

# FORMWORK AND FALSEWORK

## INFORMATION SHEET

### Overview

This Information Sheet provides advice for small businesses and workers on managing risks associated with formwork and falsework activities, for example formwork and falsework contractors.

More information is in the specific guides for [formwork](#), [falsework](#) and [slip, jump and travelling formwork systems](#).

Further information on construction work is in the [Code of Practice: Construction work](#).

### What is formwork and falsework?

Formwork means the surface of the form and framing used to contain and shape wet concrete until it is self-supporting.

Falsework means the temporary structure used to support a permanent structure, material, plant, equipment and people until the construction of the permanent structure has advanced to the stage where it is self-supporting.

### What are the risks?

Hazards and risks associated with formwork and falsework activities can include:

- collapse of the formwork and falsework
- major functional requirements of the formwork and falsework like the height, maximum live and dead loads and access requirements
- adjacent buildings and structures
- ground conditions
- electric lines
- falls and falling objects
- lifting plant and materials
- loading materials during construction
- lifting points
- mixing components
- powered mobile plant and traffic, and
- unauthorised access to the construction workplace.

### What do I need to do?

You must manage the risks to workers and other people's health and safety which may arise from the erection, alteration, dismantling and use of formwork and falsework. This includes managing the risk of plant, powered mobile plant and plant that lifts or suspends loads, for example cranes.

Consider whether risks from formwork and falsework can be completely removed from the workplace, for example by selecting an alternative construction method.

If risks cannot be eliminated think about how they can be minimised, for example:

- using precast columns and beams instead of constructing formwork and pouring concrete on site
- working at ground level or on a finished floor
- using barricades and signs to create an exclusion zone in the area where formwork is to be erected or stripped to prevent other workers entering
- using edge protection or fall arrest systems to prevent falls from heights
- scheduling delivery times so loads are not lifted onto incomplete or unsecured temporary structures or decks, and
- using personal protective equipment (PPE) like high visibility clothing, protective hand and footwear and hard hats.

### Design of plant and structures

Formwork and falsework component designers are responsible for designing components that are safe to manufacture, assemble and use for the purpose they were designed for. The formwork and falsework components are plant and may be purchased, hired in or supplied, for example by a formwork and falsework contractor.

Anything constructed to support a load including formwork and falsework, can be referred to as a structure. Design of structures and plant is inter-related and designers may have multiple responsibilities. For example formwork systems and loads will impact on the design of the structure and should be taken into consideration by the structural designer.

See the [General guide for formwork and falsework](#) for more information on plant and structural design.



## Erecting, altering and dismantling formwork and falsework

Formwork and falsework should be systematically erected and dismantled by competent persons and tied in progressively to stabilise the structure in accordance with the designer's or manufacturer's instructions. Prefabricated formwork and falsework should be erected and used in accordance with the manufacturer's instructions.

Information on foundations and footings, erecting, inspecting, altering and dismantling formwork and falsework is in the *General guide for formwork and falsework*.

Where scaffolding is used to erect formwork and falsework, it must comply with the requirements for scaffolding including using licensed scaffolders. Further information on scaffolds is in the *General guide for scaffolds and scaffolding work*.

## Competency and licensing

A person who erects, alters or dismantles formwork and falsework must be competent to do the work safely. Suitable training must be provided.

Although there is no high risk work licence for formwork and falsework erection high risk work licences are required for other associated plant, for example when undertaking scaffolding work or operating cranes, hoists, forklifts or elevating work platforms. The high risk work licensing classes are listed in Schedule 3 of the WHS Regulations.

## Safe work method statement (SWMS)

The construction of formwork and falsework or working on the resulting structure may involve activities defined as 'high risk construction work' under the WHS Regulations.

The SWMS must be developed in consultation with workers and their representatives who are carrying out the high risk construction work.

Further information on high risk construction work, SWMS and a SWMS template is in the *Code of Practice: Construction work*.

## Work Health and Safety (WHS) management plans

Where the cost of the construction work is \$250 000 or more a principal contractor for a construction project must prepare a written WHS management plan for the workplace before work on the construction project starts.

Further information on WHS management plans is in the *Code of Practice: Construction work*.

## Inspection and maintenance

A person with management or control of formwork and falsework at a workplace has a responsibility to have formwork and falsework inspected and maintained so that it is safe. This includes inspections before the formwork and falsework is loaded, after loading and after any repairs, alterations or additions to formwork and falsework are made.

For registered plant like prefabricated scaffolding and cranes, a record of all commissioning, decommissioning, inspection, maintenance, alterations and dismantling must be kept.

## Emergency plan

An emergency plan must be prepared and maintained and provide for emergency response, evacuation procedures, medical assistance and communication with emergency service organisations and others at the workplace. It should also address formwork collapse and people falling from height.

Emergency arrangements for evacuating an injured worker from, for example a formwork 'cell', should consider how to safely remove an immobilised or unconscious person. This may include creating emergency entry holes and doorways through decks and screens.

Workers must be provided with information and training on the emergency procedures for the workplace and the procedures must be tested.

For further information see the *Safe Work Australia* website ([www.swa.gov.au](http://www.swa.gov.au)).