

SCAFFOLDING AND GENERAL GUARD RAIL REQUIREMENTS

ROOF STRUCTURE	MINIMUM REQUIREMENT
1. All roofs with eaves height or above 3 metres from ground level.	Guard rail system and /or perimeter scaffold no lower than 900mm from the fascia.
2. All roofs pitched at 27.5° less than 32°	Guard rail system and/or perimeter scaffold no lower than 900mm from the fascia.
3. All roofs pitched at or above 32°	Perimeter scaffold at fascia height. Some elevations may require additional working platform within the roof structure subject to length and pitch of rafters as determined by a site safety assessment.
4. All two storey roofs below 27.5°	Guard rail system and /or perimeter scaffold no lower than 900mm from the fascia.
5. All two storey roofs at or above 27.5°	Perimeter scaffold at fascia height. Some elevations may require additional working platform within the roof structure subject to length and pitch of rafters as determined by site safety assessment.
6. All roofs exceeding two storeys.	Perimeter scaffold at fascia height. Some elevations may require additional working platform within the roof structure subject to length and pitch of rafters as determined by a site safety assessment.
7. Any potential slippery product at or above 15°(eg: fibro cement, fibreglass, metal roof products).	Guard rail system and /or perimeter scaffold no lower than 900mm from the fascia. Roofs below 15° may require a site safety assessment.
8. All “Internal Voids” with free fall off 3 metres or more from roof elevation.	Internally erected working platform to reduce free fall to less than 2 metres. Note: definition of an “Internal Void” is a roof elevation that has a cathedral or raked ceiling.
9. Work up to 3 metres. Where roof workers are not exposed to the risk of an external fall greater than 3 meters and the pitch of the roof is not greater than the critical angle (15°) then the primary risk control measure may be the establishment of a cleared area around parameter of the building known as a “clear zone”	Where a clear zone is relied on as part of the fall control measures, it must: <ul style="list-style-type: none"> • Extend 2 metres out from the edge of the gutter line. • Consist of natural soil. • Be barricaded where there is a risk of other people entering the zone. • Be kept clear of all hard surfaces such as impalement hazards(including fences, set out hurdles, stumps and partial veranda structures), building materials (including brick pallets and timber) and other obstacles.

Edge Protection Checklist

As per the requirements of AS 4576 and AS 4994:

- the guard rail system must be of robust design and able to withstand the force of someone falling against it
- top rails must be between 900mm and 1100mm above the working surface
- midrails must be provided. However, wire mesh infill panels incorporating a toeboard may be used instead of the midrail
- toeboards must be provided where reasonably practicable
- a bottom rail above the toeboard on some roof slopes may be provided for more severe roof slopes. Both a midrail and infill mesh panel will assist in preventing persons and objects from sliding off the roof
- if access points are required for equipment (e.g. tile elevators) they must be protected adequately to prevent a person falling, and
- every open edge of a stair, landing, platform or shaft opening must be protected to prevent people falling.

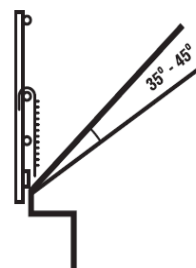
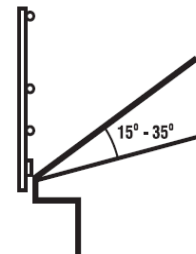
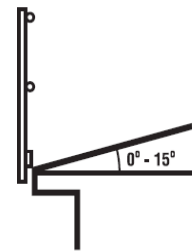
*

Edge Protection requirements for handrails

Different degrees of roof slopes

With different degrees of roof slopes, the guard rail systems should incorporate the following:

- a top rail, mid rail and toe (fender) board, when roof slopes are between 0 degrees to 15 degrees from horizontal;
- a top rail, mid rail, bottom rail and toe board, when roof slopes are between 15 degrees and 35 degrees from horizontal. The bottom rail should be fitted midway between the mid rail and the roof;
- a top rail, mid rail, bottom rail, toe board and infill mesh panel to mid rail height, when roof slopes are between 35 degrees and 45 degrees. The infill mesh panel may assist in reducing injury to a person sliding down the roof into the railing and will minimise the possibility of objects falling from the roof. Where people are likely to be working below the edge of the roof at ground level, consideration should also be given to the use of infill mesh on roofs with flatter slopes; and
- where roof slopes exceed 45 degrees, the slope is unsuitable to work on without a support system, such as a fall-arrest/restraint system or a scaffold catch platform, to prevent injury.



SCAFFOLDING CHECKLIST

- scaffolding must conform to AS/NZS 4576 and the AS/NZS 1576 series
- if scaffolding is to be erected from which a person or object could fall more than 4 metres, the scaffold must be erected, altered and dismantled by a licensed scaffolder
- an unlicensed person must not alter scaffolding without authority from a competent person
- prefabricated scaffolds must be of the same type and not mixed components, unless the mixing of components has been approved by the manufacturer. AS/NZS 4576 sets out the assurances that are needed before the components of different prefabricated scaffolding systems can be mixed in a scaffold. Unauthorised mixing of components from different manufacturers has resulted in scaffold incompatibilities and failures, posing significant risks to persons using the scaffolding
- mobile tower frame scaffolds can be used to provide safe working platforms
- scaffolding that is incomplete and left unattended must have danger tags and warning signs attached at appropriate locations to prevent use
- scaffolding exceeding a deck height of 4 metres must be inspected and tagged by a competent person before use, after any alteration or repair, and at intervals not greater than 30 days
- only a licensed person or a trainee under direct supervision of a licensed person may modify the height of a scaffold exceeding a deck height of 4 metres
- additional inspections must be carried out by a competent person following an occurrence such as a severe storm or earthquake
- safe access to and egress from the scaffold must be provided, and
- edge protection must be provided at every open edge of a work platform.