

Stairways

- **Stairways or ramps** should be provided at worker points of access where there is a break in elevation of **19 inches**.
- Ensure **stair rails** (not less than 36 inches in height) are installed on all stairways with four or more risers or rising more than 30 inches.
- Ensure that stairways are not used to store materials.
- Except during construction of the actual stairway, skeleton metal frame structures and steps must not be used, unless the stairs are filled and secured with temporary treads and landings.
- Mid-rail screens, mesh, intermediate vertical members, or equivalent intermediate structural members should be provided between the top rail and the stair rail system.
- **A handrail is required** on stairways that rise more than 30" or that have four or more risers.
- **Temporary handrails** should have a minimum clearance of three inches between the handrail and the walls, stair rail system and other objects.
- The unprotected sides and edges of stairway landings should be protected by a standard guardrail system.
- A platform must be provided at all locations where doors or gates open directly into a stairway.
- The swing of gates and doors should not reduce the effective width of the platform to less than 20 inches.

Guardrails

- A guardrail is used to protect a floor opening or open sided floor four feet above the next level down. They can be found around elevator shafts, pits, duct chases, platforms, etc.
- Guardrails must be capable of withstanding, without failure, a force of at least 200 pounds applied in any outward or downward direction on the top, 150 pounds on the mid rail and 50 pounds for the toe board.
- A typical guardrail consists of a smooth surfaced top rail, approximately 42" +/-3, with a mid-rail at 21" +/-3, and a toe-board above the walking or working level.
- Smooth metal and/or pipe may be used for guardrails if minimum standards are met.
- **Guardrails should be installed on all stairs prior to use.**
- If guardrails/handrails are damaged or removed they must be repaired immediately.

Openings

- Providing good protection of **wall and floor openings** is one way to prevent falls at heights of 4 feet or more.
- Make sure that all wall and floor openings are properly guarded and if you must remove guardrails to work, put them back in place when you are done.
- **Covers may be used** to protect workers from falling into openings in floors, roofs, etc.

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- Covers must be capable of supporting, without failure, **twice the maximum intended load** and be secured to prevent accidental displacement. **Color code the cover or mark it with the word 'hole' to provide warning of the hazard.**

As with any safety device, take the time to inspect all handrails, guardrails and covers before depending on them. Never lean on a guardrail unless you are sure it is strong enough to hold you. **Avoid floor hole covers;** walk around them. The person who installed it may not have secured it properly. When removing a hole cover, do not step forward or backward into the hole.