

Job Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 55: Stairway Safety

Introduction: Fixed stairs must be provided for access from one structure level to another, where operations require regular travel between levels, and for access to operating platforms of any equipment which requires attention routinely during operations. Fixed stairs must also be provided where daily access to elevations is required for the purposes of gauging, inspection, regular maintenance, etc. Where work at elevated surfaces may expose employees to hazards from acids, caustics, gases, or other harmful substances, or for the purpose of carrying tools or equipment by hand, fixed stairs are required, as opposed to ladders. Following are guidelines for stairway safety requirements:



Stairway Requirements in the Workplace:

Spiral stairways are not permitted except for special usage and secondary access situations where it is not practical to provide a conventional stairway. Winding stairways may be installed on tanks and similar round structures where the diameter of the structure is not less than five (5) feet.

Stair strength: Fixed stairways must be designed and constructed to carry a load of five times the normal load anticipated, but never of less strength than to safely sustain a moving, concentrated load of 1,000 pounds.

Stair width: Fixed stairways must have a minimum width of 22 inches.

Angle of stairway rise: Fixed stairs must be installed at angles to the horizontal of between 30° and 50°. Any uniform combination of rise/tread dimensions may be used that will result in a stairway at an angle within the permissible range.

Vertical clearance above any stair tread to an overhead obstruction must be at least 6 ½ feet measured from the leading edge of the tread.

Stair treads must be reasonably slip-resistant and the nosings (leading edge) must be have a non-slip finish. Welded bar grating treads without nosings are acceptable providing the leading edge can be readily identified by personnel descending the stairway, and provided the tread is serrated or is of definite non-slip design. Riser height and tread width must be uniform throughout any flight of stairs including any foundation structure used as one or more treads of the stairs. Stairs with open risers must have at least a toeboard, 4 inches high, to prevent a foot from slipping between the stairs treads.

Stairway platforms can not be narrower than the stairs, and must be a minimum of 30 inches long measured in the direction of travel.

Railings and handrails must be provided on the open sides of all exposed stairways and stair platforms. Handrails must be provided on at least one side of closed stairways preferably on the right side when descending. A standard stair-rail has a top rail, midrail, and posts, and is 30 to 36 inches high. The midrail is halfway between the top rail and stair tread.



Following is a checklist for stairway safety:

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| <ul style="list-style-type: none"> ■ Are there rails on all open sides of stairs with four or more risers? ■ Are there handrails on at least one side of closed stairs? ■ Are there railings on the open sides of all stair landings more than four feet above the working surface? ■ Are all stairs at least 22 inches wide? ■ Are stair treads firmly secured and reasonably slip resistant? | <ul style="list-style-type: none"> ■ Are defective stair treads promptly repaired or replaced? ■ Is rise height and tread width uniform throughout the entire flight of stairs? ■ Do stairs have at least 6 ½ feet of overhead clearance? ■ If less than 6 ½ feet of headroom, are they padded or indicated with contrasting paint? ■ Are stairways lighted sufficiently for low light situations? |
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Follow these guidelines for safety on stairways:

- If you climb stairs frequently, wear comfortable shoes. Avoid wearing high heels or sandals. Make sure your shoes stay tied.
- Stay to the right on the stairs especially if your view of your pathway is limited.
- Avoid carrying awkward loads on stairs. Do not use dollies on stairways unless the load is secured.
- Do not run up or down stairs. Take one stair tread at a time, never two.
- Keep stairways clear of obstructions and trip hazards.



Conclusion: Stairways are a common means of access from level to level on job-sites and in the workplace, but every year hundreds of injuries and even deaths occur as a result of stairway accidents. Use caution on stairways, especially when carrying loads, and keep stairways clean and free of clutter.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

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These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.