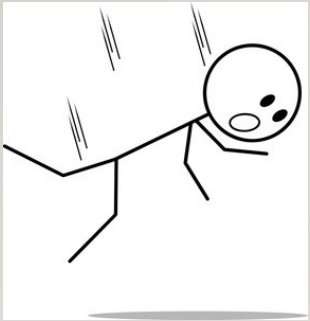


VOSHA WALKING WORKING SURFACES

THE BASICS OF THE NEW GENERAL INDUSTRY SUBPART D



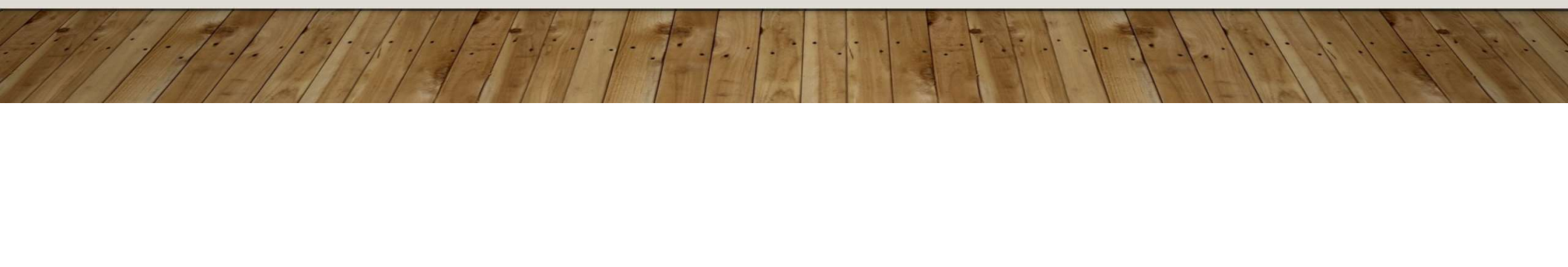
What's wrong with this picture?



FALLS IN THE WORKPLACE

- In the year 2014, 261,930 private industry and state and local government workers missed one or more days of work due to injuries from falls on the same level or to lower levels, and 798 workers died from those falls
- Falls remain the number one cause of injury/death in General Industry
- Some of the highest risk occupations for falls continue to be
 - Construction activities
 - Healthcare support
 - Building maintenance
 - Transportation and material moving
- Workers' compensation and medical costs associated with occupational fall incidents have been estimated at \$70 billion annually in the United States

Source: NIOSH, Bureau of Labor Statistics



CONDITIONS AND PRACTICES THAT RELATE TO FALLS IN THE WORKPLACE

Circumstances associated with fall incidents in the work environment frequently involve:

- Slippery, cluttered, or unstable walking/working surfaces
- Unprotected edges
- Floor holes and wall openings
- Unsafely positioned ladders
- Misused fall protection

RULE SPECIFICS – EFFECTIVE DATES

- **Scope:** This rule applies to General Industry Worksites covered by 29 CFR 1910
- **OSHA Effective Date: January 2017**
- **Vermont Effective Date: January 2018**
- Training workers on fall and equipment hazards -- **May 17, 2017;**
- Inspection and certification of permanent building anchorages -- **November 20, 2017 (now changed);**
- Installation of fall protection (personal fall arrest systems, ladder safety systems, cages, wells) on existing fixed ladders (over 24 feet) that do not have any fall protection -- **November 19, 2018;**
- Installation of ladder safety or personal fall arrest systems on new fixed ladders (over 24 feet) and replacement ladders/ladder sections -- **November 19, 2018;** and
- Installation of ladder safety systems or personal fall arrest systems on all fixed ladders (over 24 feet) – **November 18, 2036.**

WHY WHY WHY?



- OSHA's Subpart D had not been updated since its original adoption in 1971
- This particular rule update has been in the works for nearly 20 years
- There have been many changes and updates to the technology of fall protection over the many years since the original adoption
- OSHA estimates the final rule will prevent 29 worker deaths and 5,842 lost-workday injuries each year
- OSHA estimates the annual monetized benefits of the lives saved and injuries prevented will be \$614.5 million (with net benefits of \$309.5 million (benefits minus costs)).

BENEFITS FOR EMPLOYEES?

- Increases protection of employees required to climb fixed ladders
 - Requires ladders 24 feet or higher to be provided with fall protection or positioning devices (phase in)
 - Phases out qualified climber exemption for outdoor advertising
- Adopts construction criteria for Personal Fall Arrest Systems (PFAS)
- Allows for the use of PFAS as a viable option (and thereby employees are more likely to be protected)
- Provides for specific training for employees in the area of fall protection systems

WHAT ABOUT EMPLOYERS?

- **Flexibility!**
- Provides compliance flexibility for employers by increasing the fall protection options employers may use
- Provides greater consistency between OSHA's general industry and construction standards, which makes compliance easier for employers who perform both general industry and construction activities
- Incorporates advances in technology, industry best practices, and national consensus standards, which provide employers with effective and cost-efficient measures to protect workers
- Replaces outdated specification requirements with performance-based language and criteria, which provides greater flexibility and makes the final rule easier for employers and workers to understand and follow

CHANGES FROM THE OLD RULE

- **§1910.28(b):** *Protection from fall hazards;*
- This is the provision that allows employers a wider option of fall protection systems, including;
 - 1910.28(b)(1)(i)(A) – Guardrail systems
 - 1910.28(b)(1)(i)(B) – Safety Net systems
 - 1910.28(b)(1)(i)(C) - Personal fall protection systems, such as personal fall arrest, travel restraint, or positioning systems, or;
 - 1910.28(b)(1)(ii) – Where infeasible or greater hazard, the employer may use a fall protection plan in accordance with 1926.502(k)

SCAFFOLDS

- **§1910.27(a): Scaffolds**
 - This provision replaces existing (and outdated) scaffold standards with scaffold standards in the construction CFR (1926 subpart L, Scaffolds)

ROPE DESCENT SYSTEMS (RDS)

- **§1910.27(b):**
 - Codifies an earlier OSHA memo concerning RDS
 - Anchors;
 - Requires permanent anchors to be inspected, tested, certified, and maintained as capable of supporting at least 5,000 pounds per employee attached.
 - Inspections must be done annually by a qualified person
 - Anchors must be re-certified at least every 10 years
 - All certifications must be in writing
 - Prohibits the use of RDS 300 feet or more in height unless infeasible or greater hazard

FIXED LADDERS

- **§1910.28(b)(9)**; *Phase-in of ladder safety systems or personal fall arrest systems on fixed ladders*
 - Affects ladders in excess of 24 feet climbing height
 - No longer allows cages to be considered protection from injuries from falling
 - Ladders in excess of 24 feet will require ladder safety or personal fall devices installed
 - Affects all new or replacement installation with total phase in over 20 years

SERVICE PITS

- 1910.28(b)(8)
- Repair pits, service pits, and assembly pits less than 10 feet in depth. The use of a fall protection system is not required for a repair pit, service pit, or assembly pit that is less than 10 feet (3 m) deep, provided the employer:
 - 1910.28(b)(8)(i)
 - Limits access within 6 feet (1.8 m) of the edge of the pit to authorized employees trained in accordance with § 1910.30;

SERVICE PITS

- 1910.28(b)(8)(ii)
- Applies floor markings at least 6 feet (1.8 m) from the edge of the pit in colors that contrast with the surrounding area; or places a warning line at least 6 feet (1.8 m) from the edge of the pit as well as stanchions that are capable of resisting, without tipping over, a force of at least 16 pounds (71 N) applied horizontally against the stanchion at a height of 30 inches (76 cm); or places a combination of floor markings and warning lines at least 6 feet (1.8 m) from the edge of the pit. When two or more pits in a common area are not more than 15 feet (4.5m) apart, the employer may comply by placing contrasting floor markings at least 6 feet (1.8 m) from the pit edge around the entire area of the pits; and
- 1910.28(b)(8)(iii)
- Posts readily visible caution signs that meet the requirements of 1910.145 and state "Caution-Open Pit."

QUALIFIED CLIMBER

- **§1910.28(b)(10);** *Phase-out of the "qualified climber" exception in outdoor advertising for ladders over 24 feet*
 - By November 19, 2018 phases out qualified climbers that do not require protection [must comply with 1910.29(h)]
 - Employers must follow the fall protection phase in timeline of fixed ladders
 - However after November 19, 2018, employers are required to install ladder cages, wells, fall protection systems or safety devices for fixed ladder systems over 24 feet and not provided with any systems

WORK ON LOW SLOPED ROOFS

- 1910.28(b)(13)(i)
- When work is performed **less than 6 feet** (1.6 m) from the roof edge, the employer must ensure each employee is protected from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system.
- 1910.28(b)(13)(ii)
- When work is performed at **least 6 feet (1.6 m) but less than 15 feet** (4.6 m) from the roof edge, the employer must ensure each employee is protected from falling by using a guardrail system, safety net system, travel restraint system, or personal fall arrest system. The employer may use a designated area when performing work that is both infrequent and temporary.

LOW SLOPED ROOF'S CONTINUED

- 1910.28(b)(13)(iii)
- When work is performed 15 feet (4.6 m) or more from the roof edge, the employer must:
- 1910.28(b)(13)(iii)(A)
- Protect each employee from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system or a designated area. The employer is not required to provide any fall protection, provided the work is both infrequent and temporary; and
- 1910.28(b)(13)(iii)(B)
- Implement and enforce a work rule prohibiting employees from going within 15 feet (4.6 m) of the roof edge without using fall protection in accordance with paragraphs (b)(13)(i) and (ii) of this section.

TRAVEL RESTRAINT VS. WORK POSITIONING

- Travel restraint system means a combination of an anchorage, anchorage connector, lanyard (or other means of connection), and body support that an employer uses to eliminate the possibility of an employee going over the edge of a walking-working surface. This is specific to 1910
- Positioning system (work-positioning system) means a system of equipment and connectors that, when used with a body harness or body belt, allows an employee to be supported on an **elevated vertical surface**, such as a wall or window sill, and work with both hands free. Positioning systems also are called "positioning system devices" and "work-positioning equipment." This is both 1910 and 1926

**FALL PROTECTION
SYSTEMS MUST
CONFORM TO 1910.140**



STAIRS HAND/STAIR RAILS

- 1910.29(f)(1)(ii)(A)
- The height of stair rail systems installed before January 17, 2017 is not less than 30 inches (76 cm) from the leading edge of the stair tread to the top surface of the top rail;
- 1910.29(f)(1)(ii)(B)
- The height of stair rail systems installed on or after January 17, 2017 is not less than 42 inches (107 cm) from the leading edge of the stair tread to the top surface of the top rail

INSPECTIONS

- **§1910.22(d);** *Inspection of walking-working surfaces*
 - This portion requires that employers inspect walking-working surfaces regularly and as needed and correct, repair, or guard against hazardous conditions
 - If the correction involves the structural integrity of the walking working surface it must be performed by or under the supervision of a qualified person

TRAINING

- **§1910.30; Employee Training**
 - Requires that employers ensure workers who use personal fall protection and work in other specified high hazard situations (such as RDS) are trained, and retrained as necessary, about fall and equipment hazards, including fall protection systems
 - Training on specified equipment must be provided by May 17, 2017
 - Employers must provide information and training to each worker **in a manner the worker understands.**

SUBPART I

- **§1910.140;** *Personal fall protection system performance and use requirements*
 - This Provision establishes performance, care, and use criteria for all personal fall protection systems.
 - Personal Fall Protection system requirements for selection, care, inspection and use are very similar to the construction standards.
 - As in construction the use of body belts for arrest systems is prohibited.
 - Travel Restraint v. Positioning Device

OTHER ISSUES COVERED

GENERAL HOUSEKEEPING 1910.22



WHAT WE'RE FINDING

- BLOCKED EXITS!
- Flammables improperly stored
- Blocked electrical panels
- Excessive tripping hazards
- Holes in floors
- Open sided walkways
- Remember! The employer must now
Inspect the walking working surface!



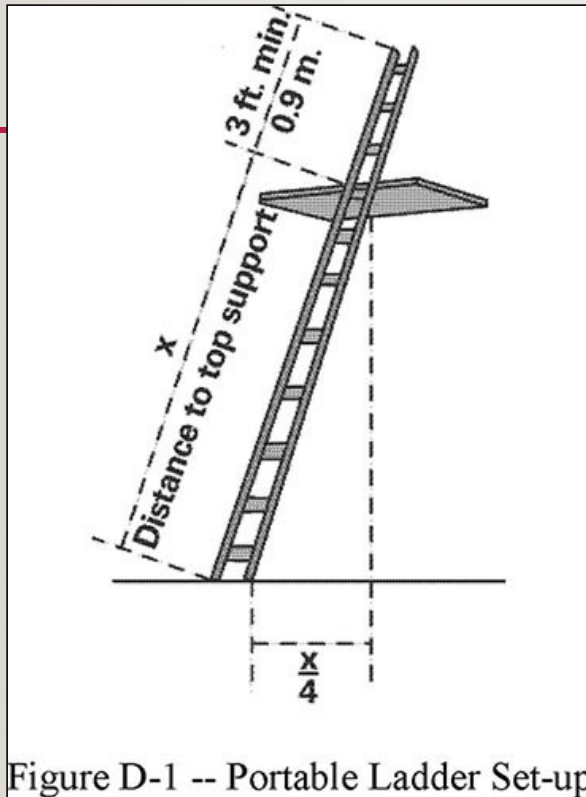
PORTABLE LADDERS 1910.23(c)



ISSUES WE ARE FINDING

- Damaged Ladders not taken out of service
- Wrong size ladders (standing on the top rung of step ladders)
- Metal ladders used next to live power
- Ladders not set properly

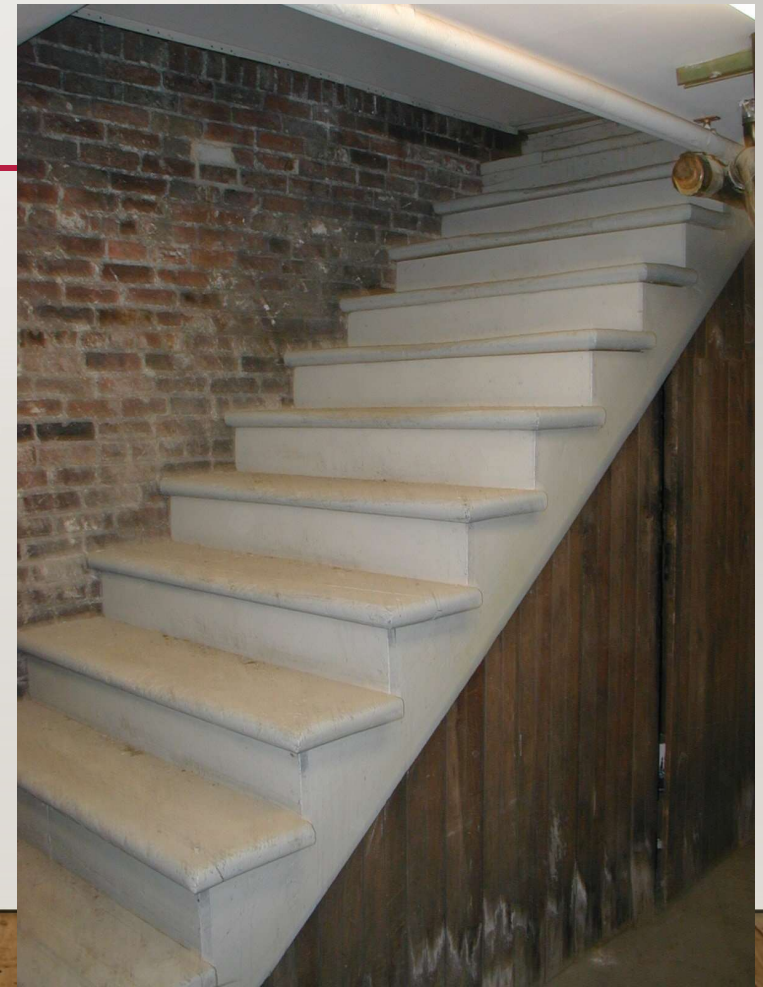
HAZARDS AND CONTROLS



Source: OSHA

- When using ladders to access another level, secure and extend the ladder at least 3 feet above the landing point.
- Angle ladder so the horizontal distance of bottom is $\frac{1}{4}$ the working length of the ladder.

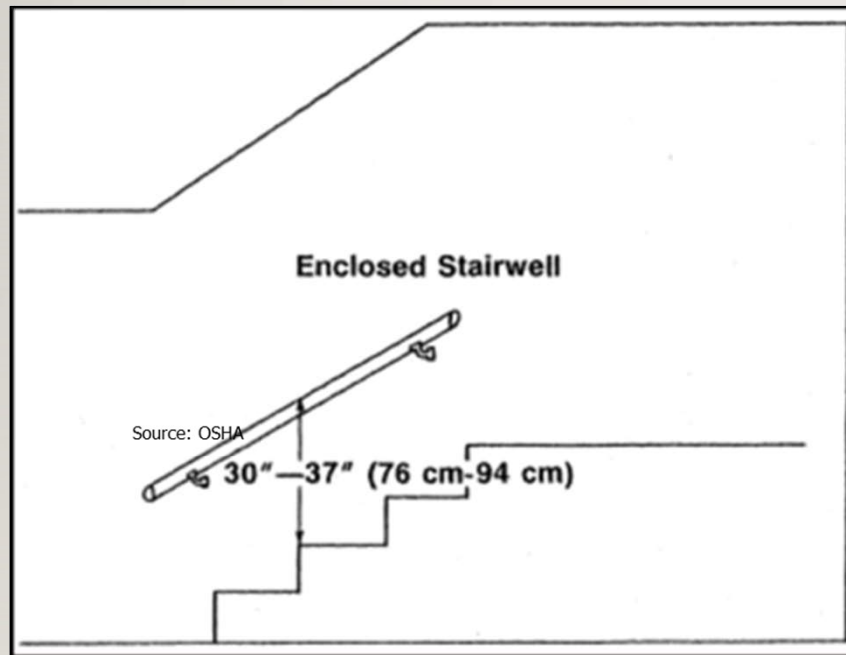
STAIRS 1910.25(B)



WHAT WE'RE FINDING

- No/Damaged/improperly built handrails
- Clutter on stair treads
- Damaged treads
- Improperly built stairs (treads not even)

HAZARDS AND CONTROLS



- Handrails are required when there is 4 or more risers.
- Mainly to be used on the right side as you descend.
- Allows you to maintain three points of contact.

LANDINGS

Prior to 1/17/2017; 20 inches. After 1/1/2017 must be 22 inches door clearance

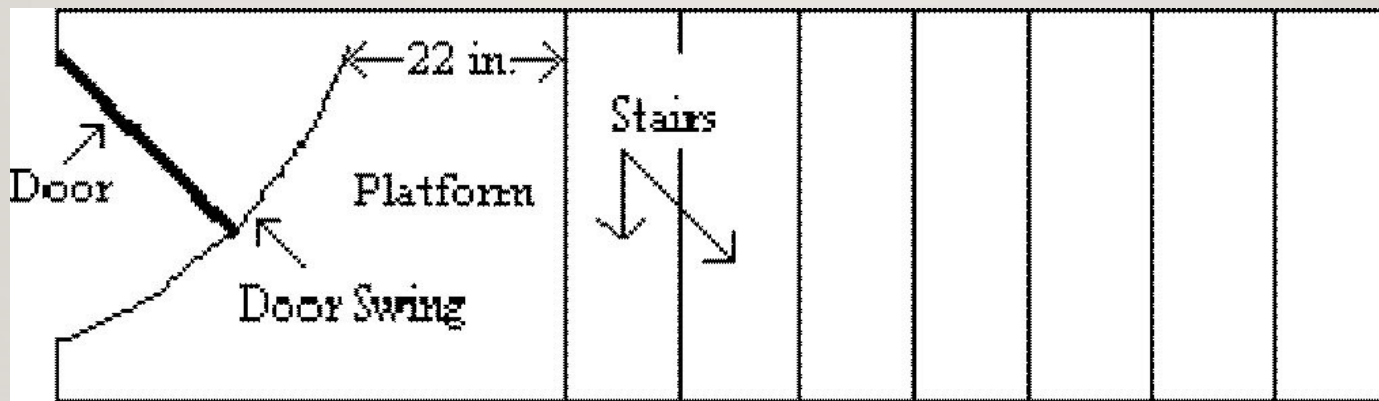


Figure D-7 -- Door or Gate Opening on Stairway

LET'S NOT FORGET WINTER!



VOSHA PICTURES









A C & B ROSCOE
P/O # 29189-92
DETROIT
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BOX













The company naughty chair!

HELPFUL TRAINING VIDEOS



YOUR DECISION TO WORK SAFELY MATTERS



Questions?