RISK SERVICES GUIDE

CONSTRUCTION PRACTICE

Construction Fall Protection Toolkit

Under **OSHA Standard 29 CFR 1926 Subpart M**, employers are responsible for protecting workers from fall hazards on construction sites. This toolkit serves as a practical companion to that standard — equipping safety professionals, site supervisors, and employees with the knowledge and ready-to-use resources needed to implement effective fall protection practices across the organization.

Importance of Fall Protection in Construction

According to the Occupational and Health Administration (OSHA), falls are the leading cause of death in construction. In 2024, there were 370 fatal falls (inclusive of slips and trips) out of 1,032 construction fatalities (BLS data- 2/19/26). These tragedies are preventable.

Important components of fall prevention on every job site include planning ahead, providing the right equipment, and training employees to use the equipment safely. When working from heights, employers must plan projects to ensure that the job is done safely. This should begin by deciding how the job will be done, what tasks will be involved, and what safety equipment will be needed to complete each task of the project.

Workers who are six feet or above a lower level are at risk for serious injury or death if they should fall. To protect these workers, employers must provide fall protection and the right equipment for the job, including the right kinds of ladders, scaffolds, and safety gear.

Every worker should be trained on the proper setup and safe use of the equipment they use on the job. Employers must train workers in recognizing hazards on the job.

The Standard

Employer Responsibilities

Initially, employers must assess the workplace to determine whether walking or working surfaces have sufficient strength and structural integrity to safely support workers. Once it is determined that the work surfaces will safely support the work activity, the employer must determine whether fall protection is required and, if so, select and provide workers with fall protection systems that comply with the criteria found in 29 CFR 1926.502.

Subpart M requires the use of fall protection when construction workers are working at heights of 6 feet or greater above a lower level. It applies at heights of less than 6 feet when working near dangerous equipment, for example, working over machinery with open drive belts, pulleys, or gears, or open vats.

Areas and Activities Covered Under Subpart M

The standard identifies specific areas and activities where fall protection or falling-object protection may be needed. For example, it might require fall protection for a worker who is:

- On a ramp, runway, or another walkway
- At the edge of an excavation
- In a hoist area
- On a steep roof
- On, at, above, or near wall openings
- On a walking or working surface with holes (including skylights) or unprotected sides or edges
- Above dangerous equipment
- Above a lower level where leading edges are under construction
- On the face of formwork and reinforcing steel
- Or otherwise on a walking or working surface 6 feet or more above a lower level.

The standard may also require fall protection where a worker is: constructing a leading edge; performing overhand bricklaying and related work; or engaging in roofing work on low-slope roofs, precast concrete erection, or residential construction. In addition, the standard requires falling object protection when a worker is exposed to falling objects.

Conventional Fall Protection Systems

Guardrail Systems – 29CFR 1926.502(b)

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 following provisions apply:

Standard Number	Provision
29 CFR 1926.502(b)(1)	Top rails, or equivalent guardrail system members, must be 42 inches plus or minus 3 inches above the walking or working level. When workers are using stilts, the top edge of the top rail, or equivalent member, must be increased an amount equal to the height of the stilts
29 CFR 1926.502(b)(2)	Screens, midrails, mesh, intermediate vertical members, or equivalent intermediate structural members must be installed between the top edge of the guardrail system and the walking or working surface when there are no walls or parapet walls at least 21 inches high.
29 CFR 1926.502(b)(2)(i)	When midrails are used, they must be installed at a height midway between the top edge of the guardrail system and the walking or working level

Standard Number	Provision
29 CFR 1926.502(b)(2)(ii)	When screens and mesh are used, they must extend from the top rail to the walking or working level and along the entire opening between top rail supports. When necessary, screens and/or mesh must be installed in a manner to prevent a worker from falling underneath.
29 CFR 1926.502(b)(2)(iii)	When intermediate members (such as balusters) are used between posts, they must not be more than 19 inches apart.
1926.502(b)(2)(iv)	Other structural members (such as additional midrails and architectural panels) must be installed so that there are no openings in the guardrail system more than 19 inches wide.
29 CFR 1926.502(b)(3)	Guardrail systems must be capable of withstanding a force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point along the top edge.
29 CFR 1926.502(b)(5)	Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members must be capable of withstanding a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member.
29 CFR 1926.502(b)(6)	Guardrail systems must have a surface to protect workers from punctures or lacerations and to prevent clothing from snagging
29 CFR 1926.502(b)(7)	The ends of top rails and midrails must not overhang terminal posts, except where an overhang poses no projection hazard
29 CFR 1926.502(b)(8)	Steel and plastic banding cannot be used as top rails or midrails.
29 CFR 1926.502(b)(9)	Top rails and midrails of guardrail systems must have a nominal diameter or thickness of at least 1/4 inch to prevent cuts and lacerations.
29 CFR 1926.502(b)(9)	If wire rope is used for top rails, it must be flagged at not more than 6-foot intervals with high-visibility material.
29 CFR 1926.502(b)(10)	When guardrail systems are used at hoisting areas, a chain, gate, or removable guardrail section must be placed across the access opening between guardrail sections during those times when hoisting operations are not taking place.
29 CFR 1926.502(b)(11) & (12)	When guardrail systems are used at holes, they must be set up on all unprotected sides or edges. When a hole is used for the passage of materials, it must not have more than two sides with removable guardrail sections. When the hole is not in use, it must be covered or provided with a guardrail system along all unprotected sides or edges.
29 CFR 1926.502(b)(13)	If guardrail systems are used around holes being used as access points (such as ladderways), gates must be used. Alternatively, the point of access must be offset to prevent workers from accidentally walking straight into the hole
29 CFR 1926.502(b)(14)	If guardrails are used on ramps and runways, they must be erected on each unprotected side or edge
29 CFR 1926.502(b)(15)	Manila, plastic, or synthetic rope used for top rails or midrails must be inspected as frequently as necessary to ensure its strength and stability.

Safety Net Systems – 29 CFR 1926.502(c)

When safety nets are used, they must be installed as close as practicable under the walking or working surface on which workers are working and never more than 30 feet below that level, 29 CFR 1926.502(c)(1). When nets are used on bridges, the potential fall area from the walking or working surface to the net must be unobstructed.

All safety nets must be installed with sufficient clearance underneath to prevent a falling body from hitting the surface or structure below the net. If the employer chooses to use nets, the following criteria apply:

Vertical distance from a working level to the horizontal plan of the net	Minimum required horizontal distance from the edge of a working surface to the outer edge of the net
Up to 5 feet	8 feet
More than 5 feet up to 10 feet	10 feet
More than 10 feet	13 feet

Drop-testing is required to ensure that safety nets and their installations are functioning properly. If an employer can demonstrate that it is unreasonable to perform a drop-test, then the employer or a designated competent person must certify that the net and its installation comply with the standard.

- Do not use defective nets. Inspect nets at least once a week for wear, damage, or deterioration of components such as net connection points.
- Remove materials, tools, and other items as soon as possible from the net and at least before the next work shift.
- To work properly, a safety net must have safe openings. Mesh openings must not exceed 23 square inches, and must not be longer than 6 inches on any side. Each opening, measured center-to-center of mesh ropes or webbing, must not exceed 6 inches.
- All mesh crossings must be secured to prevent the openings from enlarging. 29 CFR 1926.502(c)(7).
- Use safety net (or section of net) with a border rope possessing a minimum breaking strength of 5,000 pounds. 29 CFR 1926.502(c)(8).
- Do not allow one weak link to compromise a safety net. Use connections between safety net panels that are as strong as integral net components and spaced no more than 6 inches apart. 29 CFR 1926.502(c)(9).

Personal Fall Arrest Systems – 29 CFR 1926.502

A personal fall arrest system is a system that is used to safely stop (arrest) a worker who is falling from a working level. It consists of an anchorage, connectors, and a body harness. It also may include a lanyard, deceleration device, lifeline, or suitable combinations of these. Under Subpart M, body belts (Safety belts) are prohibited for use as part of a personal fall arrest system.

When employers choose to use a personal fall arrest system as a means of worker fall protection they must:

Standard Number	Provision
29 CFR 1926.502(d)(16)(ii)	Limit the maximum arresting force on a worker to 1,800 pounds when used with a body harness.
29 CFR 926.502(d)(16)(iii)	Be rigged so that a worker can neither free fall more than 6 feet nor contact any lower level
29 CFR 1926.502(d)(16)(iv)	Bring a worker to a complete stop and limit the maximum deceleration distance a worker travels to 3.5 feet.
29 CFR 1926.502(d)(16)(v)	Have sufficient strength to withstand twice the potential impact energy of a worker free falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less
29 CFR 1926.502(d)(21)	Be inspected prior to each use for wear, damage, and other deterioration. Defective components must be removed from service.

Equipment Checklists

All fall arrest system components must be inspected before each use! **DO NOT** use the equipment if any component fails inspection. When a fall arrest system fails inspection, it must be immediately tagged, removed from service, and either repaired to a fully restored state or properly disposed of.

These fall protection inspection checklists will allow you to keep track of all fall arrest systems and document their condition	Fall Protection nspection Checklis

Fall Protection Plans

Presumption of Feasibility

As a general matter, OSHA presumes that using conventional fall protection (that is, guardrails, personal fall arrest systems, or safety nets) is feasible and will not create a greater hazard to use. However, there are a few circumstances when an employer can use a site-specific fall protection plan instead of conventional fall protection.

When can a Fall Protection Plan be used?

It is possible that during leading edge work (29 CFR 1926.501(b)(2)), precast concrete erection (29 CFR 1926.501(b)(12)), or residential construction (29 CFR 1926.501(b)(13)), it may be infeasible or may create a greater hazard to use conventional fall protection for a specific task. In those circumstances, employers may implement a fall protection plan that complies with 29 CFR 1926.502(k). The employer has the burden of establishing that it is appropriate to implement a fall protection plan instead of implementing conventional fall protection systems.

Standard Number	Provision
29 CFR 1926.502(k)(1)	A fall protection plan must be prepared by a qualified person and developed specifically for the site where the work is being performed.
29 CFR 1926.502(k)(1)	The fall protection plan must be maintained and kept up to date.
29 CFR 1926.502(k)(2)	Any changes to the fall protection plan must be approved by a qualified person
29 CFR 1926.502(k)(3)	A copy of the fall protection plan with all approved changes must be maintained at the job site.
29 CFR 1926.502(k)(4)	A competent person must supervise the implementation of the fall protection plan
29 CFR 1926.502(k)(5)	The plan must document the reasons why the use of conventional fall protection is infeasible or would create a greater hazard
29 CFR 1926.502(k)(6)	The plan must include a written discussion of other measures that will be taken to reduce or eliminate the fall hazard for workers who cannot be provided with protection using conventional fall protection systems. For example, the employer must discuss the extent to which scaffolds, ladders, or vehicle-mounted work platforms can be used to provide a safer working surface and thereby reduce the hazard of falling.
29 CFR 1926.502(g) & 29 CFR 1926.502(k)(7)	The plan must identify each location where conventional fall protection methods cannot be used. These locations must then be classified as controlled access zones, and the employer must comply with the criteria in 29 CFR 1926.502(g) and 29 CFR 1926.502(k)(7).
29 CFR 1926.502(h) & 29 CFR 1926.502(k)(8)	Where no other alternative measure has been implemented, the employer must implement a safety monitoring system that complies with 29 CFR 1926.502(h) and 29 CFR 1926.502(k)(8).
29 CFR 1926.502(k)(9)	The plan must include a statement which provides the name or other method of identification for each worker who is authorized to work in controlled access zones. No other workers may enter controlled access zones.
29 CFR 1926.502(k)(10)	In the event that a worker falls, or some other related, serious incident occurs (for example, a near miss), the employer must investigate the circumstances to determine if the fall protection plan needs to be changed. For example, the plan may need to add new practices, procedures, or training. The employer must implement the needed changes to prevent similar types of falls or incidents.

When using fall protection is determined infeasible by a competent person, refer to this Sample Fall Protection Plan as a guide to keep workers safe	Sample Fall Protection Plan

ANSI & OSHA Best Practices

One of the best fall protection practices an employer can do is develop a formally managed fall protection program. Keep in mind that adhering to OSHA requirements is the minimum. Best practices dictate that employers do more than procure personal protective equipment and provide training for their employees. The following elements are described in ANSI Z359.2-2007 (Minimum Requirements for a Comprehensive Managed Fall Protection Program). This standard can be applied to any fall hazard in any industry. It is a methodical and logical approach to identifying fall hazards, creating solutions, and developing a program.

Development of Education of Key Personnel

Regardless of an organization's size, key personnel must be identified to manage the fall protection program. The group or individual charged with leading the fall protection program is responsible for identifying and categorizing fall hazards, determining solutions, writing procedures, and developing training programs.

Fall Hazard Assessment

An assessment of individual fall hazards provides an invaluable amount of information. All too often, the fall hazard assessment considers the height of a fall and/or a legislated duty to provide fall protection. Limiting the assessment to these two factors rarely provides enough information to develop adequate solutions.

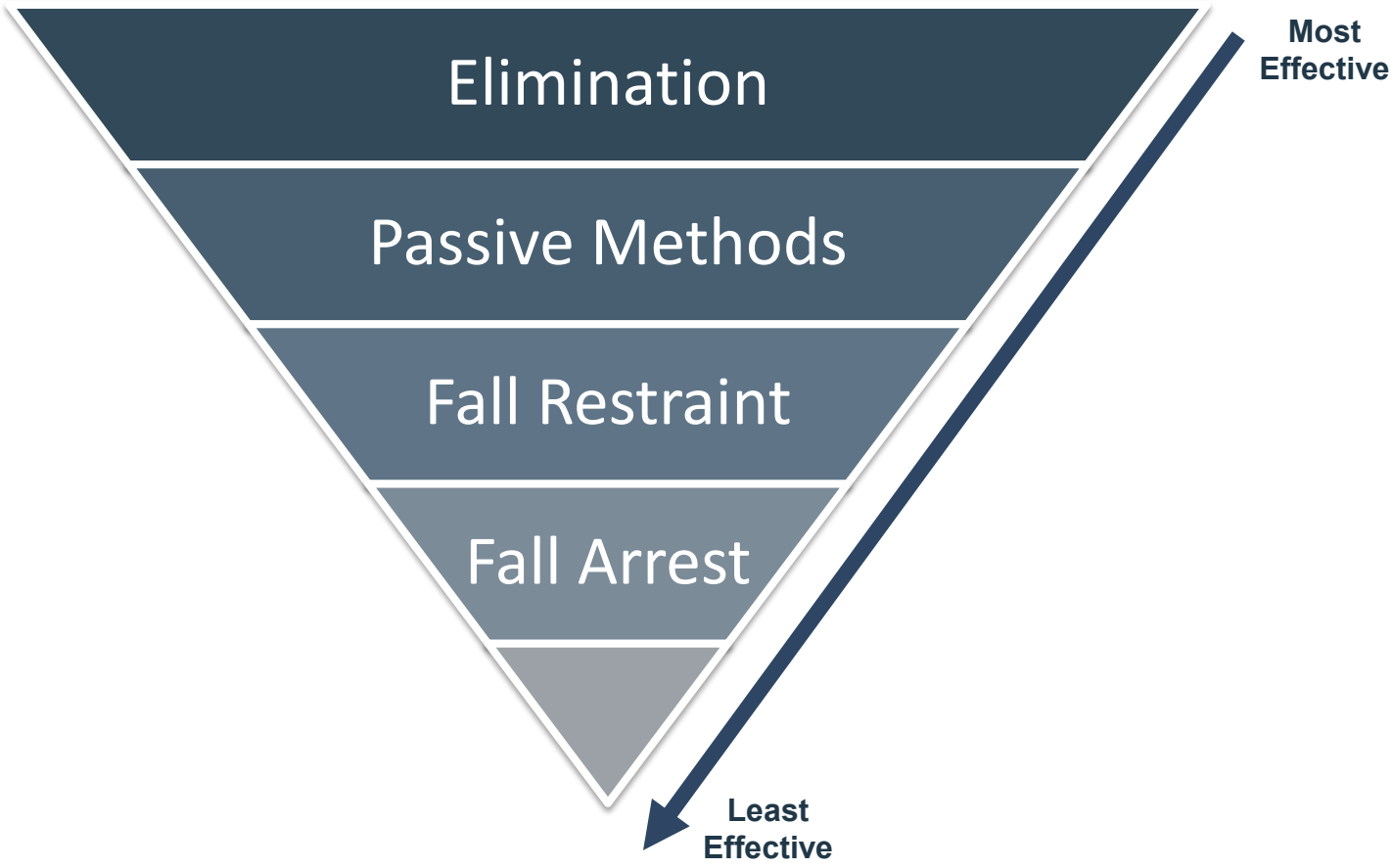
The frequency and duration of the task, similar work areas, obstructions in the area, environmental conditions, and the reason for the exposure should also be investigated. The most feasible solution is readily identified once reliable information is gathered.

This Sample Fall Protection Job Hazard Analysis (JHA) document will assist you in completing required hazard assessments prior to conducting certain construction tasks	Sample Fall Protection JHA

Hierarchy of Fall Protection

After the hazard assessment, fall protection solutions can be identified and developed based on policies and budget. The program administrator(s) can use the Hierarchy of Fall Protection to address specific hazards.

The Hierarchy of Fall Protection is the preferred order of control to eliminate or reduce fall hazards. This methodology mirrors common safety practices for hazard abatement, beginning with elimination and ending with administrative controls. Using the data from the fall hazard assessments, each solution in the hierarchy can be applied to each hazard.



(1) Elimination

The preferred solution to all fall hazards is elimination. The reason for exposure to the fall hazard is challenged, and an evaluation is conducted to determine whether a change in procedures, practices, location, or equipment will eliminate that exposure. Specifying that HVAC equipment be located on the ground or in an equipment room rather than by the edge of the roof is an example of hazard elimination.

(2) Passive Methods

Using passive fall protection methods is the next-best solution. Physical barriers, like guardrails around unprotected edges and covers over holes, are examples of passive fall protection.

There are many situations where an employer didn't consider guardrails around the perimeter of a building because of the initial higher capital cost. Yet, it's possible that the cost of the PPE is higher in the long run. PPE requires worker training, inspection, and replacement, along with the identification of anchorages, all of which require man-hours that are often not accounted for in cost estimates.

When you provide PPE as your initial solution, rescue planning must also be included. Passive protection is generally considered to provide a higher level of safety, since the opportunity for error is lower than when using PPE to accomplish the work. However, passive protection may not be warranted if the frequency and duration of exposure to the fall hazard are limited.

A comprehensive hazard assessment provides the information needed to make these kinds of decisions to maximize cost-effectiveness.

(3) Fall Restraint

Fall restraint is the next method of fall protection in the hierarchy of controls. Fall restraint systems are erected in such a manner that a fall cannot occur. Fall restraint systems use personal protective equipment to restrict workers' range of movement, preventing them from reaching the fall hazard.

(4) Fall Arrest

Fall arrest systems carry a higher risk because they must stop the falling worker with an acceptable level of force and prevent him/her from contacting the surrounding structure (or the ground).

Training in both fall restraint and fall arrest systems is key, and it's important for workers to understand the difference and how to assemble the systems.

ANSI Z359.2-2007 includes a significant amount of information about fall protection training for authorized persons, competent persons, qualified persons, rescuers, and trainers.

(5) Administrative Controls

The last control method in the Hierarchy is the implementation of administrative controls. Administrative controls are work practices or procedures that increase a worker's awareness of a fall hazard. It must be noted that administrative controls are the least preferred method of protection because they do not provide a physical or positive means of protection.

Administrative controls are preventive measures taken to reduce the likelihood of a fall. These methods include safety monitors, warning lines, warning horns, designated areas, or control lines. It must also be noted that OSHA regulates the use of many administrative controls, and it is incumbent on the fall protection program administrator to understand the jurisdictions and regulations that apply.

Fall Protection Equipment Selection

Knowing the fall protection/prevention options that exist is only the beginning. Though it is important that employers and their employees understand how to recognize fall hazards, it is even more critical that they know when to use a certain system or type of protective equipment.

When it comes to mitigating the hazards associated with falls, it is critical to understand the fall protection hierarchy of controls. Similar to NIOSH's hierarchy of controls, below is the preferred order for applying controls to workplace fall hazards. It is always best to follow this order when selecting controls.

(1) Elimination

Fall hazards can be eliminated by using a practice called prevention through design. This means the fall hazard simply does not exist due to pre-planning and design changes. For example, during the design phase, choosing to store HVAC equipment inside the building in an equipment room rather than on the roof.

(2) Engineering

Physical barriers such as guardrails (aka passive fall protection) can be installed around the perimeter of a roof, around floor holes, skylights, roof hatches, etc. There are many different types of physical barriers available, and it is important to select the correct engineering control for the task.

(3) Personal Protective Equipment

Both fall restraint and arrest systems require an employee's knowledge of how to properly wear and use the equipment. Things like how to inspect and wear the harness, lanyards, etc., and knowing where to tie off are crucial.

Though restraint and arrest systems are similar, there are two main differences outlined below.

Fall Restraint Systems as a rule of thumb, fall restraint should always be prioritized over fall arrest. Fall restraint systems use PPE to restrict a person's range of motion so they physically cannot reach a fall hazard. Because restraint systems prevent falls from occurring altogether, you need not to worry about fall distance, secondary injuries from falls, and reduce rescue issues.

Fall Arrest Systems, personal fall arrest systems, or PFAS for short, are designed to prevent a worker from striking a lower level in the event of a fall. Though a person will not hit the ground, the system, if set up and used properly, still has associated consequences. For example, if a person is not using a leading edge rated self-retracting lanyard and falls over the edge of the roof, there is a high likelihood that the cable will snap and not stop the fall.

(4) Administrative Controls

These are work practices or protocols that are used to increase a worker's awareness of a fall. Common administrative controls include safety monitors, warning lines, and designated areas. Administrative controls are permitted by OSHA in certain circumstances and have precise requirements, but are the least favorable option because no physical means of protection exist. Most commonly, administrative controls are used in combination with other fall protection controls or where other options present a greater risk.

Fall Distance Calculation

If the use of personal fall arrest systems (PFAS) has been selected as the protection method, it is important to understand that additional decisions are required. There are many different types of harnesses, lanyards, and anchor points to choose from, each with varying free-fall distances, arrest distances, etc., which ultimately increase or decrease the total fall distance. It is a good idea to work with the equipment manufacturer(s) or refer to equipment manuals to determine the fall distance before allowing workers to use the equipment.

Fall Rescue

According to CFR 1926.502(d)(20), the employer shall provide for the prompt rescue of employees in the event of a fall or ensure that employees can rescue themselves. Employees should also be trained regarding fall rescue procedures.

ANSI Fall Protection Training

The ANSI Z359 Fall Protection Code is one of the best resources for employers. Section 3.3.4 of ANSI Z359.2 (Minimum Requirements for A Managed Fall Protection Program) includes guidance on how to conduct training.

Several other training considerations not discussed here are detailed in this document. The requirements included in the ANSI Z359 Fall Protection Code can be applied to existing internal training programs or used as a measuring stick for outside training sources. Regardless of the approach, it can help build a stronger, more effective fall protection program.

Fall protection and rescue training is conducted for two fundamental reasons: to protect the worker and to protect the company.

(1) To adequately protect the worker, training must be thorough, include effective materials, allow adequate time, be conducted by qualified staff or a training company, and include observations of performance.

(2) To protect the company, fall protection training must include the same elements. This results in training that protects everyone by educating the worker at height and supporting organizations feel confident in their due diligence should a fall from elevation take place.

A key individual in a fall protection program is the Competent Person. A Competent Person is defined as: “One who is capable of identifying existing and predictable conditions in the surroundings and work areas which are unsanitary, hazardous, or dangerous, and who has authorization to take prompt corrective action.”

It is imperative that the workers’ skills and knowledge are evaluated to determine the appropriate training they require to complete the scope of work expected by their employer. Employers must also examine their organizational structure to allow a Competent Person to exercise the authority to make changes. Only after these elements have been considered and the Competent Person has been identified should training be evaluated and selected.

There are dozens of ways to conduct training. Before investing in or creating a training program, employers should understand what they are getting so that their needs are met. The end result of effective training is workers who can control fall hazards at the local level, leading to higher safety and compliance. Training should focus on this end goal. Having a certificate is not enough if the training does not accomplish these goals.

Training should include several key elements to get the job done. When selecting training, always ask the following question: “Does your fall protection training include observations of performance on each fall protection system and for each skill set that you expect your workers to have?”

Observations of Performance

Fall protection requires several physical skills: putting on a harness, setting anchorages, calculating clearance, installing systems, and, if applicable, descent control or suspended work-positioning systems. As a result, hands-on training is paramount. The student, legal departments, other agencies, or OSHA can challenge training formats that do not include performance observations, so hands-on demonstrations of skill must be included.

Training formats that do not include performance observations provide a document with the student's name but offer little evidence of the student's ability to demonstrate their training.

While covering a topic through discussion, demonstration, and documentation — supported by a test or roster — may appear sufficient, observations of performance go further by requiring the trainee to demonstrate competency to a qualified instructor. Training formats that lack this component may deliver strong content, but ultimately leave a gap in the verification of actual skill application.

Training

Requirements

As a general matter, OSHA presumes that using conventional fall protection (that is, guardrails, personal fall arrest systems, or safety nets) is feasible and will not create a greater hazard to use. However, there are a few circumstances when an employer can use a site-specific fall protection plan instead of conventional fall protection.

Employers must provide a fall protection training program to workers who might be exposed to fall hazards. Training must include how to recognize fall hazards and how to minimize them. 29 CFR 1926.503(a)(1).

Standard Number	Provision
29 CFR 1926.503(a)(2)(i)	The nature of fall hazards in the work area.
29 CFR 1926.503(a)(2)(ii)	The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used.
29 CFR 1926.503(a)(2)(iii)	The use and operation of controlled access zones; guardrail, personal fall arrest, safety net, warning line, and safety monitoring systems; and other protection to be used.
29 CFR 1926.503(a)(2)(iv)	The role of each worker in the safety monitoring system when the system is used.
29 CFR 1926.503(a)(2)(v)	The limitations on the use of mechanical equipment during the performance of roofing work on low-slope roofs.

The employer must ensure that each worker has been trained, as necessary, by a competent person who is qualified in the following areas:

Standard Number	Provision
29 CFR 1926.503(a)(2)(vi)	The correct procedures for equipment and materials handling and storage and the erection of overhead protection.
29 CFR 1926.503(a)(2)(vii)	The role of workers in fall protection plans.
29 CFR 1926.503(a)(2)(viii)	OSHA's fall protection requirements published as Subpart M.

Verification of Training

Employers must verify worker training by preparing a written Certification record. The record must contain the name or other identifying information of the trained worker, the dates of the training, and the signature of either the person who conducted the training or the employer. 29 CFR 1926.503(b)(1).

When an employer has reason to believe that an affected worker does not recognize existing fall hazards at any time after the initial training, the employer must provide retraining to that worker. For example, workers must be retrained when:

Standard Number	Provision
29 CFR 1926.503(c)(1)	Changes in the workplace render previous training obsolete.
29 CFR 1926.503(c)(2)	Fall protection equipment or systems have changed
29 CFR 1926.503(c)(3)	Inadequacies in workers' knowledge or use of fall protection systems or equipment indicate that they have not adequately understood or retained previous training.

This Sample Fall Protection Training Certification helps verify and track which employees have undergone fall protection training, and what topics were covered by the instructor	Sample Fall tection Training C

Recordkeeping

Training records should be kept on file for as long as an employee works for the company. For fall protection, OSHA requires employers to maintain fall protection training records for an additional 5 years after an employee leaves.

Certain Construction Activity Requirements

Leading Edges

Standard Number	Provision
29 CFR 1926.501(b)(2)(i)	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. There is, however, and exception: when the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer must develop and implement a fall protection plan which meets the requirements of 29 CFR 1926.502(k).
29 CFR 1926.501(b)(2)(ii).	Workers must be protected by guardrail systems, safety net systems, or personal fall arrest systems, even if they are not engaged in leading edge work, they are on a walking or working surface that is 6 feet or more above a level where leading edges are under construction

Roofing Work on Low-Sloped Roofs

A low-slope roof has a slope less than or equal to 4 in 12 (vertical to horizontal). When engaged in roofing work on a low-slope roof that has one or more unprotected sides or edges 6 feet or more above lower levels, workers must be protected from falling by:

- Guardrail systems,
- Safety net systems,
- Personal fall arrest systems,
- A combination of conventional fall protection systems and warning line systems, or
- A warning line system and a safety monitoring system.

When engaged in roofing work on low-slope roofs 50 feet or less in width, the use of a safety monitoring system without a warning line system is permitted.

Working on Steep Roofs

A Steep roof has a slope greater than 4 in 12 (vertical to horizontal). When working on a steep roof that has one or more unprotected sides or edges 6 feet or more above lower levels, each worker must be protected by:

- Guardrail systems with toeboards
- Safety net systems
- Personal fall arrest systems.

Residential Construction

Workers engaged in residential construction 6 feet or more above lower levels must be protected by conventional fall protection (i.e., guardrail systems, safety net systems, or personal fall arrest systems) unless another provision in 29 CFR 1926.501(b) provides for an alternative fall protection measure.

The exception to this is when the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer must develop and implement a site-specific fall protection plan that meets the requirements of 29 CFR 1926.502(k).

For purposes of determining the applicability of section 1926.501. (b)(13), the term “residential construction” is interpreted as covering construction work that satisfies the following two elements:

(1) the end-use of the structure being built must be as a home, i.e., a dwelling

(2) the structure being built must be constructed using traditional wood frame construction materials and methods. The limited use of structural steel in a predominantly wood-framed home, such as a steel I-beam to help support wood framing, does not disqualify a structure from being considered residential construction.

Hazards that Require Fall Protection

A construction site environment poses many hazards requiring protection. Below are some fall hazards that cannot be overlooked.

Hoist Areas – 29 CFR 1926.501(b)(3)

Each worker in a hoist area must be protected from falling 6 feet or more by guardrail systems or personal fall arrest systems. There may be times when guardrail systems (chains, gates, or guardrails) must be removed, in whole or in part, to facilitate hoisting operations. For example, during the landing of materials, a worker may need to lean through the access opening or over the edge of the access opening to receive or guide equipment and materials. At such times, a personal fall arrest system must be used to protect the worker from falling through the unprotected opening.

Holes – 29 CFR 1926.501(b)(7)

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
- Guardrail systems erected around the hole

Each worker on a walking or working surface must also be protected from tripping into, stepping into, or stepping through holes by covers.

Excavations – 29 CFR 1926.501(b)(7)

Each worker at the edge of an excavation 6 feet or more deep must be protected from falling by guardrail systems, fences, or barricades when the excavation cannot be readily seen because of plant growth or other visual barriers.

Each worker at the edge of a well, pit, shaft, or similar excavation 6 feet or more deep must be protected from falling by:

- Guardrail systems
- Fences
- Barricades
- Covers

Dangerous Equipment – 29 CFR 1926.501(b)(8)

When working 6 feet or more above dangerous equipment, each worker must be protected by guardrail systems, safety net systems, or personal fall arrest systems. When working less than 6 feet above dangerous equipment, each worker must be protected from falling into or onto the dangerous equipment by a guardrail system or equipment guards.

Wall Openings – 29 CFR 1926.501(b)(14)

Each worker working on, at, above, or near wall openings (including those with chutes attached), where the outside bottom edge of the wall opening is 6 feet or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches above the walking or working surface, must be protected with a guardrail system, a safety net system, or a personal fall arrest system.

Toolbox Talks

OSHA Toolbox Talks can be used as informal group discussions focused on specific safety issues on a jobsite. They can be used as tools to promote a safety culture and facilitate health and safety discussions before work is conducted. Below are several Fall Protection Toolbox Talks developed by OSHA:

Toolbox Talk – Fall Prevention – Important Info / Warnings About Guardrails	Warnings About Guardrails
Toolbox Talk – Fall Prevention – Full Body Arrest Harness – Do's and Don'ts	Full Body Arrest Harness
Toolbox Talk – Fall Prevention – Lanyards – Do's and Don'ts	Lanyards
Toolbox Talk – Fall Prevention – Fall Arrest Anchor Points	Fall Arrest Anchor Points

Toolbox Talk – Fall Prevention – Calculating Total Fall Clearance Distances	Calculating Fall Distance
Toolbox Talk – Fall Prevention – Safeguarding Holes in Walking & Working Surfaces	Safeguarding Holes
Toolbox Talk – Fall Prevention – Avoiding Falls While Working from Portable Ladders	Working From Portable Ladders
Toolbox Talk – Fall Prevention – Avoiding Falls from Scaffolding	Avoiding Falls From Scaffolding

For additional information, please reach out to your HUB International Advisor to ensure you have the right coverages in place to protect your business and employees on the road.