION WORK

While the information and guidance contained in this code is relevant to all types of construction work, additional guidance marked with this symbol  is provided for businesses working within the housing construction sector.

RELATIONSHIP WITH OTHER CODES

This Code should be read in conjunction with other codes of practice on specific hazards and control measures relevant to the construction industry including:

- Demolition Work
- Excavation Work
- Managing the Risk of Falls at Workplaces
- Managing Noise and Preventing Hearing Loss at Work

- Preventing Falls in Housing Construction
- Confined Spaces
- Hazardous Manual Tasks
- Safe Design of Structures
- Managing the Work Environment and Facilities
- Managing Electrical Risks in the Workplace
- How to Manage and Control Asbestos in the Workplace
- How to Safely Remove Asbestos.

HOW TO USE THIS CODE OF PRACTICE

In providing guidance, 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.

This Code also includes various references to sections of the WHS Act and Regulations which set out the legal requirements. These references are not exhaustive. The words 'must', 'requires' or 'mandatory' indicate that a legal requirement exists and must be complied with.

1. INTRODUCTION

This Chapter describes a number of key terms used in the WHS Act and Regulations and within this Code to help duty holders understand what type of construction work is covered by the legislation and what the related duties are.

1.1 What is 'construction work'?

Regulation 289

Construction work is defined as 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.


Construction work can be commercial, civil or housing construction and includes the following:

- any installation or testing carried out in connection with an activity referred to in the above definition
- the removal from the workplace of any product or waste resulting from demolition
- the prefabrication or testing of elements, at a place specifically established for the construction work, for use in construction work
- the assembly of prefabricated elements to form a structure, or the disassembly of prefabricated elements forming part of a structure
- the installation, testing or maintenance of an essential service in relation to a structure
- any work connected with an excavation
- any work connected with any preparatory work or site preparation (including landscaping as part of site preparation) carried out in connection with an activity referred to in the above definition
- an activity referred to in the above definition that is carried out on, under or near water, including work on buoys and obstructions to navigation.

'In connection with' means related to or associated with construction work. Contracts covering a project are a good guide to what activities are done in connection with construction. Examples include:

- work by architects or engineers in on-site offices or conducting on-site inspections, but not architects or engineers working in offices away from the construction site
- work by a mechanic on an excavator on-site and not in an isolated service area
- delivering building materials to different points on the site, but not making deliveries to a single designated delivery area
- excavating for a basement garage
- testing fire equipment on the construction site
- supervisors and manager moving around the site to monitor work
- surveying a site after construction has started, but not surveying a Greenfield site before construction has started, and
- traffic control on a construction site.

'In connection with' does not include planning and design activities that might have been carried out prior to commencing the construction work.

 For the purposes of this Code, **housing construction work** involves construction work relating to the following:

- detached houses
- attached dwellings, separated from each other by a fire resisting wall, such as terrace, row or town houses
- villa-homes, strata or company title home units or residential flats
- boarding and guest houses, hostels or similar with a floor area <300m², and
- ancillary buildings to the above, such as private garages, gazebos and carports.

The above are based on classes 1, 2 & 10 of the Building Code of Australia. Work on multi-storey buildings, i.e. above three habitable storeys, is not considered housing construction work for the purposes of this Code.

Examples of construction work are provided in Table 1 at Appendix A.

1.2 What is not ‘construction work’?

Construction work does not include any of the following:

- the manufacture of plant
- the prefabrication of elements, other than at a place specifically established for the construction work for use in the construction work
- the construction or assembly of a structure that, once constructed or assembled, is intended to be transported to another place
- testing, maintenance or repair work of a minor nature carried out in connection with a structure
- mining or the exploration for or extraction of minerals.

Examples of what is not construction work are provided in Table 2 at Appendix A.

1.3 What is a ‘structure’?

The WHS Act defines a structure as anything that is constructed, whether fixed or moveable, temporary or permanent. A structure includes:

- buildings, masts, towers, framework, pipelines, transport infrastructure and underground works (shafts or tunnels), for example noise reduction barriers on a freeway, communications masts or towers, electricity transmission towers and associated cables, flying cables and supports, guyed towers such as a ski-lift tower
- any component of a structure
- part of a structure.

Examples of a structure include the following:

- a roadway or pathway
- a ship¹ or submarine
- foundations, earth retention works and other earthworks, including river works and sea defence works
- formwork, falsework or any other structure designed or used to provide support, access or containment during construction work, for example a prop or formwork system
- an airfield
- a dock, harbour, channel, bridge, viaduct, lagoon or dam
- a sewer or sewerage or drainage works, for example storm water drains, sheet piling to divert the course of a river or to build a cofferdam, underground storage tanks for an irrigation system, road tunnels, ventilation or access shaft for underground services.

 Examples of structures relating to housing construction work may include:

- a carport, pergola, tool shed, tennis court, shade sails, awnings
- an in-ground swimming pool
- foundations, earth retention works and other earthworks
- a structure designed or used to provide support, access or containment during construction work, for example a prop or formwork system
- a sewer, a septic tank, or storm water drain.

Chapter 6 of the WHS Regulations (i.e. the Construction Work chapter) does not apply to plant unless:

- the plant is:
 - a ship or submarine
 - a pipe or pipeline
 - an underground tank
 - designed or used to provide support, access or containment during work in connection with construction work, for example fall prevention devices, work position systems, formwork, personnel or material hoists where these are used in connection with construction work.
- work on the plant relates to work that is carried out in connection with construction work
- the plant is fixed plant on which outage work or overhaul work that involves or may involve work being carried out by five or more persons conducting businesses or undertakings at any point in time.

¹A vessel is considered to be a 'ship' to which the WHS Regulations would apply if:

- the vessel is registrable as a 'ship' under a state, territory or Commonwealth law
- the construction or assembly of the vessel involves traditional construction methods, for example use of scaffolding or mobile cranes, or
- multiple contractors will be required to carry out the work.

It excludes tinnies, runabouts, inflatable watercraft, jet skis, dinghies and vessels that rely on manual propulsion (e.g. canoes, row boats).

1.4 What is ‘high risk construction work’?

Regulation 291 provides a list of construction work that is considered to be high risk for the purposes of the WHS Regulations. It is construction work for which a safe work method statement (SWMS) is required. Chapter 4 of this Code provides more detail on SWMS.

Examples of high risk construction work are provided in Appendix B.

1.5 What is a ‘construction project’?

Regulation 292

A construction project is a project that involves construction work where the cost of the construction work is \$250,000 or more.

A construction project covers all the activities involved in the construction work up to the point that the construction project is handed over to the person who commissioned it. The handover usually takes place at the practical completion of the project when, for example, a house is considered habitable and the buyer or owner takes possession.

VALUING CONSTRUCTION WORK

The cost of construction work can be determined by the contract price for carrying out the work. The kinds of costs that would be included are:

- project management costs associated with the work
- the costs of fittings and furnishings, including any refitting or refurbishing associated with the work (except where the work involves an enlargement, expansion or intensification of a current use of land)
- any taxes, levies or charges (other than GST) paid or payable in connection with the work by or under any law.

The cost of the construction work would not include:

- the cost of the land on which the development is to be carried out, including the civil engineering, utility and other land development cost involved in a land subdivision.
- the costs associated with marketing or financing the development (including interest on any loans)
- the costs associated with legal work carried out or to be carried out in connection with the development.

PRINCIPAL CONTRACTOR

Under the WHS Regulations, each ‘construction project’ must have a ‘principal contractor’. There can only be one principal contractor for a construction project at any one time. A principal contractor is a person conducting a business or undertaking (PCBU).

The person conducting a business or undertaking that commissions a construction project is the principal contractor, unless the person appoints another person conducting a business or undertaking to be the principal contractor and authorises the person to have management or control of the workplace and discharge the duties of the principal contractor.

A principal contractor can be a sole trader of a business or undertaking, a company or a partnership. In the case of a company, the company has the duties of the principal contractor rather than the individual managers who are employed by the company. In the case of a partnership, each partner is responsible for the duties of the principal contractor.

1.6 Other terms used in this code

Builder: This is a person conducting a business or undertaking (PCBU) that commissions the construction work and is authorised to manage, control and coordinate the construction work at the workplace. For construction projects they are referred to as the 'principal contractor'.

Subcontractor: This is a PCBU that enters into a contract with a builder or principal contractor to undertake specified construction work. They are also 'workers'.

Owner-builder: Generally, a person who builds their own home will have been issued with an owner-builder permit, license or certificate² and will be considered to be a PCBU. Owner-builders have management or control of the workplace and take on the responsibility and liability that would normally fall on the principal contractor. Owner-builders must ensure, so far as is reasonably practicable, the health and safety of any workers they engage such as electricians, plumbers and gasfitters. Building laws may also impose certain requirements.

A person is not considered to be an owner-builder or a PCBU if they:

- are a home buyer, owner or occupier commissioning work on their home, or
- are an individual undertaking maintenance, refurbishment or minor renovations of their own home or helping a friend.

Designer: A designer is a person conducting a business or undertaking that designs a structure that is to be used or could reasonably be expected to be used, as or at, a workplace, including during construction, maintenance, renovation or demolition of the structure.

1.7 Who has health and safety duties relating to construction work?

Everyone involved in construction work has health and safety duties when carrying out the work.

The primary duty under the WHS Act requires a person conducting a business or undertaking to ensure, so far as is reasonably practicable, that workers and other persons are not exposed to health and safety risks arising from the business or undertaking.

² Some jurisdictions do not issue owner builder permits, licenses or certificates.

MULTIPLE DUTIES

The nature of construction work means that there are various businesses or undertakings with duties relating to construction work. It can involve a person conducting a business or undertaking who:

- carries out construction work
- designs the building or structure
- commissions the construction work (except for a home-owner where they are not a PCBU)
- is a principal contractor
- has management or control of a workplace at which construction work is carried out
- carries out high risk construction work.

Other duty holders that have responsibilities under the WHS Act and Regulations are:

- officers (e.g. company directors)
- workers, and
- other persons (e.g. visitors to construction sites).

It is common in the construction industry for a person to fall into more than one duty holder category. For example, a principal contractor will have the duties of a principal contractor as well as other duties of a PCBU. A subcontractor is a PCBU and can also be a worker when working at a construction workplace.

SHARED DUTIES


More than one person can have the same duty. Where two or more people have the same duty, each person must comply with that duty, even if another duty holder has the same duty. This is, however, qualified by the extent to which:

- the person has the capacity to influence and control the matter, or
- would have had that capacity but for an agreement or arrangement purporting to limit or remove that capacity.

This means that a person cannot contract out of their health and safety duties, but can make arrangements with other PCBUs to do the things that will meet the duties on their behalf.

For example a principal contractor and a subcontractor, as PCBUs, will have the same duty to ensure access to first aid facilities at a workplace. It may not be practical or necessary for both PCBUs to provide the first aid facilities, so they may arrange for only one of them to provide the facilities. In doing this and confirming the facilities are in place and accessible to workers, each PCBU has 'ensured access to first aid facilities' and therefore complied with their duty.

Determining which person or persons have the capacity to influence and control the work depends on the circumstances at the time.

 For example at a housing construction site subcontractors have the capacity to directly manage the risks associated with their own work and the activities of any worker they engage to carry out the work. The principal contractor or builder will also be able to influence and control the way work is carried out, and how risks are managed by coordinating and monitoring the work and confirming that risk control measures are implemented by the subcontractor.

Although a principal contractor or builder may not be present on site at all times, they must still ensure the work is being carried out safely. The principal contractor or builder should check the subcontractor's work procedures and any SWMS (if relevant) to ensure risks associated with the work are addressed and then visit the site as necessary to verify the work is being carried out safely.

In all cases, people are expected to take reasonable care for their own safety and the safety of others.

1.8 What is required to manage risks in construction work?

Regulation **297**

Regulation **32-38**

A person conducting a business or undertaking must manage risks associated with the carrying out of construction work.

In order to manage risk under the WHS Regulations, a duty holder must:

- identify reasonably foreseeable hazards that could give rise to the risk
- eliminate the risk, so far as is reasonably practicable
- if it is not reasonably practicable to eliminate the risk, minimise the risk so far as is reasonably practicable by implementing control measures
- maintain the control measure so that it remains effective, and
- review, and if necessary revise, control measures so as to maintain, so far as is reasonably practicable, a work environment that is without risks to health and safety.

Chapter 3 of this Code provides guidance on managing the risks associated with construction work by following a systematic process that involves:

- identifying hazards
- if necessary, assessing the risks associated with these hazards
- implementing control measures
- maintaining and reviewing the effectiveness of control measures.

Guidance on the risk management process is available in the [Code of Practice: How to Manage Work Health and Safety Risks](#).

In addition to the duties covered in this Code, there are other requirements under the WHS Regulations that may apply to construction work, for example:

- Prevention of falls
- Noise
- Hazardous manual tasks
- Confined spaces
- Demolition work
- Electrical safety and electrical work
- Plant and structures
- High risk work (licensing and registrations)

- Hazardous chemicals, asbestos and lead, and
- Resolving WHS issues.

CONSULTING, COOPERATING AND COORDINATING ACTIVITIES WITH OTHER DUTY HOLDERS

Consultation is a legal requirement and an essential part of managing health and safety when carrying out construction work.

A safe workplace is more easily achieved when everyone involved in the work communicates with each other to identify hazards and risks, talks about any health and safety concerns, and works together to find solutions. This includes cooperation between the people who manage or control the work and those who carry out the work or who are affected by the work.

Section 46

A person conducting a business or undertaking must consult, cooperate and coordinate activities with all other persons who have a work health or safety duty in relation to the same matter, so far as is reasonably practicable.

Since various contractors and subcontractors work on the same construction site, their activities are likely to overlap and interact with each other. They each have a duty to protect the health and safety of workers and other persons at the workplace and must therefore consult, cooperate and coordinate activities to ensure each person is made aware of what the others are doing, to identify the hazards and risks and decide who is best placed to take action to control the risks.

Principal contractors for a construction project have specific duties under the WHS Regulations to include arrangements in their WHS management plan that outline how persons conducting a business or undertaking at the workplace will consult, cooperate and coordinate activities between each other.

One of the ways in which PCBUs should do this is by discussing WHS arrangements with other duty holders, including other subcontractors, prior to commencing work (e.g. by visiting the site or by phone, fax or email).

Subcontractors working on the same site should also discuss their activities with each other directly.


Example 1:

As part of work for a builder, a roof tile subcontractor installs a roof perimeter guardrail system to minimise the risk of falls. The builder reaches an agreement with the roof tiler that the guardrail will remain in place until solar panels are installed by another subcontractor. The roof tiler contacts both the builder and the panel installer when the tiling is complete, and the panel installer checks to make sure the guardrail is properly installed before commencing work. The panel installer then lets the builder know when the panels are finished, and arrangements are then made to dismantle the guardrail. The builder also checks the progress of the work regularly and ensures that the relevant fall protection information is included in each subcontractor's SWMS and is properly installed on site.

Example 2:

An electrician needs to isolate the electricity supply so that they can work safely. At the same time, a carpenter requires electricity for powered equipment. If the electrician doesn't communicate with the carpenter about the electricity shut off, and if the carpenter reconnects the supply, this increases the risk of injury to them both. The electrician should speak with both the carpenter and the builder to advise that the electricity supply will be shut off and negotiate the time during which electricity will be unavailable. The carpenter should check with the electrician to make sure it is safe to use the electricity supply.

Example 3:

 A plumber's work on one site is delayed, so he decides to continue work on another job. On the way to the second site, the plumber telephones the builder of the home and leaves a message that the plumber will be attending the site. The builder calls the plumber back to let him know that bricks are being delivered that day. The plumber assures the builder that his workers and vehicle will be away from the site access point and delivery area. The builder also reminds the plumber to lock the gates when he finishes work.

CONSULTING WORKERS

Section 47

The WHS Act requires the PCBU to consult, so far as is reasonably practicable, with workers who carry out work for them who are (or are likely to be) directly affected by a work health and safety matter.

Section 48

If the workers are represented by a health and safety representative, the consultation must involve that representative.

The broad definition of a 'worker' under the WHS Act means that a PCBU must consult with their employees and anyone else who carries out work for their business or undertaking, including contractors, apprentices, subcontractors and their employees. The builder and subcontractors, as PCBUs, share this duty.

'Consultation' includes


- sharing information with workers
- giving them a reasonable opportunity to express their views and raise issues
- giving them a reasonable opportunity to contribute to the decision-making process
- considering the views of the workers
- advising workers of the outcome of the consultation.

Some of the matters that should be discussed with workers include

- identifying risks to work safety at the workplace
- measures to be taken to manage risks, such as permit to work systems, SWMS, WHS management plans
- adequacy of facilities
- proposing changes that may directly affect work safety
- policies and procedures, such as site safety rules and incident notification.

In many cases, decisions about construction work and construction projects are made prior to engaging workers. In that case, it may not be possible to fully consult with workers in these early stages. However, it is important to consult with them as the construction work progresses.

At its most basic level, consultation should involve talking to each other about work health and safety. Consultation can occur by holding discussions with workers face-to-face or by phone, fax, email or other networks. Where workers are culturally or linguistically diverse or are inexperienced then face-to-face consultation may be more effective.

 For example, the builder or principal contractor can communicate with subcontractors via face-to-face meetings, email, phone or fax, and request that information is passed on to the subcontractor's workers. It is important that the builder follows up with the workers and the subcontractors to check the information has been passed on, and that any feedback is provided to the builder. This may take place when the builder or his representative is on site. Other options include conducting toolbox talks; sending out information on-line and requesting feedback; or using telephone hook-ups.

Consultation may also occur through the builder talking to subcontractors and asking them to share information with the subcontractor's workers and pass any feedback back to the builder.

Toolbox talks or pre-start meetings can be used by both the builder and subcontractors to provide information to and receive feedback from workers as well as assist in raising the awareness of how construction work can be carried out in a safe and healthy manner.

At a toolbox talk, the PCBU can provide updates on any upcoming issues which may have an effect on health and safety, for example:

- new high risk construction activities
- changes in access and site security
- changes which may affect members of the public.

When using toolbox talks it is considered best practice to:

- keep a record of the topic covered, attendees and any feedback received;
- organise a program of toolbox talks to give workers sufficient opportunity to provide input into how risks should be controlled; and
- monitor the effectiveness of toolbox talks through safety outcomes (for example, control measures implemented and near misses).

Further guidance on consultation is available in the [*Code of Practice: Work Health and Safety Consultation, Cooperation and Coordination*](#).

2. SPECIFIC DUTIES RELATING TO CONSTRUCTION WORK

2.1 Persons conducting a business or undertaking

DESIGNERS

PCBUs who design a structure that is to be used, or could reasonably be expected to be used as, or at, a workplace have specific WHS duties.

There may be multiple designers who are involved in the design of a structure and have the same duties, for example draftspersons, building designers, architects and engineers. A builder could be a designer if they design a structure themselves or are involved in altering the design for a building, even after construction work has commenced.

In relation to construction work, a designer of a structure or any part of a structure that is to be constructed must give a written report to the PCBU who commissioned the design. The report must specify, so far as the designer is reasonably aware, the hazards relating to the design that create a risks to the health and safety of persons who will carry out construction work on the structure and that are specific to the particular design.

In addition the designer can provide information to anyone who is issued with the design on how they have designed the structure to be without risk to health and safety throughout its lifecycle when it is used as a workplace if they request it. This includes during construction, maintenance, use and demolition. This information may also be included in the designers' safety report.

Further information is provided in Appendix C. For detailed guidance on designers' duties refer to the *Code of Practice: Safe Design of Structures*.

PERSON THAT COMMISSIONS CONSTRUCTION WORK

The WHS Regulations require a person conducting a business or undertaking that commissions construction work to:

- consult, so far as is reasonably practicable, with the designer of the whole or any part of the structure about how to ensure that risks to health and safety arising from the design during the construction work are eliminated, so far as is reasonably practicable, or if it is not reasonably practicable to eliminate the risks, minimised so far as is reasonably practicable. Such consultation must include giving the designer any information that the person has in relation to the hazards and risks at the workplace where the construction work is to be carried out
- take all reasonable steps to obtain a copy of the designer's safety report if they did not themselves commission the design of the construction project, and
- give the principal contractor any information they have in relation to hazards and risks at or in the vicinity of the workplace where the construction project is to be carried out.

While there may be persons who represent the person that commissions the construction work or a construction project and coordinate the commissioning (e.g. project managers, construction managers, architects or engineers), the person that actually commissions the work will remain the duty holder.

Examples of persons that commission construction work include:

- a builder engaging a designer to design a large spanning roof truss system for a home
- property developers, clients, owner-builders
- a subcontractor engaging an engineer to design precast and tilt-up panels for a home.

2. SPECIFIC DUTIES RELATING TO CONSTRUCTION WORK

PRINCIPAL CONTRACTOR³

Under the WHS Regulations a principal contractor for a construction project must:

- Ensure signs are installed that:
 - show the principal contractor's name and telephone contact numbers (including an out of hours telephone number)
 - show the location of the site office for the project, if there is one, and
 - are clearly visible from outside the workplace, or the work area of the workplace, where the construction project is being undertaken.
- Prepare and review the WHS management plan for the workplace, ensuring, so far as is reasonably practicable, that each person who is to carry out the construction work is made aware of the plan, their right to inspect it and ensuring that a copy of the WHS management plan is accessible for the appropriate amount of time.
- Obtain the SWMS before high risk construction work on the construction project commences.
- Make arrangements for ensuring compliance with the requirements for general workplace management in Part 3.2 of the WHS Regulations.
- Manage the specific risks to health and safety associated with:
 - the storage, movement and disposal of construction materials and waste at the workplace
 - the storage of plant that is not in use
 - traffic in the vicinity of the workplace that may be affected by construction work carried out in connection with the construction, and
 - essential services at the workplace.

More detail on the WHS management plan is in Chapter 5 of this Code. Information on the role of the principal contractor in general workplace management arrangements is in Chapter 7 of this Code.

PERSONS WHO HAVE MANAGEMENT OR CONTROL OF A CONSTRUCTION WORKPLACE

A person with management or control of a workplace at which construction work is carried out must:

- ensure, so far as is reasonably practicable, that the workplace is secured from unauthorised access, having regard to all relevant matters, including risks to health and safety arising from unauthorised access to the workplace, the likelihood of unauthorised access occurring and, to the extent to which it cannot be prevented, how to isolate hazards within the workplace
- obtain essential services information when excavation work is to be carried out and provide it to any person engaged to carry out the excavation work.


³ The term "principal contractor" is used here to describe the additional specific duties that apply to principal contractors of construction projects (i.e. construction work valued at \$250,000 or more). In addition to the above, other duties of the WHS laws may apply to builders and principal contractors regardless of the value of the work.

2. SPECIFIC DUTIES RELATING TO CONSTRUCTION WORK

Depending on the circumstances, both the builder and subcontractors may have these duties in relation to the part of the workplace over which they have management or control.

For example, the person with management or control of the workplace must take all reasonable steps to ensure underground essential services information is obtained prior to directing or allowing excavation work to commence. Both the builder and excavation subcontractor must consult with each other to decide who will obtain the required information before the work starts. If the builder obtains the information, the information must be provided to the excavation subcontractor and the excavation subcontractor must provide it to the workers engaged to carry out the work. The excavation contractor can also ask for this information to ensure they carry out their work safely.

Both the builder and subcontractors would also have a duty to ensure, so far as is reasonably practicable, that subcontractors' work areas are secured against unauthorised access prior to leaving the site if hazards are present. For example, both duty holders must ensure that the risk of anyone falling into open excavations after hours is eliminated or minimised so far as is reasonably practicable. The duty holders should consult to reach an agreement as to who should actually secure the site. The excavation subcontractor might undertake to barricade the excavation area in an agreed way and the builder might undertake to fence off the construction site to prevent unauthorised persons entering the site.

 Bricklaying subcontractors working on site by themselves should secure their scaffolds, for example by removing access ladders prior to leaving the site. As the builder also has a duty to ensure health and safety in relation to scaffolds at the workplace, they should consult, cooperate and coordinate with the bricklaying subcontractor to determine how any risks will be managed (i.e. the way in which the scaffold will be secured). This might be as simple as having a discussion and agreeing that the subcontractor will secure the scaffold in a way that is determined to be safe.

PERSONS CARRYING OUT HIGH RISK CONSTRUCTION WORK

The WHS Regulations place obligations on persons conducting a business or undertaking that includes the carrying out of high risk construction work to:

- ensure that a SWMS is prepared before the proposed work commences;
- make arrangements to ensure that the high risk construction work is carried out in accordance with the SWMS;
- ensure that a copy of the SWMS is given to the principal contractor before the work commences
- ensure that the SWMS is reviewed and revised if necessary ;
- keep a copy of the SWMS until the high risk construction work is completed, or if a notifiable incident occurs in connection with the high risk construction work, for at least two years after the incident occurs, and
- ensure that for the period the SWMS must be kept it is readily accessible to any worker engaged to carry out the high risk construction work and for inspection under the Act (e.g. by an inspector).

2. SPECIFIC DUTIES RELATING TO CONSTRUCTION WORK

OTHER DUTIES

Apart from the specific duties outlined above, a person conducting a business or undertaking must:

- manage risks to health and safety when excavation work is being carried out and comply with the requirements of the WHS Regulations regarding the excavation of trenches
- comply with the requirements of the WHS Regulations in relation to general construction induction training.

2.2 Officers

Officers, for example company directors, have a duty under the WHS Act to exercise due diligence to ensure that the person conducting the business or undertaking complies with its duties and obligations under the WHS laws. Exercising 'due diligence' includes taking reasonable steps to:

- have up-to-date knowledge of work health and safety matters
- gain an understanding of the organisation's operations, including its hazards and risks
- ensure that the PCBU has available for use, and uses, appropriate resources and processes to eliminate or minimise risks to health and safety that arise from the construction work
- ensure that the PCBU has appropriate processes for receiving, considering and responding to information about hazards, risks and incidents
- ensure that the PCBU has, and implements, processes for complying with its work health and safety duties, and
- verify that these resources and processes are provided and used.

2.3 Workers

A worker is any person who carries out work in any capacity for a business or undertaking. Workers include direct employees, subcontractors and employees of subcontractors, employees of labour hire companies and apprentices. Workers must always:

- take reasonable care for their own health and safety
- take reasonable care that their acts or omissions do not adversely affect the health and safety of other persons, and
- comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace.

In relation to construction work, workers must:

- keep their general construction induction training card available for inspection, or
- if awaiting a decision on their application for a general construction induction training card—keep their general induction training certification available for inspection.

Subcontractors must comply with both the duties of workers and of PCBUs. Self-employed PCBUs are also workers for their own business or undertaking.

2.4 Other persons

Other persons at the workplace, for example inspectors and visitors to construction sites (including home owners and potential buyers), have a duty to:

- take reasonable care for their own health and safety
- take reasonable care that their acts or omissions do not adversely affect the health and safety of other persons, and
- comply, so far as is reasonably practicable, with any reasonable instruction given to them by the PCBU.

3. MANAGING RISKS WITH CONSTRUCTION WORK

3.1 Identifying hazards

The first step in the risk management process is to identify the hazards associated with construction work. Examples of hazards include:

- the construction workplace itself, including its location, layout, condition and accessibility
- the use of ladders, incorrectly erected equipment, unguarded holes, penetrations and voids, unguarded excavations, trenches, shafts and lift wells, unstable structures such as incomplete scaffolding or mobile platforms, fragile and brittle surfaces such as cement sheet roofs, fibreglass roofs, skylights and unprotected formwork decks
- falling objects, for example tools, debris and equipment
- collapse of trenches
- structural collapse
- the handling, use, storage, and transport or disposal of hazardous chemicals
- the presence of asbestos and asbestos-containing materials
- welding fumes, gases and arcs
- hazardous manual tasks
- the interface with other works or trade activities
- the physical working environment, for example the potential for electric shock, immersion or engulfment, fire or explosion, slips, trips and falls, people being struck by moving plant, exposure to noise, heat, cold, vibration, radiation (including solar UV radiation), static electricity or a contaminated atmosphere, and the presence of a confined space.

3.2 Assessing the risks

Assessing the risk includes considering:

- the severity of any injury or illness that could occur, for example is it a small isolated hazard that could result in a very minor injury or is it a significant hazard that could have wide ranging and severe affects, and
- the likelihood or chance that someone will suffer an illness or injury, for example consider the number of people exposed to the hazard.

Under the WHS Regulations, a risk assessment is not mandatory for construction work however it is required for specific situations, for example when working with asbestos. In many circumstances a risk assessment will assist in determining the control measures that should be implemented.

It will help to:

- identify which workers are at risk of exposure
- determine what sources and processes are causing that risk
- identify if and what kind of control measures should be implemented
- check the effectiveness of existing control measures.

A risk assessment is not necessary if the risk and how to control it is already known.

3.3 Controlling the risks

The WHS Regulation may require specific control measures to be implemented in certain circumstances. For example, the risk of collapse of trenches 1.5 metres or more in depth must be controlled with shoring, benching or battering. Where specific controls are prescribed, these must be implemented before work proceeds.

THE HIERARCHY OF CONTROL MEASURES

Some control measures are more effective than others. Control measures can be ranked from the highest level of protection and reliability to the lowest. This ranking is known as the *hierarchy of control*. The higher order controls must always be considered first.

ELIMINATING THE RISK

This means removing the hazard or hazardous work practice from the workplace. This is the most effective control measure and must always be considered before anything else. For example, eliminate the risk of a fall from a height by doing the work at ground level.

If elimination of the risk is not reasonably practicable, you must consider using substitution, isolation or engineering controls, or a combination of these control measures, to minimise the risk.

MINIMISING THE RISK BY USING ONE OF THE FOLLOWING CONTROL MEASURES

Substitution

Minimise the risk by substituting or replacing a hazard or hazardous work practice with a less hazardous one. For example:

- Substituting a two-part epoxy substance with a water-based acrylic waterproofing system will minimise exposure to a hazardous substance;
- Substituting an ordinary brick-cutting saw blade with a noise-reduced saw blade will minimise exposure to hazardous noise; and
- Using a water-based paint rather than a solvent-based paint.

Isolation

Minimise the risk by isolating or separating the hazard or hazardous work practice from people. For example:

- Isolating a mobile plant work zone from workers and/or the public with physical barriers to minimise the risk of contact occurring between a person and the mobile plant.

Engineering Controls

Engineering controls are physical control measures to minimise risk. For example:

- Carrying tools from one level to another with a material hoist or craning material will minimise the risk of workers developing a musculoskeletal disorder.
- Benching, battering or shoring the sides of the excavation will minimise the risk of a person being trapped and prevent the excavation from collapsing.

3. MANAGING RISKS WITH CONSTRUCTION WORK

- Enclosing an open cab excavator, for example using a falling object protective structure (FOPS) or a roll-over protective structure (ROPS), will minimise the risk of an operator being struck by a falling object or being crushed if the excavator rolls over.
- Using safety switches or residual current devices (RCD) to minimise the risk of electric shock.

MINIMISING THE RISK USING ADMINISTRATIVE CONTROLS

Administrative controls should only be considered when other higher order control measures are not practicable, or to increase protection from the hazard. These are work methods or procedures designed to minimise the exposure to a hazard, such as ensuring there is no unauthorised entry of a person to a work area. For example:

- Using a 'keep out' sign and a person to secure an exclusion zone when dismantling scaffolding to minimise the risk of people entering the work area and being struck by a falling object.
- Scheduling tasks so they are completed outside peak UV radiation times to reduce exposure to UV radiation.
- Implementing a training program to show workers how to use new equipment.
- Implementing a job rotation system.
- Using permit systems to prevent unauthorised persons from entering a confined space.

MINIMISING THE RISK USING PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE is the lowest order control measure in the hierarchy of controls. PPE should also only be considered when other higher order control measures are not reasonably practicable or to increase protection from the hazard.


PPE relies on the proper fit and use of the PPE and does nothing to change the hazard itself. It therefore requires thorough training and effective supervision to ensure compliance and effectiveness. Examples of PPE include:

- Wide brimmed hats that shade face, head, neck and ears (where hard hats are required then it should be a hard hat brim or neck flap), sunglasses and broad spectrum SPF 30 or higher sunscreen to minimise the exposure to ultraviolet (UV) radiation.
- High visibility reflective clothing or vests.
- Ear plugs or ear muffs to minimise the risk of exposure to excessive noise when operating noisy machinery and power tools.

COMBINATION OF CONTROL MEASURES

In many cases a combination of control measures may be implemented to control a risk. When selecting and implementing a combination of control measures it is important to consider whether any new risks might be introduced as a result and, if so, whether the combination of the control measures should be reviewed.

Example 1

 To manage the risk of a fall when a worker is removing old roofing on a building under demolition, control measures may include the following:

- determine whether the roof can be demolished from the ground (elimination)
- if this is not reasonably practicable, minimise the risk of a fall by working off scissor lifts and/or elevating work platforms (engineering control)
- provide training on site rules and SWMS about work at heights (administrative control).

Example 2

To manage the risk of persons working in the same area from being struck by mobile plant, control measures may include:

- using traffic lights instead of a traffic controller to control traffic at road works (elimination)
- replacing an item of mobile plant which has a restricted field of vision to one that has a clear field of vision (substitution)
- using zero tail swing excavators rather than conventional tail swing excavators (substitution)
- segregating the work processes through distance and time (isolation)
- installing collision avoidance technology (in accordance with manufacturer's instructions) when the vehicle is reversing (engineering)
- developing and implementing a traffic management plan for any traffic control being carried out (administrative)
- requiring all workers to wear high visibility reflective clothing or vests (PPE).

Regulation 37

Implemented control measures must be maintained to ensure they are fit for purpose, suitable for the nature and duration of the work, and are installed, set up and used correctly.

3.4 Reviewing control measures

The control measures that are put in place to protect health and safety should be regularly reviewed to make sure they are effective. A review should occur on a regular basis and can be done by using the same methods as the initial hazard identification process. Common methods include workplace inspection, consultation, testing and analysing records and data. Reviewing the control measures also involves considering whether a higher order control measure is now reasonably practicable.

Regulation 38

You must review your control measures and, if necessary, revise them:

- when the control measure is not effective in controlling the risk
- before a change at the workplace that is likely to give rise to a new or different health and safety risk that the control measure may not effectively control
- if a new relevant hazard or risk is identified
- if the results of consultation indicate that a review is necessary, or
- if a health and safety representative requests a review.

When reviewing control measures, the SWMS must also be reviewed and revised where necessary.

If problems are found, go back through the risk management steps, review your information and make further decisions about control measures.

A change at the workplace includes:

- a change to the workplace itself or any aspect of the work environment
- a change to a system of work, a process or a procedure.

Where a SWMS has been developed for high risk construction work or a WHS management plan has been developed for a construction project, these documents must also be reviewed and revised (where necessary) when control measures have been reviewed.

4. SAFE WORK METHOD STATEMENTS (SWMS)

4.1 What is a SWMS?

A SWMS is required for the 18 high risk construction work activities defined in the WHS Regulations. Examples of high risk construction work are provided in Appendix B.

A SWMS is a written document that sets out the high risk construction work activities to be carried out at a workplace, the hazards and risks arising from these activities and the measures to be put in place to control the risks. Its primary purpose is to help supervisors and workers implement and monitor the control measures established at the workplace to ensure high risk construction work is carried out safely.

For all other construction activities a SWMS is not required. However, a person conducting a business or undertaking must manage risks to health and safety by eliminating or minimising risks so far as is reasonably practicable.

WHO IS RESPONSIBLE FOR PREPARING A SWMS?

A person conducting a business or undertaking must prepare a SWMS—or ensure a SWMS has been prepared—before high risk construction work starts.

The person responsible for carrying out the high risk construction work is best placed to prepare the SWMS in consultation with workers who will be directly engaged in the high risk construction work. This person understands the work being carried out, is responsible for providing training, instruction and supervision to the workers undertaking the work and can ensure the SWMS is implemented, monitored and reviewed correctly. If more than one person has the duty to ensure a SWMS is or has been prepared, they must consult with each other to co-ordinate who will be responsible for actually preparing it.

There may be situations where there are different types of high risk construction work occurring at the same time at the same workplace, for example if work is being carried out:

- where there is a risk of a person falling more than 2 metres, and
- near a trench with an excavated depth greater than 1.5 metres.

In these cases one SWMS may be prepared to cover all high risk construction work activities being carried out at the workplace. Alternatively, a separate SWMS can be prepared for each type of high risk construction work. If separate SWMS are prepared, consider how the different work activities may impact on each other and whether this may lead to inconsistencies between control measures.

Example

A subcontractor, such as a roof plumber, is engaged to install roof sheeting on a structure that is higher than 2 metres. A second subcontractor is engaged to use a crane to lift the roof sheeting so the first subcontractor can install it. Both subcontractors are required to prepare a SWMS for the high risk construction work being carried out—that is for the work where there is a risk of falling more than 2 metres and for the work involving powered mobile plant.

In this case, the subcontractors may decide to prepare one SWMS to cover both types of high risk construction work or they may decide to prepare two separate SWMS. If separate SWMS are being prepared, the subcontractors must consult, co-operate and co-ordinate to ensure the work will be carried out safely. The builder or principal contractor must be provided with the SWMS and monitor their activities.

4.2 Preparing a SWMS

SWMS CONTENT

Regulation 299(2)

A safe work method statement must:

- identify the work that is high risk construction work
- specify hazards relating to the high risk construction work and risks to health and safety associated with those hazards
- describe the measures to be implemented to control the risks, and
- describe how the control measures are to be implemented, monitored and reviewed.

A template SWMS is at Appendix D. This template outlines the information which must be included in a SWMS and other information which should be included, for example the details of the person responsible for ensuring compliance with the SWMS.

The content of a SWMS should provide clear direction on the control measures to be implemented. There should be no statements that require a decision to be made by supervisors or workers. For example, the statement 'use appropriate PPE' does not detail the control measures. The control measures should be clearly specified.

An example of the information to be included in a SWMS is at Appendix E.

WORKPLACE SPECIFIC FOCUS

A SWMS must take into account the circumstances at the workplace that may affect the way in which the high risk construction work is carried out—that is the site where the high risk construction work is being carried out, the work environment and the workers carrying out the work.

A generic SWMS may be prepared and used for high risk construction work activities that are carried out on a regular basis. However, a generic SWMS must be reviewed to take into account the hazards and risks for the specific workplace and be revised as necessary.

CONSULTATION

Workers and their health and safety representatives (if any) should be consulted in the preparation of the SWMS. If there are no workers engaged at the planning stage, consultation should occur with workers when the SWMS is first made available to workers, for example during workplace-specific training or a toolbox talk. Workers should also be consulted when a SWMS is reviewed.

A SWMS may include details of workers who have been consulted on the content of the SWMS, the date the consultation occurred and the signature of each worker acknowledging their participation in developing the SWMS.

CONSTRUCTION PROJECTS

If high risk construction work is being carried out in connection with a construction project, a SWMS must take into account the WHS management plan prepared by the principal contractor.

A person conducting a business or undertaking must provide the principal contractor with a copy of the SWMS before high risk construction work starts.

4. SAFE WORK METHOD STATEMENTS (SWMS)

The principal contractor also has a duty to take all reasonable steps to obtain the SWMS before high risk construction work starts, for example by:

- asking contractors to provide a copy of the SWMS before they start work and to have the SWMS available on site at all times, and
- making it clear in the WHS management plan that the SWMS must be provided to the principal contractor before work starts.

For a construction project the SWMS may also include:

- the name of the principal contractor
- the address where the high risk construction work will be carried out
- the date the SWMS was prepared and the date it was provided to the principal contractor
- the review date (if any).

4.3 Implementing a SWMS

COMPLYING WITH A SWMS

Regulation 300

A person conducting a business or undertaking that includes the carrying out of high risk construction work must put in place arrangements for ensuring that high risk construction work is carried out in accordance with the SWMS for the work.

All persons conducting a business or undertaking who are involved in high risk construction work must develop and implement arrangements to ensure the work is carried out in accordance with the SWMS. The person conducting a business or undertaking who directly engages the workers that will be performing the high risk construction work is best placed to implement the SWMS and to ensure compliance.

Arrangements may include a system of routine or random workplace inspections, for example observing workers and supervisors to see if the control measures outlined in the SWMS are being implemented.

The responsibility to implement, monitor and review the control measures may be allocated to a person supervising the work such as a work crew's leading hand or supervisor. However, the duties of the person conducting a business or undertaking are not transferrable. The person conducting a business or undertaking must be satisfied the control measures are implemented, monitored and reviewed to ensure the health and safety of the workers.

A builder must have a system in place to monitor compliance with the SWMS. This system may include checking that the control measures detailed in the SWMS are being used when the builder or the builder's representative attends the site.

If the work is not being carried out in accordance with the SWMS then the work must stop immediately or as soon as it is safe to do so. Work must not resume until the work can be carried out in accordance with the SWMS. If work is stopped, the work and the SWMS should be reviewed to identify non-compliance and ensure that the method in the SWMS is the most practical and safest way of doing the task. If another method is identified as being a reasonably practicable option, the SWMS should be revised to take this change into account before re-commencing work.

4. SAFE WORK METHOD STATEMENTS (SWMS)

PROVIDING INFORMATION AND INSTRUCTION

All workers who will be involved in high risk construction work must be provided with information and instruction so they:

- understand the hazards and risks arising from the work
- understand and implement the risk controls in a SWMS
- know what to do if the work is not being conducted in accordance with the SWMS.

This information and instruction may be provided during general construction induction training, workplace-specific training or during a toolbox talk by the principal contractor, contractor or subcontractor.

KEEPING THE SWMS AND MAKING IT AVAILABLE

The SWMS must be kept and made available to any person engaged to carry out the high risk construction work and for inspection until the high risk construction work to which it relates is completed or for at least 2 years following the occurrence of a notifiable incident.

Where a SWMS is revised, all versions should be kept.

The SWMS should be kept at the workplace where the high risk construction work will be carried out. If this is not possible, then a SWMS should be kept at a location where it can be delivered to the workplace quickly. A SWMS can also be kept electronically.

If a SWMS is revised, all versions should be kept.

4.4 Reviewing a SWMS

Section 3.4 of this Code provides information on when control measures must be reviewed. If the control measures detailed in a SWMS are revised the SWMS must be reviewed and revised as necessary.

The review process should be carried out in consultation with workers including contractors and subcontractors who may be affected by the operation of the SWMS and their health and safety representatives (if any).

When a SWMS has been revised the person conducting a business or undertaking should ensure:

- people involved with the high risk construction work are advised that a revision has been made and how they can access the revised SWMS. For a construction project, the principal contractor must be given a copy of the revised SWMS
- people who will need to change a work procedure or system as a result of the review are advised of the changes in a way that will enable them to implement their duties consistently with the revised SWMS, and
- workers that will be involved in the high risk construction work are provided with the relevant information and instruction that will assist them to understand and implement the revised SWMS.

5. WHS MANAGEMENT PLANS FOR CONSTRUCTION PROJECTS

Regulation 309

All construction projects (i.e. construction work costing \$250,000 or more) must have a written WHS management plan prepared by the principal contractor before work on the construction project commences.

5.1 What is a WHS management plan?

A WHS management plan is a written plan that sets out the arrangements for managing some site health and safety matters. The intention of a WHS management plan is to ensure the required processes are in place to manage the risks associated with a complex construction project, as there are usually many contractors and subcontractors involved and circumstances can change quickly from day to day.

The WHS management plan must be in writing and must be prepared by the principal contractor before a project commences. It should be easily understood by workers (including contractors and subcontractors). It may not be necessary to communicate the entire WHS management plan to all workers; however, they must be made aware of the parts that are applicable to the work they are carrying out.

5.2 What must the WHS management plan contain?

The WHS Management Plan must contain:

- names of persons at the workplace whose positions or roles involve specific health and safety responsibilities, for example site supervisors, project managers, first aid officers
- arrangements for consultation, cooperation and coordination
- arrangements for managing incidents
- site-specific health and safety rules and how people will be informed of the rules
- arrangements to collect and assess, monitor and review SWMS.

It may also include information on:

- the provision and maintenance of a hazardous chemicals register, safety data sheets and hazardous chemicals storage
- the safe use and storage of plant
- the development of a construction project traffic management plan
- obtaining and providing essential services information
- workplace security and public safety
- ensuring workers have appropriate licences and training to undertake the construction work.

5.3 How to prepare a WHS management plan

While a WHS management plan is required for every construction project, a principal contractor may prepare a generic WHS management plan that applies to several construction projects, if the arrangements to manage work health and safety are the same for each construction project. However the principal contractor must review and revise the plan to ensure it addresses the risks of the actual workplace.

5. WHS MANAGEMENT PLANS FOR CONSTRUCTION PROJECTS

Appendix *F* provides further advice on preparing WHS management plans.

Appendix *G* provides a template for a WHS management plan.

Appendix *H* provides an example of a completed WHS management plan.

5.4 Informing people about the WHS management plan

Regulation 310

The principal contractor must ensure, so far as is reasonably practicable, that all persons who are to carry out construction work on the construction project are made aware of the content of the WHS management plan in respect to their work and their right to inspect the plan.

The principal contractor may do this by:

- giving subcontractors a copy of the plan with a requirement to make their workers aware of the contents of the plan that are applicable to their work, prior to commencing work on site, and checking to make sure this is done
- displaying the plan on site on a sign or a sticker
- giving each worker a copy of the plan directly.

5.5 Reviewing and revising a WHS management plan

Regulation 311

The principal contractor must review and, as necessary, revise the WHS management plan to ensure it remains up-to-date and relevant for the construction project.

Situations where a WHS management plan may be reviewed include where there are significant changes to site conditions that result in changes to the contents such as site safety rules, or persons with responsibility for health and safety.

Following the revision of the WHS management plan, if a process has changed, the principal contractor must ensure, so far as is reasonably practicable, that each person carrying out construction work in connection with the construction project is made aware of the revisions to the WHS management plan. This may be achieved in the same manner as detailed in section 5.4.

5.6 Keeping the WHS management plan

The WHS management plan (including any revisions to it) must be kept and made available to any person engaged to carry out the construction work, and for inspection until the construction project is completed and for at least 2 years after a notifiable incident occurs.

6. INFORMATION, TRAINING, INSTRUCTION AND SUPERVISION

All PCBUs, including builders, subcontractors and self-employed persons (e.g. sole traders) must provide relevant information, training, instruction and supervision to protect all persons from risks to their health and safety arising from construction work carried out.

Regulation 39

A person conducting a business or undertaking must ensure that information, training and instruction provided to a worker is suitable and adequate, having regard to:

- the nature of the work carried out by the worker
- the nature of the risks associated with the work at the time of the information, training and instruction, and
- the control measures implemented.

The training provided must be readily understandable by any person to whom it is provided.

A range of activities can assist in ensuring people have the necessary knowledge and skills to complete the work safely, including general construction induction training and other training that may be specific to the workplace or the task the person is performing.

Information that might be provided includes workplace health and safety arrangements and procedures, such as for emergency evacuations. Information can be provided in various forms, including written formats or verbally, for example during workplace-specific training, pre-start meetings or toolbox talks.

Information and instruction are often provided at the same time. In addition, supervisors will provide specific workplace instructions during the work, including for health and safety. Supervisors should be aware of and provide the level of supervision necessary to ensure the health and safety of workers, including checking workers' competency to undertake the work.

6.1 General construction induction training

Regulation 316–317

If a worker has either not successfully completed general construction induction training, or has successfully completed general construction induction training more than 2 years previously but has not carried out construction work in the preceding 2 years, a person conducting a business or undertaking must:

- not direct or allow the worker to carry out construction work, and
- ensure that general construction induction training is provided to a worker engaged by the person who is carrying out construction work.

General construction induction training provides basic knowledge of construction work, the work health and safety laws that apply, common hazards likely to be encountered in construction work, and how the associated risks can be controlled.

Any person who is to carry out construction work must successfully complete general construction induction training, for example project managers and engineers, foreman, supervisors, surveyors, labourers and trades persons.

6. INFORMATION, TRAINING, INSTRUCTION AND SUPERVISION

General construction induction training must be delivered in Australia by a Registered Training Organisation (RTO) and cover the content set out in the specified VET course for general construction induction training. The training should include:

- the roles, responsibilities and rights of duty holders
- health and safety consultation and reporting processes
- the principles of risk management
- common construction hazards and control measures
- safety information and documentation (e.g. WHS management plans and SWMS).

GENERAL CONSTRUCTION INDUCTION TRAINING CARDS

Regulation 317

A person conducting a business or undertaking must ensure workers have successfully completed general construction induction training before starting construction work. Each construction worker must hold:

- a general construction induction training card, or
- a general construction induction training certification that has been issued within the preceding 60 days if the worker has applied for but not yet been issued with a general construction induction training card.

Once a person has successfully completed general construction induction training they may apply to the regulator for a general construction induction training card.

If a worker has applied for a general construction induction training card and has not been notified of the decision on the application within 60 days of submitting the application, the worker is taken to hold a general construction training card until a decision is made by the regulator. If the worker receives a cancellation notice, they must return the card as requested in the notice.

Where a worker holds a card that is issued by a regulator in a different jurisdiction to where the work is being carried out, then the card is recognised as being valid as long as it is used in accordance with the terms and conditions under which it was granted. For example, this does not apply if the card has been suspended or cancelled.

Workers must keep their card available for inspection by an inspector. They will also need to provide their card to the person conducting a business or undertaking that engages them so they can be sure the worker has successfully completed the training.

6.2 Workplace specific induction training

Workplace specific induction training aims to provide information about work health and safety issues and safe work practices that are specific to the construction workplace. It should be conducted by a person conducting a business or undertaking that has management or control at the workplace or by the principal contractor for the construction project.

This training need not include common information already provided to workers, such as that contained in the SWMS or common matters covered in general construction induction training.

6. INFORMATION, TRAINING, INSTRUCTION AND SUPERVISION


Workplace specific induction training may cover the following:

- hazards and control measures relevant to the site
- location of underground services
- site specific safety documents, policies and plans (e.g. traffic management plans, the WHS management plan)
- supervisory, consultation and reporting arrangements
- site safety rules
- workplace facilities, including their location, use and maintenance
- first aid provisions and emergency procedures, including after-hours emergency contacts
- health monitoring requirements and procedures
- access, egress and security
- how safety issues are resolved.

All workers should attend workplace specific induction training so they can become aware of procedures, management and reporting arrangements, as well as other issues that are relevant to a particular construction workplace. Other persons who visit the site may also require some workplace specific induction training.

Workplace specific induction training can be delivered in a variety of ways, including:

- toolbox talks
- pre-start meetings
- on-the-job instructions
- one-off sessions or events called for a specific purpose.

 In housing construction work, PCBUs must provide relevant workplace specific training. Subcontractors can provide this training to the workers they employ or engage and do this on behalf of the builder or principal contractor following appropriate consultation. The builder or principal contractor should discuss with subcontractors the site conditions and specific work health and safety issues to be used for this training and then verify that the training has been provided.

For example, before starting excavation work the builder obtained current underground essential services information for the site. This was provided to all subcontractors who will carry out excavation work, such as foundations, plumbing, electrical, landscaping and fencing subcontractors. When on site, the builder checks that the subcontractors and their workers are aware of and understand the information and control measures. Any deficiencies found are addressed prior to any excavation work commencing.

6.3 Other training

Other training may also be necessary to ensure that the worker has the relevant information and instruction when undertaking a particular construction activity. For example, task specific training on how to use fall arrest equipment may be provided to a worker required to work at height.

Task specific training should be developed for the actual task carried out and be regularly reviewed and updated whenever there are changes to the task, processes, systems of work, plant and substances that may affect health and safety.

6.4 Supervision

Supervision is particularly important where workers are unfamiliar with the site or the nature of the work.

Workers in a supervisory role (e.g. leading hand or foreman) should be trained and authorised to ensure the work is carried out in accordance with relevant policies, procedures and the SWMS. In some cases the most experienced worker on the site may take on the role of supervisor.

7. GENERAL WORKPLACE MANAGEMENT ARRANGEMENTS

The principal contractor must put in place arrangements for ensuring compliance with the following duties:

- providing a safe working environment
- providing and maintaining adequate and accessible facilities
- providing first aid
- preparing, maintaining and implementing emergency plans
- providing workers with PPE, if PPE is to be used to minimise a risk to health and safety
- managing risks associated with airborne contaminants
- managing risks associated with hazardous atmospheres including ignition sources
- storage of flammable and combustible substances
- managing risks associated with falls, and
- managing risks associated with falling objects.

Any arrangements the principal contractor provides do not absolve other PCBUs from complying with these requirements. If, for example, a principal contractor provides facilities for the workplace, other PCBUs do not also have to provide facilities but need to satisfy themselves that the facilities provided by the principal contractor are adequate to enable the PCBUs to meet their responsibilities.

The principal contractors may put in place arrangements for ensuring compliance with the above requirements through contractual arrangements, but they cannot rely only on these arrangements to ensure compliance. The principal contractor may also coordinate with other PCBUs, such as subcontractors, and check compliance whenever the principal contractor attends the construction site. Alternatively, the principal contractor may directly provide the relevant facilities and/or procedures.

Principal contractors also have duties to manage the following specific risks:

- the storage, movement and disposal of construction materials and waste
- the storage of plant that is not in use
- traffic in the vicinity of the workplace that may be affected
- essential services.

Where required, the risk management process outlined in Chapter 3 of this Code must be followed to manage the associated risks.

Appendix I provides further guidance on workplace management arrangements for housing construction work.

Appendix J provides guidance on workplace management arrangements for general construction work.

Further guidance on specific control measures is located in the [Code of Practice: Managing the Work Environment and Facilities](#).

APPENDIX A – EXAMPLES OF CONSTRUCTION WORK

Table 1 Examples of construction work (as defined in Regulation 289), including housing construction work:

Activity	Examples of construction work
Any installation or testing carried out in connection with the construction work, e.g. electrical and alarm systems	<ul style="list-style-type: none"> ■ Installing an alarm system in a building during the fit-out phase of its construction ■ Testing an electrical installation in a building under construction (but testing, maintenance and repair work is not covered if the floor has been completed and handed over to the building owner with a certificate of occupancy, unless it is fixing defects arising from the construction work) ■ Installing an alarm system in a house during the fit-out phase of its construction ■ Testing the electrical wiring and connections in a house under construction (but testing, maintenance and repair work is not covered if the house has been completed and handed over to the owner with a certificate of occupancy, unless it is fixing defects arising from the construction work) ■ Fixing defects as part of the defect liability period after the house has been completed and handed over to the owner.
Rubbish removal	<ul style="list-style-type: none"> ■ Loading trucks, waste bins and rubbish skips with demolition waste.
The prefabrication or testing of elements, at a place specifically established for the construction work, for use in construction work.	<ul style="list-style-type: none"> ■ Making concrete panels or roof trusses at the construction site ■ Preparing bitumen at a bitumen plant specifically established for road construction work ■ Undertaking on-site concrete batch testing ■ Making wall frames or roof trusses at the construction site ■ Making concrete panels at the construction site ■ Undertaking on-site concrete batch testing.
Assembly or disassembly of prefabricated elements on site	<ul style="list-style-type: none"> ■ Constructing a factory using precast concrete panels ■ Dismantling a prefabricated building ■ Installing prefabricated power poles ■ Installing bridge beams ■ Assembling a kit home ■ Building housing units using precast concrete panels ■ Installing a kitchen made up of prefabricated modules ■ Fencing the site off with temporary fencing panels.

APPENDIX A - EXAMPLES OF CONSTRUCTION WORK

Table 1 Examples of construction work (as defined in Regulation 289), including housing construction work:

Activity	Examples of construction work
Excavation work and site preparation	<ul style="list-style-type: none"> ■ Preparatory site clearing, benching or levelling done before construction ■ Soil-testing the ground for design purposes before construction of a structure ■ Installing an in-ground swimming pool or spa ■ Doing excavations while constructing a golf course, house foundations, or basement garage ■ Assembling temporary fencing for a building site ■ Carrying out remediation excavation work on a contaminated site ■ Excavating trenches to install services such as gas and electricity other than for the purpose of testing, maintenance or repair work of a minor nature ■ Soil-testing the ground for design purposes before construction ■ Temporarily fencing-off the building site.
The installation, testing or maintenance of an essential service in relation to a structure.	<ul style="list-style-type: none"> ■ Roughing-in telephone, television and internet cables ■ Major drainage repair works ■ Installing a waste water or grey water recycling system ■ Installing solar heating units ■ Major drainage repair works ■ Installing solar panels.
Work carried out on, under or near water, including work on buoys and obstructions to navigation.	<ul style="list-style-type: none"> ■ Dredging to prepare for the erection of a structure ■ Re-piling jetties and piers ■ Building a structure on or near a river, lake or reservoir ■ Driving navigation markers into the seabed ■ Constructing a boat ramp or any other structure over water for a waterfront home ■ Constructing a structure near a swimming pool.

APPENDIX A - EXAMPLES OF CONSTRUCTION WORK

Table 2 Examples of activities that are not considered construction work (see Regulation 289(3)):

Activity	Examples of what is not construction work
The manufacture of plant.	<ul style="list-style-type: none"> ■ The manufacture of plant that is not (or will not be) fixed including machinery, equipment, vehicles and vessels. ■ Any manufacturing stages involved in mass producing components for the kind of plant covered by Chapter 6 of the WHS Regulations (see Regulation 290(2)). <p>Note: Chapter 6 of the WHS Regulations applies to the construction of some types of plant for example the construction or assembly of fixed plant, ships and submarines.</p> <p>It also applies to any work on plant at a pre-existing construction site.</p>
Prefabrication of elements off-site	<ul style="list-style-type: none"> ■ Making building elements such as windows or roof trusses at a factory or workshop that makes such elements for industry in general. <p>Note: It is construction work if elements are made at the construction site where the elements are to be used.</p>
The construction or assembly of a structure that once constructed or assembled is intended to be transported to another place.	<ul style="list-style-type: none"> ■ Mobile or pre-fabricated homes.
Testing, maintenance or repair work of a minor nature carried out in connection with a structure.	<ul style="list-style-type: none"> ■ Undertaking regular inspections of a building's fire equipment or lifts ■ Servicing or repair of an air-conditioning system ■ Replacing or repairing solar panels ■ Replacing or repairing a damaged door ■ Repainting a wall in an existing home ■ Replacing or repairing carpet in a house that is not under construction ■ Replacing or repairing individual roof tiles <p>Testing, maintenance or repair work is considered of a minor nature if it requires little or no pre-start preparation of the work area. It is small scale and involves minimal control measures. Minimal preparation of the work area includes:</p> <ul style="list-style-type: none"> ■ small scale work that does not impact on the existing design or stability of the building or structure ■ work that can be completed using hand tools ■ work that has minimal effect on the public – i.e. roads and footpaths are unaffected.
Mining or the exploration for, or extra Mining or the exploration for, or extraction of, minerals.	<ul style="list-style-type: none"> ■ extracting sand or rock from a quarry or an open-cut mine ■ tunnelling or shafts in an underground mine to extract or inject minerals, including activities such as installing roof supports ■ installing services as part of mining, including communication and controls such as ventilation ■ drilling for a sample or developing a shaft ■ removing overburden at an open-cut mine.

APPENDIX B – EXAMPLES OF HIGH RISK CONSTRUCTION WORK

Table 3 Examples of high risk construction work (as defined in Regulation 291):

High Risk Construction Work	Examples
<p>Work that involves a risk of a person falling more than 2 metres.</p> <p><i>*Note: in some jurisdictions the fall height limit for high risk construction work is 3 metres.</i></p>	<ul style="list-style-type: none"> ■ installing an evaporative cooler on the roof of a house ■ installing roof trusses ■ installing roof tiles or roof sheeting ■ working adjacent to a pit or opening with a fall height of more than 2 metres
Work that is carried out on a telecommunication tower	<ul style="list-style-type: none"> ■ installing equipment on a telecommunications tower
Work that involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure	<ul style="list-style-type: none"> ■ knocking down a load-bearing wall in a house ■ removing bracing from a wall or roof as part of a renovation ■ knocking down load-bearing walls as part of a warehouse conversion
Work that involves, or is likely to involve, the disturbance of asbestos	<ul style="list-style-type: none"> ■ removing floor tiles containing asbestos as part of a renovation ■ cutting or drilling into an asbestos cement sheet wall ■ demolishing a house that contains asbestos ■ working on asbestos cement pipework
Work that involves structural alterations or repairs that require temporary support to prevent collapse	<ul style="list-style-type: none"> ■ using props to support a ceiling where a load-bearing wall will be removed
Work that is carried out in or near a confined space	<ul style="list-style-type: none"> ■ connecting a new sewer to a sewer main in a 3-metre trench ■ unblocking a sewer line from within a large underground sewer pit
Work that is carried out in an area that may have a contaminated or flammable atmosphere	<ul style="list-style-type: none"> ■ removing pipework or tank that may contain the residue of hazardous chemicals. ■ demolishing a petrol station and removing old tanks ■ decommissioning plant
Work that is carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres or is carried out in or near a tunnel	<ul style="list-style-type: none"> ■ laying or repairing pipes or conduits in a trench that is more than 1.5 metres deep ■ testing drainage pipes in a trench that is more than 1.5 metres deep ■ working near bored piers that are greater than 1.5 m deep ■ building a tunnel in the course of constructing an underground railway or road
Work that involves the use of explosives	<ul style="list-style-type: none"> ■ using explosives to breakup rock or to remove a tree stump ■ blasting in preparation of construction of a building or a road <p>Note: Using explosive power tools is not considered 'work that involves the use of explosives'</p>

APPENDIX B - EXAMPLES OF HIGH RISK CONSTRUCTION WORK

Table 3 Examples of high risk construction work (as defined in Regulation 291):

High Risk Construction Work	Examples
<p>Work that is carried out on or near:</p> <ul style="list-style-type: none"> ■ pressurised gas distribution mains or piping ■ chemical, fuel or refrigerant lines ■ energised electrical installations or services 	<ul style="list-style-type: none"> ■ excavating foundations near to an existing gas supply ■ drilling into a wall where live electrical wiring may be present ■ working near overhead or underground power lines ■ 'Near' in the above circumstances means close enough that there is a risk of hitting or puncturing the mains, piping, electrical installation or service. ■ Electrical installations/services do not include appliances such as power leads and electrically powered tools.
<p>Work that involves tilt-up or precast concrete</p>	<ul style="list-style-type: none"> ■ building housing units using precast panels ■ installing a precast drainage pit
<p>Work that 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.</p>	<ul style="list-style-type: none"> ■ using part of the road to deliver construction materials to the site ■ installing drainage that involves digging up part of the road, kerb or gutter ■ building an additional lane on a road
<p>Work that is carried out in an area at a workplace in which there is any movement of powered mobile plant</p>	<ul style="list-style-type: none"> ■ working in an area of a construction site that is not isolated from the movement of skid steer loaders, backhoes, mobile cranes or trucks
<p>Work that is carried out in an area in which there are artificial extremes of temperature.</p>	<ul style="list-style-type: none"> ■ inside enclosed roof cavities ■ construction work in an operating cool room or freezer ■ construction work alongside an operating boiler
<p>Work that is carried out in or near water or other liquid that involves a risk of drowning</p>	<ul style="list-style-type: none"> ■ installing shade sails over a swimming pool ■ building a gazebo adjacent to a swimming pool ■ constructing a bridge over a river or restoring a wharf
<p>Work that involves diving work</p>	<ul style="list-style-type: none"> ■ Divers undertaking structural repairs to the jetty of a waterfront home ■ structural work on marinas, wharves and piers

APPENDIX C – DESIGN DUTIES

This appendix provides information to builders about consulting and working with designers on work health and safety matters during the construction process. It also explains the kind of work health and safety information designers must provide to ensure the safe 'buildability' of structures.

Guidance for designers is available in the *Code of Practice: Design of Structures*.

The WHS Act requires a designer to:

- so far as is reasonably practicable, ensure that the structure is designed to be without risks to the health and safety of persons who:
 - at a workplace, use the structure for a purpose for which it was designed;
 - construct the structure at a workplace;
 - carry out any reasonably foreseeable activity at the workplace in relation to the manufacture, assembly or use of the structure for a purpose for which it was designed, or the proper demolition or disposal of the structure;
 - are at or in the vicinity of a workplace and who are exposed to the structure at the workplace or whose health may be affected by a use or activity referred to above.
- carry out, or arrange for the carrying out of, any calculations, analysis, testing or examination that may be necessary for the performance of the above duties;
- give adequate information to each person who is provided with the design for the purpose of giving effect to it concerning:
 - each purpose for which the structure was designed;
 - the results of any calculations, analysis, testing or examination; or
 - any conditions necessary to ensure that the structure is without risks to health and safety when used for a purpose for which it was designed or when carrying out any activity referred to above.
- on request, so far as is reasonably practicable, give current relevant information on the matters referred to above to a person who carries out or is to carry out any of the activities referred to above.

A designer of a structure or any part of a structure has additional obligations under the WHS Regulations to give a written report to the PCBU that commissioned the design. This report must specify the hazards relating to the design of the structure that, so far as the designer is reasonably aware:

- create a risk to the health or safety of persons who are to carry out any construction work on the structure or part; and
- are associated only with the particular design and not with other designs of the same type of structure.

There may be multiple designers who are involved in the design of a structure and have the same duties, for example draftspersons, architects and engineers. A builder could also be considered to be a designer if they design a structure themselves or are involved in altering the design for a building, even after construction work has commenced.

Example 1 – A builder or subcontractor who alters or modifies a design without consulting the original or subsequent designer assumes the duties of a designer.

Any changes to the design of a structure may affect the health and safety of those who work on or use the structure and must be considered by the person altering or modifying a design.

If new or different health and safety risks are created, further calculations, analysis, testing or examination may be required, and a revised safety report may need to be prepared.

CONSULTING, CO-OPERATING AND CO-ORDINATING ACTIVITIES WITH OTHER DUTY HOLDERS

The design process often occurs in various stages and involves different people who make financial, commercial, specialist or technical decisions over a design, for example, clients, architects, project managers and interior designers.

Such decisions may positively or negatively affect the safety of a building. In these circumstances, each party will have responsibility for health and safety in the design stage.

So far as is reasonably practicable, the duty holders involved must consult each other on the hazards and risks associated with the building and work together on appropriate design solutions. This would include a client co-operating with a designer in changing a design to address a health and safety risk identified in the design process.

CALCULATION, TESTING OR EXAMINATION

Designers of structures must carry out, or arrange the carrying out of, any calculations, analysis, testing or examination that may be necessary to ensure the safety of the design.

Depending on qualifications and experience, a designer may not always be aware of construction methods and processes to be applied in practice and should therefore seek feedback from builders about the safe 'buildability' of their design.

Other legislative provisions governing the design of buildings and structures in Australia include the building laws in each jurisdiction and the National Construction Code of Australia (NCCA). The Building Code of Australia (BCA) is part of the NCCA. In addition, there are technical and engineering guidelines and standards produced by other government agencies, Standards Australia and relevant professional bodies.

PROVIDING INFORMATION

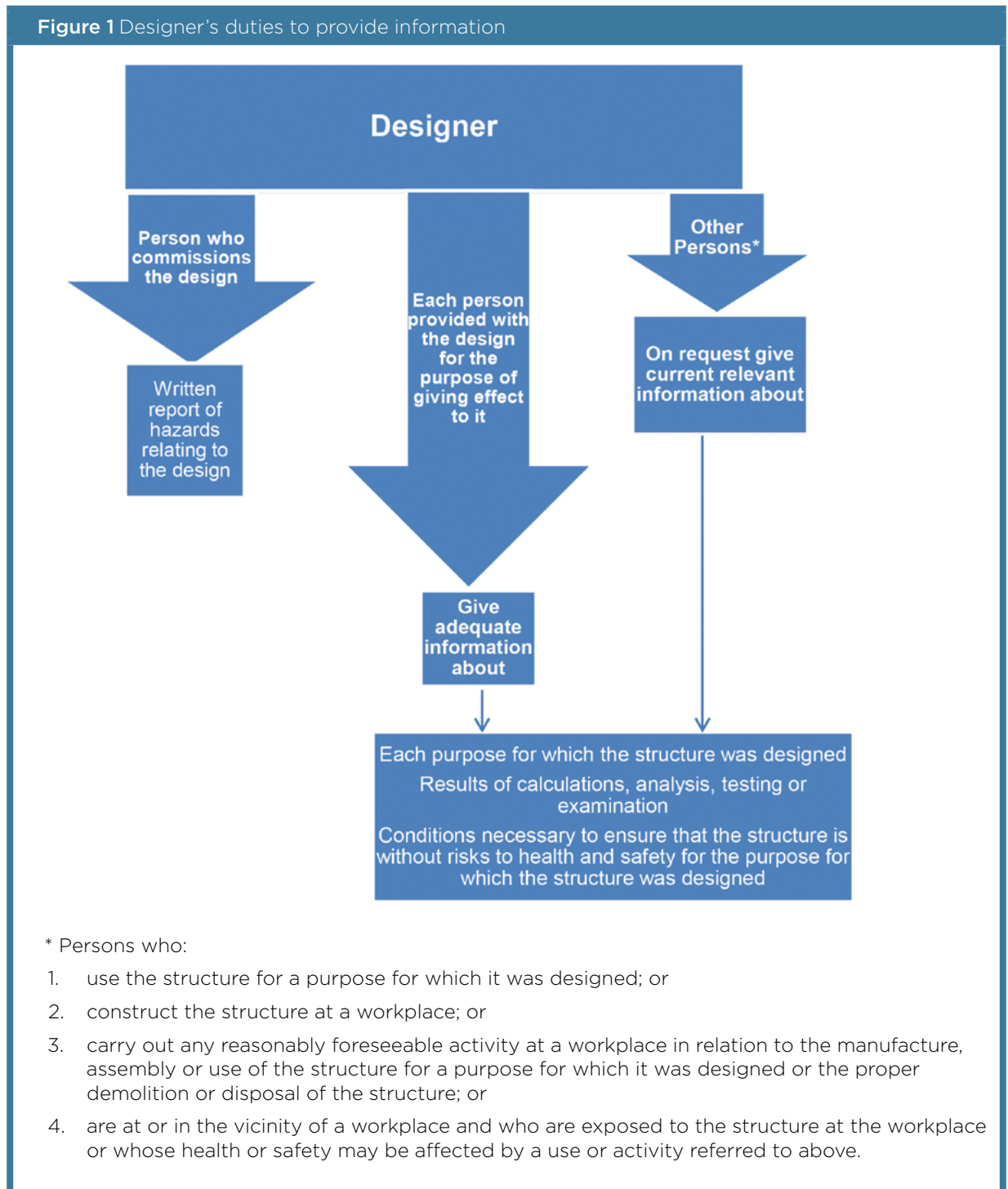
Information on how the designer has designed the structure to be without risk to health and safety must be provided to anyone issued with the design documents. This includes the lifecycle of the structure from construction, maintenance, use and demolition at end of life. In addition, a safety report detailing hazards unique to that design must be provided to the PCBU who commissions the construction work.

Designers must give adequate information to each person who is provided with the design and who is to give effect to the design, such as the home owner or builder, about:

- the purposes for which the structure was designed;
- the results of any calculations, analysis, testing or examination. This may include:
 - a statement to the effect that the design complies with the Building Code of Australia;
 - any relevant Australian Standards; and
 - whether the designer has made reasonable enquiries of builders regarding the design of the buildability of the designed structure to ensure that the structure can be built in a safe way in practice;
- any conditions necessary to ensure that the structure is without risks to safety when carrying out work activities such as construction, maintenance and demolition.

The designer must also, so far as is reasonably practicable, provide this information to any person who carries out activities in relation to the structure—like a renovator—if requested.

Figure 1 illustrates how information about safe design should flow to different duty holders.



THE DESIGNER'S SAFETY REPORT

A written safety report is required for designs of structures that have unusual or atypical features which present hazards and risks during the construction phase. Examples of designs that may introduce unique hazards include:

- a design that specifies a steel structure that has to be built in a particular sequence to prevent it from structural collapse during construction
- a design that specifies ventilation in the sub-floor because the home is to be built on land fill and there is a risk of a build-up of methane gas which could create risks to those excavating or constructing the home
- putting an additional storey on top of an existing storey
- a design that specifies an unusually steep pitch that might present risks of falls, and
- a concrete slab incorporating pre-stressing reinforcement steel.

A written safety report is not required for designs of structures that have typical features such as a single storey, timber framed, slab-on-ground house constructed in a new housing estate using typical housing materials designed to be built by housing industry tradespeople and workers.


WHAT HAZARDS MUST BE INCLUDED IN THE DESIGNER'S REPORT?

The report must identify the hazards that the designer is reasonably aware create a risk to the health or safety of persons who are to carry out any construction work on the structure. Only hazards unique to the particular design need to be included.

The designer may recommend ways to control the risks associated with the hazards identified. This may be done in consultation with the PCBU carrying out the work and may include:

- competency requirements for workers carrying out the construction work
- requirements for the kind of plant that should be used
- the sequence a steel structure should be erected, or
- supervision requirements or other risk control measures for the construction work.

WHEN MUST A SAFETY REPORT BE PROVIDED FOR DESIGNS OF RESIDENTIAL HOMES?

 The designer must provide a written report if the person commissioning the design is a PCBU.⁴

If the home owner is a PCBU and the owner commissions the construction project and engages a principal contractor, the owner must give the principal contractor any information the owner has about hazards and risks, including a copy of the designer's report.

⁴ The person commissioning the design is not a PCBU if they are a home buyer, owner or occupier commissioning work on their home; or an individual undertaking maintenance, refurbishment or renovations of their own home or helping a friend.

APPENDIX D – SAFE WORK METHOD STATEMENT TEMPLATE

RECOMMENDED STEPS FOR FILLING OUT THE SWMS TEMPLATE

1. Consult with relevant workers involved with the high risk construction work on the activities involved and associated hazards, risks and controls.
2. In the 'What is the high risk construction work?' column, identify the high risk construction work that will be undertaken.
3. In the 'What are the hazards and risks?' column, list the hazards and risks for each high risk construction work activity.
4. Identify the workplace circumstances that may affect the way in which the high risk construction work will be done. For example:
 - information relating to the design of the structure, the workplace (e.g. location, access, transport) and information contained in the WHS Management Plan
 - information on any 'essential services' located on or near the workplace
 - confirmation the regulator has been advised of any 'notifiable work' (e.g. demolition work involving explosives)
 - safe work methods and plant to be used.
5. In the 'How will the hazards and risks be controlled?' column, select an appropriate control or combination of controls by working through the hierarchy of controls. It is important you are able to justify why the selected control measure is reasonably practicable for the specific workplace.

SELECTING CONTROL MEASURES

1. Eliminate the risks so far as is reasonable practicable.
2. If this is not reasonably practicable, minimise them so far as reasonably practicable by:
 - substituting the hazard
 - isolating the hazard
 - implementing engineering controls
3. If the risk still remains, minimise the remaining risk by implementing administrative controls
4. If the risk still remains, minimise the remaining risk by ensuring the provision and use of suitable personal protective equipment (PPE).

SWMS COMPLIANCE (INFORMATION, MONITORING AND REVIEW)

1. Brief each team member on the SWMS before commencing work. Ensure each team member knows work is to stop if the SWMS is not followed.
2. Observe the work being carried out and monitor compliance with the SWMS. Review risk controls regularly, including:
 - before a change occurs to the work itself, the system of work or the work location
 - if a new hazard associated with the work is identified
 - when new or additional information about the hazard becomes available

APPENDIX D - SAFE WORK METHOD STATEMENT TEMPLATE

- when a notifiable incident occurs in relation to the work
- when risk controls are inadequate or the SWMS is not being followed.

In all of the above situations stop the work, review the SWMS, adjust as required and re-brief the team.

3. Keep the SWMS in a readily available location for the duration of the high risk construction work and for at least 2 years after a notifiable incident occurs.
4. If high risk construction work is being carried out in connection with a construction project, the principal contractor must be provided with a copy of the SWMS before the high risk work starts.

APPENDIX D - SAFE WORK METHOD STATEMENT TEMPLATE

NOTE: Work must be performed in accordance with this SWMS.

This SWMS must be kept and be available for inspection until the high risk construction work to which this SWMS relates is completed. If the SWMS is revised, all versions should be kept.

If a notifiable incident occurs in relation to the high risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident.

[PCBU Name, contact details]		Principal Contractor (PC)	[Name, contact details]
Works Manager: Contact phone:		Date SWMS provided to PC:	
Work activity:	[Job description]	Workplace location:	
High risk construction work:	<input type="checkbox"/> Risk of a person falling more than 2 metres (note: in some jurisdictions this is 3 metres)	<input type="checkbox"/> Work on a telecommunication tower	<input type="checkbox"/> Demolition of load-bearing structure
	<input type="checkbox"/> Likely to involve disturbing asbestos	<input type="checkbox"/> Temporary load-bearing support for structural alterations or repairs	<input type="checkbox"/> Work in or near a confined space
	<input type="checkbox"/> Work in or near a shaft or trench deeper than 1.5 m or a tunnel	<input type="checkbox"/> Use of explosives	<input type="checkbox"/> Work on or near pressurised gas mains or piping
	<input type="checkbox"/> Work on or near chemical, fuel or refrigerant lines	<input type="checkbox"/> Work on or near energised electrical installations or services	<input type="checkbox"/> Work in an area that may have a contaminated or flammable atmosphere
	<input type="checkbox"/> Tilt-up or precast concrete elements	<input type="checkbox"/> Work on, in or adjacent to a road, railway, shipping lane or other traffic corridor in use by traffic other than pedestrians	<input type="checkbox"/> Work in an area with movement of powered mobile plant
Person responsible for ensuring compliance with SWMS:	<input type="checkbox"/> Work in areas with artificial extremes of temperature	<input type="checkbox"/> Work in or near water or other liquid that involves a risk of drowning	<input type="checkbox"/> Diving work
What measures are in place to ensure compliance with the SWMS?		Date SWMS received:	
Person responsible for reviewing SWMS control measures:		Date SWMS received by reviewer:	
How will the SWMS control measures be reviewed?			
Review date:		Reviewer's signature:	

APPENDIX D - SAFE WORK METHOD STATEMENT TEMPLATE

<p>What are the tasks involved?</p> <p>List the work tasks in a logical order.</p>	<p>What are the hazards and risks?</p> <p>Identify the hazards and risks that may cause harm to workers or the public.</p>	<p>What are the control measures?</p> <p>Describe what will be done to control the risk. What will you do to make the activity as safe as possible?</p>
<p>Name of Worker(s)</p>		<p>Worker signature(s)</p>
<p>Date SWMS received by workers:</p>		

APPENDIX E - SAFE WORK METHOD STATEMENT EXAMPLE

NOTE: Work must be performed in accordance with this SWMS.

This SWMS must be kept and be available for inspection until the high risk construction work to which this SWMS relates is completed. If the SWMS is revised, all versions should be kept.

If a notifiable incident occurs in relation to the high risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident.

ABC Bricklaying 123 Mortar Street Standard Course ACT 2600 Ph: (02) 1234 5678		Principal Contractor (PC) Date SWMS provided to PC: Workplace location:		XYZ Contracting Services 8910 Management Road Projectville ACT 2666 Ph: (02) 9876 5432 5 February 2012 Potters Hut, Brick Street, Pottery ACT 2600
Works Manager: Contact phone:	Fred Bloggs 0400 111 111	Date SWMS provided to PC:	Workplace location:	Demolition of load-bearing structure
Work activity:	Bricklaying	Date SWMS provided to PC:	Work on a telecommunication tower	Work in or near a confined space
High risk construction work:	<input checked="" type="checkbox"/> Risk of a person falling more than 2 metres (note: in some jurisdictions this is 3 metres)	<input checked="" type="checkbox"/> Temporary load-bearing support for structural alterations or repairs	<input type="checkbox"/> Work on or near pressurised gas mains or piping	<input type="checkbox"/> Work in an area that may have a contaminated or flammable atmosphere
	<input type="checkbox"/> Likely to involve disturbing asbestos	<input type="checkbox"/> Use of explosives	<input checked="" type="checkbox"/> Work on or near energised electrical installations or services	<input checked="" type="checkbox"/> Work in an area with movement of powered mobile plant
	<input type="checkbox"/> Work in or near a shaft or trench deeper than 1.5 m or a tunnel	<input checked="" type="checkbox"/> Work on or near water or other liquid that involves a risk of drowning	<input checked="" type="checkbox"/> Work on, in or adjacent to a road, railway, shipping lane or other traffic corridor in use by traffic other than pedestrians	<input type="checkbox"/> Diving work
	<input type="checkbox"/> Work on or near chemical, fuel or refrigerant lines	Joe Bloggs, Leading Hand	Date SWMS received:	
	<input type="checkbox"/> Tilt-up or precast concrete elements	ABC Bricklaying WHS policies and procedures, general and workplace induction training, toolbox meetings, SWMS provided to and discussed with worker(s) at workplace and signed-off, ongoing workplace supervision by experienced leading hand.		
<input type="checkbox"/> Work in areas with artificial extremes of temperature	Fred Bloggs, Works Manager	Date SWMS received by reviewer:		
Person responsible for ensuring compliance with SWMS:	Joe Bloggs, Leading Hand			
What measures are in place to ensure compliance with the SWMS?	ABC Bricklaying WHS policies and procedures, general and workplace induction training, toolbox meetings, SWMS provided to and discussed with worker(s) at workplace and signed-off, ongoing workplace supervision by experienced leading hand.			
Person responsible for reviewing SWMS control measures:	Fred Bloggs, Works Manager			
How will the SWMS control measures be reviewed?	SWMS control measures to be reviewed (and revised if necessary) if work tasks/methods change or unexpected issues arise.			
Review date:				Reviewer's signature:

APPENDIX E - SAFE WORK METHOD STATEMENT EXAMPLE

What are the tasks involved?	What are the hazards and risks?	What are the control measures?
<p>List the work tasks in a logical order.</p> <p>Delivery of bricks</p> <ul style="list-style-type: none"> ■ Movement of powered mobile plant. ■ Work in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians. 	<p>Identify the hazards and risks that may cause harm to workers or the public.</p> <p>Workers being struck by powered mobile plant, including delivery vehicle and forklift used for unloading.</p> <p>Workers being struck by vehicles in adjacent road or traffic corridor.</p> <p>Vehicles in adjacent road or traffic corridor being struck by falling objects.</p>	<p>Describe what will be done to control the risk. What will you do to make the activity as safe as possible?</p> <p>Implement workplace traffic management plan and make available to workers:</p> <ul style="list-style-type: none"> ■ Exclusion zone for mobile plant to be clearly identified (signage and barricades as per site plan) and controlled during vehicle loading/unloading operations. ■ Dedicated, trained road traffic controller(s) to direct traffic entering and leaving site and control traffic (pedestrian and vehicle) on adjacent pedestrian footpaths and roadways. ■ Use portable traffic signals and/or temporary safety barriers to direct/control traffic flow as required. ■ Brick delivery vehicle to be unloaded on-site (not from public roadway). <p>Place brick pallets adjacent to bricklaying work areas (inside workplace boundaries and clear of workplace traffic routes).</p>
<p>Working at ground level</p> <ul style="list-style-type: none"> ■ Movement of powered mobile plant. 	<p>Being struck by powered mobile plant.</p>	<p>Powered mobile plant to travel on planned and controlled workplace traffic routes.</p> <p>Where powered mobile plant are required to travel outside of planned and controlled routes, a dedicated, trained road traffic controller is to control plant movement.</p>

APPENDIX E - SAFE WORK METHOD STATEMENT EXAMPLE

What are the tasks involved?	What are the hazards and risks?	What are the control measures?
<p>List the work tasks in a logical order.</p> <p>Working above ground</p> <ul style="list-style-type: none"> ■ A risk of a person falling more than 2 metres. ■ Construction work that is carried out on or near energised electrical installations or services. 	<p>Identify the hazards and risks that may cause harm to workers or the public.</p> <p>Worker falling from height.</p> <p>Worker coming in contact with and/or receiving electric shock from overhead electric lines.</p> <p>Plant/equipment contacting overhead electric lines.</p>	<p>Describe what will be done to control the risk. What will you do to make the activity as safe as possible?</p> <p>For bricklaying activity where there is a risk of a person falling less than 2 metres, use fully decked heavy duty frame trestle scaffolds, with bay lengths of 1.8 metres or less.</p> <p>For bricklaying activity where there is a risk of a person falling greater than 2 metres, use heavy duty modular scaffolds with brick-guards.</p> <p>Scaffolds from which a person can fall more than 4 metres must be constructed and certified by a licensed scaffolder.</p> <p>For all scaffolds:</p> <ul style="list-style-type: none"> ■ Platforms are not to be loaded with more than 100 bricks per bay (or 400 kg of blocks). ■ No scaffold alterations are to be undertaken except by licensed scaffolder. ■ Access to scaffold platforms is to be via stairs or ladder towers. <p>The exclusion zones and approach distances to overhead electric lines at the locations and distances specified on the site plan are to be clearly identifiable and enforced by a dedicated controller.</p>
<p>Constructing brick walls</p> <p>Structural alterations or repairs that require temporary support to prevent collapse.</p>	<p>Worker injured by structural collapse before completion & curing.</p>	<p>Brace all constructed brick walls in accordance with Company Instruction Sheet #3.</p>

APPENDIX E - SAFE WORK METHOD STATEMENT EXAMPLE

What are the tasks involved?	What are the hazards and risks?	What are the control measures?
<p>List the work tasks in a logical order.</p> <p>Work completion</p> <ul style="list-style-type: none"> ■ A risk of a person falling more than 2 metres. ■ Structural alterations or repairs that require temporary support to prevent collapse. 	<p>Identify the hazards and risks that may cause harm to workers or the public.</p> <p>Injuries to public from unauthorised access to workplace (e.g. falls greater than 2 metres, structural collapse).</p>	<p>Describe what will be done to control the risk. What will you do to make the activity as safe as possible?</p> <p>All scaffolding and site fencing is secure and serviceable. All entries and exits must be locked at the end of each day.</p>
Name of Worker(s)		Worker signature(s)
Tom Smith		
Date SWMS received by workers:		14 January 2012

APPENDIX F – PREPARING A WHS MANAGEMENT PLAN

The level of detail required for a WHS management plan will depend on how complex the workplace is (in particular, the number of contractors at the workplace at any one time) and the risks involved in the work.

PEOPLE WITH HEALTH AND SAFETY RESPONSIBILITIES

Persons at the workplace whose positions or roles involve specific health and safety responsibilities must be identified in the WHS management plan. For example, people who should be listed include WHS managers, first aid officers and project managers. Their responsibilities should be briefly described. Health and safety representatives do not need to be listed, unless they have a coordinating role separate to their role as a health and safety representative.

ARRANGEMENTS FOR CONSULTATION, COOPERATION AND COORDINATION

An important part of the WHS management plan involves the arrangements for consultation, cooperation and coordination of all persons conducting a business or undertaking at the workplace.

The principal contractor must include details in the WHS management plan about how the persons conducting a business or undertaking at the workplace will consult and cooperate with each other. There should be ongoing consultation and cooperation between all duty holders so that when work overlaps, each person is aware of other construction activities and can control any associated hazards and risks. Examples include:

- holding pre-commencement WHS meetings with all contractors and subcontractors
- scheduling regular contractor/subcontractor WHS meetings
- holding toolbox WHS meetings
- establishing a construction project WHS committee
- distributing a regular WHS newsletter.

In many cases, people who have responsibilities are not always at the workplace all the time.

It is recommended that consultation arrangements for communicating with people off-site also be included in the WHS management plan.

ARRANGEMENTS FOR MANAGING INCIDENTS

The principal contractor should consider the types of health and safety incidents that might occur. The WHS management plan should document the actions that will be taken and who will represent the principal contractor. The following should be included (covering both the process involved and the person responsible for it):

APPENDIX F - PREPARING A WHS MANAGEMENT PLAN

Process	Action to be taken
Incident management	<ul style="list-style-type: none"> ■ Arrangements to stabilise and evacuate any injured person after ensuring safety of rescuers ■ Arrangements for isolating the incident scene ■ Arrangements for making the workplace safe after the incident ■ Arrangements for preserving the incident site ■ Arrangements for notifying the principal contractor ■ Notification of the relevant regulator and emergency services as necessary ■ Arrangements for the investigation of an incident.
Emergency situations	<ul style="list-style-type: none"> ■ The emergency plan for the construction project ■ Arrangements for testing of the emergency plan ■ Arrangements for training and instruction requirements.
First aid arrangements	<ul style="list-style-type: none"> ■ The facilities and first aid equipment that will be provided by the principal contractor ■ Arrangements for training in first aid ■ First aid equipment that will be provided by contractors and subcontractors.

The WHS management plan should also include arrangements for reporting and acting upon any 'near misses'.

SITE-SPECIFIC HEALTH AND SAFETY RULES

The WHS management plan must detail any site-specific WHS rules that the principal contractor requires persons to comply with and the arrangements for ensuring that all persons at the workplace are informed of these rules. The rules should be simple and clear and, where appropriate, they should show who each rule applies to.

The nature of the work, hazards, size and location of the workplace, and the number and composition of the workers and other persons at the workplace can assist in determining the site-specific rules.

After finalising the rules, the principal contractor should inform everyone in the workplace about them, for example by:

- holding toolbox meetings or face-to-face discussions
- posting them in a prominent position at the workplace
- distributing copies to everyone at the workplace.

If there are people at the workplace who do not understand English well, the WHS management plan should set out how these people will be informed of the rules.

ARRANGEMENTS TO PREPARE, COLLECT AND ASSESS, MONITOR AND REVIEW SWMS

The WHS management plan must include details of the arrangements for the preparation, collection and any assessment/approval, monitoring and review of SWMS at the workplace.

The principal contractor should ensure that the work being undertaken does not conflict with control measures being used by other contractors or subcontractors working in the same location or create additional risks for others.

The WHS management plan may also include arrangements to ensure that SWMS are followed by all affected workers (including contractors and subcontractors), and that work is ceased if the SWMS is not being followed.

APPENDIX G - WHS MANAGEMENT PLAN TEMPLATE

Principal Contractor details		Project Details <i>(Insert project address where relevant)</i>	
People with specific health and safety responsibilities <i>List details of people with specific responsibilities for this project e.g. site supervisor, safety manager; or where to obtain their specific contact details</i>			
Name	Position	Brief description of WHS responsibilities	
Arrangements in place for consultation, cooperation and coordination		Persons responsible	
<i>Describe the consultation, cooperation and coordination arrangements between PCBUS, such as subcontractors, so that if work overlaps, each is aware of others' activities in relation to compliance with the WHS laws.</i>			
Arrangements for managing work health and safety incidents		Persons responsible	
<i>Describe the arrangements to manage each type of incident that may occur and who will contact the emergency services and the local safety authority. Also describe the first aid arrangements for the project.</i>			

APPENDIX G - WHS MANAGEMENT PLAN TEMPLATE

Safe Work method Statements (SWMS) <i>Set out the arrangements to collect, assess, monitor and review SWMS at the workplace</i>	Persons responsible
Site safety rules <i>Each rule should be simple and clear. Set out who is covered by the rule and who is responsible for communicating it/how it will be ensured that all persons at the workplace are informed of the rules.</i>	Persons responsible for communicating the rule

APPENDIX H - SAMPLE COMPLETED WHS MANAGEMENT PLAN

Principal Contractor Details	XYZ Builders Pty Ltd 27 Main Street, Newcastle, NSW	Project Details <i>(Insert project address where relevant)</i>	This WHS Management plan applies to all XYZ Builders Pty Ltd construction projects
People with specific health and safety responsibilities <i>Insert details of people with specific responsibilities for this project e.g. site supervisor, safety manager, or where to obtain their specific contact details</i>			
Name	Position	Brief description of WHS responsibilities	
Various	XYZ Builders Site Supervisor Please contact XYZ builders on (02) 4325 1100 for contact details of the supervisor for your site	PCs representative and first point of contact for all site WHS matters Implement, monitor and maintain this WHS Management Plan and make it available to workers Ensure the principal contractor signage is posted and visible Confirm all workers have construction induction training. Keep all persons informed of safety issues relating to this site. Ensure site is inspected and that work is being done by workers in accordance with SWMS and the site safety rules	
James McDonald	XYZ Builders Safety Manager Ph (02) 4325 1135 Mob 0412 234 134	Company health and safety manager with responsibility for implementing policies, systems and instructions to be used at all XYZ Builders sites. Point of contact for WHS matters when the XYZ Builders site supervisor is unavailable.	
Various	Subcontractors	Responsible for the health and safety of themselves and their own workers and anyone else who may be affected by their actions Provide SWMS to XYZ Builders prior to commencing work on site Ensure that work is done in accordance with the SWMS and site safety rules	
Arrangements in place for consultation, cooperation and coordination <i>Describe the consultation, cooperation and coordination arrangements between PCBUs, such as subcontractors, so that if work overlaps, each is aware of others' activities in relation to compliance with the WHS laws</i>			Persons responsible
Liaise with subcontractors about WHS arrangements prior to commencing work. Provide a copy of this plan to subcontractors and make it available to workers.			XYZ Builders Site Supervisor
Assist subcontractors to modify SWMS if necessary to adequately control risks to health and safety.			XYZ Builders Site Supervisor
Coordinate the interaction of subcontractors to ensure their proposed actions to control risks do not clash.			XYZ Builders Site Supervisor

APPENDIX H - SAMPLE COMPLETED WHS MANAGEMENT PLAN

Persons responsible	Arrangements for managing work health and safety incidents <i>Describe the arrangements to manage each type of incident that may occur and who will contact the emergency services and the local safety authority. Also describe the first aid arrangements for the project.</i>
XYZ Builders Site Supervisor	<p>General emergencies</p> <ul style="list-style-type: none"> ■ Implement the emergency plan for this project ■ Notify the XYZ Builders Site Supervisor ■ Notify emergency services if necessary
Subcontractors	<p>Incident management</p> <ul style="list-style-type: none"> ■ Provide access to a first aid kit and trained first aider. ■ Arrange first aid / transport / ambulance to Medical Centre. ■ Report any incidents which occur at this site to the XYZ Builders Site Supervisor as soon as possible. ■ Depending on nature of incident, stop work at the incident area and make it secure. ■ If the incident is notifiable notify WorkCover and make sure that the incident area is not disturbed
Subcontractors	<ul style="list-style-type: none"> ■ Log all incidents in site diary and report details to XYZ Builders Safety Manager as soon as possible ■ Attend the site for all notifiable incidents.
XYZ Builders Site Supervisor	<ul style="list-style-type: none"> ■ Ensure incident has been notified to WorkCover where required. ■ Undertake investigation, consult with workers and provide recommendations.
XYZ Builders Safety Manager	

APPENDIX H - SAMPLE COMPLETED WHS MANAGEMENT PLAN

Safe Work method Statements (SWMS) <i>Set out the arrangements to collect, assess, monitor and review SWMS.</i>	Persons responsible
<ul style="list-style-type: none"> ■ Provide copy of SWMS to the XYZ Builders Safety Manager or Site Supervisor prior to commencing the work. 	Subcontractors
<ul style="list-style-type: none"> ■ Request copy of SWMS from subcontractors that will be carrying out high risk construction work 	XYZ Builders Safety Manager
<ul style="list-style-type: none"> ■ Supervise workers to make sure that the work is performed in accordance with the SWMS. 	Owner of SWMS (e.g., Subcontractors or XYZ Builders Site Supervisor)
<ul style="list-style-type: none"> ■ Modify the SWMS whenever the control measures are revised 	Owner of SWMS (e.g., Subcontractors or XYZ Builders Site Supervisor)
<ul style="list-style-type: none"> ■ Assist subcontractors to modify SWMS (where necessary) to ensure all risks to health and safety will be under adequate control 	XYZ Builders Site Supervisor
Site safety rules <i>Each rule should be simple and clear. Set who is covered by the rule and who is responsible for communicating it.</i>	Persons responsible for communicating the rule
<ul style="list-style-type: none"> ■ All subcontractors to make their workers aware of the contents of this WHS management plan and make sure they understand these site safety rules. ■ No access to the site unless XYZ Builders Site Supervisor knows about it first. ■ If an area is barricaded do not enter the barricaded area unless authorized to do so ■ All subcontractors to have first aid kits available in their vehicles whenever working on site ■ Work areas are to be kept clean and tidy at all times & rubbish to be placed in bins/cages ■ All nails on waste timber to be removed or bent over ■ No alcohol or drugs (other than prescription drugs) to be consumed on this site ■ No fighting, bullying, harassment or aggressive behaviour by anyone on this site ■ All persons must leave site amenities in a clean, tidy and hygienic state after use - notify the XYZ Builders Site Supervisor if facilities are unhygienic. 	Subcontractors

APPENDIX I – HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBU's to consider
The work environment – Regulation 40	
<p>A PCBU must ensure, so far as is reasonably practicable that the layout of the workplace allows, and is maintained to allow, persons to enter, exit, and move within it safely, both under normal working conditions and in an emergency.</p>	<ul style="list-style-type: none"> ■ Providing sufficient clear space for site access and exit points ■ Providing entry and exit areas and passageways that are lit, and kept free from materials, waste and debris ■ Avoiding blocking walkways or work areas ■ Allocating enough area to safely store materials or plant for the construction work ■ Considering scheduling deliveries ‘just in time’ to reduce quantity of materials needing storage on site ■ Considering the need to separate areas such as loading zones, materials storage, waste and recycling areas
<p>A PCBU must ensure, so far as is reasonably practicable that work areas have space for work to be carried out safely.</p>	<ul style="list-style-type: none"> ■ Encouraging subcontractors and workers to adopt good housekeeping practices ■ Providing adequate clear space for movement to all work areas ■ Providing walkways and scaffold access platforms that have at least 450 mm clear access ■ Keeping driveways and footpaths clear of materials
<p>A PCBU must ensure, so far as is reasonably practicable that floors and other surfaces are designed, installed and maintained to allow work to be carried out safely.</p>	<ul style="list-style-type: none"> ■ Keeping the worksite free from trip hazards ■ Keeping ramps adequately supported and stabilised ■ Avoiding excessive debris and material on scaffolds ■ Avoiding exposed nails ■ Reducing waste accumulation by providing adequate waste bins or dedicated waste placement points ■ Elevating electrical extension leads so as not to present tripping hazards (in access routes) ■ Stacking materials to minimise tripping hazards ■ Minimising the need for protruding objects or protect against tripping or lacerations ■ Avoiding the accumulation of combustible and flammable materials by keeping only the lowest quantity needed.

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBU's to consider
The work environment – Regulation 40	
A PCBU must ensure, so far as is reasonably practicable that lighting enables each worker to carry out work safely, persons to move around safely and safe evacuation in an emergency.	<ul style="list-style-type: none"> ■ Providing artificial light whenever working at night or in dark areas such as basements where natural lighting is insufficient ■ Checking lighting regularly to ensure it remains sufficient for the construction work or project as it progresses
A PCBU must ensure, so far as is reasonably practicable that ventilation enables workers to carry out their work without risk to their health and safety.	<ul style="list-style-type: none"> ■ Providing adequate openings for natural ventilation or provide artificial ventilation such as exhaust fans if required
A PCBU must ensure, so far as is reasonably practicable that workers exposed to extremes of heat or cold are able to carry out work without risk to their health and safety.	<ul style="list-style-type: none"> ■ Consider rescheduling work in the open in very hot weather conditions, or ensure subcontractors are adequately managing risk of heat stress ■ Providing access to adequate, cool, clean water ■ Providing access to appropriate PPE
A PCBU must ensure, so far as is reasonably practicable that work in relation to or near essential services (such as gas, electricity, water, sewerage and telecommunications) does not affect the health and safety of persons at the workplace.	<p>Note: Services may be overhead, underground or hidden in floor slabs and behind walls.</p> <ul style="list-style-type: none"> ■ Making enquiries before work commences to find out what essential services could create a risk if contacted or damaged, including those adjacent to where the excavation work is carried out, e.g. by contacting Dial Before You Dig or similar services

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBU's to consider
Excavation work - Regulation 304 - 306	
<p>Before commencing excavation work, a PCBU with management or control of the workplace must take all reasonable steps to obtain current underground services information that relates to the workplace and areas adjacent to the workplace. The person must provide this information to all persons carrying out the excavation work and ensure it is readily available for inspection under the WHS Act until the excavation is completed or, if there is a notifiable incident relating to the excavation, 2 years after the incident occurs. All PCBU's must have regard to that information during the work.</p> <p>The PCBU who proposes to excavate a trench of at least 1.5 m deep must ensure so far as is reasonably practicable that the work area is secured against unauthorised access. The PCBU must also minimise risk by ensuring that all sides of the trench are adequately supported by either benching, battering, or shoring by shielding or other comparable means.</p>	<ul style="list-style-type: none"> ■ Making enquiries before work commences to find out what essential services could create a risk if contacted or damaged, including those adjacent to where the excavation work is carried out, e.g. by contacting Dial Before You Dig or similar services ■ Providing relevant information to workers, such as: <ul style="list-style-type: none"> ■ the essential services that may be affected; ■ the location, including depth, of any pipes, cables or other plant associated with the affected essential services; and ■ any conditions on the proposed excavation work. ■ Minimising the risk of falling into excavations and trenches by parawebbing or cordoning off the area ■ Filling excavations and trenches as soon as practical ■ Keeping workers not involved in trenching work away from the work area ■ Barricading unfilled trenches against unauthorised access after hours <p>Further information on how to manage the risks associated with excavation work is available in the <i>Excavation Work Code of Practice</i>.</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
Adequate and Accessible Facilities - Regulation 41	
<p>PCBUs must, so far as is reasonably practicable, ensure:</p> <ul style="list-style-type: none"> ■ the provision of adequate facilities for workers, including toilets, drinking water, washing facilities and eating facilities; and ■ that the facilities are maintained in good working order and are clean, safe and accessible. 	<p>When determining adequate facilities, consider:</p> <ul style="list-style-type: none"> ■ the location of the site ■ the nature of the work to be done ■ the number of workers ■ the availability of power and services. <p>Plan for the following:</p> <ul style="list-style-type: none"> ■ the safe and convenient location of facilities ■ positioning and construction to prevent external flooding ■ clear access to facilities at all times ■ hygienic and safe discharge of waste water ■ clean and sanitary facilities ■ adequate natural and/or artificial lighting for safe access and use of facilities. <p>Enclosed facilities should be of sound construction and weatherproof, with adequate ventilation and lighting</p> <p>Meal and shelter facilities</p> <p>Workers should be provided with hygienic and weatherproof meal and shelter facilities in an area accessible to the building under construction at the earliest opportunity, for example in the garage or similar covered area.</p> <p>These facilities should include:</p> <ul style="list-style-type: none"> ■ adequate seating (which could include a board across two trestles and other alternatives to chairs) and a clean surface upon which to place food, which could include an esky provided by the worker or subcontractor or other material owned or controlled by the relevant subcontractor ■ a rubbish bin with a lid or appropriate alternative(s) for the hygienic disposal of food scraps. <p>At the initial stages of construction, but only until an adequate area can be made available, shelter may be provided in the form of contractors' vehicles.</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
<p>Adequate and Accessible Facilities - Regulation 41</p>	<p>Toilets</p> <p>Workers must have access to conveniently located toilet facilities. Where the toilet is not connected to the sewerage system, self-contained fresh water flushing portable toilets should be provided that are regularly serviced in accordance with the supplier's information and instructions, but not less than monthly.</p> <p>To provide an acceptable standard of hygiene and privacy, the toilet must be:</p> <ul style="list-style-type: none"> ■ kept clean ■ weatherproof ■ well lit and well ventilated, either naturally or artificially ■ provided with a hinged seat and lid ■ provided with a door that can be locked from inside ■ provided with a well-drained floor above ground level that is covered with a durable waterproof material ■ provided with a plentiful supply of toilet paper ■ set up to remain level and stable under all working conditions. <p>Toilets may be shared between sites if:</p> <ul style="list-style-type: none"> ■ the sites are under the control of the same builder or there is clear agreement between the builders ■ the toilets are convenient and readily accessible to the workers on each site ■ there is at least one toilet per 15 male workers or one toilet per 10 female workers. <p>However, one unisex toilet may be provided in workplaces with both male and female workers where:</p> <ul style="list-style-type: none"> ■ the total number of people who normally work at the workplace is 10 or less ■ there are two or less workers of one gender. <p>Where female workers are present on site, appropriate measures for sanitary item disposal should be made, such as a disposal unit provided in the portable toilet or sewer connected toilet closet.</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
Adequate and Accessible Facilities - Regulation 41	<p>Washing Facilities</p> <p>Hand washing facilities within or adjacent to each toilet or urinal should be provided. Clean water and soap should be provided for the purposes of washing.</p> <p>Drinking Water</p> <p>A readily accessible and plentiful supply of drinking water must be available to all workers on the site.</p> <p>The site water tapping, complete with hose bib-tap, should be installed at the earliest opportunity.</p> <p>Where a mains water supply connection is not possible, drinking water may be provided using flasks, labelled water containers, water bags or similar. However, mains water supply should be provided at the earliest possible time.</p> <p>Drinking water facilities must be separated from toilet facilities to ensure adequate hygiene.</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
Site Security - Regulation 298	
<p>A person with management or control of a workplace at which construction work is carried out must ensure, so far as is reasonably practicable, that the workplace is secured from unauthorised access.</p> <p>A person with management or control of a scaffold at a workplace must ensure that unauthorised access to the scaffold is prevented while the scaffold is incomplete or unattended.</p>	<p>PCBUs, including subcontractors, encouraging their workers to secure the site or their work area against unauthorised access prior to leaving the site, especially if hazards are present, e.g. by securing or isolating any open excavation if there is a risk of anyone falling into it.</p> <p>For sites in close proximity to a route travelled by children, such as a school, park or recreational area, considering installing a perimeter fence if hazards cannot be removed or secured against unauthorised access.</p> <p>While construction work is being carried out and people are on site, a fence may be left unlocked or incomplete to ensure safe entry and exit.</p> <p>Guidelines for suitable types of fencing include:</p> <ul style="list-style-type: none"> ■ it should be difficult to gain access under the fence and to scale the fence ■ they should be able to withstand the anticipated loads to which it may be subjected, such as wind forces, persons attempting to scale and vehicle impact loads ■ where a fence is comprised of discrete panels, the joints should not weaken it and should provide the same level of security as the panels ■ gates should not represent a weak point and the closed gate should provide the same level of security

Requirement	Examples of actions for PCBUs to consider
First Aid - Regulation 42	
<p>Provision of first aid equipment and worker access to the equipment and to facilities for administering first aid.</p> <p>Access to persons trained to administer first aid.</p>	<p>PCBUs providing their supervisors and other directly engaged workers and employees with access to a construction first aid kit.</p> <p>First aid kits and access information may be kept in subcontractor's or worker's vehicles.</p> <p>Informing all workers about the arrangements for first aid and how to obtain access to first aiders. The builder may do this by providing the relevant information to subcontractors and instructing them to inform their workers about these arrangements, for example during workplace specific training. Subcontractors may also make their own arrangements for first aid.</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
Emergency planning - Regulation 43	
<p>PCBUs must ensure that an emergency plan is prepared for the workplace.</p> <p>All workplaces must have an emergency plan that has been specifically developed for the particular workplace and its specific hazards and covers a range of potential incidents.</p> <p>The emergency plan must include:</p> <ul style="list-style-type: none"> ■ an effective response to an emergency; ■ evacuation procedures; ■ notifying emergency service organisations at the earliest opportunity; ■ medical treatment and assistance; and ■ effective communication between the person authorised to coordinate the emergency response and persons at the workplace. <p>Workers must receive information, training and instruction about implementing the emergency plan.</p>	<p>Identifying the types of emergency most likely to arise from their activities, e.g. fire, gas leak, explosion, structural collapse, serious injury.</p> <p>Identifying who must be contacted and notified in an emergency</p> <p>Setting out how to evacuate the workplace</p> <p>Giving this information to workers</p> <p>Communicating the emergency plan by including the arrangements in the WHS management plan or in a separate emergency plan, informing subcontractors and requiring them to pass this information to their respective workers</p> <p>Including in the emergency plan any necessary procedures for rescuing people, for example assisting workers suspended on a safety harness.</p> <p>Note: such emergency procedures are required in some situations such as work in a confined space or when using a fall arrest system.</p> <p>Displaying the evacuation procedures on site</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
Remote and Isolated Work - Regulation 48	
<p>PCBUs must manage the risks associated with remote or isolated work, including ensuring effective communication with the worker carrying out remote or isolated work.</p>	<p>Considering the following factors when assessing the risks:</p> <ul style="list-style-type: none"> ■ How long will the person need to be alone to finish the job? ■ Is there increased risk at certain times of day? For example, working late at night - lower temperatures or low levels of lighting may increase risks ■ What machinery, tools and equipment may be used? ■ Are high risk activities involved? For example, work at heights, work with electricity, hazardous substances or hazardous plant ■ What forms of communication does the worker have access to? ■ Are there procedures for regular contact with the worker? ■ Is the work in a remote location that makes immediate rescue or attendance of emergency services difficult? ■ Will the emergency communication system work properly in all situations? ■ Is fatigue likely to increase risk (for example, with long hours driving a vehicle or operating machinery)? ■ What is the worker's level of work experience and training? Is the worker able to make sound judgements about his or her own safety? ■ Are you aware of a pre-existing medical condition that may increase risk? <p>The control of risks may be achieved using the following:</p> <p><i>Communication systems</i> - If the workplace has mobile phone coverage communication via the mobile phone is adequate. In situations where mobile phone coverage is not available, another method that will allow a worker to call for help in the event of an emergency may be chosen, for example two way radio, personal security system, personal locator beacons (PLB), satellite phones. PCBU can also record GPS coordinates of the site in the plan to enable these to be provided to Emergency Services where necessary.</p> <p>Note: If relying on mobile phones confirm coverage in the area where the worker will work before work commences. It is important that batteries are kept charged or that a spare is available.</p> <p><i>Buddy systems</i> - where the worker, supervisor or another worker calls-in regularly or at agreed times.</p>

APPENDIX I - HOUSING CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

Requirement	Examples of actions for PCBUs to consider
Personal Protective Equipment (PPE) - Regulation 44, 46	
<p>Where PPE is being used to minimise risk the PCBU who directs the carrying out of work must provide PPE to workers unless another PCBU does so. PPE must be in accordance with Regulation 44(3).</p> <p>The worker must wear the equipment in accordance with any information, training or reasonable instruction by the PCBU.</p>	<p>Each PCBU providing PPE to workers that they engage directly</p> <p>Each worker who is a PCBU (e.g. self-employed trades) providing their own PPE</p> <p>Each PCBU providing training and supervision to ensure the proper fit and use of the PPE</p>

Requirement	Examples of actions for PCBUs to consider
Falling Objects - Regulation 54, 55	
<p>A PCBU must manage risks to health and safety associated with an object falling on a person if the falling object is reasonably likely to injure the person.</p> <p>PCBU must eliminate the risk, so far as is reasonably practicable. If the risk cannot be eliminated, a PCBU must minimise the risk of falling objects by providing and maintaining a safe system of work, including (so far as is reasonably practicable):</p> <ul style="list-style-type: none"> preventing objects from falling freely; or providing a system to arrest the fall of a falling object. 	<p>Providing a secure barrier, such as toe boards or guardrail infill panels on scaffolds</p> <p>Providing a safe means of raising and lowering objects, such as materials hoists, tile elevators, or gin wheels</p> <p>Setting up an exclusion zone that prohibits persons from entering</p> <p>Securing and properly bracing structures</p> <p>Securing loose material such as ply wood, metal-sheeting and off cuts against the wind</p> <p>Using tool lanyards</p> <p>Erecting catch platforms and/or nets</p>

Requirement	Examples of actions for PCBUs to consider
Site Signs - Regulation 308	
<p>For all construction projects (i.e. construction work costing \$250,000 or more) signs must be installed that:</p> <ul style="list-style-type: none"> show the principal contractor's name and telephone contact numbers (including an out of hours telephone number); show the location of the site office for the project if there is one; and are clearly visible from outside the workplace, or the work area of the workplace, where the construction project is being undertaken. 	<p>Installing a site sign on the site boundary</p> <p>Note: A site sign may also be used to detail the WHS management plan or elements of the plan such as the site safety rules.</p>

APPENDIX J – GENERAL CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

THE WORK ENVIRONMENT

Regulation 40

A person conducting a business or undertaking must ensure, so far as is reasonably practicable, that:

- the layout of the workplace allows, and is maintained to allow, persons to enter and exit the workplace and move within it safely, both under normal working conditions and in an emergency
- work areas have space for work to be carried out safely
- floors and other surfaces are designed, installed and maintained to allow work to be carried out safely
- lighting enables each worker to carry out work safely, persons to move around safely and safe evacuation in an emergency
- ventilation enables workers to carry out their work without risk to their health and safety
- workers exposed to extremes of heat or cold are able to carry out work without risk to their health and safety, and
- work in relation to or near essential services (such as gas, electricity, water, sewerage and telecommunications) do not affect the health and safety of persons at the workplace.

An untidy workplace can cause injuries. Good housekeeping practices are essential to ensure a safe workplace, for example:

- the entry, exits and access ways in the workplace are kept clean and clear of materials and waste
- a safe system implemented for collecting, storing and disposing of excess or waste materials by providing adequate rubbish bins and recycling bins
- enough area is allocated to safely store materials or plant for the construction work
- temporary electrical supply cables are positioned so as not to present tripping hazards (off the floor or away from access routes as far as is reasonably practicable)
- materials are safely stacked away from fences and hoardings and located to minimise re-handling and reduce transport distances
- combustible and flammables substances and other hazardous chemicals are safely stored and clearly identified
- protruding objects such as exposed nails etc. are removed or covered.

For a construction project, principal contractors must also ensure, so far as is reasonably practicable, that the storage, movement and disposal of construction materials and waste at the workplace are without risks to health and safety.

Further guidance on specific control measures is located in the [*Code of Practice: Managing the Work Environment and Facilities*](#).

ENTRY AND EXIT

The means of entry and exit to and from all areas of the workplace must be safe. For example, providing separate entries and exits for mobile plant (including cranes or trucks) and pedestrians will reduce the risk of persons being hit by moving vehicles. If persons and vehicles have to share a traffic route, use kerbs, barriers or clear markings to designate a safe walkway and have traffic management controls implemented.

Entry and exit areas and passageways should be clearly lit, signed and kept free from materials and debris to minimise the risk of trips and slips.

Emergency exit routes must be easily identifiable, kept free from obstruction and have emergency lighting, directional signs and exit points marked. Emergency lighting back-up systems should have sufficient capacity to provide safe emergency egress for a reasonable period of time in the event of power failure. Emergency lighting systems should be tested regularly to ensure an evacuation could be safely carried out in both daylight and night time conditions.

WORK AREAS

Work areas should be clearly identified and separated as necessary so that work can be undertaken safely. A workplace management plan may be prepared to outline different areas, including loading zones, access and egress, materials storage, offices, first aid stations, waste and recycling areas. Signs may be used to provide clear instructions to persons at the construction workplace, for example, 'No Entry', 'No Smoking', 'PPE required', and signs identifying hazard areas.

Vehicle, plant and pedestrian traffic in the workplace may be controlled through clear vehicle paths, allocated parking areas, signage, physical barriers and/or traffic controllers.

Where there is risk of falling objects, exclusion zones may need to be created to prevent unauthorised people entering the work area and being put at risk.

FLOORS AND SURFACES

The type of work surfaces that are required at a workplace will depend on the different phases of construction and the type of work being carried out. Construction work surfaces will vary (e.g. earth, steel, timber and concrete) and the risk of slips and trips must be appropriately controlled.

Consideration should be given to the surface slope, profile and how workers carry out work on the surface. Dust, moisture and the materials from which the surface is constructed will also present hazards to workers and the placement of materials and equipment. Surfaces should be inspected regularly and maintained to eliminate or minimise slip and trip hazards.

LIGHTING

Adequate lighting must be provided to supplement low levels of natural light to ensure tasks can be conducted safely.

The level of illumination should match the demands of the job and the location. The following are examples for minimum lighting levels at the workplace:

- general access ways and base lighting to rooms, stairways: 40 LUX
- typical building work (e.g. bricklaying, plastering, gyprock and electrical): 160 LUX.

If adequate lighting cannot be provided, the room or area should be suitably locked out and not used.

Lighting installations should avoid the risk of electric shock, burns and glare. For example, high intensity lighting such as halogen and metal halide fittings should be installed at a sufficient height and angle so as to prevent glare and contact burns and have sufficient clearance from combustible materials so as not to create a fire hazard.

Lighting should be checked regularly to ensure it remains adequate for the construction work or project as it progresses. Any defective globes, lamp guards and fittings should also be replaced or repaired promptly by a competent person.

HEAT AND COLD

Heat stress can arise from working in high air temperatures, exposure to high thermal radiation or high levels of humidity, including working on a formwork deck, landscaping works and fit-out work in an enclosed non air-conditioned structure. The symptoms of heat stress include dizziness, fatigue, headache, nausea, breathlessness, clammy skin or difficulty remaining alert.

If it is not reasonably practicable to eliminate exposure to heat and cold, risks can be minimised with a range of control measures. Examples of control measures in a hot work environment may include installing shade structures, task rotation, rest breaks, or isolating workers from heat. Workers must have access to adequate, cool, clean water.

Outdoor workers should be provided with protection in adverse weather conditions, for example sunshades, sheds, caravans, tents and windbreaks. Protection against solar ultraviolet (UV) exposure is also important, for example by:

- organising outdoor work so that workers carry out alternative tasks or work in shade during hot periods of the day
- providing personal protective clothing and equipment, such as a wide brim hat, long sleeved and collared shirt, long pants, sunglasses and sunscreen, and hard hat attachments

ESSENTIAL SERVICES

Essential services include the supply of gas, water, sewerage, telecommunications, electricity, chemicals, fuel and refrigerant in pipes or lines. The principal contractor for a construction project must manage the risks to health and safety associated with essential services at the workplace.

The WHS Regulations define construction work that is carried out on or near:

- pressurised gas distribution mains or piping
- chemical, fuel or refrigerant lines
- energised electrical installations

as high risk construction work and a SWMS must be prepared before this work commences.

Before work commences, the principal contractor must find out what services are at or near the location where the work is to be done that could create a risk if contacted or damaged. Services may be underground or hidden in floor slabs and behind walls.

UNDERGROUND ESSENTIAL SERVICES

Underground essential services use pipes, cables or other associated plant located underground.

Regulation 304

Before commencing excavation work, a person conducting a business or undertaking with management or control of the workplace must take all reasonable steps to obtain current underground services information that relates to the workplace and areas adjacent to the workplace. The person must provide this information to all persons carrying out the excavation work and ensure it is readily available for inspection under the WHS Act until the excavation is completed or, if there is a notifiable incident relating to the excavation, 2 years after the incident occurs.

General location of underground services can be determined by a number of different methods, including:

- contacting organisations that can assist in locating underground services (e.g. **DIAL BEFORE YOU DIG**)
- examining the records held by the person commissioning the construction work.

Relevant information includes:

- the essential services that may be affected
- the location, including depth, of any pipes, cables or other plant associated with the affected essential services
- any conditions on the proposed excavation work.

All persons carrying out the excavation work must have regard to that information during the work.

Further information on how to manage the risks associated with excavation work is available in the *Code of Practice: Excavation Work*.

Regulation 41

FACILITIES AT A CONSTRUCTION WORKPLACE

A person conducting a business or undertaking must ensure, so far as is reasonably practicable:

- the provision of adequate facilities for workers, including toilets, drinking water, washing facilities and eating facilities, and
- that the facilities are maintained in good working order and are clean, safe and accessible.

Given the often temporary and dynamic nature of construction workplaces, how these facilities are provided and who provides them will vary at workplaces that carry out construction work.

When providing facilities, all relevant matters must be considered, including:

- the nature of the work being carried out at the workplace
- the nature of the hazards at the workplace
- the size, location and nature of the workplace
- the number and composition of the workers at the workplace.

Affected workers must also be consulted when making decisions about the adequacy of facilities for the welfare of workers.

DECIDING WHAT FACILITIES ARE REQUIRED

To decide what facilities are required at any particular construction workplace, a person conducting a business or undertaking must consider:

- the nature of the work being carried out. For example, if workers are required to change into protective clothing to use hazardous chemicals, it may be reasonably practicable to provide change rooms
- the size, location and nature of the workplace. For example:
 - where there are existing suitable facilities available (e.g. a factory shut-down), arrange with the owner to use these facilities
 - where the construction work will be carried out in a remote or isolated area that is not connected to essential services, portable toilets, drinking water and washing facilities should be provided
- the number and composition of the workers at the workplace. For example:
 - facilities need to be accessible during the hours that shift workers are working
 - where there are both male and female workers, separate toilet, washing and shower facilities may be required.

Other factors that should be considered:

- Toilets, washing and shower facilities must not be used for any other purposes, for example storing of dangerous goods. Closets and urinals should be washed and kept in a clean, hygienic condition.
- Adequate washing facilities that are suitably drained, and wash basins/troughs should be supplied with hot and cold running water.
- Personal cleaning products such as soap and towels or air dryers should be supplied.

NUMBER OF TOILETS

For workplaces within buildings, the *National Construction Code of Australia* sets out the ratio of toilets to the number of workers, and the specifications for toilets. Generally, separate toilets should be provided in workplaces where there are both male and female workers. However, one unisex toilet may be provided in workplaces with both male and female workers where:

- the total number of people who normally work at the workplace is 10 or less
- there are two or less workers of one gender.

For example, a construction workplace with two male and eight female workers or with one female and three male workers could have a unisex toilet because there are 10 or fewer workers in total and two or fewer workers of one gender.

Any female toilet, including unisex facilities, should have adequate means for disposing of sanitary items.

For all other construction workplaces, separate toilets should be provided using the following ratios:

Workers	Closet Pan(s)	Urinals
Males	1 per 15 males (or fraction of)	1 per 20 males (or fraction of) Note: A urinal is not required for less than 10 workers. If a slab urinal is provided, each 600 mm shall be regarded as one urinal.
Females	1 per 10 females (or fraction of)	N/A

Refer to the table at the end of this appendix for examples of facilities required at different sites.

Further general guidance on workplace facilities is available in of the [Code of Practice: Managing the Work Environment and Facilities](#).

FIRST AID

Regulation 42

A person conducting a business or undertaking at a workplace must ensure:

- the provision of first aid equipment for the workplace
- that each worker at the workplace has access to the equipment, and
- access to facilities for the administration of first aid.

All workplaces must have first aid provisions in case of injury or illness. All construction workplaces must have access to a trained first aider. First aid staff should be familiar with the specific conditions and hazards at the construction workplace and the types of injuries likely to occur.

The names of first aid officers, first aid procedures and emergency contact phone numbers should be part of the workplace-specific training and displayed in prominent locations visible to all workers.

The principal contractor must put in place arrangements for ensuring compliance with the requirement to provide first aid at the construction project workplace. How the principal contractor intends to ensure compliance should be detailed in the WHS management plan.

When considering first aid provisions for a workplace, including the number of and training requirements for first aiders, the person conducting a business or undertaking and/or the principal contractor, should take into account the:

- nature of the work and the workplace hazards
- size and location of the workplace
- number and occupations of the workers and other people.

A construction workplace where high risk construction work is undertaken should be considered a high risk workplace. In these circumstances, it may be appropriate to employ specific work health professionals or services.

Further guidance on how to provide first aid is available in the [Code of Practice: First Aid in the Workplace](#).

EMERGENCY PLANNING

Regulation 43

A person conducting a business or undertaking at a workplace must ensure that an emergency plan is prepared for the workplace.

All workplaces must have an emergency plan that has been specifically developed for the particular workplace and its specific hazards and covers a range of potential incidents. All persons at the construction workplace must receive information, training and instruction about implementing the emergency plan.

A reliable and effective means of communication should be established between all work areas and persons involved to permit and ensure effective evacuation of danger areas.

Rescue equipment and a communication system to contact any necessary emergency services, should be available and readily accessible at the workplace.

The emergency procedures in the emergency plan must clearly explain how to respond in various types of emergency, including how to evacuate people from the workplace in a controlled manner. Contact numbers for emergency services should be prominently displayed.

A register of all persons who are at the construction workplace on a particular day should be kept so that in the case of any emergency everyone can be accounted for.

Emergency procedures must include:

- an effective response to an emergency
- evacuation procedures
- notifying emergency service organisations at the earliest opportunity
- medical treatment and assistance
- effective communication between the person authorised by the person conducting the business or undertaking to coordinate the emergency response and all persons at the workplace.

For example, emergency procedures may include:

- the personnel in charge of emergencies, including personnel to respond to and oversee the evacuation of injured persons
- the warning system (e.g. the alarm signal for evacuation)
- the safe assembly point
- shutting down of work, including plant and electrical equipment
- information regarding hazardous chemicals located on site
- provision of fire fighting and rescue equipment at appropriate locations
- procedures for assisting injured people and people whose means of escape are limited
- procedures for managing the risk of combustible materials (such as paper, card, wood, dust, timber, plastic and polystyrene) and highly flammable liquids and gases (such as solvents, liquefied petroleum gas (LPG) and oxygen)
- procedures following an evacuation, for example undertaking a headcount to determine if all persons that were at the construction workplace have been accounted for
- procedures regarding incident investigation, counselling and debrief.

The evacuation procedures should be displayed in appropriate location(s) at the construction workplace. The emergency plan and evacuation procedures must be tested on a regular basis.

PERSONAL PROTECTIVE EQUIPMENT

Regulation 44

Where PPE is to be used to minimise a risk to health and safety, the person conducting a business or undertaking who directs the carrying out of work must provide the PPE to workers at the workplace, unless the PPE has been provided by another person conducting a business or undertaking.

Regulation 46

The worker must, so far as the worker is reasonably able, use or wear the equipment in accordance with any information, training or reasonable instruction by the person conducting the business or undertaking.

PPE is one of the least effective ways of controlling risks to health and safety and should only be used:

- when there are no other practical control measures available (as a last resort)
- as an interim measure until a more effective way of controlling the risk can be used, or
- to supplement higher level control measures (as a back-up).

A worker who is provided with PPE by a person conducting a business or undertaking must:

- use or wear the equipment in accordance with any information, training or reasonable instruction provided by the person conducting a business or undertaking, so far as they are reasonably able
- not intentionally misuse or damage the equipment
- advise the person conducting a business or undertaking of any damage to, defect in or need to clean or decontaminate any of the equipment that they are aware of.

If the PPE is uncomfortable or does not fit properly, the worker should consult with their manager.

APPENDIX J - GENERAL CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

PPE used at a workplace must be:

- selected to minimise risk to health and safety
- suitable for the nature of the work and any hazard associated with the work
- a suitable size and fit and reasonably comfortable for the person wearing it
- maintained, repaired or replaced so it continues to minimise the risk, including ensuring the equipment is clean, hygienic and in good working order.

Selection processes must include consultation with workers and their health and safety representatives and should also include:

- detailed evaluation of the risk and performance requirements for the PPE
- ensuring compatibility of PPE items where more than one type of PPE is required (e.g. ear muffs with a hard hat)
- consultation with the supplier to ensure PPE is suitable for the work and workplace conditions
- preference for PPE that complies with the relevant Australian Standard or equivalent standard.

Examples of PPE that should be provided to workers:

- head protection (e.g. hard hats must be worn to protect against falling objects or collision with fixed objects, tools or plant)
- foot protection (e.g. safety boots with toe and mid-sole protection such as steel cap boots)
- eye protection (e.g. goggles or glasses when working with power or machine tools and pressure equipment; face shields should be worn when handling hazardous chemicals; suitable welding goggles must be worn for gas welding and cutting; welding helmets should be worn for electric arc welding; welding screens will protect the eyes of other persons from welding flashes)
- gloves
- sun protective hats, sun protective work clothing (long sleeved collared shirts, long pants), sunglasses and SPF 30 or higher broad spectrum sunscreen
- high visibility clothing.

The following equipment may also be provided where it has been identified by a risk assessment:

- hearing protection if the noise levels are not within the appropriate levels (e.g. ear plugs or ear muffs should be worn when working with or near jackhammers, grinders, explosive-powered tools or pile driving)
- respiratory protection (e.g. respirators, face masks or cartridge filters should be worn where there is a risk of exposure to hazardous chemical vapours, fumes, dust or fibres)
- body protection (e.g. aprons, safety harnesses, lanyards, shock absorbers and inertia reels).

Other persons including visitors to the workplace should also be provided with PPE (e.g. hard hats, gloves, ear protection, high visibility clothing and respiratory protection) to wear when they are at the construction workplace to protect them from health and safety risks. They must wear the PPE in accordance with any information, training and instruction provided to them by the person conducting a business or undertaking at the workplace.

FALLING OBJECTS

Regulation 54

A person conducting a business or undertaking must manage risks to health and safety associated with an object falling on a person if the falling object is reasonably likely to injure the person.

Regulation 55

The person conducting a business or undertaking must:

- eliminate the risk, so far as is reasonably practicable, or
- if that is not reasonably practicable to minimise the risk so far as is reasonably practicable.

This requires the person conducting a business or undertaking to provide and maintain a safe system of work including:

- fall prevention, so far as is reasonably practicable, or
- if fall prevention is not reasonably practicable, a system to arrest the fall of a falling object, so far as is reasonably practicable.

Falling objects can pose a significant risk and cause serious injuries to workers at construction workplaces or members of the public if control measures are not implemented to eliminate or minimise the associated risks. For example, a person could receive fatal head injuries if building materials or equipment is not secured or prevented from falling. It is essential to ensure that objects do not fall onto workers or other persons who may be under or adjacent to the area where the work is being performed.

Objects that could fall include:

- parts of a structure being built or dismantled
- walls being demolished
- materials stored or stacked at the workplace
- construction or waste material
- debris
- plant
- tools
- scaffolding components
- pre-cast concrete panels.

When work must be undertaken at height or there are open excavations there will be a risk of people or objects that fall, topple over or roll over. If work cannot be performed safely from the ground or from solid construction, fall prevention, such as perimeter guard rails and temporary work platforms (e.g. scaffolding, elevating work platforms and work boxes) should be provided.

Control measures that can be implemented to manage the risk of falling objects when undertaking construction work include:

- securing and properly bracing structures
- securing loose material such as plywood, iron sheets and off-cuts against the wind
- using chutes when placing debris into a skip below the work area
- erecting perimeter containment screens

APPENDIX J - GENERAL CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

- not stacking materials close to un-meshed guardrails and perimeter edges
- enclosing areas over which loads are being lifted
- using toe boards on edge protection
- using tool lanyards
- erecting catch platforms and/or nets
- using a gantry where work involving multiple levels is being performed beside a footpath
- closure of the adjoining area to form an exclusion zone
- establishing traffic management devices including road diversions or traffic detours
- using a spotter on the ground level when loads are being lifted to higher levels
- using traffic controllers to direct pedestrians or other traffic
- working outside normal hours
- using PPE such as hard hats.

Fall prevention must be considered and, so far as is reasonably practicable, implemented before considering options for arresting the fall of objects.

Control measures include:

- using the appropriate equipment to raise and lower objects, including ensuring that working load limits are not exceeded
- providing a secure physical barrier at the edge of the elevated area, such as toe boards or infill panels that form part of a guardrail system
- erecting perimeter containment screening made of mesh, timber, plywood or metal sheeting. The framework supporting the screen should be able to bear the load of the screen
- inspecting pallets each time before use to make sure they are in a safe condition
- load pallets correctly to ensure load stability, banding, shrink or stretch wrap can help with this.

When considering control measures to contain or catch falling objects, identify the types of objects that could fall, as well as the fall gradient and distance, to ensure that any protective equipment or structures are strong enough to withstand the impact forces of the falling object. Examples of these control measures include:

- erecting a covered pedestrian walkway
- erecting a catch platform with vertical sheeting or perimeter screening
- providing overhead protective structures on mobile plant

FALLS FROM HEIGHTS

For more information and guidance on falls, consult the following model codes of practice:

- *Managing the risk of falls in the workplace*
- *Preventing falls in housing construction.*

APPENDIX J - GENERAL CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

GENERAL CONSTRUCTION WORKPLACE FACILITIES							
Workplace	Toilets	Hand washing facilities	Drinking water	Eating facilities	Showers	Change rooms	Personal storage
<p>What facilities are required?</p> <p>Example 1: Large residential project</p> <ul style="list-style-type: none"> ■ New multiple single dwellings not included in housing construction work definition ■ Max 30 workers at any one time, including 3 female workers ■ \$1.5 Million 	<p>Minimum requirements:</p> <ul style="list-style-type: none"> ■ 1 female pan (inc adequate means for disposal of sanitary items, ■ 2 male pan, and ■ 2 (space) urinal. <p>Options include:</p> <ul style="list-style-type: none"> ■ temporary facilities such as portable toilets ■ relocatable buildings with toilet facilities, or ■ use new building facilities when available. 	<p>Minimum requirements:</p> <ul style="list-style-type: none"> ■ 1 female hand basin, and ■ 2 male hand basin <p>Options include:</p> <ul style="list-style-type: none"> ■ temporary facilities such as portable toilets with a hand basin ■ relocatable buildings with hand washing facilities, or ■ use new building facilities when available. 	<p>Drinking water facilities such as:</p> <ul style="list-style-type: none"> ■ direct connection to the mains water supply, ■ bottled water or containers. 	<p>A separate dining facility such as:</p> <ul style="list-style-type: none"> ■ relocatable building, or ■ use of part of new building when available. 	<p>If required, provide 2 separate shower facilities such as:</p> <ul style="list-style-type: none"> ■ portable shower units, or ■ use new building facilities when available. 	<p>If required:</p> <ul style="list-style-type: none"> ■ provide temporary change room facilities, or ■ use area of new building. 	<p>If required, provide:</p> <ul style="list-style-type: none"> ■ lockable space in an existing or relocatable building, or ■ lockable vehicle or trailer, or ■ lockable tool/storage boxes.
	<p>Number and type based on number and sex of workers</p>	<p>Number based on number of workers</p>	<p>Adequate supply of cool, clean drinking water (free of charge).</p>	<p>Hygienic dining facilities for eating meals and preparing and storing food.</p>	<p>For example, if the work involves dirty, hot or arduous work.</p>	<p>For example, if a need to change in and out of clothing (e.g. PPE).</p>	<p>For example, if a need to store personal belongings such as tools.</p>

APPENDIX J - GENERAL CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

GENERAL CONSTRUCTION WORKPLACE FACILITIES							
Workplace	Toilets	Hand washing facilities	Drinking water	Eating facilities	Showers	Change rooms	Personal storage
<p>What facilities are required?</p> <p>Example 2: Commercial construction project</p> <ul style="list-style-type: none"> ■ New 12 storey office tower ■ Max 70 workers, including 5 female workers ■ \$200 Million ■ Hazardous chemicals in use at the workplace 	<p>Number and type based on number and sex of workers</p> <p>Minimum requirements:</p> <ul style="list-style-type: none"> ■ 1 female pan (inc adequate means for disposal of sanitary items, ■ 5 male pans, and ■ 5 (space) urinal. <p>Additional requirements due to multi-storey building:</p> <ul style="list-style-type: none"> ■ 1 toilet (at least) provided on every third floor. <p>Options include:</p> <ul style="list-style-type: none"> ■ relocatable buildings with toilet facilities ■ temporary facilities such as portable toilets, or ■ use new building facilities when available. 	<p>Number based on number of workers</p> <p>Minimum requirements:</p> <ul style="list-style-type: none"> ■ 5 female hand basin, and ■ 5 male hand basins. <p>Options include:</p> <ul style="list-style-type: none"> ■ relocatable buildings with hand washing facilities ■ temporary facilities such as portable toilets with a hand basin, or ■ use new building facilities when available. 	<p>Adequate supply of cool, clean drinking water (free of charge).</p> <p>Drinking water facilities such as:</p> <ul style="list-style-type: none"> ■ direct connection to the water supply, or ■ bottled water or containers. 	<p>Hygienic dining facilities for eating meals and preparing and storing food.</p> <p>A separate dining facility such as:</p> <ul style="list-style-type: none"> ■ relocatable building, or ■ use of part of new building when available. 	<p>For example, if the work involves dirty, hot or arduous work.</p> <p>If required provide 3 male and 1 separate female shower facilities, such as portable shower units.</p> <p>Specialised shower facilities may also be required dependent on the types of activities being undertaken, and any use of hazardous chemicals at the workplace.</p>	<p>For example, if a need to change in and out of clothing (e.g. PPE).</p> <p>As some workers are required to use hazardous chemicals at the workplace, which requires the use of specific PPE, change room facilities should be provided.</p> <p>When required:</p> <ul style="list-style-type: none"> ■ provide temporary change room facilities, or ■ use area of new building. 	<p>For example, if a need to store personal belongings such as tools.</p> <p>When required, provide:</p> <ul style="list-style-type: none"> ■ lockable space in change room facility ■ lockable container, vehicle or trailer, or ■ lockable tool/storage boxes.

APPENDIX J - GENERAL CONSTRUCTION WORKPLACE MANAGEMENT ARRANGEMENTS

GENERAL CONSTRUCTION WORKPLACE FACILITIES							
Workplace	Toilets	Hand washing facilities	Drinking water	Eating facilities	Showers	Change rooms	Personal storage
What facilities are required?	Number and type based on number and sex of workers	Number based on number of workers	Adequate supply of cool, clean drinking water (free of charge).	Hygienic dining facilities for eating meals and preparing and storing food.	For example, if the work involves dirty, hot or arduous work.	For example, if a need to change in and out of clothing (e.g. PPE).	For example, if a need to store personal belongings such as tools.
Example 3: Civil construction project	Minimum requirements: <ul style="list-style-type: none"> ■ 5 male pans, and ■ 4 (space) urinal. Due to rural location and portability of the workplace, temporary facilities such as portable toilets or relocatable facilities should be provided.	Minimum requirements: <ul style="list-style-type: none"> ■ 5 male hand basins. Options include: <ul style="list-style-type: none"> ■ temporary facilities such as portable toilets with a hand basin, or ■ relocatable buildings with hand washing facilities. 	Drinking water facilities such as: <ul style="list-style-type: none"> ■ direct connection to the local water supply, or ■ bottled water or containers. 	Access provided to a separate dining facility such as a relocatable building e.g. transportable lunchroom.	If required, provide 3 separate shower facilities such as portable shower units (dependent on the types of activities undertaken).	If required, access provided to temporary change room facilities such as a relocatable building.	If required, provide: <ul style="list-style-type: none"> ■ lockable space in a relocatable building, ■ lockable vehicle or trailer, or ■ lockable tool/storage boxes.
<ul style="list-style-type: none"> ■ New major road ■ Outdoor and rural location ■ Max 70 workers (no female workers on site) ■ \$350 Million 							

LIST OF AMENDMENTS

Page Number	Amendments – 14 November 2013
Front cover	Publication date changed from July 2012 to November 2013
2	Scope and application amended to reflect that additional material on housing construction has been included
5	Table of examples of construction work has been moved to Appendix A
5	New section 1.2 titled 'What is not construction work'
5	New section 1.3 titled 'What is a structure'
6	Examples of structures in housing construction inserted
7	New section 1.4 titled 'What is high risk construction work'
7	New section 1.5 titled 'What is a construction project'
7	Minor changes to language and additional information about principal contractors added to new section 1.5 'What is a construction project'
8	New Section 1.6 titled 'Other terms used in this code' – includes definitions of builder, subcontractor, owner-builder and designer
8	Section 1.7 is titled 'Who has health and safety duties relating to construction work'
8-9	Section 1.7 'Who has health and safety duties relating to construction work' now has specific information on multiple and shared duties, including targeted information for the housing construction sector
10	New Section 1.8 titled 'What is required to manage risks in construction' (was section 2.2 in previous version)
10	Section 1.8 includes specific information on consulting with other duty holders and examples
14	Section 2 is now titled 'Specific duties relating to construction work'
14	Section 2.1 is now titled 'Persons conducting a business or undertaking' and includes the previous sections on 'designers', 'person that commissions construction work', 'principal contractor', 'persons who have management or control of a workplace at which construction work is carried out', 'persons carrying out high risk construction work' and 'other duties'. Some of these have been subject to minor amendments.
15	Footnote added to clarify application of WHS duties to principal contractors
17	New Section 2.2 titled 'Officers'
17	New Section 2.3 titled 'Workers'
18	New Section 2.4 titled 'Other persons'
20	Section 3.3 'Controlling the risks' includes additional introductory paragraph about specific control measures to control risks and provides an example
21	Minimising the risk by substituting one of the following control measures (substitution) – example of substituting a manual task with a material hoist or craning material has been replaced with an example involving substitution of solvent-based paint with water-based paint
21	Minimising the risk by substituting one of the following control measures (engineering controls) – additional examples included
21	Minimising the risk by using administrative controls now includes additional example about scheduling tasks
21	Combination of control measures – additional text added before examples
22	Combination of control measures – additional example included for housing construction industry

Page Number	Amendments – 14 November 2013
24	Section 4.1 'What is a SWMS' text has been amended.
24	Section 4.1 'Who is responsible for preparing a SWMS' text has been amended
25	Section 4.2 'Preparing a SWMS' has been revised
26	Section 4.3 'Implementing a SWMS' has additional text about monitoring the SWMS
27	'Keeping the SWMS and making it available' – text has been amended
27	Section 4.4 'Reviewing a SWMS' – text has been amended
28	Section 5.1 'What is a WHS management plan' – text has been amended
28	Section 5.2 'What must the WHS management plan contain' – text has been amended. Title in previous version was 'Preparing a WHS management plan contain?'
28	Section 5.3 'How to prepare a SWMS' has been amended and refers to further information in appendices
29	Section 5 – addition of Section 5.4 'Informing people about the WHS management plan'
29	Addition of Section 5.5 'Reviewing and revising a WHS management plan'
29	Section 5.6 'Keeping the WHS management plan'
	Information on preparing WHS management plans moved to Appendix F
30	Section 6 'Information, training, instruction and supervision' – additional text included
30	Section 6.1 'General construction induction training' – text has been amended
31	'General construction induction training cards' – text has been amended, including addition of an example for housing construction
31	Section 6.2 is now titled 'Workplace specific induction training' and text has been amended
32	Section 6.3 'Other training' – text has been amended
32	Section 6.4 'Supervision' – text has been amended
34	Section 7 – 'General workplace management arrangements' – text amended to refer to principal contractor instead of PCBU as in previous version of code
34	Section 7 'General workplace management arrangements' – significant amounts of text moved to appendix
35	New Appendix A: Examples of construction work
38	New Appendix B: Examples of high risk construction work
40	New Appendix C: Design duties
44	New Appendix D: Safe Work Method Statement Template
48	New Appendix E: Safe Work Method Statement Example
52	New Appendix F: Preparing a WHS Management Plan
55	New Appendix G: WHS Management Plan Template
57	New Appendix H: Sample Completed WHS Management Plan
60	New Appendix I: Housing construction workplace management arrangements
70	New Appendix J: General construction workplace management arrangements

THIS CODE PROVIDES PRACTICAL
GUIDANCE ON HOW TO MEET WORK
HEALTH AND SAFETY REQUIREMENTS
RELATING TO CONSTRUCTION WORK.
