

Safety Alert

Serious incidents occurring due to unguarded voids on construction sites

The purpose of this Safety Alert is to highlight the dangers of unguarded voids (also known as penetrations) on construction sites and the requirement to manage the risk of falls.

Background

Falling through unguarded voids is a contributing factor to a number of serious injuries and deaths in the construction industry. Three serious incidents have occurred in the past four years on Territory construction sites due to unguarded voids.

Incident 1: a 19-year-old worker broke his leg after falling approximately 2.9 metres through a void at a residential construction site. NT WorkSafe charged the two companies involved.

Incident 2: A 31-year-old worker fell 3 metres through a void onto concrete during asbestos removal at a Darwin school. The worker suffered fractures to his shoulder and spine, and was unable to work for over a year. NT WorkSafe charged the principal contractor of the worksite, and the worker's employer over the incident.

Incident 3: On 8 April 2020, a 60-year-old worker died after falling over 3 metres through a void onto concrete. The incident, which occurred at a residential construction site in the suburb of Bayview, is currently under investigation.

Any construction work that involves the risk of a person falling more than 2 metres is considered high-risk construction work under [Regulation 291 of the Work Health and Safety \(National Uniform Legislation\) Regulations 2011](#).



Image 1: Unguarded voids are a serious risk to workers health and safety.

Contributing factors

- In all three incidents, the workers were working near unguarded voids where there was a risk of a fall.

Action required

- All duty holders must ensure that a safe work method statement (SWMS) is prepared, as required for high-risk construction work. The SWMS must eliminate the risk of falls during construction, or if that is not reasonably practicable, minimise the risks as far as reasonably practicable.
- All workers, including sub-contractors on site must understand and work in accordance with the SWMS, including understanding the fall protection systems in place, and the procedures to follow if a change needs to be made to the fall protection system.
- Voids on construction sites must be made safe immediately after being formed. Voids can include openings for stairwells or partially completed floors.
- Covering the void may eliminate the risk of falling, provided the void cover:
 - is made of material strong enough to withstand the likely impact of any person falling onto it;
 - can bear the weight of any static loads expected in the area of the void;
 - is fixed in place to prevent accidental dislodgement or removal, and
 - has appropriate signage to indicate there is a void underneath.
- If the building being constructed has concrete floors, consider using cast-in safety mesh during the concrete pour to cover the voids.
 - If safety mesh is used, the mesh must be strong enough to withstand the likely impact of any person falling onto it. The safety mesh can be cut out at a later date.
- If covering the void is not practical, barriers such as perimeter guardrails or fall protection devices like scaffolding or safety nets must be used to minimise the risk of falls.
- Refer to the Code of Practice for managing the risk of falls in housing construction for additional practical guidance to manage the risks of falls on residential construction.

Further information

For further information, please refer to the following:

Codes of Practice

- [Managing the risk of falls in housing construction](#)
- [Managing the risk of fall at workplaces](#)

Safety Alerts

- [Protecting the voids in house construction](#) (WorkSafe NSW)
- [Trapdoors and penetration covers in construction](#) (WorkSafe QLD)

Videos

- [How to prevent falls on a construction site using void covers](#) (WorkSafe NSW)

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