

**INSTALLATION / SPECIFICATIONS FOR THE SMART SET SAFETY TEMPORARY FALL PROTECTION/SAFETY RAIL SYSTEM**

**Installation Instructions for the Smart Set Safety Rail System when installing post on 8 Ft. Centers:**

The Maximum Spacing for the Smart Posts is 8 ft centers using 10 ft rails over lapping each post by 1 ft. in each direction

Top Rail requirement when using a 2 x 4 rail: To maintain OSHA STANDARDS USE A Fiber (stress grade) construction grade lumber 2 inch by 4 inch (5 cm x 10 cm) lumber. See OSHA **1926.502 (b)** on page 2 of 2. A standard 2 x 4 will not span 8ft.

**NOTE:** Another option for 8ft centers is to use a standard 2 x 6 x 10ft clear standard lumber for top rail to maintain strength and minimum height requirements.

Mid and Toe Rails should be at least a standard 2 x 4 lumber to work with the post.

**Securing the Smart Set Post to specific subfloor types:**

**Warning:** check with Fastener Company for proper fastener depth and load requirements.

**Example 1 for anchoring post to concrete (3000 lb. 4 inches thick):** use 4 Titen HD Simpson Strong -Tie® anchoring system requires 4 fasteners per post. Required size is 3/8 x 2-3/4 inch imbedded depth with fender washers.

**Example 2 for anchoring post to wood I beam joist:** use 4 – 3/8 x 2 inch lag bolts with fender washers per Smart Post.

**IMPORTANT:** HAND TIGHTEN ONLY thumb screw to secure the rails in place.

**Installation Instructions for the Smart Set Safety Rail System when installed on 7 Ft. Centers:**

If posts are mounted on 7 ft. Centers, standard clear 2 x 4 lumber can be used for top, mid and toe rails.

All other details of installation are the same as the 8 ft center instruction above.

## INSTALLATION AND SPECIFICATIONS FOR THE SMART SET SAFETY TEMPORARY FALL PROTECTION/SAFETY RAIL SYSTEM

**(CORNERS AND GATES)** When coming to a corner set posts 1 ft 6 inches out from the corner and let the rail run by until it contacts the rail coming from the other direction. Use 2 ft blocks behind rails to end a run of railing. You may also create a gate by installing vertical pieces of wood screwing them 2 ft inside the post to the 3 rails creating a gate that can allow you to remove the top, mid and toe rail together. (Works very well for elevator shafts under construction)

**For any questions regarding this product, and questions concerning proper installation, Immediately contact your distributor or Smart Set Representative.**

**When The Smart Set Safety Rail System is installed correctly, the system will meet and or exceed OSHA standards.**

OSHA Regulation (Standards - 29 CFR) **1926.502(b)(4)** states:

When the 200 pound (890 N) test load specified in paragraph (b)(3) of this section is applied in a downward direction, the top edge of the guardrail shall not deflect to a height less than 39 inches (1.0 m) above the walking/working level. ***Guardrail system components selected and constructed in accordance with the Appendix B to subpart M of this part will be deemed to meet this requirement.***

### **1926 Subpart M - Appendix B**

OSHA's Regulations (Standards - 29 CFR) Guardrail Systems - Non-Mandatory Guidelines for Complying with **1926.502(b)** - **1926 Subpart M App B** - States in part:

The standard requires guardrail systems and components to be designed and built to meet the requirements of **1926.502(b)(3), (4), and (5)**. This Appendix serves as a non-mandatory guideline to assist employers in complying with these requirements

. . .

(1) For wood railings: Wood components shall be minimum 1500 lb-ft/in(2) fiber (stress grade) construction grade lumber; the posts shall be at least 2-inch by 4-inch (5 cm x 10 cm) lumber spaced not more than 8 feet (2.4 m) apart on centers; the top rail shall be at least 2-inch by 4-inch (5 cm x 10 cm) lumber, the intermediate rail shall be at least 1-inch by 6-inch (2.5 cm x 15 cm) lumber. All lumber dimensions are nominal sizes as provided by the American Softwood Lumber Standards, dated January 1970 . . .