

Tower scaffolds

What you need to do

A tower scaffold is one way to prevent a fall when working at height. The type of tower selected must be suitable for the work and erected and dismantled by people who have been trained and are competent to do so.

Those using tower scaffolds should also be trained in the potential dangers and precautions required during use.

Tower scaffold provision and use must be properly managed and include rigorous scaffold inspection arrangements.

Key issues with tower scaffolds are:

- **Erection and dismantling**
- **Stability**
- **Precautions and inspection**
- **Using and moving**

What you need to know

Many people are injured each year when they fall from towers or when the tower overturns.

Towers should be erected by trained and competent people. There are a number of organisations that provide training for the safe erection and use of tower scaffolds.

The incidents that occur are mainly caused by:

- **Dangerous methods of erection or dismantling** – where a safe system is not being followed;
- **Defects in the erected scaffold** – where the tower structure is incorrectly assembled or where a platform guardrail is missing;
- **Misuse of the scaffold** – where a ladder is used on a tower causing it to overturn or when a person falls while the tower is being moved.

Erection and dismantling

The manufacturer or supplier or hirer has a duty to provide an instruction manual explaining the erection sequence, including any bracing requirements and the height to which the tower can be erected safely. This information must be passed on to the person erecting the tower and the person supervising the work.

Towers should be erected following a safe method of work, either using:

- **Advance guard rail system** – where temporary guard rail units are locked in place from the level below and moved up to the platform level. They are in place before the operator accesses the platform to fit the permanent guard rails.
- **'Through-the-trap' (3T)** – involves the operator taking up a working position in the trap door of the platform, from where they can add or remove the components which act as the guard rails on the level above the platform. It is designed to ensure that the operator does not stand on an unguarded platform.

Stability

To maintain tower stability you must make sure:

- the tower is resting on firm, level ground with the locked castors or base plates properly supported. Never use bricks or building blocks to take the weight of any part of the tower;
- stabilisers or outriggers are installed when required by the instruction manual; and
- that a tower is never erected to a height above that recommended by the manufacturer.

Precautions and inspection

Tower scaffolds must comply with the standard required for all types of scaffolds, e.g. double guardrails, toe boards, bracing and access ladder.

When the tower is purchased or hired it should arrive with all the necessary components to prevent falls and ensure stability.

Towers rely on all parts being in place to ensure adequate strength. They can collapse if sections are left out.

All towers must be inspected following assembly and then at suitable regular intervals by a competent person. In addition, if the tower is used for construction work and a person could fall 2 metres or more from the working platform, then it

must be inspected following assembly and then every 7 days. Stop work if the inspection shows it is not safe to continue and put right any faults.

The result of an inspection must be recorded and kept until the next inspection is recorded.

Using and moving

Make sure everyone involved is aware of, and follows, these simple rules:

Using

Never use a tower:

- in strong winds;
- as a support for ladders, trestles or other access equipment;
- with broken or missing parts; or
- with incompatible components.

Moving

When moving a tower you should **always**:

- reduce the height to a maximum of 4m;
- check that there are no power lines or other obstructions overhead;
- check that the ground is firm, level and free from potholes; and
- push or pull using manual effort from the base only.

Never move a tower while people or materials are on the tower, or in windy conditions.