Construction Fall Protection Subpart M – Quick Tips

Here are the relevant guidelines and requirements for construction fall protection:

The following list of questions and associated regulations provide guidance on common safety issues related to 29 CFR 1926.501 to 1926.503. While it by no means covers every area of fall protection in construction, it does highlight some of the more common safety issues and provides a basic understanding of these requirements.

Question: Do walking and working surfaces have the strength and structural integrity to support people safely?

Regulation: 29 CFR 1926.501(a)(2)

Question: Are employees prohibited from working or walking on surfaces that are not designed to support them safely?

Regulation: 29 CFR 1926.501(a)(2)

Question: Do guardrail systems, safety net systems or personal fall arrest systems protect employees when they work on unprotected sides and edges of walking and working surfaces that are six feet or more above a lower level?

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a fall protection plan must still be developed and implemented.

Regulation: 29 CFR 1926.501(b)(1)

Question: Do guardrail systems, safety net systems or personal fall arrest systems protect employees during construction of leading edges six feet or more above lower levels?

Regulation: 29 CFR 1926.501(b)(2)(i)

Question: Do guardrail systems or personal fall arrest systems protect workers in a hoist area from falling six feet or more to lower levels?

Regulation: 29 CFR 1926.501(b)(3)

Question: Does a personal fall arrest system protect employees if guardrail systems are removed for hoisting operations, requiring employees to lean through the access opening or out over the edge of the access opening (e.g., to receive or guide equipment and materials)?

Regulation: 29 CFR 1926.501(b)(3)

Question: Do personal fall arrest systems, covers, or guardrail systems erected around holes protect employees on walking and working surfaces more than six feet above lower levels from falling through holes (including skylights)?

Regulation: 29 CFR 1926.501(b)(4)(i)

Question: Do covers protect employees on a walking and working surface from tripping in or stepping into holes (including skylights)?

Regulation: 29 CFR 1926.501(b)(4)(ii)

Question: Do covers protect employees on a walking and working surface from objects falling through holes (including skylights)?

Regulation: 29 CFR 1926.501(b)(4)(iii)

Question: Do guardrail systems, safety net systems or positioning device systems protect employees on the face of framework or reinforcing steel more than six feet above lower levels from falling?

Regulation: 29 CFR 1926.501(b)(5)

Question: Do guardrail systems, fences or barricades protect employees at the edge of an excavation six feet or more in depth from falling when the excavations are not readily seen because of

plant growth or other visual barrier?

Regulation: 29 CFR 1926.501(b)(7)(i)

Question: Do guardrail systems, fences, barricades or covers protect employees at the edge of a well, pit, shaft or similar excavation six feet or more in depth from falling?

Regulation: 29 CFR 1926.501(b)(7)(ii)

Question: Do guardrail systems or equipment guards protect employees from falling from less than six feet onto dangerous equipment?

Regulation: 29 CFR 1926.501(b)(8)(i)

Question: Do guardrail systems, personal fall arrest systems or safety net systems protect employees six feet or more above dangerous equipment from fall hazards?

Regulation: 29 CFR 1926.501(b)(8)(ii)

Question: Do guardrail systems, safety net systems, personal fall arrest systems or controlled access zones protect employees performing overhand bricklaying and related work six feet or more above lower levels from falling?

Regulation: 29 CFR 1926.501(b)(9)

Question: Does a guardrail system, safety net system or personal fall arrest system protect employees performing overhand bricklaying and related work when reaching more than 10 inches below the level of the walking/working surface from falling?

Note: Bricklaying operations performed on scaffolds are regulated by Subpart L – Scaffolds

Regulation: 29 CFR 1926.501(b)(9)(i)

Question: Are employees engaged in roofing activities on low-slope roofs with unprotected sides and edges six feet or more above lower levels protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of a

warning line system and guardrail system, warning line system and safety net system or warning line system and personal fall arrest system, or warning line system and safety monitoring system?

On roofs 50 feet or less in width, the use of a safety monitoring system alone is permitted.

Regulation: 29 CFR 1926.501(b)(10)

Question: Do guardrail systems with toe boards, safety net systems or personal fall arrest systems protect employees on steep roofs with unprotected sides and edges six feet or more above lower levels from falling?

Regulation: 29 CFR 1926.501(b)(11)

Question: Are employees engaged in the erection of precast concrete members and related operations six feet or more above lower levels protected from falling by guardrail systems, safety net systems or personal fall arrest systems?

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a fall protection plan must still be developed and implemented.

Regulation: 29 CFR 1926.501(b)(12)

Question: Are employees engaged in residential construction activities six feet or more above lower levels protected from falling by guardrail systems, safety net systems or personal fall arrest systems?

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a fall protection plan must still be developed and implemented.

Regulation: CFR 1926.501(b)(13)

Question: Are employees protected from falling by a guardrail system, a safety net system or a personal fall arrest system if they are working on, at, above or near wall openings (including those with chutes attached) where (a) the outside bottom edge of

the wall opening is six feet or more above lower levels and (b) the inside bottom edge of the wall opening is less than 39 inches above the walking and working surface?

Regulation: 29 CFR 1926.501(b)(14)

Question: Are employees on a walking/working surface not otherwise addressed six feet or more above lower levels protected from falling by a guardrail system, safety net system or personal fall arrest system?

Regulation: 29 CFR 1926.501(b)(15)

Question: When an employee is exposed to falling objects, are they required to wear a hard hat?

Regulation: 29 CFR 1926.501(c)

Question: When an employee is exposed to falling objects, is one of the following measures implemented?

Erect toe boards, screens or guardrail systems to prevent objects from falling from higher levels.

Erect a canopy structure and keep potential fall objects far enough away from the edge of the higher level so that those objects would not go over the edge if they were displaced.

Barricade the area to which objects could fall, prohibit employees and students from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were displaced

Regulation: 29 CFR 1926.501(c)

Question: Has a training program been provided to everyone who might be exposed to fall hazards?

Note: The training program must enable each employee to recognize the hazards of falling and know the procedures for minimizing these hazards

Regulation: 29 CFR 1926.503(a)(1)

Question: Is the training program conducted by a competent person?

Regulation: 29 CFR 1926.503(a)(2)

Question: Have individual certification records been prepared that contain the name or other identity of the person trained, the date(s) of the training and the signature of the employer or person who conducted the training?

Regulation: 29 CFR 1926.503(b)(1)

Question: Is the latest training certification for all persons trained available for inspection?

Regulation: 29 CFR 1926.503(b)(2)

Question: Is retraining conducted if a person can no longer recognize the hazards of falling or follow the proper procedures?

Regulation: 29 CFR 1926.503(c)

Question: Is retraining conducted when changes in the workplace render previous training obsolete?

Regulation: 29 CFR 1926.503(c)(1)

Question: Is retraining conducted when changes in the types of fall protection systems or equipment render previous training obsolete?

Regulation: 29 CFR 1926.503(c)(2)

Question: Is retraining conducted if a person cannot use fall protection systems or equipment or has not retained the requisite understanding or skill?

Regulation: 29 CFR 1926.503(c)(3)

FALL RESCUE

All fall rescue programs should be as safe as possible and take as

little time as possible to bring a fallen worker to safety. When a fall occurs, any number of factors can create challenges to the effective rescue of the victim. Weather conditions, physical obstacles and the condition of the victim can consume time and create hindrances for rescue personnel.

All rescue plans should be regularly reviewed to ensure that the procedures are manageable and realistic in their time estimates. Employers act in their own best interests by implementing the safest and quickest rescue plan and by practicing procedures to maximize preparation for a real emergency.

OSHA RECOMMENDS THESE GENERAL GUIDELINES:

- Rescue suspended workers as quickly as possible
- Be aware of the potentially life threatening risks of orthostatic intolerance and suspension trauma
- Be aware of signs and symptoms of orthostatic intolerance
- Be aware that suspended workers who are unconscious or have head injuries are particularly at risk for orthostatic intolerance
- Be aware of the factors that can increase the risk of suspension trauma
- Be aware that some authorities advise against moving the rescued workers to a horizontal position too quickly

For more information on the suspension trauma and orthostatic intolerance, see After the Fall Event – Preventing Suspension Trauma.

OTHER CONSTRUCTION STANDARDS RELATED TO FALL PROTECTION

29 CFR 1926.104 SAFETY BELTS, LIFELINES AND LANYARDS

(a) Lifelines, lanyard and safety harnesses must only be used for employee safeguarding. Any of these products that are subject to in-service loading must be immediately removed from service and not be reused again.

(b) Lifelines must be secured above the point of operation to an anchorage capable of supporting a minimum dead weight of 5400 pounds.

(c) Lifelines used on rock-scaling operations, or in areas where the lifeline may be subjected to cutting or abrasion, must be a minimum of 7/8-inch wire core manila rope. For all other lifeline applications, a minimum of 3/4-inch manila or equivalent, with a minimum breaking strength of 5400 pounds, must be used.

(d) Safety belt lanyards must be a minimum 1/2-inch nylon rope or equivalent with a maximum length to allow the user to fall not more than six feet and have a nominal breaking strength of 5400 pounds.

29 CFR 1926.105 SAFETY NETS

(a) Safety nets must be provided when workplaces are higher than 25 feet above ground or water surfaces or other surfaces where the use of ladders, scaffolds, catch platforms, temporary floors, safety lines or safety belts is impractical.

(c)(1) Nets must extend eight feet beyond the edge of the work surface where employees are exposed and must be installed as close under the work surface as practical but in no case more than 25 feet below the work surface. Nets must be hung with sufficient clearance to prevent user’s contact with the surfaces or structures below. Such clearances must be determined by impact load testing.

(d) The mesh size of nets shall not exceed six inches by six inches. All new nets must meet accepted performance standards of 17,500 foot-pounds minimum impact resistance as determined and certified by the manufacturers, and must bear a label of proof test. Edge ropes must provide a minimum breaking strength of 5000 pounds.

DEFINITIONS PERTAINING TO THIS SECTION:

Lanyard means a rope, suitable for supporting one person. One end

is fastened to a safety belt or harness and the other end is secured to a substantial object or a safety line.

Lifeline means a rope, suitable for supporting one person, to which a lanyard or safety belt (or harness) is attached.

Safety belt means a device, usually worn around the waist which, by reason of its attachment to a lanyard and lifeline or a structure, will help prevent a worker from falling. Body belts are to be used for restraint and positioning only, not as part of a personal fall arrest system. A worker who uses a body belt as part of a personal fall arrest system is exposed to potentially falling out of the belt, serious internal injuries and asphyxiation through prolonged suspension.

COMMONLY ASKED QUESTION

Q: What is a "competent person"?

A: The term "competent person" is used in many OSHA standards and documents. According to the 1926 construction standard, an OSHA "competent person" is defined as "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them" [29 CFR 1926.32(f)]. By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, and has the authority to correct them.

SOURCE

29 CFR 1926.501 Subpart M

RELATED ARTICLES

After the Fall Event – Preventing Suspension Trauma
Fall Protection for Aerial Work Platforms
Fall Protection Equipment
OSHA Scaffolding Requirements

(Rev. 9/2015)

The information contained in this article is intended for general information purposes only and is based on information available as of the initial date of publication. No representation is made that the information or references are complete or remain current. This article is not a substitute for review of current applicable government regulations, industry standards, or other standards specific to your business and/or activities and should not be construed as legal advice or opinion. Readers with specific questions should refer to the applicable standards or consult with an attorney.

Source: Grainger Know How – https://www.grainger.com/know-how