

Guide to construction safety fencing and barricading on Griffith University campus

All contractors and employees have legal obligations under the Qld Workplace Health and Safety Act, to protect members of the public, from the hazards of building or maintenance work. On University campuses, this specifically includes the protection of our University staff and students, as well as visitors.

There are specific Regulations under the WH & S Act, which define the obligations for Principal Contractors of civil construction and other types of work. The WH & S Regulations require mandatory risk management and prescribe minimum protection measures for hazards such as:

(a) Falling objects from heights or where flying objects could otherwise hit someone during construction work, demolition or erection or dismantling of formwork or scaffolding.

Falling or flying objects include:

- parts of structures being demolished or built
- stored or stacked building materials
- waste or rubbish materials
- tools or items of plant
- scaffolding components
- flying debris or other hazards from welding, grinding or cutting of wood, metal or other

(b) Falls into trenches or excavations

(c) Falls from heights



This Griffith University safety guide aims to complement the WH & S Regulatory requirements, not replace them.

Why fence or barricade off your work area or site?

The University is open 24 hours a day, 7 days a week and students live on-campus in at least 2 of our 5 campuses. A perimeter fence or barricade can prevent unauthorised persons from gaining access to your work site, where they can be exposed to building or maintenance hazards such as exposed steel reinforcing, trenches, excavations or electrical sources.

The main groups of persons exposed to such hazards on campus during work and non work hours, could be adolescent and adult students, and staff and occasionally the children of either group.

While a fence or barricade will not always stop those who are determined to gain access to your work area ie: vandals or thieves, it will discourage most people and may demonstrate that you have taken reasonable steps to meet your responsibilities under the WH & S Act.

When should you fence your worksite?

Construction barricades or fences on campus must be erected **before** any work begins on dismantling, building or other site preparation.

What type of fence or barricade should you use?

We see the University campus as a high risk category workplace, as high volumes of staff or student numbers usually have normal access to or pass through most work areas. The risk level is the same as for inner city areas and other main business areas. For high risk sites such as these, it is necessary to prevent public [staff and student] accessing the work site in the first instance.

The type of fencing required for a particular work site or area on campus depends on

- the worksite construction or maintenance hazards including presence of AC sheeting or asbestos material
- the local environmental conditions - access or pathways, stairs, trees or vegetation , weather, working inside or outside
- the expected job length - time to complete project or part of [this alone should not determine fence type]

Other risk factors to consider on campus include worksite location and proximity to:

- campus shops and businesses
- campus amenities eg: ATM's, toilets, lunch or eating areas, parking meters or spaces
- offices or laboratories
- trenches, excavations or service pits,
- University plant or other restricted areas of essential service - power, gas, telecommunications
- Nearby or traversing tactile indicator trails for visually impaired persons and
- the likelihood of students or staff being around after hours eg: evening classes, weekend activities.

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- **For defined construction sites**, contractors should refer directly to the relevant Regulations as listed below for mandatory standards of barricading, hoarding, gantries or other forms of site containment.
- **For minor construction, maintenance or repair jobs** that pose low to medium risk to students or staff *eg: repairs to footpaths, open shallow manholes*, fencing or barricading should comprise [as a minimum]
 - portable plastic or metal folding or erected barriers with horizontal guardrails which can withstand reasonable side forces and remain upright - minimum 900 mm high or
 - plastic mesh barriers 900 mm high supported by capped star pickets or other upright structures at maximum spacing of 3 metres or
 - to restrict access to open excavations, trenches or service pits, use highly visual barricades - eg: wire fencing /hoarding or orange plastic mesh, with bottom of barricade placed no more than 150 mm from ground level and installed at least 1.5 metres back from edge .
 - alternatively , open pits or excavations should be provided with a sturdy cover that is capable of withstanding all loads likely to be imposed on it and hazard warning signs are be placed to alert persons of any trip/fall hazards.
 - where a person may fall 1 metre or less in common areas, edge protection of 900 mm high [minimum] must be erected . It must be able to withstand downwards and outwards force of impact from any person who may fall against it. Edge protection may also include midrails and handrails as the situation demands.



"Witches hats", chicken or barbwire, single strand wire, are not suitable safety fencing materials.

Definitions:

WH & S Regulations - Civil construction work means construction work in relation to any of the following structures—

- a structure mentioned in schedule 3⁸⁹ of the Act,
- definition structure, paragraph (b), (c) or (d);
- a bridge;
- a pumping station;
- a refinery;
- a telecommunications structure.

WH & S Act - structure means—

- (a) a building, a steel or reinforced concrete construction, wall, mast, tower, pylon, structural cable or telecommunications structure; or
- (b) an underground works (including shafts and tunnels), pipe, pipeline, sea defence works, river works, earthworks or earth retaining construction or other construction designed to preserve or alter a natural feature; or
- (c) a road or highway, footpath or driveway, railway line or siding, tramway line, airfield, dock or harbour, water storage or supply system (including a constructed lagoon), sewerage or drainage system, electricity or gas generation facility, transmission or distribution facility, example, a golf course, playing field, racecourse or swimming pool); or
- (d) production, storage or distribution facilities for heavy industries; or
- (e) fixed plant; or
- (f) a ship or submarine; or
- (g) formwork, falsework, scaffold or other construction designed or used to provide support, access or containment during construction work.

WH & S Regulations - [Workplace Health and Safety Qld website](#)

- S 70 - Asbestos removal work
- S 172 - Principal Contractors obligation to erect signs
- S 173 - Principal Contractors obligation about housekeeping practices
- S 175 - Principal Contractors obligation for common plant
- S 176 - Principal Contractors obligation for hazardous substances
- S 177 - Principal Contractors obligation underground services
- S 178 - Principal Contractors obligation for falling objects
 - S 180 - Control measures for civil construction work and housing construction work
 - S 181 - Control measures for construction work that is not civil construction work or housing construction work
 - S 183 - Control measures for demolition work or work erecting or dismantling formwork
 - S 184 - Perimeter containment screening
 - S 185 - Catch platform as control measures
 - S 186 - Gantry as a control measure
 - S 187 - Load lifted over adjoining area
 - S 188 - Closure of part or all of adjoining area