GENERAL INDUSTRY FALL PROTECTION ASSESSMENT TOOL

This documented is intended to be used as a tool to identify fall hazards in the workplace. While the intention is to be a comprehensive tool of OSHA’s Subpart D - Walking-Working Surfaces and the other applicable fall protection requirements, further research may be required to ensure employee safety is adequate.

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General Industry Fall Protection Assessment Tool

# Tool Purpose

This tool is dedicated to the protection of employees from on-the-job injuries. All employees have the responsibility to work safely on the job. The purpose of this tool is to provide safety standards specifically designed to cover fall prevention and protection at their assigned unit. Supervisors are responsible to ensure that each employee is trained and made aware of the fall protection measures in place at their workplace; prior to the start of their work assignment, when there is a change in this policy, and on an annual basis.

# Duty to Have Fall Protection

Falls are among the most common causes of serious work-related injuries and deaths. Supervisors need to realize that these injuries and deaths are preventable and that it is supervisor’s responsibility to set up the workplace to protect employees.

To prevent employees from being injured from falls, supervisors must:

A fall hazard assessment will be conducted for any of the following fall hazards:

1. [Unprotected sides and edges](#_Unprotected_Sides_and_1)
2. [Hoist areas](#_Hoist_Areas_1)
3. [Holes](#_Holes)
4. [Dockboards](#_Dockboards_1)
5. [Runways or similar walkways](#_Runways_or_Similar_1)
6. [Dangerous equipment](#_Dangerous_Equipment_1)
7. [Openings](#_Openings_1)
8. [Repair pits, service pits and assembly pits less than 10 feet in depth](#_Repair_Pits,_Service_1)
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11. [Stairways](#_Stairways_1)
12. [Scaffolds and rope descent systems](#_Scaffolds_and_Rope_1)
13. [Low Slope Roofs](#_Low_Slope_Roofs_1)
14. [Slaughtering facility platforms](#_Slaughtering_Facility_Platforms)
15. [Walking-working surfaces not otherwise addressed](#_Walking-Working_Surfaces_Not_1)
16. [Protection from falling objects](#_Protection_from_Falling_1)

If any of the above fall hazards are identified one or more of the following methods shall be used, to mitigate the hazard. Supervisors must recognize that fall prevention methods, along with proper training on the fall hazards present, provide a safer work environment for their employees. The use of fall prevention methods will have priority over fall protection methods.

## Fall Prevention Methods

* [Guardrail systems](#_Guardrail_Systems)
* [Falling Object Protection](#_Falling_Object_Protection)
* [Covers](#_Safety_Net_Systems)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Designated Area](#_Designated_Area_2)

## Fall Protection Methods

* [Safety Net System](#_Safety_Net_Systems_1)
* [Personal Fall Protection System](#_Personal_Fall_Protection_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)
* [Ladder Safety System](#_Covers_1)
* [Rope Descent System](#_Rope_Descent_Systems)

# Housekeeping

A simple way that supervisors ensure hazards that will lead to slips, trips and falls are kept to a minimum by employing good housekeeping work practices. Supervisors should require employees to keep their workstations and work environment neat and orderly, at the end of every shift, or on an as needed basis.

Supervisors that realize through an effective housekeeping policy, employees are significantly more protected from the following:

* tripping over loose objects on floors, stairs. and platforms
* being hit by falling objects
* slipping on greasy, wet, or dirty surfaces
* striking against projecting, poorly stacked items, or misplaced material
* cutting, puncturing, or tearing the skin of hands or other parts of the body on projecting nails, wire, or steel strapping

To ensure that this plan remains effective, supervisor will:

* allow employees time throughout the day, and at the end of shift to perform housekeeping duties, as needed
* provide proper the PPE for housekeeping duties (refer to PPE Hazard Assessment)

Walking-working surfaces are inspected regularly, and as necessary, and maintained in a safe condition

Hazardous conditions on walking-working surfaces are corrected or repaired before an employee uses the walking-working surface again. If the correction or repair cannot be made immediately, the hazard must be guarded to prevent employees from using the walking-working surface until the hazard is corrected or repaired.

When any correction or repair involves the structural integrity of the walking-working surface, a qualified person performs or supervises the correction or repair.

# Duty to Have Fall Protection Details

## Unprotected Sides and Edges

When an employee is exposed to a walking-working surface with an unprotected side or edge that is 4 feet or more above a lower level, Supervisors are responsible to ensure is protected from falling by one or more of the following:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [[Personal Fall Protection System](#_Personal_Fall_Protection_1)](#_Personal_Fall_Protection),
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)

### Definition

**Unprotected side or edge.** Any side or edge of a walking-working surface (except at entrances and other points of access) where there is no wall, guardrail system, or stair rail system to protect an employee from falling to a lower level.

## Hoist Areas

When employees are exposed to falling 4 feet or more to a lower level in a hoist area, Supervisors are responsible to ensure that they are protected by one of the following:

* [Guardrail systems](#_Guardrail_Systems)
* [Personal Fall Protection System](#_Personal_Fall_Protection_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)

When any portion of a guardrail system, gate, or chains is removed, and an employee must lean through or over the edge of the access opening to facilitate hoisting, Supervisors are responsible to use a [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) to protect the employee from falling.

If grab handles are installed at hoist areas, they meet the requirements of [OSHA’s 1910.29(l)](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9721&p_table=STANDARDS).

### Definition

**Hoist Area.** Any elevated access opening to a walking-working surface through which equipment or materials are loaded or received.

##

## Holes

When employees are exposed to falling through any hole (including skylights) that is 4 feet or more above a lower level, Supervisors are responsible to ensure that they are protected by one or more of the following:

* [Covers](#_Safety_Net_Systems)
* [Guardrail systems](#_Guardrail_Systems)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)

Each employee will be protected from tripping into or stepping into or through any hole that is less than 4 feet above a lower level by covers or guardrail systems.

### Definition

**Hole.** A gap or open space in a floor, roof, horizontal walking-working surface, or similar surface that is at least 2 inches in its least dimension.

##

## Dockboards

Where an employee is exposed from falling 4 feet or more to a lower level, Supervisors are responsible to ensure they are protected by one of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* Handrails

A guardrail system or handrails are not required when:

* Dockboards are being used solely for materials-handling operations using motorized equipment
	+ Employees engaged in these operations are not exposed to fall hazards greater than 10 feet
* Those employees have been trained in accordance with OSHA’s 1910.30

When a dockboard is used the following requirements (**1910.26 – Dockboards**) must be met:

* They are capable of supporting the maximum intended load intended by the manufacturer.
* Dockboards put into initial service on or after January 17, 2017 are designed, constructed, and maintained to prevent transfer vehicles from running off the dockboard edge.
	+ When there is no hazard of transfer vehicles running off the dockboard edge, Supervisors are responsible to demonstrate dockboards that do not have run-off protection may be used.
* Portable dockboards are secured by anchoring them in place or using equipment or devices that prevent the dockboard from moving out of a safe position.
	+ If a supervisor demonstrates that securing the dockboard is not feasible, the supervisor will ensure there is sufficient contact between the dockboard and the surface to prevent the dockboard from moving out of a safe position.
* Measures, such as wheel chocks or sand shoes, are used to prevent the transport vehicle (e.g., a truck, semi-trailer, trailer, or rail car) on which a dockboard is placed, from moving while employees are on the dockboard; and
* Portable dockboards are equipped with handholds or other means to permit safe handling of dockboards.

### Definition

**Dockboard.** Portable or fixed device that spans a gap or compensates for a difference in elevation between a loading platform and a transport vehicle. Dockboards include, but are not limited to, bridge plates, dock plates, and dock levelers.

##

## Runways or Similar Walkways

When an employee is exposed to falling 4 feet or more to a lower level on a runway or similar walkway, Supervisors are responsible to ensure that the employee is by a guardrail system.

When supervisors can demonstrate that it is not feasible to have guardrails on both sides of a runway used exclusively for a special purpose, supervisors may omit the guardrail on one side of the runway, provided that:

* The runway is at least 18 inches wide; **AND**
* Each employee is provided with and uses a [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) or [[Travel Restraint System](#_Travel_Restraint_System)](#_Covers_1)[.](#_Travel_Restraint_System)

### Definition

**Runway.** An elevated walking-working surface, such as a catwalk, a foot walk along shafting, or an elevated walkway between buildings.

##

## Dangerous Equipment

When an employee is **less than 4 feet** above dangerous equipment, Supervisors are responsible to ensure the employee is protected from falling into or onto the dangerous equipment by a guardrail system or a travel restraint system, unless the equipment is covered or guarded to eliminate the hazard.

When an employee is **more than 4 feet** above dangerous equipment, Supervisors are responsible to ensure the employee is protected from falling by one of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)

### Definition

**Dangerous Equipment.** Equipment, such as vats, tanks, electrical equipment, machinery, equipment or machinery with protruding parts, or other similar units, that, because of their function or form, may harm an employee who falls into or onto the equipment.

##

## Openings (Wall Openings)

When an employee is on a walking-working surface near an opening, including one with a chute attached, where the inside bottom edge of the opening is less than 39 inches above that walking-working surface and the outside bottom edge of the opening is 4 feet or more above a lower level, Supervisors are responsible to ensure the employee is protected by one or more of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)

When grab handles are used, Supervisors are responsible to ensure that they are at least 12 inches long and are mounted to provide at least 3 inches of clearance from the opening.

### Definition

A gap or open space in a wall, partition, vertical walking-working surface, or similar surface that is at least 30 inches high and at least 18 inches wide, through which an employee can fall to a lower level.

##

## Repair Pits, Service Pits and Assembly Pits Less than 10 feet in Depth

The use of a fall protection system is not required for a repair pit, service pit, or assembly pit that is less than 10 feet deep:

* Limits access within 6 feet of the edge of the pit to authorized employees trained in accordance with §1910.30; **AND**
* Applies floor markings at least 6 feet from the edge of the pit in colors that contrast with the surrounding area; or places a warning line at least 6 feet from the edge of the pit as well as stanchions that are capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion at a height of 30 inches or places a combination of floor markings and warning lines at least 6 feet from the edge of the pit. When two or more pits in a common area are not more than 15 feet apart, supervisors may comply by placing contrasting floor markings at least 6 feet from the pit edge around the entire area of the pits; **AND**
* Posts readily visible caution signs that meet the requirements of OSHA’s 1910.145 and state "Caution—Open Pit."

##

## Fixed Ladders (extended higher than 24 feet above lower level)

For fixed ladders that extend more than 24 feet above a lower level, Supervisors are responsible to ensure:

* Each fixed ladder installed **before November 19, 2018** is equipped with a personal fall arrest system, ladder safety system, cage, or well.
* Each fixed ladder installed **on and after November 19, 2018**, is equipped with a [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) or a [Ladder Safety System](#_Covers_1).
* When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) or [Ladder Safety System](#_Covers_1) is installed in at least that section of the fixed ladder, cage, or well where the replacement is located.
* **On and after November 18, 2036**, **ALL** fixed ladders are equipped with a [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) or [Ladder Safety System](#_Covers_1).

When a one-section fixed ladder is equipped with a personal fall protection or a ladder safety system or a fixed ladder is equipped with a personal fall arrest or ladder safety system on more than one section, Supervisors are responsible to ensure:

* The personal fall arrest system or ladder safety system provides protection throughout the entire vertical distance of the ladder, including all ladder sections; **AND**
* The ladder has rest platforms provided at maximum intervals of 150 feet

Supervisors are responsible to ensure ladder sections having a cage or well:

* Are offset from adjacent sections; **AND**
* Have landing platforms provided at maximum intervals of 50 feet

Supervisors may use a cage or well in combination with a [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) or [Ladder Safety System](#_Covers_1) provided that the cage or well does not interfere with the operation of the system.

### Definitions

**Cage** - an enclosure mounted on the side rails of a fixed ladder or fastened to a structure behind the fixed ladder that is designed to surround the climbing space of the ladder. A cage also is called a "cage guard" or "basket guard."

**Fixed Ladder** - a ladder with rails or individual rungs that is permanently attached to a structure, building, or equipment. Fixed ladders include individual-rung ladders, but not ship stairs, step bolts, or manhole steps.

**Ladder safety system** - a system designed to eliminate or reduce the possibility of falling from a ladder. A ladder safety system usually consists of a carrier, safety sleeve, lanyard, connectors, and body harness. Cages and wells are not ladder safety systems.

**Well** - a permanent, complete enclosure around a fixed ladder.

##

## Outdoor Advertising (Billboards)

1. See “[Fixed Ladders](#_Fixed_Ladders_(extended_1)” Section above. All requirements and standards that apply to fixed ladders, including [Personal Fall Protection Systems](#_Personal_Fall_Protection) ([OSHA’s 1910.140](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=1291)), apply to Outdoor Advertising.
* When an employee engaged in outdoor advertising climbs a fixed ladder **before November 19, 2018** that is not equipped with a cage, well, [Personal Fall Arrest System](#_Personal_Fall_Arrest_1), or a [Ladder Safety System](#_Covers_1) Supervisors are responsible to ensure the employee:
* Is physically capable, as demonstrated through observations of actual climbing activities or by a physical examination, to perform the duties that may be assigned, including climbing fixed ladders without fall protection; **AND**
* Has successfully completed a training or apprenticeship program that includes hands-on training on the safe climbing of ladders and is retrained as necessary to maintain the necessary skills; **AND**
* Has the skill to climb ladders safely, as demonstrated through formal classroom training or on-the-job training, and performance observation; **AND**
* Performs climbing duties as a part of routine work activity

## Stairways

When an employee is exposed to an unprotected side or edge of a stairway landing that is 4 feet or more above a lower level is protected by a guardrail or stair rail system, Supervisors are responsible to ensure each flight of stairs having at least 3 treads and at least 4 risers is equipped with stair rail systems and handrails that meets the requirements in Table D-2.



### Definitions

**Stairway (stairs)** - risers and treads that connect one level with another and includes any landings and platforms in between those levels. Stairways include standard, spiral, alternating tread-type, and ship stairs.

**Stair rail or stair rail system** - a barrier erected along the exposed or open side of stairways to prevent employees from falling to a lower level.

##

## Scaffolds and Rope Descent Systems

When scaffolds are used the supervisor is responsible to ensure that each employee is protect by the requirements of OSHA’s 1926 Subpart L:

* [1926.451](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10752) - General requirements
* [1926.452](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10753) - Additional requirements applicable to specific types of scaffolds
* [1926.453](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=10754) – Aerial Lifts
* [1926.454](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10755) – Training Requirements
* The **Non-Mandatory Appendices of OSHA’s 1926 Subpart L** have supplemental information have additional information than what is required.

Before any rope descent system is used, Supervisors are responsible to obtain, in writing that the building owner has identified, tested, certified, and maintained each anchorage so that it is capable of supporting at 5,000 pounds, for each employee attached.

Employees will not be allowed to use these anchorages or rope descent system until this inspection has been conducted. This inspection will be conducted by a qualified person, as necessary. If use of anchorages are infrequent, this inspection will be conducted at least every 10 years. This inspection will be completed and on file no later than November 20, 2017.

When working at heights greater than 300 feet, Supervisors are responsible to use another method of fall protection to keep employees safe. If a rope descent system must be used, a job hazard analysis will be done to ensure that a rope descent system is the most feasible, safer option.

A rope descent system must be used following the manufacturer’s instructions and warnings, or under the direction of a qualified person.

Employees who use a rope descent system will be trained in both fall and equipment hazards of the system.

Employees will also be trained in the inspection of the rope descent system. If a defect is found, Supervisors are responsible to remove it from service and replace it.

When employees are using a rope descent system, they will be using separate and independent personal fall arrest systems, meeting all of the requirements of OSHA’s 1910.140.

Seat boards used with (Company Name)’s rope descent system will be able to support a live load of 300 pounds.

 A prompt recuse plan has been developed for employees using a rope descent system.

The ropes of each rope descent system in used will be effectively padded or otherwise protected, where they can contact edges of the building, anchorage, obstructions, or other surfaces, to prevent them from being cut or weakened.

When descents are greater than 130 feet, stabilization is provided at the specific work location.

No employee will be allowed to use a rope descent system when hazardous weather conditions, such as storms or gusty or excessive wind, are present.

Equipment, such as tools, squeegees, or buckets, is secured by a tool lanyard or similar method to prevent it from falling.

The ropes of each rope descent system will be protected from exposure to open flames, hot work, corrosive chemicals, and other destructive conditions.

### Definitions

**Anchorage**. A secure point of attachment for equipment such as lifelines, lanyards, deceleration devices, and rope descent systems.

**Rope descent system**. A suspension system that allows an employee to descend in a controlled manner and, as needed, stop at any point during the descent. A rope descent system usually consists of a roof anchorage, support rope, a descent device, carabiner(s) or shackle(s), and a chair (seatboard). A rope descent system also is called controlled descent equipment or apparatus. Rope descent systems do not include industrial rope access systems.

**Scaffold**. Any temporary elevated or suspended platform and its supporting structure, including anchorage points, used to support employees, equipment, materials, and other items. For purposes of this subpart, a scaffold does not include a crane-suspended or derrick-suspended personnel platform or a rope descent system.

##

## Low Slope Roofs

When work is performed **less than 6 feet from the roof edge**, Supervisors are responsible to ensure each employee is protected from falling by one of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)

When work is performed **at least 6 feet but less than 15 feet from the roof edge**, Supervisors are responsible to ensure each employee is protected from falling by one of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)
* [Designated Area](#_Designated_Area_2) (when performing work that is both infrequent and temporary).

When work is performed **15 feet or more from the roof edge**, Supervisors are responsible to protect each employee from falling by one of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [Travel Restraint System](#_Travel_Restraint_System_1)
* [Personal Fall Arrest System](#_Personal_Fall_Arrest_1)
* [Designated Area](#_Designated_Area_2)

Supervisors is **not required** to provide any fall protection, provided the work is **both infrequent and temporary**; **AND a work rule is implemented and enforced that prohibits employees from going within 15 feet of the roof edge** without using one of the methods of fall protection above.

### Definition

**Low Slope Roof.** A roof that has a slope less than or equal to a ratio of 4 in 12 (vertical to horizontal).

## Slaughtering Facility Platforms

Supervisors are responsible to protect each employee on the unprotected working side of a slaughtering facility platform that is 4 feet or more above a lower level from falling by using on or more of the following methods:

* [Guardrail systems](#_Guardrail_Systems)
* [Travel Restraint System](#_Travel_Restraint_System_1)

When supervisors can demonstrate the use of a guardrail or travel restraint system is not feasible, the work may be done without those systems provided:

* The work operation for which fall protection is infeasible is in process; **AND**
* Access to the platform is limited to authorized employees; **AND**
* The authorized employees are trained in accordance with OSHA’s 1910.30.

## Walking-Working Surfaces Not Otherwise Addressed

Supervisors are responsible to ensure each employee on a walking-working surface 4 feet or more above a lower level is protected from falling by:

* [Guardrail systems](#_Guardrail_Systems)
* [Safety Net System](#_Safety_Net_Systems_1)
* [Personal Fall Protection System](#_Personal_Fall_Protection_1), such as personal fall arrest, travel restraint, or positioning systems

##

## Protection from Falling Objects

When an employee is exposed to falling objects, Supervisors are responsible to ensure that each employee wears head protection that meets the requirements of [OSHA’s 1910.135](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9785&p_search_str=&p_search_type=&p_status=CURRENT) of this part. In addition, supervisors must protect employees from falling objects by implementing one or more of the following:

* Erecting toeboards, screens, or guardrail systems to prevent objects from falling to a lower level.
* Erecting canopy structures and keeping potential falling objects far enough from an edge, hole, or opening to prevent them from falling to a lower level
* Barricading the area into which objects could fall, prohibiting employees from entering the barricaded area, and keeping objects far enough from an edge or opening to prevent them from falling to a lower level

# Fall Prevention System Requirements

## Guardrail Systems

Supervisors are responsible to ensure guardrail systems meet the requirements of [OSHA’s 1910.29 – Fall Protection and Falling object Protection – Criteria and Practices](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9721&p_table=STANDARDS).

The following checklist will be completed to ensure all requirements of guardrail systems are met. If an item cannot be answered with a “yes,” then work will not be allowed to proceed. Corrective action will be taken to fix the deficiencies identified.

|  |
| --- |
| Guardrail Systems |
|  | Y | N | N/A | Comments |
| Top Rail |
| 1. Are the top edges of top rails 42’’± 3’’ above the walking-working surface?
 |  |  |  |  |
| * 1. If top edges of the top rails exceed 45’’, are the requirements of Figure D-11\* are met? (see Figure D-11)
 |  |  |  |  |
| 1. When a 200-pound test load is applied to the top rail of the guardrail system, it does not deflect to a height of less than 39 inches above the walking-working surface?
 |  |  |  |  |
| Midrails |
| 1. Is a wall or parapet installed and at least 21 inches tall?

\*If yes, a midrail or other intermediate vertical member is not required. |  |  |  |  |
| 1. Are midrails installed at a height midway between the top edge of the guardrail system and the walking-working surface?
 |  |  |  |  |
| 1. Do screens and mesh extend from the walking-working surface to the top rail and along the entire opening between top rail supports?
 |  |  |  |  |
| 1. Are intermediate vertical members (such as balusters), or other equivalent intermediate members (midrails and architectural panels) are installed no more than 19 inches apart?
 |  |  |  |  |
| 1. Are midrails/intermediate members capable of withstanding, without failure, a force of at least 150 pounds (667 N) applied in any downward or outward direction at any point?
 |  |  |  |  |
| Strength Requirements |
| 1. Are the guardrail systems are capable of withstanding, a force of at least 200 pounds (890 N) applied in a downward or outward direction within 2 inches of the top edge, at any point along the top rail?
 |  |  |  |  |
| 1. Are top rails and midrails are at least 0.25-inches in diameter or in thickness?
 |  |  |  |  |
| 1. Steel banding and plastic banding are not used for top rails or midrails.
 |  |  |  |  |
| 1. Manila or synthetic rope used for top rails or midrails meet the strength requirements stated above in Items 2 and 7.
 |  |  |  | Last inspected date: |
| 1. Do guardrails have a smooth-surface to protect employees from injury, such as punctures or lacerations, and to prevent catching or snagging of clothing?
 |  |  |  |  |
| 1. The ends of top rails and midrails do not overhang the terminal posts.
 |  |  |  |  |
| Hoist Areas |
| 1. A removable guardrail section, consisting of a top rail and midrail, are placed across the access opening between guardrail sections when employees are not performing hoisting operations.
 |  |  |  |  |
| 1. If chains or gates are used, instead of a removable guardrail section at hoist areas, do the chains or gates provide a level of safety equivalent to guardrails?
 |  |  |  |  |
| Holes |
| 1. Are guardrails used around holes installed on all unprotected sides or edges of the hole?
 |  |  |  |  |
| 1. When materials are being passed through the hole, there are not more than two sides of the guardrail system are removed.
 |  |  |  |  |
| 1. When materials are not being passed through the hole, is the hole guarded by a guardrail system along all unprotected sides or edges or closed over with a cover?
 |  |  |  |  |
| 1. When guardrails around holes serve as points of access, do they have a self-closing gate that slides or swings away from the hole, and is equipped with a top rail and midrail or equivalent intermediate member that meets guardrail requirements above OR is offset to prevent an employee from walking or falling into the hole?
 |  |  |  |  |
| Ramps and Runways |
| 1. Are guardrails installed along each unprotected side or edge?
 |  |  |  |  |
| Stair Rails and Handrails |
| 1. Are handrails are at least 30 inches and not more than 38 inches high, as measured from the leading edge of the stair tread to the top surface of the handrail? (see Figure D-12)
 |  |  |  |  |
| 1. If the stair rail was installed before January 17, 2017, it is not less than 30 inches from the leading edge of the stair tread to the top surface of the top rail?
 |  |  |  |  |
| 1. If the stair rail was installed after January 17, 2017, it is not less than 42 inches from the leading edge of the stair tread to the top surface of the top rail?
 |  |  |  |  |
| 1. If the top rail of a stair rail system acts as a handrail, is the height of the stair rail system at least 36 inches and not more than 38 inches as measured at the leading edge of the stair tread to the top surface of the top rail? (See Figure D-13)
 |  |  |  |  |
| 1. Is there at least 2.25 inches of finger clearance between handrails and any other object?
 |  |  |  |  |
| 1. Are handrails and stair rail systems smooth-surfaced to protect employees from injury, such as punctures or lacerations, and to prevent catching or snagging of clothing?
 |  |  |  |  |
| 1. There are no openings more than 19 inches (in its least dimension) in a stair rail system?
 |  |  |  |  |
| 1. Do handrails have the shape and dimension necessary so that employees can grasp the handrail firmly?
 |  |  |  |  |
| 1. The ends of handrails and stair rail systems do not present any projection hazards.
 |  |  |  |  |
| 1. Are handrails and the top rails of stair rail systems are capable of withstanding, without failure, a force of at least 200 pounds applied in any downward or outward direction within 2 inches of any point along the top edge of the rail?
 |  |  |  |  |



 **Figure D-13 – Combination Handrail and Stair Rail**

**Note to paragraph (b) of this 1910.29:** The criteria and practices requirements for guardrail systems on scaffolds are contained in 29 CFR part 1926, subpart L.

## Falling Object Protection

The following checklist will be completed to ensure all employees are protected where falling objects create a hazard. If “yes” cannot be answered to all of the following items, then work will not be allowed to proceed and corrective action will be taken to fix the deficiencies identified.

|  |
| --- |
| Falling Object Protection |
|  | Y | N | N/A | Comments |
| Toeboards |  |  |  |  |
| Are toeboards erected along the exposed edge of the overhead walking-working surface for a length that is sufficient to protect employees below? |  |  |  |  |
| Do toeboards have a minimum vertical height of 3.5 inches as measured from the top edge of the toeboard to the level of the walking-working surface? |  |  |  |  |
| Do toeboards have a clearance or opening of no more than a 0.25-inch above the walking-working surface?  |  |  |  |  |
| Are toeboards solid or have any openings that exceed 1 inch at its greatest dimension? |  |  |  |  |
| When used around vehicle repair, service, or assembly pits, do toeboards have a minimum height of 2.5 inches?\*If you can demonstrate that a toeboard would prevent access to a vehicle that is over the pit, the toeboard can be omitted. |  |  |  |  |
| At any point of the toeboard, is it capable of withstanding, without failure, a force of at least 50 pounds (222 N) applied in any downward or outward direction? |  |  |  |  |
| If tools, equipment, or materials are piled higher than the top of the toeboard, has paneling or screening been installed from the toeboard to the midrail of the guardrail system and for a length that is sufficient to protect employees below? |  |  |  |  |
| If tools, equipment, or materials are piled higher than the midrail, has paneling or screening been installed to the top rail of the guardrail system and for a length that is sufficient to protect employees below? |  |  |  |  |
| Are all openings in guardrail systems are small enough to prevent objects from falling through the opening? |  |  |  |  |
| If canopies are used for falling object protection, are they strong enough to prevent collapse and to prevent penetration by falling objects? |  |  |  |  |

## Covers

Supervisors are responsible to ensure each cover for a hole in a walking-working surface is capable of supporting without failure, **at least twice the maximum intended load** that may be imposed on the cover at any one time and is secured to prevent accidental displacement.

For any stairway used less than once per day where traffic across the stairway floor hole prevents the use of a fixed guardrail system (e.g., holes located in aisle spaces), Supervisors are responsible to protect employees from falling into the hole by using a hinged floor hole cover that meets the criteria in [OSHA’s 1910.29](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9721&p_table=STANDARDS) and a removable guardrail system on all exposed sides, except at the entrance to the stairway.

|  |
| --- |
| Covers |
|  | Y | N | N/A | Comments |
| Holes |
| 1. Are guardrails used around holes installed on all unprotected sides or edges of the hole?
 |  |  |  |  |
| 1. When materials are being passed through the hole, there are not more than two sides of the guardrail system are removed.
 |  |  |  |  |
| 1. When materials are not being passed through the hole, is the hole guarded by a guardrail system along all unprotected sides or edges or closed over with a cover?
 |  |  |  |  |
| 1. When guardrails around holes serve as points of access, do they have a self-closing gate that slides or swings away from the hole, and is equipped with a top rail and midrail or equivalent intermediate member that meets guardrail requirements above OR is offset to prevent an employee from walking or falling into the hole?
 |  |  |  |  |

## Travel Restraint System

In cases where fall prevention cannot be implemented a travel restraint system will be used to eliminate any chance of the exposed employee from going over the edge of a walking-working surface.

Travel restraint system consists of 3 parts:

* Anchorage and anchorage connector;
* Body support – full body harness, body belt, etc.;
	+ Body belts ARE ALLOWED to be used with travel restraint systems, since a fall is not possible.
* Connecting devices – lanyard, rope, wire rope, etc.

These three components must pass the criteria located in [Personal Fall Protection System](#_Personal_Fall_Protection_1) and [Personal Fall Arrest System](#_Personal_Fall_Arrest_1) below.

## Designated Area

When supervisors use a designated area, employees will remain within the designated area while work operations are underway.

The following checklist will be completed to ensure all requirements of the Designated Area are met. If a competent person cannot answer “yes” to all of the following items, then work will not be allowed to proceed, and corrective action will be taken to fix the deficiencies identified.

|  |
| --- |
| Designated Area Requirements |
|  | Y | N | N/A | Comments |
| Warning Lines |
| 1. The perimeter of the designated area is delineated with a warning line consisting of a rope, wire, tape, or chain.
 |  |  |  |  |
| 1. Each warning line has a minimum breaking strength of 200 pounds.
 |  |  |  |  |
| 1. The lowest point, including sag, is not less than 34 inches above the walking-working surface.
 |  |  |  |  |
| 1. The lowest point, including sag, is not more than 39 inches above the walking-working surface.
 |  |  |  |  |
| 1. The warning line is supported in a manner that pulling on one section does not result in adjacent sections of the line to fall out of the limits in Item 3 or 4 on this checklist.
 |  |  |  |  |
| 1. The warning line is clearly visible from 25 feet away, or anywhere in the designated area.
 |  |  |  |  |
| 1. The warning line is erected as close to the work area as the task permits.
 |  |  |  |  |
| 1. The warning line is 6 feet or more from the roof edge for work that is both temporary and infrequent.
 |  |  |  |  |
| * 1. The waring line is not less than 15 feet for any other work.
 |  |  |  |  |
| Mobile Mechanical Equipment |
| 1. When work is both temporary and infrequent the warning line is 6 feet or more from the unprotected side or edge that is parallel to the direction of travel. Of the mobile equipment.
 |  |  |  |  |
| 1. When work is both temporary and infrequent the warning line is 10 feet or more from the unprotected side or edge that is perpendicular to the direction of travel. Of the mobile equipment.
 |  |  |  |  |

##

# Fall Protection System Requirements

## Safety Net Systems

When supervisors use a safety net system, the following checklist will be completed to ensure all of the requirements of the safety net system are met. If a “yes” cannot be answered to all of the following items, then work will not be allowed to proceed, and corrective action will be taken to fix the deficiencies identified.

|  |
| --- |
| Safety Net Systems |
| Last weekly inspection date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Conducted by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  | Y | N | N/A | Comments |
| Are safety nets installed as close as practicable under the walking-working surface on which employees are working? |  |  |  |  |
| The distance between the walking-working surface on which the employees are working and the safety net is never more than 30 feet. |  |  |  |  |
| Is the potential fall area from the walking-working surface to the net is unobstructed? |  |  |  |  |
| Is there sufficient clearance below the safety net to prevent contact with a force equal to the drop test\*?  |  |  |  |  |
| Safety nets are not defective and used as part of the fall protection system. |  |  |  |  |
| Have defective components been removed from service? |  |  |  |  |
| Safety nets are inspected after any occurrence which could affect the integrity of the safety net system. |  |  |  | Date of last occurrence: |
| Materials, scrap pieces, equipment, and tools which have fallen into the safety net are removed as soon as possible (at least before the next shift) |  |  |  |  |
| The maximum size of each safety net mesh opening does not exceed 36 square inches and is not longer than 6 inches on any side,  |  |  |  |  |
| The opening, measured center-to-center of mesh ropes or webbing, is not longer than 6 inches.  |  |  |  |  |
| Are all mesh crossings secured to prevent enlargement of the mesh opening? |  |  |  |  |
| Does the border rope for webbing have a minimum breaking strength of 5,000 pounds (22.2 kN)? |  |  |  |  |
| Are the connections between safety net panels placed not more than 6 inches apart and as strong as the integral net components? |  |  |  |  |

Safety nets shall extend outward from the outermost projection of the work surface as follows:

Up to 5’

More than 5’, up to 10 ‘

More than 10’, up to 30 ‘

8’

10’

30’

Safety nets and their installations shall be capable of absorbing an impact force equal to that produced by the drop test specified in paragraph (c)(4)(i) of OSHA’s 1926.502.

Except as provided in paragraph (c)(4)(ii) of OSHA’s 1926.502, safety nets and safety net installations shall be drop-tested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at 6-month intervals if left in one place. The drop-test shall consist of a 400-pound (180 kg) bag of sand 30 + or - 2 inches in diameter dropped into the net from the highest walking/working surface at which employees are exposed to fall hazards, but not from less than 42 inches above that level.

When supervisors can demonstrate that it is unreasonable to perform the drop-test required by paragraph (c)(4)(i) of OSHA’s 1926.502 supervisors (or a designated competent person) shall certify that the net and net installation is in compliance with the provisions of paragraphs (c)(3) and (c)(4)(i) of this section by preparing a certification record prior to the net being used as a fall protection system. The certification record must include an identification of the net and net installation for which the certification record is being prepared; the date that it was determined that the identified net and net installation were in compliance with paragraph (c)(3) of this section and the signature of the person making the determination and certification. The most recent certification record for each net and net installation shall be available at the jobsite for inspection.

##

## Personal Fall Protection System

Supervisors are responsible to ensure that the personal fall protection systems in use at the facility meet the requirements in the following checklist. When a manufactured fall protection system is used, it will be assembled and maintained according to the manufacturer’s instructions. If a “yes” is not able to be provided to any of the following items, the personal fall protection system is not to be used until corrective action is implemented and the deficiency resolved.

Personal fall protection systems and their components in use at supervisors are used exclusively for employee fall protection and not for any other purpose, such as hoisting equipment or materials.

Personal fall protection system or its components subjected to impact loading will be removed from service immediately and not used again until a competent person inspects the system or components and determines that it is not damaged and safe for use for employee personal fall protection. The competent person designated by supervisors.

Personal fall protection systems will be inspected before initial use during each work shift for mildew, wear, damage, and other deterioration, and defective components must be removed from service. These inspections will be conducted by the supervisors and employees using the personal fall protection equipment.

If a “yes” is not able to be provided to any of the following items, the personal fall protection system is not to be used until corrective action is implemented and the deficiency resolved.

|  |
| --- |
| Personal Fall Protection System Requirements |
|  | Y | N | N/A | Comments |
| Connectors |
| 1. Are connectors drop forged, pressed, or formed steel, or made of equivalent materials?
 |  |  |  |  |
| 1. Do connectors have a corrosion resistant finish, and all surfaces and edges must be smooth to prevent damage to interfacing parts of the system?
 |  |  |  |  |
| Lanyards and Lifelines |
| 1. Will each employee be attached to a separate lifeline?
 |  |  |  |  |
| 1. Do lanyards and vertical lifelines have a minimum breaking strength of 5,000 pounds? 1
 |  |  |  |  |
| 1. Do self-retracting lifelines and lanyards that automatically limit free fall distance to 2 feet or less have components capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position?
 |  |  |  |  |
| 1. Has a competent person or qualified person inspected each knot in a lanyard or vertical lifeline to ensure that it meets the requirements of Items 4 and 5 of this checklist, before any employee is allowed to use the lanyard or lifeline?
 |  |  |  |  |
| 1. If a horizontal lifeline is used, does the complete personal fall arrest system maintain a safety factor of at least two? 2
 |  |  |  |  |
| 1. If a horizontal lifeline is used, has it been designed, installed, and used under the supervision of a qualified person?
 |  |  |  |  |
| 1. Are travel restraint lines capable of sustaining a tensile load of at least 5,000 pounds?
 |  |  |  |  |
| 1. Lifelines are not made of natural fiber rope.
 |  |  |  |  |
| 1. If polypropylene rope is used, does it contain an ultraviolet (UV) light inhibitor? 4
 |  |  |  |  |
| 1. Are ropes, belts, lanyards, and harnesses used for personal fall protection compatible with all connectors used? 5
 |  |  |  |  |
| 1. Are ropes, belts, lanyards, lifelines, and harnesses used for personal fall protection protected from being cut, abraded, melted, or otherwise damaged?
 |  |  |  |  |
| 1. Has prompt rescue plan been developed for each employee in the event of a fall?
 |  |  |  |  |
| 1. Is the personal fall protection system worn with the attachment point of the body harness located in the center of the employee's back near shoulder level? If the free fall distance is limited to 2 feet or less, the attachment point may be located in the pre-sternal position.
 |  |  |  |  |
| D-Rings, Snaphooks, and Carabiners |
| 1. Are D-rings, snaphooks, and carabiners capable of sustaining a minimum tensile load of 5,000 pounds? 1
 |  |  |  |  |
| 1. Are D-rings, snaphooks, and carabiners proof tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or incurring permanent deformation? 1
 |  |  |  |  |
| 1. Is the gate strength of snaphooks and carabiners, proof tested to 3,600 lbs. in all directions? 1
 |  |  |  |  |
| 1. Are snaphooks and carabiners the automatic locking type that require at least two separate, consecutive movements to open?
 |  |  |  |  |
| 1. Unless designed for such connections, snaphooks and carabiners ARE NOT CONNECTED directly to webbing, rope, or wire rope.
 |  |  |  |  |
| 1. Unless designed for such connections, snaphooks and carabiners ARE NOT CONNECTED to each other.
 |  |  |  |  |
| 1. Unless designed for such connections, snaphooks and carabiners ARE NOT CONNECTED to a D-ring to which another snaphook, carabiner, or connector is attached.
 |  |  |  |  |
| 1. Unless designed for such connections, snaphooks and carabiners ARE NOT CONNECTED to a horizontal lifeline.
 |  |  |  |  |
| 1. Unless designed for such connections, snaphooks and carabiners ARE NOT CONNECTED to any object that is incompatibly shaped or dimensioned in relation to the snaphook or carabiner such that unintentional disengagement could occur when the connected object depresses the snaphook or carabiner gate, allowing the components to separate.
 |  |  |  |  |
| Anchorages |
| 1. Are anchorages used to attach personal fall protection equipment independent of any anchorage used to suspend employees or platforms on which they work?
 |  |  |  |  |
| 1. If personal fall protection equipment is used on mobile work platforms on powered industrial trucks, is the anchorage attached to an overhead member of the platform, located at any point above and at the center of the platform? 3
 |  |  |  |  |
| 1. Are anchorages capable of supporting at least 5,000 pounds for each employee attached? 1
 |  |  |  |  |
| 1. Were anchorages designed, installed, and used, under the supervision of qualified person? 2
 |  |  |  |  |

**1** Equipment will have an ANSI rating stamped on it. If the rating is not stamped on the equipment, refer to the manufacturer’s operator’s manual.

**2** A fall protection qualified engineer must develop a system that can withstand double the force/load of maximum arresting force of all workers using the system.

**3** Personal fall protection is **not required** on mobile work platforms on powered industrial trucks **if all guardrails** are in place. If you wish to use personal fall protection equipment a 3’-4’ lanyard is recommended. If using a self-retracting lifeline (SRL), a Class A SRL is recommended. This will limit the free fall to a distance of 24’’. Additional training may be required, as well. Employees will need to be trained on swing fall and tip over hazards. Employees should also be trained to not ever climb over the guardrails.

4 A UV light inhibitor is applied to the rope to provide protection from discoloration and eventual weakening of polypropylene fibers of the rope from UV rays.

5 If personal fall protection equipment from more than one manufacturer is used, make sure that you receive approval from the manufacturers.

## Personal Fall Arrest System

In addition to the requirements in “[Personal Fall Protection System](#_Personal_Fall_Protection_1)” section, Supervisors are responsible to also ensure that when personal fall arrest systems are used, that the following requirements are met:

|  |
| --- |
| Personal Fall Arrest System Requirements |
|  | Y | N | N/A | Comments |
| 1. Does the personal fall arrest system limit the maximum force on the employee to 1,800 pounds?
 |  |  |  |  |
| 1. Does the personal fall arrest system bring the employee to a complete stop and limit the deceleration distance the employee travels to 3.5 feet (42 inches)?
 |  |  |  |  |
| 1. Does the personal fall arrest system have the strength to withstand twice the potential impact energy of the employee free falling a distance of 6 feet, or the free fall distance permitted by the system?
 |  |  |  |  |
| 1. Is the employee within the system/strap configuration without making contact with the employee's neck and chin area?
 |  |  |  |  |
| 1. Is the combined body and tool weight of the employee less than 310 pounds?
 |  |  |  |  |
| * 1. If total weight is greater than 310 pounds, has the system been tested and appropriately modified?
 |  |  |  |  |
| 1. Is the device used to connect to the horizontal lifeline is capable of locking in both directions on the lifeline if the horizontal lifeline may become a vertical lifeline?
 |  |  |  |  |
| 1. Is the personal fall arrest system rigged in such a manner that the employee cannot free fall more than 6 feet or contact a lower level?
 |  |  |  |  |
| 1. Body belts are not used as part of a personal fall arrest system.
 |  |  |  |  |

Appendix D to Subpart I of Part 1910— Test Methods and Procedures for Personal Fall Protection Systems Non-Mandatory Guidelines - <https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=1297>

## Ladder Safety System

Where a ladder safety system is used, Supervisors are responsible to ensure:

* Each ladder safety system allows the employee to climb up and down using both hands and does not require that the employee continuously hold, push, or pull any part of the system while climbing
* The connection between the carrier or lifeline and the point of attachment to the body harness or belt does not exceed 9 inches
* Mountings for rigid carriers are attached at each end of the carrier, with intermediate mountings spaced, as necessary, along the entire length of the carrier so the system has the strength to stop employee falls
* Mountings for flexible carriers are attached at each end of the carrier and cable guides for flexible carriers are installed at least 25 feet apart but not more than 40 feet apart along the entire length of the carrier
* The design and installation of mountings and cable guides does not reduce the design strength of the ladder
* Ladder safety systems and their support systems are capable of withstanding, without failure, a drop test consisting of an 18-inch drop of a 500-pound weight.

## Rope Descent Systems

Before any rope descent system is used, Supervisors are responsible to obtain, in writing that the building owner has identified, tested, certified, and maintained each anchorage so that it is capable of supporting at 5,000 pounds, for each employee attached.

Employees will not be allowed to use these anchorages or rope descent system until this inspection has been conducted. This inspection will be conducted by a qualified person, as necessary. If use of anchorages are infrequent, this inspection will be conducted at least every 10 years. This inspection will be completed and on file no later than **November 20, 2017**.

When working at heights greater than 300 feet, Supervisors are responsible to use another method of fall protection to keep employees safe. If a rope descent system must be used, a job hazard analysis will be done to ensure that a rope descent system is the most feasible, safer option.

A rope descent system must be used following the manufacturer’s instructions and warnings, or under the direction of a qualified person.

Employees who use a rope descent system will be trained in both fall and equipment hazards of the system.

Employees will also be trained in the inspection of the rope descent system. If a defect is found, Supervisors are responsible to remove it from service and replace it.

When employees are using a rope descent system, they will be using separate and independent personal fall arrest systems, meeting all of the requirements of OSHA’s 1910.140.

Seat boards used with rope descent system will be able to support a live load of 300 pounds.

 A prompt recuse plan has been developed for employees using a rope descent system.

The ropes of each rope descent system in use at Supervisors are responsible to be effectively padded or otherwise protected, where they can contact edges of the building, anchorage, obstructions, or other surfaces, to prevent them from being cut or weakened.

When descents are greater than 130 feet, stabilization is provided at the specific work location.

No employee will be allowed to use a rope descent system when hazardous weather conditions, such as storms or gusty or excessive wind, are present.

Equipment, such as tools, squeegees, or buckets, is secured by a tool lanyard or similar method to prevent it from falling.

The ropes of each rope descent system will be protected from exposure to open flames, hot work, corrosive chemicals, and other destructive conditions.

# Training Requirements

## Fall Hazards

Before any employee is exposed to a fall hazard Supervisors are responsible to provide training for each employee who uses personal fall protection systems or who is required to be trained as specified elsewhere in this program. Supervisors are responsible to ensure employees are trained in the requirements of this paragraph **on or before May 17, 2017**.

Supervisors are responsible to ensure that each employee is trained by the competent person.

Supervisors are responsible to ensure each employee is trained in at least the following topics:

* The nature of the fall hazards in the work area and how to recognize them
* The procedures to be followed to minimize those hazards
* The correct procedures for installing, inspecting, operating, maintaining, and disassembling the personal fall protection systems that the employee uses
* The correct use of personal fall protection systems and equipment specified in this program, including, but not limited to, proper hook-up, anchoring, and tie-off techniques, and methods of equipment inspection and storage, as specified by the manufacturer

## Equipment Hazards

Supervisors are responsible to train each employee **on or before May 17, 2017** in the proper care, inspection, storage, and use of equipment covered by this program before an employee uses the equipment.

Supervisors are responsible to train each employee who uses a dockboard to properly place and secure it to prevent unintentional movement.

Supervisors are responsible to train each employee who uses a rope descent system in proper rigging and use of the equipment in accordance with [OSHA’s 1910.27](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9719&p_table=STANDARDS).

Supervisors are responsible to train each employee who uses a designated area in the proper setup and use of the area.

## Retraining

Supervisors are responsible to retrain an employee when management/supervision has reason to believe the employee does not have the understanding and skill required by the “[Fall Hazard](#_Fall_Hazards)” and “[Equipment Hazard](#_Equipment_Hazards)” sections of this program. Situations requiring retraining include, but are not limited to, the following:

* When changes in the workplace render previous training obsolete or inadequate
* When changes in the types of fall protection systems or equipment to be used render previous training obsolete or inadequate
* When inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee no longer has the requisite understanding or skill necessary to use equipment or perform the job safely

## Training Must Be Understandable

Supervisors are responsible to provide information and training to each employee in a manner that the employee understands.

# Definitions

**Anchorage** - a secure point of attachment for equipment such as lifelines, lanyards, deceleration devices, and rope descent systems.

**Authorized** - an employee who the employer assigns to perform a specific type of duty or allows in a specific location or area.

**Fall hazard** - any condition on a walking-working surface that exposes an employee to a risk of harm from a fall on the same level or to a lower level.

**Fall protection** - any equipment, device, or system that prevents an employee from falling from an elevation or mitigates the effect of such a fall.

**Guardrail system** - a barrier erected along an unprotected or exposed side, edge, or other area of a walking-working surface to prevent employees from falling to a lower level.

**Handrail** - a rail used to provide employees with a handhold for support.

**Lower leve**l - a surface or area to which an employee could fall. Such surfaces or areas include, but are not limited to, ground levels, floors, roofs, ramps, runways, excavations, pits, tanks, materials, water, equipment, and similar surfaces and structures, or portions thereof.

**Personal fall arrest system** - a system used to arrest an employee in a fall from a walking-working surface. It consists of a body harness, anchorage, and connector. The means of connection may include a lanyard, deceleration device, lifeline, or a suitable combination of these.

**Personal fall protection system** - a system (including all components) an employer uses to provide protection from falling or to safely arrest an employee’s fall if one occurs. Examples of personal fall protection systems include personal fall arrest systems, positioning systems, and travel restraint systems.

**Platform** - a walking-working surface that is elevated above the surrounding area.

**Qualified** - a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project.

**Toeboard** - a low protective barrier that is designed to prevent materials, tools, and equipment from falling to a lower level, and protect employees from falling.

**Travel restraint system** - a combination of an anchorage, anchorage connector, lanyard (or other means of connection), and body support that an employer uses to eliminate the possibility of an employee going over the edge of a walking-working surface.

**Walking-working surface** - any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location.

**Warning line** - a barrier erected to warn employees that they are approaching an unprotected side or edge, and which designates an area in which work may take place without the use of other means of fall protection.