



Work Health and Safety: Some Considerations for Architects and Designers

By Cameron Solley, Partner
Insurance, Litigation & Risk Management Group

Workplace Duties

The Work Health and Safety Act 2011 (the WHS Act) applies at any work place, including a construction site and residential premises when a contractor is engaged to carry out work there.

While work is being carried out, for example, to construct a building or do renovation work at a residential premises, an architect or designer will likely be a person conducting a business or undertaking (PCBU), and therefore have health and safety duties to others under the WHS Act.

- The Architect owes a duty as a PCBU to their workers and themselves while they are at work at the premises to ensure their workers' and their own health and safety while at work. The Architect also has a duty of care to ensure, so far as is reasonably practicable, that the health and safety of other people is not put at risk from the work being carried out. This would include the health and safety of residents and any visitors who are there when work is being carried out.
- There is also a duty imposed on any workers carrying out the work for the business operator to:
 - take reasonable care for their own health and safety
 - take reasonable care that their actions or omissions do not adversely affect the health and safety of others, such as residents and visitors
 - comply with reasonable instructions given by the PCBU.
- Interestingly, in the case of a residential premises, the home owner/residents and any visitors while work is being carried out at the premises have a duty to:



- take reasonable care for their own health and safety
- take reasonable care that their actions or omissions do not adversely affect the health and safety of other persons
- comply with reasonable instructions given by the PCBU.

The WHS Act imposes a specific duty on officers of PCBUs to exercise due diligence to ensure that the PCBU meets its work health and safety duties. This duty requires officers to be **proactive** in ensuring that the PCBU complies with its work health and safety duties.

To protect their position, Architects and Designers need to ensure that all steps have been, or are being, taken to ensure appropriate workplace systems, procedures, education processes are in place to achieve a safe working environment as contemplated by the Act. The laying of a good audit trail will be appropriate so that it can be said, and proven through written records, that workplace health and safety practices are being appropriately implemented and monitored for compliance. Obviously, you do not need to take the health



and safety obligations to extreme: you only have to do what is reasonably practicable to ensure the health and safety of workers and volunteers and other persons who are impacted by the work being undertaken. Common sense applies, but must be applied in an environment where workplace safety is taken very seriously by the authorities.

Design Duties

Under the WHS Act, a PCBU that designs a structure that will be used or could reasonably be expected to be used as a workplace must ensure so far as is reasonably practicable that the structure is without risks to health and safety. Compliance with this duty would include testing, carrying out analysis and providing specific health and safety information about the structure.

The duties also apply to designers of domestic residences but only to the extent that at some stages in the lifecycle the residence may become a workplace and the design could affect the health and safety of workers who will carry out work on the building, such as construction, maintenance and demolition.

For example, buildings will require maintenance in the future. Therefore, the building design needs to provide for a safe way to obtain access to machinery rooms or roof areas for cleaning or accessing otherwise dangerous locations which will require maintenance access. Some areas might require safety harness connection points, and so consideration should be taken to their inclusion at the design stage.

The person that commissions construction work (the client) has specific duties under the WHS Regulations to:

- consult with the designer, so far as is reasonably practicable, about how to ensure that health and safety risks arising from the design during construction are eliminated or minimised, and
- provide the designer with any information that the client has in relation to the hazards and risks at the site where the construction work is to be carried out.

What Risk Management strategies should Architects and Designers have in place?

To demonstrate due diligence of ensuring that the

PCBU (whether that be itself, the client or a principal contractor engaged to manage and control the health and safety for the workplace) meets its work health and safety duties, Architects and Designers will need to show that they have taken reasonable steps to:

- acquire and update their knowledge of health and safety matters
- understand the operations being carried out by the PCBU in which they are employed, and the hazards and risks associated with the operations
- ensure that the PCBU has, and uses, appropriate resources and processes to eliminate or minimise health and safety risks arising from work being done
- ensure that the PCBU has appropriate processes in place to receive and respond promptly to information regarding incidents, hazards and risks
- ensure that the PCBU has, and uses, processes for complying with duties or obligations under the WHS Act.

In respect of its duties, the designer of a structure should:

- identify reasonably foreseeable hazards associated with the design of the structure
 - In the same way that designers consider the future impact of a building on environmental sustainability, designers should consider how their design will affect the health and safety of those who will interact with the structure throughout its life.
- if necessary, assess the risks arising from the hazards
 - A risk assessment involves considering what could happen if someone is exposed to a hazard and the likelihood of it happening.
 - The more serious the risk of harm, the more time and effort should be dedicated to eliminating or minimising the risk.
 - If similar tasks or processes apply for a number of projects, or the design is of a fairly routine nature, a generic risk assessment model might be appropriate. However, the designer is still responsible for ensuring that the generic assessment is valid for the project before deciding to adopt it.

- For designs of structures that have unusual or atypical features which present hazards and risks during the construction phase, the designer must provide a written safety report to the PCBU who commissioned the design that specifies the hazards.
- The safety report should include information about:
 - any hazardous materials or structural features and the designer's assessment of the risk of injury or illness to construction workers arising from those hazards
 - the action the designer has taken to control those risks, for example changes to the design.
- eliminate or minimise the risk by designing control measures
 - So far as is reasonably practicable, the duty holders (including other PCBUs, workers and the client) 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.
- review the control measures
 - Control measures for common hazards may be chosen from known solutions. For other new or complex hazards a risk assessment may be necessary to assist in determining the most effective control measures. The design development phase should involve:
 - Developing a set of design options in accordance with the hierarchy of control
 - Selecting the optimum solution. Balance the direct and indirect costs of implementing the design against the benefits derived.
 - Testing, trialling or evaluating the design solution
 - Redesigning to control any residual risks
 - Finalising the design, preparing the safety report and other risk control information needed for the structure's lifecycle.

The hierarchy of control:

- Elimination of the hazard and associated risk;

If elimination is not possible, then consider the following control measures, or a combination of them:

- Substitution with a less hazardous process or material
- Isolation of the hazard from people
- Engineering controls
- Administrative controls
- Personal protective equipment

Architects and Designers must be aware of their obligations under the WHS Act and put in place appropriate processes to ensure compliance. To do so, Architects and Designers should have:

- knowledge of work health and safety legislation, codes of practice and other regulatory requirements
- an understanding of the intended purpose of the structure
- knowledge of risk management processes
- knowledge of technical design standards
- an appreciation of construction methods and their impact on the design
- the ability to source and apply relevant data on human dimensions, capacities and behaviours.

An important starting point is compliance with the Code of Practice relating to the Safe Design of Structures issued by Safe Work Australia, which provides practical guidance for architects for understanding work health and safety issues. The Code is admissible in Court proceedings as evidence of what is known about a hazard, risk or control and the Court may rely on the code in determining what is reasonably practicable in the circumstances to which the code relates. Architects and Designers should therefore familiarise themselves with the Code of Practice and formulate written procedures based on it to monitor compliance.

A work health and safety inspector may, during a routine audit or inspection, ask a company director for evidence that the company is meeting its due diligence requirements. Architects and Designers should keep records / log books of the steps taken to

exercise due diligence as discussed above.

How is WH&S likely to approach this?

WH&S will apply the legislation and regulations stringently, and judge an architect's compliance with the legislation and regulations by comparing actual operations and actions with the provisions of the Code of Practice.

Nevertheless, there is a objective or "common sense" element to the application of the legislation, since the duty of a person conducting a business or undertaking to ensure health and safety is qualified by what is reasonably practicable. This involves asking what the reasonable person in their position would do in the circumstances to address a health and safety risk at work. Deciding what is 'reasonably practicable' requires taking into account and weighing up all relevant matters including:

- the likelihood of the hazard or the risk occurring
- the degree of harm that might result from the hazard or the risk
- knowledge about the hazard or risk, and ways of eliminating or minimising the risk
- the availability and suitability of ways to eliminate or minimise the risk, and
- after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.

While designers may not have management and control over the actual construction work they can discharge their duty by consulting, co-operating and co-ordinating activities, where reasonably practicable, with those who do have management or control of the construction work, for example by:

- applying risk management processes to more traditional designs and considering whether new or innovative approaches to design will eliminate or minimise risk and result in an intrinsically safer building or structure
- providing information of any identified hazards arising from an unconventional design to those who will construct or use the building
- providing guidance on how a structure might be constructed safely
- carrying out the above in collaboration with

those who have expertise in construction safety.

Therefore, architects and designers should look to take these steps in each project and retain evidence of their having done so, preferably in clear written notes.

Difference between Civil / Statutory Liability

In the context of health and safety at work, civil liabilities may arise against an architect where a person is injured at the worksite, caused by a failure to ensure a safe environment. An injury to a worker may give rise to a workers' compensation claim, which could lead to a claim for contribution as against the architect. Where the injured person is not a worker, but is for example a visitor to the work place, or perhaps even the client or a friend of the client who visits a residence being renovated, a direct civil claim for compensatory damages could be raised against an architect. Damages claimed could be for pain and suffering, medical expenses and any lost income resulting from the injury.

The nationally harmonised WH&S regime in fact imposes criminal sanctions upon corporations and officers. Where the primary duty to ensure health and safety at work is breached, penalties of up to \$3 million for a corporation and up to \$600,000 and five years' gaol can be imposed for the most serious cases involving recklessness and serious harm to a person.



Cameron Solley
PARTNER

P: 07 3231 8868

E: csolley@thymac.com.au