



C3 Safety Training: 12 Month Module

Module 12: December – Fall Protection

Company Name: _____ Date: _____

C3 Project Name: _____

In the construction industry in the United States, falls are the leading cause of worker fatalities. The standard for fall protection deals with both the human and equipment-related issues in protecting workers from fall hazards.

Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is within 6 feet of the edge or lower level shall be protected from falling by the use of guardrails, safety net systems or personal fall arrest systems.

Examples of Fall Protection Requirements for Certain Construction Activities:

- **Leading Edge**
 - Each worker constructing a leading edge 6 feet or more above a lower level must be protected by guardrail systems, safety net systems, or personal fall arrest systems.
- **Overhead Bricklaying and Related Work**
 - All workers reaching more than 10 inches below the level of the walking or working surface on which they are working must be protected by a guardrail system, safety net system or personal fall arrest systems.
- **Roofing Work on Low-Slope Roofs** less than or equal to 4 in 12 (vertical to horizontal) must be protected by
 - Guardrail, safety net, personal fall arrest system, a combination of conventional fall protection systems and warning line, or a warning line system and a safety monitoring system.
- **Working on steep roofs** greater than 4 in 12 (vertical to horizontal).
 - Guardrail, safety net, personal fall arrest system, or a combination of conventional fall protection systems.
- **Other walking or working surfaces**
 - As a general matter, each worker on a walking or working surface 6 feet or more above a lower level must be protected from falling by a guardrail system, a safety net system or a personal fall arrest system.
- **Guardrail Systems**
 - Guardrail systems are barriers erected to prevent workers from falling to lower levels. If the employer chooses to use guardrail systems to protect workers from falls, the guardrail must have the following:
 - Top Rail
 - Mid Rail
 - Toe Board



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- **Holes**
 - Each worker on walking or working surfaces must be protected from falling through holes including skylights that are more than 6 feet above lower levels by personal fall arrest systems, covers, or guardrail system erected around such holes.
 - Each worker on a walking working surface must be protected from tripping into or stepping through holes by covers.

- If you are at risk for falling 6 feet or more, you must use appropriate fall protection equipment. One type of appropriate fall protection equipment is the personal fall arrest system. The entire personal fall arrest system must be capable of withstanding the impact force involved in a fall. A person without protection will free fall 4 feet in ½ second and 16 feet in 1 second. A personal fall arrest system includes a full body harness, a shock absorbing lanyard or a rope grab and vertical lifeline with sound anchorage able to support a dynamic load of 5,000 pounds.

- **Fall Arrest** – Do these things to avoid falls and injuries.
 - Inspect all fall protection equipment prior to use.
 - Pick an anchorage point that will support 5,000 lbs. per worker (strong enough to support a pickup truck)
 - Fall arrest systems should be rigged so employees can't free fall more than 6 feet or contact any lower level.
 - Tie off above your head. A six foot person who ties off at their feet could free-fall as far as 12 feet.
 - Place anchorage directly above/behind your work area to avoid potential swing fall hazards.
 - Use the shortest lanyard possible. The shorter the tie-off, the shorter the fall.
 - Have anchorage points selected by a trained competent person.

- **Be Aware**
 - Identify all potential tripping and falling hazards before work
 - Never jump from any height
 - Look for fall hazards such as unprotected floor openings or edges, shafts, skylights, stairwells, and roof openings.