



Company Name: _____ Job Site Location: _____

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

Topic 465: Hand, Stairway, and Standard Railing

Introduction: A railing is a vertical barrier erected to prevent falls. The top member of the railing serves as a handrail. The intermediate rail is approximately midway between the handrail and working surface. Railings are for protection while working on, or near floor openings, wall openings, open-sided floors, platforms, runways, stairways, and holes.

Handrails: Handrails are a single bar or pipe, supported on brackets from a wall or partition, as on a stairway or ramp, to furnish persons with a handhold in case of tripping. The mounting of handrails are required to be such that the completed structure is capable of withstanding a load of 200 pounds applied in any direction at any point on the rail.

- **Handrails must** consist of a lengthwise member mounted directly on a wall or partition, by means of brackets attached to the lower side of the handrail, so as to offer no obstruction to a smooth surface along the top, and both sides of the handrail. The handrail should be rounded, so it will furnish an adequate handhold for anyone grasping it, to avoid falling. The ends of the handrail should be turned into the supporting wall, or otherwise arranged, so as not to constitute a projection hazard.
- **The height of handrails are required** to be not more than 34 inches, nor less than 30 inches, from the upper surface of the handrail to the surface of tread, in line with the face of the riser, or to the surface of a ramp.
- **Handrails must be** at least 2 inches in diameter when made of hardwoods. Handrails must be at least 1 ½ inches in diameter when made of metal pipe. The lengths of the brackets are required to give a clearance of at least 3 inches between the handrail and the wall, or any other projection.



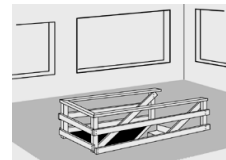
Stairway Railing- is a vertical barrier erected along exposed sides of a stairway. Every flight of stairs having four or more risers should be equipped with stairway railing **as follows:**

- A right side descending rail on stairways less than 44 inches wide having both sides enclosed. On stairways having both sides open and less than 44 inches wide, railing needs to be on each side. Stairways greater than 44 inches wide, but less than 88 inches wide need one handrail on each enclosed side and one stair railing on each open side. Stairways greater than 88 inches wide need one handrail on each enclosed side, one stair railing on each open side, and one intermediate stair railing located approximately midway of the width.



Standard Railing- is a vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or runway. The anchoring of posts and framing of members for railings of all types must be of such construction that the completed structures be capable of withstanding 200 pounds applied in any direction

- **Standard railing is required** to consist of a top rail, intermediate rail, and posts. Standard railing must have a vertical height of 42 inches nominal from the upper surface of the top rail to the floor, platform, runway, or ramp level.
- **The top rail must** be smooth-surfaced throughout the entire length. **The intermediate rail must** be halfway between the top rail and the floor, platform, runway, or ramp. **The ends of the rails should not** overhang the terminal posts, except where such overhang does not constitute a projection hazard.
- **Wood** railing posts are to be made of at least 2-inch by 4-inch stock spaced 6 feet apart, or less. The top and intermediate rails must be at least 2-inch by 4-inch stock. If the top rail is made of two right-angle pieces of 1-inch by 4-inch stock, posts may be spaced on 8 foot centers, with a 2-inch by 4-inch intermediate rail.
- **Pipe** railings, posts, and top and intermediate railings must be at least 1 ½ inches nominal diameter with posts spaced not more than 8 feet on centers.
- **Posts** are to be spaced no more than 8 feet on centers.



Conclusion: OSHA regulations state that “Employers shall provide and install all fall protection systems required before an employee begins work.” Falling from heights is the leading cause of injury at job sites. Proper railing will add to a safe and compliant work place.

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.)

Foreman/Supervisor's Signature: _____

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.