



On advice from Workplace Health and Safety Queensland, the following provides a checklist and outlines the necessary process to assist designers in understanding their responsibilities under the new legislation.

The Safe Design of Structures Code of Practice states: The designer must provide a written safety report to the client that specifies the hazards relating to the design of the structure of which the designer may reasonably be aware, that may:

- Create a risk to persons who are to carry out the construction work or
- Are associated with this particular design and not with other designs of the same type of structure.

More comprehensive recommendations are covered in the draft code approved by Safe Work Australia yet to be approved by Workplace Health and Safety Queensland.

Application

This particular checklist is relevant to designers. Designers should be aware that the obligations under the WHS Act 2011 extend to many design related stakeholders, including:

- Architects, building surveyors, interior designers and all other design practitioners who contribute to or have overall responsibility for any part of the design
- Building services designers and engineers
- Contractors who include design within their scope of works
- Temporary works engineers
- Persons specifying alteration, demolition or dismantling work

Designers should also be aware that the WHS Act provides for shared responsibility by many stakeholders in the value chain, including:

- Client
- Importers
- Distributors
- Installers

Therefore, designers are not alone in either their responsibilities or the need to effectively communicate and make transparent all issues that relate to the health and safety of the structures that they are involved with.

The Code of Practice advises: A 'Safety Report' or similar document is an ideal mechanism to ensure that design related health and safety concerns are raised and addressed and will ensure that designers will have an equitable basis for any issues that arise.



Checklist

1. Pre-design Phase

Establish the design context and set up consultation methods with the client:

- Set up a file of details of your requirements under the WHS Legislation.
- From this set up a draft risk management plan addressing all elements of the 'Safe Design of Structures' guidelines.
- Create a draft communication plan on all those matters you will need to highlight as part of your safety report.
- Understand intended use of the structure.
- Obtain industry injury/illness profile and statistics.
- Request any relevant safety / health aspects of the project from the client.
- Seek guidance on structure hazards and possible solutions.
- Engage with a workgroup of the client and stakeholders in the project.

2. Conceptual and Schematic Design Phase

Establish a framework for the preliminary hazard analysis and identify hazards affected by the design of the structure considering:

- Siting
- High consequence hazards
- Systems of work
- Environment
- Incident mitigation
- Run this framework by the stakeholder workgroup

3. Design Development Phase

Determine how hazards will be prevented or eliminated through either:

- Implementing solutions from recognised standards (ref Note #1), or
- Conducting a risk assessment process for hazards that have no suitable solution in standards or there is a poor safety record in this area.
- Establish design risk controls.
- Discuss this hazard reduction plan with the stakeholder group.

Ensure WHS report is included with the structural design requirements.

4. Final Design

- Review designs to establish whether satisfactory risk elimination or minimisation has been achieved.
- Communicate and seek feedback from the stakeholder group.

If not satisfactory, redesign to further reduce risks.

Note #1

The ASI's position is that the safety of a structure cannot be assured if the compliance to the appropriate standards for the critical components (materials and fabrication) that make up that structure cannot be ascertained.

In consultation with the relevant authorities, the ASI interprets WHS Act 2011 to mean the designer must consider assessment of compliance to the relevant codes to ensure the safety of the design.

This means that steel structures to design codes AS/NZS 4100, 4600 or 5100 must meet the code requirements of the relevant Australian steel material and fasteners including bolts as well as welding codes to ensure compliance. The ASI has provided Technotes on these matters for assistance in meeting the relevant codes.

Ref.: <http://steel.org.au/elibrary/asi-technical-notes/>

