

Howard Talks Tech

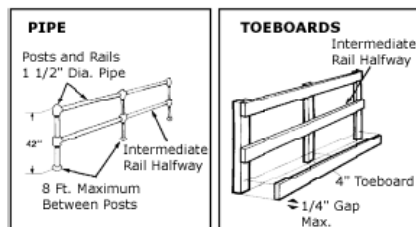
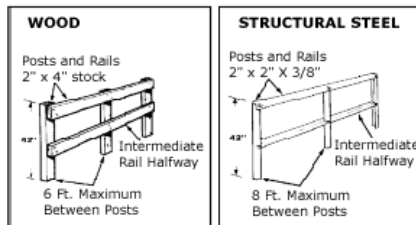
What are the Specifications for a “Standard Guard Rail”?

Many OSHA standards talk about guarding against falls; such as the following:

- Every stairway floor opening shall be guarded by a *standard railing*
- Every ladder way floor opening or platform shall be guarded by a *standard railing*
- Every open-sided floor ...4' or more above adjacent floor ...shall be guarded by a *standard railing*
- Every runway shall be guarded by a *standard railing*
- ...degreasing units, and similar hazards shall be guarded with a *standard railing*

Any conscientious person can recognize the exposure; however, sometimes our response is inadequate. Some will place a warning sign, others a piece of hi-visibility tape, & others may

place a chain. A few will simply ignore the exposure feeling that the hazard is easily recognized & will be avoided. Yet if we stop & look we can find the specifications that the experts developed & OSHA incorporated as adequate protection, i.e., the “*Standard Guard Rail*.”



1910.23(e)(1) A **standard railing** shall consist of top rail, intermediate rail, and posts, and shall have a vertical height of 42" nominal from upper surface of top rail to floor, platform, runway, or ramp level. The top rail shall be smooth-surfaced throughout the length of the railing. The intermediate rail shall be approximately halfway between the top rail & the floor, etc. The ends of the rails shall not overhang the terminal posts

except where such overhang does not constitute a projection hazard.

- barriers ... shall be of such construction & mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least 200 lbs. applied in any direction (except upward) at any point on the corresponding member.
- For wood railings, the posts shall be of at least 2" by 4" stock spaced not to exceed 6'; the top & intermediate rails shall be of at least 2" by 4" stock. If top rail is made of 2 right-angle pieces of 1" by 4" stock, posts may be spaced on 8' centers, with 2" by 4" intermediate rail.
- A standard toe board shall be 4" nominal in vertical height from its top edge to the level of the floor. It shall be securely fastened in place and with not more than 1/4" clearance above floor level.

Likewise there are specifications for a **handrail**; **1926.1052(c)(3)(i)**

- Stairways having 4 or more risers or rising more than 30', shall be equipped with at least 1 handrail;
- The height of handrails shall be not more than 37" nor less than 30" from the upper surface of the handrail to the surface of the tread, in line with the face of the riser at the forward edge of the tread.
- Handrails ...of stair rail systems shall be capable of withstanding, without failure, a force of at least 200 Lbs. applied ..., in any direction, at any point along the top edge.