

Barriers, Guardrails and Handrails

Protection Against Falling



Definitions

Barrier

An upright panel intended to prevent a user from falling. The vertical height of barriers should be a minimum of 700mm above the platform or standing surface.

Guardrail

A horizontal rail intended to prevent a user from falling. Guardrails measure between 600-850mm above the platform or standing surface.

Handrail

A rail intended to assist the user to balance. The diameter of handrails should measure between 16mm to 45mm to provide a comfortable grip.



Requirements

All Age Settings

- For **easily accessible equipment**, a barrier must be installed on platforms measuring more than 600mm above ground level.
- For **not easily accessible equipment**, a guardrail or barrier is required for platforms 1000-2000mm above ground level. A barrier is required for platforms more than 2000mm above ground level.
- A single handrail is required 600-900mm above the foot position. Two or more handrails may be provided as long as the upper handrail is not more than 1000mm above the standing surface and spacing between handrails does not introduce entrapment hazards.

Supervised Early Childhood Settings

- A guardrail or barrier is required for platforms 600-1200mm above ground level. A barrier is required for platforms >1200mm above ground level.
- A single handrail is required 450-700mm above the foot position.

Bridges

- A guardrail or barrier is required for rigid bridges less than 1500mm above ground level.
- A barrier is required for rigid bridges more than 1500mm above ground level.

Barriers

- Openings must not present a head and neck entrapment hazard. Any opening 600mm or more above ground level must be smaller than 89mm or larger than 230mm.
- Must be designed to prevent users gaining a foothold which may assist them to climb onto the top rail. Any horizontal rails should be replaced with either vertical infill panels or solid panels.
- When constructed of timber, reduce openings between pickets to less than 75mm (and more than 25mm) to allow for warping and shrinkage. Include some transparency such as a plastic bubble to assist with supervision.



child safety is no accident



Unintended Access

Care must be taken in the design of play equipment to ensure components do not contain horizontal or near horizontal rails or bars that may be used as steps for climbing.

The design of barriers should discourage children from standing or sitting on them and not contain openings that provide hand or foot holds that may encourage climbing.



Inspection and Maintenance

AS 4685.0 requires routine maintenance checks to be conducted on a regular basis.

For example:

- Check regularly for loose or missing barriers, guardrails and handrails
- If barrier has been damaged or has parts missing, check that head and neck entrapment (openings between 89-230mm) and finger entrapment (openings between 8-25mm) are not introduced from repair works
- Check and tighten any loose bolts
- Check for rust and corrosion on metal components
- Check for deterioration, warping and rotting of timber components. Timber requires regular sealing



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