

Walking & Working Surfaces / Back Safety and Ergonomics

29 CFR 1910.21-30

29 CFR 1910.66-67

29 CFR 1926.450-454

29 CFR 1926.1050-1060

Scope

- Federal regulations cover the rules for the design and use of fixed and portable ladders, scaffolds, aerial devices, aisles, stairways, floors, wall openings, manholes, vaults and general housekeeping.

Scaffolds

- Controls must be in place to ensure that only trained and qualified people use and erect scaffolds.
- Scaffolds must be:
 - Designed by a qualified person.
 - Plumb, rigid and square.
 - Secured properly.
 - Have sound footing

Scaffolds

- Designed with appropriate scaffolding grade materials.
- Provided with proper means of egress and access.
- Used near energized conductors only at proper distances and manner.
- Provided with adequate railing and toe boards.

Scaffolds

- Designed with maximum loading requirements in mind.
- Maintained in good condition.
- Assembled within appropriate fall protection requirements.
- Dismantled properly.

Scaffolds

- The following scaffold training must be met (29 CFR 1926.454 (a-c):
 - Everyone who erects, disassembles, moves, operates, repairs, inspects, and maintains scaffolding must be trained by a competent person who recognizes hazard associated with the scaffolds.
 - Everyone who uses scaffolds must have scaffold user training to recognize hazards associated with working for scaffolding.

Scaffolds

- Re-training must be conducted to ensure continued scaffolding safety.
- Everyone who uses fall protection must have training regarding the safe use and maintenance of the fall protection. (29 CFR 1926.451 (g))
- Scaffolds must be inspected prior to use and in accordance with 29 CFR 1926.451 and 29 CFR 1910.28.

Aerial Lifts

- If aerial lifts are being used, such as, extensible boom platforms, aerial ladders, articulating boom platforms, vertical towers or any combination of these, the following must be met:
 - They must be used in accordance with appropriate ANSI standards for Vehicle-Mounted Elevating and Rotating Work Platforms.
 - They must be field-modified (adding a man basket or extension, etc.)

Aerial Lifts

- The manufacturer must have written approval for any modifications.
- Only authorized personnel are allowed to operate the aerial lifts and they must be trained in the safe operation of the lifts.
- Aerial lifts must be used in accordance with the specified safe operating procedures.

Aerial Lifts

- Load limits on boom and baskets must be maintained.
- They must be given required electrical tests.
- Proper fall protection must be provided and used and inspected per specified schedule.
- Welding on aerial lifts (maintenance, etc) must be allowed only in accordance with appropriate standards.
- If you will be designated to operate an Aerial Lift, you will receive specific training on the piece of equipment you will operate.

Aisle and Passageways – Housekeeping

- If mechanical handling equipment is being used, the following must be met:
 - Sufficient safe clearances must be allowed for aisles, at loading docks, through doorways, and whenever turns or passage must be made.
 - Aisle and passageways must be maintained clear and in good repair.
 - Permanent aisles and passageways must be appropriately marked.

Aisle and Passageways – Housekeeping

- Floors on which materials will be placed overhead must be labeled with appropriate loading criteria.
- These limits must be ensured
- Passageways, storerooms, and service rooms must be maintained in a clean, safe and sanitary manner.
- Where possible these areas must be maintained in dry condition.

Handrails, Guardrails, and Toe Boards – Manholes

- Handrails, guardrails, and toe boards must be consistently used and maintained on stairways, open-sided floors or walls, floor openings, around dangerous equipment and unprotected sides and edges where a fall hazard exists.
- These systems must be designed in accordance with applicable standards.

Handrails, Guardrails, and Toe Boards – Manholes

- Railing systems must be provided that include appropriate top rail, mid-rail and toe board where required.
- Manhole covers must be in place and there must be provisions for proper removal and replacement of these covers.

Ergonomics



What is Ergonomics?

- The science of fitting jobs to the people who work in them and performing those jobs so they have least impact on a person's body.

Why have an Ergonomics Program?

- To reduce work-related musculoskeletal disorders (MSDs)
- MSDs are disorders of:
 - muscles
 - nerves
 - tendons
 - ligaments
 - joints
 - cartilage
 - blood vessels
 - spinal discs

Ways to avoid Injury

- Use proper lifting techniques
- Use PPE, such as knee pads or back brace
- Avoid putting body in awkward or uncomfortable positions
- Reduce repetition

Summary

- The principle behind ergonomics is that by fitting the job to the worker, MSDs can be reduced and ultimately eliminated.

Through employee education, early reporting of MSDs, and the identification and correction of MSD hazards these types of injuries can be effectively controlled.

QUESTIONS ?