



Falling Objects

This document provides employers, self-employed and employees with information about WorkSafe's current Construction Safety Focus on preventing objects from falling from height at construction sites.

Falling objects are a leading cause of death and serious injury in the construction industry, and also pose a risk to the public in streets adjacent to construction sites.

WorkSafe inspectors are currently visiting sites across Victoria to ensure duty holders are meeting their obligations and adequately controlling the risk of falling objects associated with construction work.

Background

Each year, WorkSafe follows-up on hundreds of notifiable incidents involving falling objects.

In the past five years, more than 740 construction workers have required workers compensation as a result of being injured by a falling object.

Forces and deflection of falling objects

A relatively light and small object (eg nuts and bolts) can cause serious or fatal injuries when it hits a person from height.

Falling objects may deflect from structures or be blown diagonally by strong winds onto nearby public footpaths and streets.

Common causes of objects falling

Construction equipment (eg hand tools) and materials (eg scaffolding tubes and timber) often fall from height due to:

- Gaps between perimeter safety screens or holes in safety netting/mesh where works are occurring
- Missing toe/kick boards on scaffolding
- Materials falling from machinery or whilst loads are being lifted
- Materials being stored close to edges or left unsecured
- Materials being blown from structures by wind
- Materials or tools being knocked or dropped.

Where objects often land

Objects that fall from height often land:

- External to structures - within site boundaries
- External to structures - in the streets after deflecting from structures or being blown diagonally by the wind
- Internally within the structure - eg falling through voids, risers or other inadequately protected internal edges.

Duty holder obligations

Employers have a general duty to provide and maintain a safe working environment to employees (including contractors) so far as is reasonably practicable.

Duty holders (employers and self-employed persons) must also ensure, so far as is reasonably practicable, that other persons (eg members of the public) are not exposed to risks to their health or safety arising from their business activities.

Duty holders must follow the hierarchy of control for construction work set out in Part 5.1 of the OHS Regulations when controlling the risk of falling objects associated with construction work.

Risk control measures

Risk control measures that prevent objects from falling in the first place are generally more reliable than control measures which are only effective after an object has fallen.

Note: A combination of risk control measures will usually be required.

Example falling object risk control measures

Eliminate Eliminate the risk by designing the risk out of the build. For example: Offsite assembly or fabrication to eliminate activities (or parts of activities) that would otherwise be performed at an elevated edge.

Reduce remaining risk by using a containment system or securing objects, through substitution, isolation or engineering controls, for example:

Substitute Guardrail systems that incorporate mesh infill panels & kickboards

Isolate Exclusion zones at ground level, below elevated perimeter/edge work

Engineer Perimeter safety screens on the building
Rated overhead protection gantries

Perimeter scaffolds enclosed with safety mesh, hoarding boards or brick guards

Retention screens or mesh around edges of internal voids and penetrations

Safety netting, mesh or curtains systems for the retention or containment of materials

Securing scaffold planks with proprietary clips to prevent dislodgement/uplift from high winds

Restrain loose materials with ropes, ratchet straps or adequate weights.

Note: Risk may be further reduced by use of tool lanyards, bags, pouches or buckets to contain loose items.

Reduce remaining risk, for example:

Administration Line markings/signage to advise lanyard systems are to be used on tools

Utilise adverse weather warning apps and have a response plan in place

Ensure good housekeeping practices.

Personal Protective Equipment Reduce effects of the risk, for example: use of hard hats, high visibility clothing, steel capped boots.

Employee duties

While at work, employees must take reasonable care of their own health and safety and that of others who may be affected by their acts or omissions at a workplace. This includes not interfering with or misusing anything provided at a workplace in the interests of health, safety or welfare (eg not removing kick boards).

Construction Safety Focus

Further Information

Visit www.worksafe.vic.gov.au to download the following publications:

Information About, Prevention of, and protection from falling objects on midrise structures

Industry Standard, Safe erection of structural steel

Information About, Safe Work Method Statements

Working safely in the general construction industry, Handbook

Working safely in housing construction industry, Handbook

A handbook for workplaces, Controlling OHS Risks and Hazards

Health and Safety Guide to Consultation

Contact WorkSafe's Advisory Service on (03) 9641 1444 or free call 1800 136 089.

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