

Temporary Barricading and Signage Guideline Section 1 - Purpose and Scope

- (1) This Guideline aims to assist with managing workplace health and safety risks during construction or maintenance work across The University of Queensland (UQ) campuses and sites, through the selection, effective installation and maintenance of temporary barricades and signage.
- (2) This Guideline does not apply to the following:
 - a. permanent, fixed edge protection such as handrails or fixed fencing;
 - b. permanent, fixed hazard barriers such as debris screens in laboratories or workshops;
 - c. traffic control requiring an approved traffic management plan; or
 - d. construction fencing at a site under the control of an external contractor.

Section 2 - Barricading and Signage Standards

(3) Where a Job Hazard Analysis (JHA) determines that a safety barrier system capable of physical protection is required, the barrier system should be designed in accordance with the relevant Standard for the application of the barrier system. Refer to Section 8 for examples of relevant Australian Standards.

Section 3 - General Considerations

- (4) Barricading controls should be implemented and authorised as part of a safe work system to protect people from hazards including:
 - a. being struck by falling objects, moving plant or traffic.
 - b. fall from height, including falling into open excavations, confined spaces and falls from unprotected edges such as removed flooring, walkways, stairs and/or hand railings.
 - c. exposure to hazardous chemicals.
 - d. unauthorised entry into a high-risk area such as confined space, or any other work area.
 - e. any potentially hazardous work processes such as hot works, scaffolding, radiation work and work involving asbestos.
- (5) Barricading and signage should only be used:
 - a. when there are no other practical control measures available.
 - b. as an interim measure, until a more effective way of controlling the risk can be used or the hazard is no longer present.
 - c. to supplement higher level control measures or as a secondary control measure.
- (6) Barricading and signage should be visible and legible. Illumination of barricades and signs should be considered where general lighting, either natural or artificial, does not provide suitable visibility.

- (7) Other considerations include:
 - a. processes to instruct workers not to enter barricaded areas unless authorised to do so.
 - b. review of barricading and signage periodically to ensure it remains effective in controlling the risk.
 - c. maintaining barricading and signage to ensure it is kept in good condition and remains effective.
 - d. removing as soon as practicable barricading and signage that is no longer required.
- (8) The barricading and signage controls outlined above should also be implemented and authorised as part of an incident management and emergency response plan (ERP).

Section 4 - Risk Assessment and Management

(9) A risk assessment will determine the most effective type of temporary barricade and signage. Refer to the risk assessment when planning new tasks and activities to mitigate the identified risk exposures to an acceptable level. Continuous review and monitoring of risks and controls, following the planning stage, will help to ensure ongoing relevant and appropriate risk management practices are in place.

Section 5 - Selection and Use of Barricading

Selection of Barricade

- (10) Factors that influence the selection of the type of barricade (soft or hard) include:
 - a. risk associated with the hazard;
 - b. the exposure to the hazard of persons not involved in the work activity;
 - c. required strength of the barrier, for example, impact potential;
 - d. the amount of clearance required from the hazard by the barricade;
 - e. the height of a potential fall (≥2m); and
 - f. the depth of any excavations or penetrations (≥ 1.5 m).
- (11) The selection of barricades and signage should be determined following the completion of a risk assessment and the determination of Risk Category posed by the hazard (see Table 1 below) and with reference to UQ's Risk Matrix.

Table 1: Barricading Selection According to Risk Rating Category

Risk Rating	Actions	
Extreme	A barricade is mandatory and must be fitted with permanent fixed signage.	
High	Where the hazard is permanent or prolonged, a barricade and fixed signage is the mandatory minimum requirement. Where the hazard is temporary, barrier mesh and signage are the mandatory minimum standard.	
Medium	Barrier tape is the mandatory minimum requirement.	
Low	Signage.	

(12) Where a JHA determines that physical protection from a hazard is required, the barricading should be designed, installed and used in accordance with the relevant Australian Standards (refer to Section 2). Appendix A details the barricading selection requirements.

Use of Barricade

(13) The barricade should encompass the entire potentially affected area of the hazard and take into account factors such as:

- a. possible deflection of a falling object;
- b. slag or sparks created from hot work activities;
- c. distance from the hazard; and
- d. creating an additional hazard, for example, access and egress.

(14) Barricades should be erected to protect people from inadvertent exposure to the hazard on all sides, and accompanied by an appropriate sign placed on all access points. Refer to Appendix B for the appropriate signage for barricading. Soft barricading that is used to provide a means of restricted access around a penetration or an unprotected edge should be located at least two metres from the outside of the edge.

Barricading for Electrical Work

(15) When identified in a risk assessment, electrical work barricades should be erected to prevent access to electrical hazards. In addition, where an energised switchboard is in the same work area, it should have its own barricading and signage to identify the hazard. The barricade should be erected using appropriate stands and tape/expandable barrier rails.

(16) Where practical and appropriate, the barricade should have an opening no greater than two metres. The entry size can be varied by the person in control of work to suit the work location provided it does not introduce a hazard and the work area is clearly delineated. Restricted access signs are to be placed at appropriate spacing along the barricade. Switchboards under isolation should have details of the isolation recorded on the restricted access signs.

High Voltage (HV) Testing Barricades

(17) High voltage testing barricades should be erected around electrical equipment that is under test to provide a minimum safe approach distance for unauthorised or untrained persons, in accordance with the <u>Electrical Safety</u> <u>Regulation 2013</u>.

Section 6 - Safety Sign Requirements

(18) Safety signs should be erected to warn people of specific hazards and to communicate precautionary measures and emergency actions. Safety signs should be erected in accordance with the <u>Work Health and Safety Regulation</u> 2011 and relevant Australian Standards, in relation to the following:

- a. confined spaces;
- b. specific personal protective equipment (PPE) requirements;
- c. hazardous chemicals:
- d. asbestos;
- e. lead;
- f. fire protection equipment;
- g. hazardous areas;
- h. emergency and first aid information;
- i. emergency eyewash and shower;
- j. traffic management and pedestrian control.

Section 7 - Removal of Barricades and Signage

(20) If a barricaded area is not signed and no work is being undertaken in the area, the barricading should not be removed. Contact the area's Client Facilities Manager or supervisor to identify the reason for the barricading. If the reason for the barricading cannot be identified, a Job Hazard Analysis (JHA) should be conducted prior to any removal.

Section 8 - Relevant Legislation and Standards

Source	Reference
La statation	Work Health and Safety Regulation 2011 (s68, s305A, s308, s353, s469)
Legislation	Electrical Safety Regulation 2013
	AS 1319:1994 Safety signs for the occupational environment
	AS 4687:2007 Temporary fencing and hoardings
	AS/NZS 4994.1:2009 Temporary edge protection - General requirements
Australian Standard	AS/NZS 4994.3:2010 Temporary edge protection Part 3: Installation and dismantling for edges other than roof edges
	AS 1742.1:2014 Manual of uniform traffic control devices. Part 1: General introduction and index of signs
	AS 1742.3:2009 Manual of uniform traffic control devices. Part 3: Traffic control for works on roads
	AS/NZS 3845:1999 Road safety barrier systems
Codes of Practice Safe Work Australia Code of Practice: Managing the Risks of Plant in the Workplace Code of Page 2021	

Section 9 - Definitions

Term	Definition
Barricading / Barricade	Anything acting to obstruct passage such as barrier tape, cones, railing, temporary fencing/ cover, or other barrier intended to limit access to a potentially hazardous area.
Soft Barricade	Demarcation or barricade consisting of caution or danger tape which may be attached to delineator cones. Hard Barricade – self-supporting fence, or a self-supporting series of continuous plastic, concrete, or other solid barriers, erected or placed to restrict the entry of persons to an area.
Barrier Mesh	Any flexible, high visibility mesh used for the purpose of cordoning off an area where a hazard has been identified. It does not offer the physical impact protection of barricading.
Caution Zone	An area where a hazard exists and certain health, safety and environment precautions must be met, but personnel aware of the hazard may enter the barricaded area with caution.
Danger Zone	An area where there is a definite risk of injury or harm; danger barricading is used to establish a no-go zone where access to the area is prohibited without appropriate authorisation.
Restricted Access Areas	Locations where potential or actual safety hazards exist and no person may enter without explicit authorisation. This includes demolition areas, abandoned buildings, or areas that have been identified as being potentially unsafe.
Sign	An inscribed board, plaque, or other delineated space on which a combination of legend or symbolic shape is used to convey a message.

Section 10 - Appendices

- (21) Please see <u>attached document</u> containing the following 3 appendices:
 - a. Appendix A: Barricading selection requirements
 - b. Appendix B: Appropriate signage for barricading
 - c. Appendix C: Types of safety signs commonly used on site

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