



Tailgate/Toolbox Safety Training

Safety Services Company-Safety Meeting Division, PO Box 6408 Yuma, AZ 85366-6408 Toll Free (866) 204-4786



Company Name: _____ Job Site Location: _____

Date: _____ Time Started: _____ Time Finished: _____ Foreman/Supervisor: _____

Topic 179: Fall Protection for Steel Erection (Subpart R)

Introduction: OSHA and the National Safety Council record an average of 35 fatalities and 2,279 lost-workday injuries annually, resulting from falls in steel erection construction. OSHA estimates that fatalities will be reduced by 85% and injuries reduced by 50% each year if the requirements for Fall Protection for Steel Erection are complied with.

Steel Erection – is considered to be the construction, alteration, or repair of steel building, bridges, and other structures, including the installation of metal decking and all planking used during the process of erection. Activities considered part of steel erection include rigging, hoisting, laying out, placing, connection, guying, bracing, dismantling, burning, welding, bolting, grinding, sealing, and caulking. When any of these related activities for steel construction are done at heights, fall protection is required.



Fall Restraint System – means a fall protection system that prevents the user from falling any distance. The system is comprised of either a body belt or a body harness, along with anchorages, connectors, lanyards, lifelines, and other necessary equipment and devices.

Personal Fall Arrest System – means a system to arrest an employee in a fall from a working level. The system consists of an anchorage, body harness, connectors, lanyard, deceleration device, lifeline, or any suitable combination of these. The use of a body belt for fall arrest is prohibited.

Positioning Device System – means a body belt or body harness rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, or column and work with both hands free while leaning.



Following are general Federal OSHA requirements for Fall Protection for Steel Erection:

- **Except for employees** working in Controlled Decking Zones (CDZ), each employee working in a steel erection activity who is walking/working at heights must be protected from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, positioning device systems, or fall restraint system.
- **On multi-story structures**, perimeter safety cables must be installed at the final interior and exterior perimeters after decking is installed.
- **At levels above 15 feet** but less than 30 feet over a lower level, personnel must be provided with a personal fall arrest system, a positioning device system, a fall restraint system, and wear the equipment necessary to be able to be tied off, or be provided with other means of protection from fall hazards by use of guardrails, safety cables, or safety net systems.

Controlled Decking Zone – may be established in that area of the structure over 15 feet and up to 30 feet above a lower level where metal decking is initially being installed and forms the leading edge of a work area. In each CDZ the following will apply:

- **Each employee working at the leading edge** in a CDZ must be protected from fall hazards of more than two stories or 30 feet, whichever is less.
- **Access to a CDZ** must be limited to only those employees engaged in leading edge work.
- **The boundaries of a CDZ** must be clearly marked. The CDZ must not be more than 90 feet wide and 90 feet deep from any leading edge. The CDZ must be marked by use of control lines or the equivalent. Unsecured decking in a CDZ must not exceed 3,000 square feet.
- **Each employee working in a CDZ** must have completed CDZ training.
- **Safety deck attachments** must be performed in the CDZ from the leading edge back to the control line and must have at least two attachments.
- **Final deck attachments** and installation of shear connectors shall not be performed in the CDZ.

Fall protection gear provided by the steel erector may remain in the area where steel erection activity has been completed, to be used by other trades, only if the controlling contractor or its authorized representative has directed the steel erector to leave the fall protection gear in place and has inspected and accepted control and responsibility of the fall protection gear, prior to authorizing persons other than steel erectors to work in the area.

Fall protection training must be provided by the employer and shall be conducted by a qualified person. Training must include instruction in all aspects of the fall protection requirements for steel erection construction, such as the correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used; the recognition and identification of fall hazards in the work area, the use and operation of guardrails, personal fall arrest, positioning devices, fall restraint, and safety net systems.



Conclusion: Steel erection construction by its very nature is a high hazard occupation. However, proper training, following the rules and regulations, paying attention to details, and recognizing the hazards on the jobsite will make the job as safe as it can be.

Follow these requirements for safe steel erection operations.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Foreman/Supervisor's Signature:

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.