

## Floor Openings

This guideline provides the best practice recommendations for controlling the hazard presented by floor openings on a Polygon construction site.

### Regulation

There are two subsections of Section 4.59 of the Regulation that prescribe how an opening in a floor or roof opening must be addressed and that would be applicable on a construction site.

#### 4.59(1)

*A pit or other opening in a floor, walkway, roof or other area accessible to workers, which is a danger to workers, must be securely covered with a cover of adequate size and strength or guarded by fixed or movable guardrails, which must be identified as such and kept in place except when necessarily removed to work in the opening or pit.*

#### 4.59(4)

*If a worker must enter an area not normally accessible and that has openings that are a danger, such openings must be guarded or personal fall protection must be used while the worker is in the area.*

An opening in a floor will be considered a “*danger to workers*” on a Polygon construction site if it is possible for a worker to fall through the opening to a surface below.

Examples of openings that will generally be large enough to be a danger are:

- Vent Shafts
- Stairways or Stairway Openings
- Elevator Shafts
- Mechanical Shafts

This list is not exhaustive and it is the role of the Site Safety Coordinator, in conjunction with the Site Superintendent, to exercise his or her judgment in determining if any opening is a danger to workers.

### Responsibility

In general, the responsibility to protect an opening falls to the Contractor who created the hazard. For example, if the Forming or Framing Contractor constructs an opening then it is their responsibility to protect themselves and other workers from that opening. (*WCA Sec. 115 & 116*)

Once the Contractor has adequately protected the opening and if the area will be accessible to workers of other contractors the responsibility to regularly inspect and maintain the method of protection falls to PCML. That said, any Contractor who has to modify or remove the protection for any reason is then immediately responsible to replace that protection or provide an alternative.

# Methods of Protection

## Guardrails

The primary method of protection for any opening is a guardrail system and must always be the first consideration. Guardrails are particularly effective for protecting Elevator Shafts and Stairways until the final wall or framing is complete.

All guardrails must comply with Section 4.58 of the OHS Regulation.

## Covers

If a guardrail system is not practicable for an opening then a cover may be used.

## Material

The cover must be plywood or better (no sheathing).

## Size

The cover material should be the appropriate size relative to the opening. For example, a 24 inch x 24 inch opening in a concrete slab could be covered with a 28 inch x 28 inch cover. A full sheet of plywood may be excessive.

Using appropriate / custom sizes helps to prevent any covers from being mistaken for standard building material.

## Support

Any cover, unless protected from access by a guardrail system, must be able to fully support the weight of any worker on the site.

All covers where the area below is accessible to workers must be able to withstand any reasonably foreseeable impact from above.

## Secured

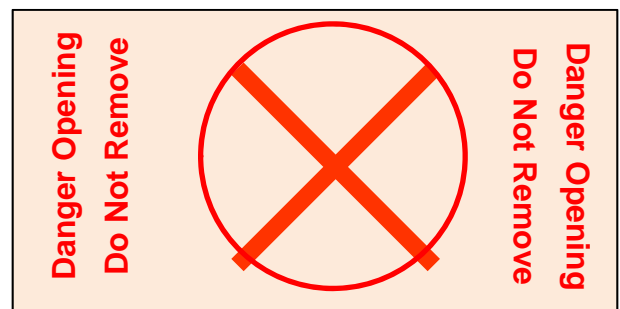
The cover material must be secured so that it cannot be moved. This is generally achieved by nailing the cover to the floor in at least two spots. It is preferred that all 4 corners of a cover are secured.

## Marking / Signage

Each cover must be clearly marked that there is an opening beneath and that it not to be removed.

Depending on the size and location of a cover it may

be necessary to use semi-permanent or reusable signage such as a coroplast sign. If using spray paint for any lettering it is recommended that a stencil be used for legibility.



1 Example of Floor Cover Marking

## Inspection

It is important to identify all openings on the site and regularly inspect the covers or protective systems that have been put in place.

**Paint fades, nails can pull out, covers can be damaged.**

Regular inspections, ideally every day if there is regular activity adjacent to the opening but no less than once per week, will serve to identify if a cover or protective system is in need of any maintenance or repair.