



INTEROFFICE MEMORANDUM
Oregon Occupational Safety & Health Division

Date: July 29, 1999
Revised: October 21, 2005

TO: All OR-OSHA
FROM: Marilyn Schuster, Policy Manager

SUBJECT: Acceptable guardrail & stair railing heights

Issue: In some Oregon workplaces the height of guardrails and stair railings do not comply with Oregon OSHA's requirements. Are any of these railing systems accepted by Oregon OSHA as meeting the intent of the standard and considered in compliance?

Discussion: Guardrail and stair railing heights often vary depending on which recognized standard they are designed to meet. For example, Oregon-OSHA requires 42 inch high guardrails in fixed workplaces, while allowing a 3 inch variance (plus or minus) from that height on construction sites. Federal OSHA requires 42 inch high guardrails, though 36 inches is acceptable until a current rulemaking proposal becomes final. Openings between intermediate members must not exceed 19 inches. The Uniform Building Code requires guardrails at least 42 inches high. ANSI recommends guardrails 40 to 44 inches high.

Stair railing heights also vary. Oregon OSHA requires 30 to 34 inch high stair rails in fixed workplaces, and 30 to 37 inch high rails on construction sites. Federal OSHA requires 42 inch high stair rails, though rails as low as 30 inches will be accepted until adoption of a current proposal. The Uniform Building Code requires stair rails 34 to 38 inches high. ANSI

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recommends stair rails 34 to 44 inches high. In some locations, based on work process and amount of exposure, it may not be feasible to provide a guardrail constructed to any recognized standard height. Roofs with low parapets, and bridge decks with low (Jersey-style barrier) railings are good examples.

Conclusion: If a guardrail or stair rail meets the height requirements of any one of the following: Oregon OSHA, federal OSHA (including proposals), Uniform Building Code, or ANSI; then that railing system is considered to provide adequate protection and be in compliance. In those instances when it is infeasible to provide a guardrail that meets a standard's height requirement, an acceptable alternative can be a combination of height plus width at the top of the rail. When the work process is such that exposure to a hazard is minimal, then the use of a barrier with a 30" minimum height is acceptable provided the depth of the barrier (measured horizontally between the two faces) is great enough to equal at least 48 inches when added to the vertical measurement. If height and width is calculated for an appropriate barrier the total must be greater than the 42" required for a vertical only barrier because of the lower vertical minimum allowed. Any combination of 30 inches or more in height plus width that equals 48 inches or more is acceptable. An example is limited exposure near a 30 inch or higher parapet wall with a top width that completes the 48 inch requirement. In some instances a wider horizontal distance (off-limits to all activity) can be established and clearly identified on the inner side of the barrier to make it physically impossible to stumble or fall over the barrier. An example is work performed on the roadway of a bridge while using the sidewalk as distance from a 30 inch or higher barrier.

