



## Fact Sheet

# An introduction to safe design

### Introduction

This fact sheet provides guidance to the building and construction industry on:

- how safe design is assessed as part of the Australian Government Building and Construction Occupational Health and Safety (OHS) Accreditation Scheme (the Scheme); and
- planning for safe design in construction for those not necessarily applying for accreditation under the Scheme.

### What is safe design?

Safe design is the integration of hazard identification and risk assessment methods to eliminate or minimise the risks of injury throughout the life of a product or structure.

The safe design approach begins with an emphasis on making choices about design, materials and methods of manufacture or construction to enhance the safety of the finished product.

Safe design is good business because it improves safety and reduces costs by:

- improving risk management of OHS issues during the construction phase;
- protecting constructors from injury; and
- reducing the need for redesign and retrofitting.

The importance of safe design was highlighted in the Cole Royal Commission's final report into the building and construction industry. It noted that OHS should begin at the design phase of a project and not wait until construction starts.

The importance of safe design is also reflected in its inclusion in the **Federal Safety Commissioner's Safety Principles and Guidance**. The principle for safe design encourages industry participants to ensure that safe design and constructability are considered at the planning and procurement stages of a construction project to reduce or eliminate hazards and control risks.

### The Scheme and safe design

The Scheme was established as part of the Australian Government's commitment to foster a new culture in the industry where work must be performed safely, as well as on budget and on time.

As part of the Scheme, specific criteria were identified as essential to improving OHS performance in the industry.

Accredited contractors under the Scheme must demonstrate the integration of safe design in construction processes under one of the Scheme criteria:

*Integration of design issues into the risk management process – the degree to which safe design is considered and incorporated in the planning and construction phases.*

Over the page are examples that demonstrate how contractors plan for safe design under the Scheme.

### For further information you can:

- visit the FSC website at [fsc.gov.au](http://fsc.gov.au)
- contact the FSC Assist Line on **1800 652 500**
- contact the OFSC via email at [ofsc@deewr.gov.au](mailto:ofsc@deewr.gov.au)

## Examples to demonstrate safe design planning

Conduct a design risk assessment at the design phase to identify OHS issues that may arise in the construction phase.	<ul style="list-style-type: none"> <li>▪ An OHS management system is in place which demonstrates that safety issues have been considered in the course of planning the project.</li> <li>▪ A procedure is in place for conducting or obtaining a design risk assessment.</li> <li>▪ A design review checklist is developed to apply at the design phase.</li> </ul>
Ensure OHS risks identified at the initial design phase (and unable to be eliminated) are incorporated into safety plans.	<ul style="list-style-type: none"> <li>▪ A procedure is in place for managing risks, including the incorporation of any design risk into project safety plans.</li> <li>▪ A job safety analysis procedure is in place (including safe design).</li> <li>▪ A flowchart is developed outlining a process for hazard identification and risk management of design hazards.</li> </ul>
Assess and control design-related OHS risks impacting on safety during the construction phase.	<ul style="list-style-type: none"> <li>▪ A procedure is in place for the assessment and control of OHS risks (including design-related risks).</li> <li>▪ A flowchart is developed showing risk assessment and control procedure (including design-related risks).</li> <li>▪ A register of OHS risks and control measures (including design-related risks) is in place.</li> <li>▪ Controls identified as part of an OHS risk assessment form part of all subsequent procedures, processes and systems for the project.</li> </ul>
Ensure OHS risks are managed in the event of design changes during the construction phase.	<ul style="list-style-type: none"> <li>▪ A procedure is in place for the review and assessment of risks associated with any design changes, including who is to be involved and any subsequent documentation affected.</li> <li>▪ A template is developed for design change review and approval.</li> <li>▪ There is a position/role description indicating authority to approve design changes.</li> <li>▪ A procedure is in place for communication of any design changes and changes in risks to all employees and workers involved in the project.</li> </ul>

These practices to implement safe design are also applicable to construction companies other than those applying for accreditation under the Scheme. Building and construction industry participants should also refer to applicable Commonwealth, state or territory OHS legislation to ensure they are meeting their OHS obligations with regard to safe design.

The examples of safe design planning used in this fact sheet are provided to assist industry: contractors are encouraged to develop their own initiatives for safe design planning. Adoption of the practices described in this fact sheet does not guarantee accreditation under the Scheme.

This fact sheet is correct as of 12 October 2007. Produced by the Office of the Federal Safety Commissioner.

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