

Falling-object hazards

Explain dangers

The most common injuries workers suffer from falling objects are bruises, fractures, strains, and sprains. The objects that commonly fall range from large items such as roof trusses and steel beams to small items such as fasteners and small hand tools.

Identify controls

There are two types of controls you can use to prevent falling objects from hurting workers:

- 1. Physical controls** physically stop the object from falling (or from falling very far).
- 2. Procedural controls** refer to changing the way you work so that objects can't fall.

PHYSICAL CONTROLS

Guardrails

Toeboards must be installed on all guardrails. They stop objects from falling down to the level below. Toeboards must be a minimum of 89 mm (3.5 in) high and installed flush with the surface.

If you pile material higher than 89 mm (3.5 in) high, put plywood panels or screening on the guardrails. This will prevent materials from falling down to the level below and stop small objects from falling through the openings between rails.

Open grating covers

If you are performing work on open grating, place non-slip plywood or a similar product on top of the grating to prevent small objects from falling through it.

Barricades and overhead protective structures

Use barricades to block off exclusion zones—areas where workers are not allowed—below the work area. Combine barricades with signs that indicate it is an exclusion zone and entry is prohibited. This includes hoisting areas. When barricades are not practical, use overhead protective structures.

Tool lanyards and tethers

These attach tools directly to the worker's harness or tool belt. If used properly, they will prevent tools from dropping to a lower level.

Carts with sides

When moving equipment, tools, or material, always use a cart that is an appropriate size for what you are moving and make sure the cart has sides. If you need to extend something over the sides of the cart, you must secure the item and the cart must be stable.

PROCEDURAL CONTROLS

Securing loads

When lifting, make sure the load is balanced and secured. Check for small or loose pieces before you lift. Otherwise, a shift in the load or the wind could cause objects to fall. Before placing a load on a scaffold or a platform, make sure the work area has properly built guardrails.

Good hoisting practices

Never lift, lower, or swing a load over someone's head. Use barricades to block off areas where loads are being lifted or lowered. If the operator's view is impeded in any way, use a signaller to assist the operator. Always use proper rigging procedures and ensure the rigging equipment is in good condition.

Good housekeeping

Keep tools and other materials away from edges, railings, and other elevated surfaces. Always stack materials on flat surfaces and secure them, if necessary, to avoid movement. When working, be aware of your surroundings and watch that you don't inadvertently knock or hit something off the level you are work on down to the level below.

Proper material stacking

To prevent tipping, store materials and equipment at least six feet away from an edge. If you are working near openings, arrange materials so that they can't roll or slide in the direction of the opening and use opening covers. Always secure material to prevent movement from the wind. When you remove something from a secured pile, don't forget to resecure the material.

Demonstrate

Perform a site inspection to identify falling-object hazards.