# MAKING A SITE SAFE

**There are many types of hazards associated with site establishment and construction. Managing these hazards is important and will ensure everyone goes home safely at the end of the day.**

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Identification of the hazards associated with construction and demolition is the responsibility of everyone on site; however, the ultimate responsibility for site safety lies with the site foreperson or project manager. Both the Department of Labour and the Building Consent Authority (BCA) can take action against site personnel where hazards exist or are not being adequately managed. Where building inspectors consider that there are dangers on the site, they may refuse to undertake a booked inspection or stop the job until these concerns are resolved.

## Clause F5 applies to all building sites

The Acceptable Solutions associated with Building Code Clause F5 *Construction and demolition hazards* focus strongly on commercial type projects. But the objectives, functional requirements and performance criteria apply to all building sites. These aim to ensure that tools and materials cannot fall off the site, causing harm or damage to people and property. Work should be undertaken in such a way that it does not endanger adjoining properties. The Code also has a strong focus on restricting the entry of children to the site.

Building consent applicants' documentation should show how they intend to comply with Clause F5. For a commercial project this may involve providing details of the construction and location of site barriers and/or hoardings. Where overhead gantries or cranes are likely to be installed, this needs to be discussed with the BCA before making the application.

Some BCAs may also have requirements under their District Plan or bylaws around fencing and how sites are serviced by delivery vehicles, site personnel parking and so on.

## Common sense steps a good start

In many situations, compliance with Clause F5 is achieved simply by people being sensible about the steps they take to protect themselves, adjoining property and other people on or off the site. The location of the site in relation to the public and adjoining properties also needs to be taken into account.

On residential sites, simple visual barriers around the site, for example, fluorescent plastic mesh fixed to a taut top and bottom wire between steel warratahs, may deter unauthorised entry, although these are not part of the compliance document requirements. A clean, organised site without easy access to upper levels and scaffolding will make it less tempting to children. Storing sheet materials flat on the ground or having them secured when leaning against walls, and having barriers around falls and other hazards, will reduce the likelihood of an accident.

Where there are deep excavations for the likes of poles, cover the top of the holes or fence the immediate area off. Trenches should be adequately shored, and those deeper than 1.5 m need formal notification (see *Build* 110 February/March 2009, page 74). On-site stormwater should also be managed so that sediment does not get into drains or watercourses.


Don't leave material lying about that can be easily blown around the site. Weigh or tie down roofing and other materials and cover piles of sand. On sandy sites, it may be necessary to have a watering system in place to stop sand being blown onto adjacent properties.

## Extra care by public walkways

When building on or close to a public walkway, extra care needs to be taken, particularly where the site is in a built-up area. Footpaths should

be left as undisturbed as possible, appropriate signage should be installed and trip hazards should be avoided. It may be necessary to sweep the footpath at the end of each day.

The Acceptable Solutions to Clause F5 provide a range of examples for site hoardings and fencing, such as chainlink type fencing solutions (a range of easy-to-install, pre-made fencing solutions are available) or post and rail fences clad in sheet material such as plywood. The fences or hoardings should be appropriate to the hazard and strong enough to resist likely accidental impact. They should also be difficult to climb! The Acceptable Solutions suggest heights for various kinds of barriers/fencing and hoardings, depending on the construction.

## Scaffolding has special requirements

Where there is a scaffolding system protecting the public, all clips and sharp ends should be wrapped and made visible to stop people walking into the scaffolding or being scratched or cut. There are several requirements for scaffolding that must be followed that sit outside of Clause F5. This information can be found in the Department of Labour document *Scaffolding – approved code of practice for the safe erection and use of.*

## Keys to achieving compliance with Clause F5

There are some common principles that should be applied on a site to help achieve compliance with Clause F5:

- Have a site-specific hazard management plan in place *before* you start work.
- Identify local BCA requirements when working near busy pedestrian walkways or roads.
- Keep the site clean and tidy.
- Remove ladders to upper levels or scaffolding when nobody is on site.
- Store sheet materials flat when possible.
- Install visual barriers around the site (for example, fluorescent mesh fixed to warratahs with a taut top and bottom wire).
- Install appropriate signage (after-hours contact details for the main contractor is recommended).
- Add protection to all materials with sharp edges or corners, and cap the ends of all exposed reinforcing.
- Fence water hazards.
- Manage individual site hazards as they arise during the project.
- Follow industry guidelines and codes of practice for cranes, scaffolding and trenches.

Everyone on site is responsible for managing hazards and should ensure a safe and pleasant working environment for themselves and for the public.

*The Department of Labour has a range of useful information around site health and safety management, see www.osh.govt.nz.*