



Fall Protection Program

Prepared to Meet OSHA Regulations 29CFR1926.500-
1926.503 and OR OSHA 29CFR1910, 437-002-0134(5)

This Fall Protection Program addresses the hazards associated with working in elevated areas, and the use of fall protection equipment and practices to prevent injuries from falling from these elevated areas.



Table of Contents

Introduction.....	3
Definitions	4
Hazard Identification.....	7
• Unprotected sides and edges.....	7
• Leading edges.....	7
• Hoist areas.....	7
• Holes.....	7
• Formwork and reinforcing steel.....	7
• Ramps, runways, and other walkways.....	8
• Excavations.....	8
• Dangerous equipment.....	8
• Roofing work on Low-slope roofs.....	8
• Steep roofs.....	8
• Precast concrete erection.....	8
• Wall openings.....	8
• Walking/working surfaces not otherwise addressed.....	8
• Protection from falling objects.....	9
Fall Protection Systems and Requirements.....	9
Personal Fall Arrest Systems.....	9
Positioning Device Systems	11
Warning Line Systems	12
Safety Monitoring Systems.....	13
Covers.....	13
Protection from Falling Objects	14
Guardrail Systems	14

Safety & Loss Prevention

Revision Date: 11/013/2018

Fall Protection Program



Using Ladders.....	15
Training.....	16
Appendix A.....	17
Fall Protection Selection Chart.....	17



Fall Protection Program

Prepared to Meet OSHA Regulations 29CFR1926.500-1926.503 and OR OSHA 29CFR1910, 437-002-0134(5)

Introduction

Linn Benton Community College (LBCC) seeks to provide a safe working and learning environment for employees and students. To accomplish this, LBCC has instituted a number of programs and procedures that include engineering controls for hazards whenever feasible, hazard assessments, and employee safety training to mitigate accidents and injuries.

When an employee is **exposed to a hazard** from a walking/working surface with an unprotected side or edge, which is six feet or more above the lower surface, he/she shall be protected from falling by the use of guardrails, a safety net system, or personal fall arrest systems. Employees with the following job titles or from the following areas have specific responsibilities within the program and should be familiar with its contents:

- Safety & Loss Prevention Director
- Facilities Director & Assistant Director
- Maintenance
- Grounds
- Information Services

Elements of this program include:

- Hazard Identification
- Fall Protection Systems and Requirements
- Training

Questions regarding this program or its contents should be direct to the Safety & Loss Prevention Director at 541-191-4940.

Safety & Loss Prevention

Revision Date: 11/013/2018



Definitions

- *Anchorage* means a secure point of attachment for lifelines, lanyards or deceleration devices.
- *Body belt* (safety belt) means a strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline, or deceleration device.
- *Body harness* means straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.
- *Buckle* means any device for holding the body belt or body harness closed around the employee's body.
- *Connector* means a device which is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabineer, or it may be an integral component of part of the system (such as a buckle or deering sewn into a body belt or body harness, or a snap-hook spliced or sewn to a lanyard or self-retracting lanyard).
- *Controlled access zone* (CAZ) means an area in which certain work (e.g., overhand bricklaying) may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled.
- *Dangerous equipment* means equipment (such as pickling or galvanizing tanks, degreasing units, machinery, electrical equipment, and other units) which, as a result of form or function, may be hazardous to employees who fall onto or into such equipment.
- *Deceleration device* means any mechanism, such as a rope grab, rip-stitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest.
- *Deceleration distance* means the additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body belt or body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.
- *Equivalent* means alternative designs, materials, or methods to protect against a hazard which the employer can demonstrate will provide an equal or greater degree of safety for employees than the methods, materials or designs specified in the standard.
- *Failure* means load refusal, breakage, or separation of component parts. Load refusal is the point where the ultimate strength is exceeded.
- *Free fall* means the act of falling before a personal fall arrest system begins to apply force to arrest the fall.
- *Free fall distance* means the vertical displacement of the fall arrest attachment point on the employee's body belt or body harness between onset of the fall and just before the system begins to apply force

Fall Protection Program



to arrest the fall. This distance excludes deceleration distance, and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.

- *Guardrail system* means a barrier erected to prevent employees from falling to lower levels.
- *Hole* means a gap or void 2 inches (5.1 cm) or more in its least dimension, in a floor, roof, or other walking/working surface.
- *Infeasible* means that it is impossible to perform the construction work using a conventional fall protection system (i.e., guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection.
- *Lanyard* means a flexible line of rope, wire rope, or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.
- *Leading edge* means the edge of a floor, roof, or formwork for a floor or other walking/working surface (such as the deck) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading edge is considered to be an “unprotected side and edge” during periods when it is not actively and continuously under construction.
- *Lifeline* means a component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.
- *Low-slope roof* means a roof having a slope less than or equal to 4 in 12 (vertical to horizontal).
- *Lower levels* means those areas or surfaces to which an employee can fall. Such areas or surfaces include, but are not limited to, ground levels, floors, platforms, ramps, runways, excavations, pits, tanks, material, water, equipment, structures, or portions thereof.
- *Mechanical equipment* means all motor or human propelled wheeled equipment used for roofing work, except wheelbarrows and mop carts.
- *Opening* means a gap or void 30 inches (76 cm) or more high and 18 inches (48 cm) or more wide, in a wall or partition, through which employees can fall to a lower level.
- *Overhand bricklaying and related work* means the process of laying bricks and masonry units such that the surface of the wall to be jointed is on the opposite side of the wall from the mason, requiring the mason to lean over the wall to complete the work. Related work includes mason tending and electrical installation incorporated into the brick wall during the overhand bricklaying process.
- *Personal fall arrest system* means a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.
- *Positioning device system* means a body belt or body harness system rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Fall Protection Program



- *Rope grab* means a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.
- *Roof* means the exterior surface on the top of a building. This does not include floors or formwork which, because a building has not been completed, temporarily become the top surface of a building.
- *Roofing work* means the hoisting, storage, application, and removal of roofing materials and equipment, including related insulation, sheet metal, and vapor barrier work, but not including the construction of the roof deck.
- *Safety-monitoring system* means a safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.
- *Self-retracting lifeline/lanyard* means a deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.
- *Snap-hook* means a connector comprised of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object. Snap-hooks are generally one of two types:
 - The locking type with a self-closing, self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection; or
 - The non-locking type with a self-closing keeper which remains closed until pressed open for connection or disconnection. As of January 1, 1998, the use of a non-locking snap-hook as part of personal fall arrest systems and positioning device systems is prohibited.
- *Steep roof* means a roof having a slope greater than 4 in 12 (vertical to horizontal).
- *Toe board* means a low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.
- *Unprotected sides and edges* means any side or edge (except at entrances to points of access) of a walking/working surface, e.g., floor, roof, ramp, or runway where there is no wall or guardrail system at least 39 inches (1.0 m) high.
- *Walking/working surface* means any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, formwork and concrete reinforcing steel but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties.
- *Warning line system* means a physical barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without the use of guardrail, body harness, or safety net systems to protect employees in the area.
- *Work area* means that portion of a walking/working surface where job duties are being performed.



Hazard Identification

Prior to beginning work, the walking/working surface must be assessed for fall hazards which could include:

- *Unprotected sides and edges.* Each employee whose work task (walking or working) will take them within 10 feet of an unprotected side or edge which is 4 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.
- *Leading edges.* Each employee who is constructing a leading edge 4 feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest system.

Each employee on a walking/working surface 4 feet or more above a lower level where leading edges are under construction, but who is not engaged in the leading edge work, shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system. If a guardrail system is chosen to provide the fall protection, and a controlled access zone has already been established for leading edge work, the control line may be used in lieu of a guardrail along the edge that parallels the leading edge.

- *Hoist areas.* Each employee in a hoist area shall be protected from falling 4 feet or more to lower levels by guardrail systems or personal fall arrest systems. If guardrail systems or portions thereof, are removed to facilitate the hoisting operation and an employee must lean through the access opening or out over the edge of the access opening (to receive or guide equipment and materials, for example), that employee shall be protected from fall hazards by a personal fall arrest system.
- *Holes.* Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 4 feet above lower levels, by personal fall arrest systems, covers, or guardrail systems erected around such holes if their task (walking or working) will take them within 10 feet of the hole (thus exposing them to a fall hazard).
Each employee on a walking/working surface shall be protected from tripping in or stepping into or through holes (including skylights) by covers.
Each employee on a walking/working surface shall be protected from objects falling through holes (including skylights) by covers.
- *Formwork and reinforcing steel.* Each employee on the face of formwork or reinforcing steel shall be protected from falling 4 feet or more to lower levels by personal fall arrest systems, safety net systems, or positioning device systems.

Fall Protection Program



- *Ramps, runways, and other walkways.* Each employee on ramps, runways, and other walkways shall be protected from falling 4 feet or more to lower levels by guardrail systems.
- *Excavations.* Each employee at the edge of an excavation 4 feet or more in depth shall be protected from falling by guardrail systems, fences, or barricades when the excavations are not readily seen because of plant growth or other visual barrier;
Each employee at the edge of a well, pit, shaft, and similar excavation 4 feet or more in depth shall be protected from falling by guardrail systems, fences, barricades, or covers.
- *Dangerous equipment.* Each employee less than 4 feet above dangerous equipment shall be protected from falling into or onto the dangerous equipment by guardrail systems or by equipment guards.
Each employee 4 feet or more above dangerous equipment shall be protected from fall hazards by guardrail systems, personal fall arrest systems, or safety net systems.
- *Roofing work on Low-slope roofs.* Each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 4 feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system.
Or, on roofs 50-feet or less in width, the use of a safety monitoring system alone [i.e. without the warning line system] is permitted.
- *Steep roofs.* Each employee on a steep roof with unprotected sides and edges 4 feet or more above lower levels shall be protected from falling by guardrail systems with toe boards, safety net systems, or personal fall arrest systems.
- *Precast concrete erection.* Each employee engaged in the erection of precast concrete members (including, but not limited to the erection of wall panels, columns, beams, and floor and roof “tees”) and related operations such as grouting of precast concrete members, who is 4 feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems.
- *Wall openings.* Each employee working on, at, above, or near a wall where the outside bottom edge of the wall opening is 4 feet or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches above the walking/working surface, shall be protected from falling by the use of a guardrail system, a safety net system, or a personal fall arrest system.
- *Walking/working surfaces not otherwise addressed.* Each employee on a walking/working surface 4 feet or more above lower levels shall be protected from falling by an appropriate warning line, guardrail system, safety net system, or personal fall arrest system.



- *Protection from falling objects.* When an employee is exposed to falling objects, the employer shall have each employee wear a hard hat and shall implement one of the following measures:
 - Erect toe boards, screens, or guardrail systems to prevent objects from falling from higher levels; or,
 - Erect a canopy structure and keep potential fall objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally displaced; or,
 - Barricade the area to which objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.

Fall Protection Systems and Requirements

The selection of specific fall protection methods must be based upon the criteria found in Appendix A - *Fall Protection Selection Chart*. Fall protection must be installed or put on prior to entering the elevated work area or platform when work tasks (walking or working) on a campus roof will take the employee within 10 feet of the edge of the building and, for personal fall protection devices, must be worn at all times when working.

If there is the potential for employees being struck by falling objects while employing the listed fall protection, then hard hats must be worn in the work area. In addition, one or more of the following must be implemented to protect workers from falling objects associated with work from elevated platforms or areas.

Personal Fall Arrest Systems

The use of Body Belts (versus Body Harnesses) is prohibited, and they may not, under any circumstances, be used as a substitute for a Body Harness. A body harness is not required for most applications using ladders. However, circumstances may necessitate the use of a body harness while using a ladder if, for instance, the work is being conducted over 4- ft. above the ground and it involves reaching out from the ladder.

The body harness is the primary method of personal fall arrest in use at LBCC. The harness must meet all of the criteria listed or be replaced with equipment that does meet all of the criteria:

- Connectors drop forged, pressed or formed steel, or equivalent

Safety & Loss Prevention

Revision Date: 11/013/2018

Fall Protection Program



- Connectors have corrosion-resistant finish, with all smooth surfaces to prevent damage to interfacing parts
- Dee-rings and snap-hooks proof-tested to at least 3,600-lbs. (16-kN) without cracking, breaking, or permanently deforming
- Locking type snap-hooks
- Horizontal lifelines must be designed, installed, and used under the supervision of a qualified person, and must have a safety factor of at least 2.
- Lanyards and vertical lifelines with minimum breaking strength of 5,000-lbs.
- Self-retracting lifelines and lanyards with automatic free fall limit of 2-ft or less capable of sustaining minimum tensile load of 3,000-lbs. (applied at full extension of device)
- Self-retracting lifelines and lanyards without automatic free fall limit of 2-ft. or less, ripstitch lanyards, and tearing and deforming lanyards capable of sustaining a minimum tensile load of 5,000-lbs (applied at full extension of device)
- Ropes and straps/webbing used in lanyards, lifelines, and strength components of body belts made from synthetic fibers
- Approved, appropriate anchorages for attachment of personal fall arrest equipment independent of any platform supports or suspension components, and capable of supporting at least 5,000-lbs. per employee attached, **or** designed, installed, and used as part of a complete personal fall arrest system with a safety factor of at least 2 and under the supervision of a qualified person.
- Limits maximum arresting force to 900-lbs. with body belts, or 1,800-lbs. for body harnesses
- Rigged to prevent employee from falling more than 6-ft., or contacting any lower surface
- Brings an employee to a complete stop and limits maximum deceleration distance to 3.5-ft.
- Has sufficient strength to withstand twice the potential impact energy of an employee free fall of 6-ft., or the free fall distance of the system, whichever is less
- Attachment point of body harness located in the center of the wearer's back, near shoulder level, or above the wearer's head

Use of a Personal Fall Arrest System must meet the following criteria:

- Locking snap-hooks may not be used for the following types of connections/engagements unless designed to do so, and so specified by the manufacturer:
 - Directly to webbing, rope, or wire rope
 - To each other

Safety & Loss Prevention

Revision Date: 11/013/2018

Fall Protection Program



- To a dee-ring to which another snap-hook or other connector is attached
- To a horizontal lifeline
- To any object that is shaped in such a way as to potentially cause the the snap-hook to open
- For work on scaffolding or other similar work platforms with horizontal lifelines which may become vertical lifelines, devices connecting to the lifeline must be able to function horizontally and vertically
- Separate vertical lifeline for each employee
- Lifelines protected against being cut or braded
- Body harnesses and components used only for employee fall protection, and not for hoisting or lifting
- Removed from service, inspected by qualified individual, and repaired or replaced, as necessary, if subjected to an impact loading
- Inspected for damage or deterioration prior to each use
- Not attached to guardrail systems, hoists, or loads
- Limits employee movement to the edge of the walking/working surface at hoist areas

Positioning Device Systems

Positioning Device Systems are used to support an employee while performing work and must meet the following criteria:

- Restricts employee from falling more than 2-ft.
- Secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall, or 3,000-lbs., whichever is greater
- Connectors drop forged, pressed or formed steel, or made of equivalent materials
- Connectors have corrosion-resistant finish, and all surfaces and edges are smooth to prevent damage to interfacing parts of the system
- Connecting assemblies with a minimum tensile strength of 5,000-lbs.
- Dee-rings and snap-hooks proof-tested to a minimum tensile load of 3,600-lbs. without cracking, breaking, or permanently deforming

Use of a Positioning Device System must comply with the following:

Safety & Loss Prevention

Revision Date: 11/013/2018



- Locking snap-hooks may not be used for the following types of connections/engagements unless designed to do so, and so specified by the manufacturer:
 - Directly to webbing, rope, or wire rope
 - To each other
 - To a dee-ring to which another snap-hook or other connector is attached
 - To a horizontal lifeline
 - To any object that is shaped in such a way as to potentially cause the opening of the snap-hook
- Body harnesses and components used only for employee fall protection, and not for hoisting or lifting
- Removed from service, inspected by qualified individual, and repaired or replaced, as necessary, if subjected to an impact loading
- Inspected for damage or deterioration prior to each use

Warning Line Systems

Warning lines may sometimes be appropriate to provide a warning to employees that they are nearing an unprotected edge. Warning line systems may only be used on low-slope or flat roofs. Warning line systems must meet the following criteria:

- Located at least 10-ft. (3.1-m) from the roof edge.
- Access paths to points of access, materials handling areas, storage areas, and hoisting areas formed by using two warning lines.
- Access paths not in use must be blocked by a rope, wire, chain, or other barricade set at the same height as the warning lines, and of similar strength.

Warning line systems must be constructed of ropes, wires, or chains with supporting stanchions.

The warning line system must meet the following specifications/criteria:

- Flagged at no more than 6-ft. (1.8-m) intervals with a high-visibility material.
- Rope, wire, or chains are no less than 34-in. (0.9-m) from the work surface at the lowest point, nor more than 39-in. at the highest point.
- Erected stanchions (with rope, wire, or chain) capable of staying upright when a force of at least 16-lbs. (71-N) is applied horizontally, perpendicular to the warning line, in the direction of the walking/working surface, and at a height of 30-in. (0.8-m) above the working surface.

Fall Protection Program



- Rope, wire, or chains with a minimum tensile strength of 500-lbs. (2.22-kN), and capable of supporting the loads applied to the stanchions without breaking.
- Rope, wire, or chains attached to stanchions in such a way as to prevent slack being taken up in other sections when one section is pulled before the stanchion falls over.

Painted warning lines have been deemed appropriate by an OSHA consultation :

- On LB's flat roof system if they are painted 10' from the building and/or skylight edge
- If employees properly use fall protection for any work within 10' of the edge of the building and/or skylight.
- If only trained and approved employees are accessing the roof.
- If designated walkways to equipment and access points are at least 10' away from the building edges and are marked and utilized.
- If employees accessing the roof, outside of the green roof railed area, are trained in this safety plan and the use of fall protection equipment.

No employee may enter the area outside the warning lines unless they are performing work there and have other means of fall protection. Mechanical equipment used on roof tops may only be used or stored in areas where employees are protected by a warning line system, guardrail system, or personal fall arrest system.

Safety Monitoring Systems

When a roof is less than or equal to 50' wide and is considered low slope or flat, a safety monitoring system may be used to help protect employees from fall hazards. Safety monitoring entails the use of an employee to monitor the activities of other workers while in elevated areas, and to warn them of any fall hazards. The safety monitor must:

- Be competent in recognizing fall hazards
- Warn employees when they appear to be unaware of a fall hazard or are acting unsafely
- Be on the same walking/working surface and within visual sight of the monitored employee/s
- Be close enough to communicate orally with the monitored employee/s
- Not have other responsibilities or duties that might distract him/her from monitoring

Covers

Covers must be used to prevent employees from falling through roof, floor, or other walking/working surface openings. The following criteria must be met when using covers for fall protection:

Safety & Loss Prevention

Revision Date: 11/013/2018



- Covers used in roadways or vehicular aisles must be capable of supporting, without failure, at least twice the maximum axle load of the largest vehicle expected to pass over it.
- Covers used in areas other than roadways or vehicular aisles must be capable of supporting, without failure, at least twice the weight of the employees, equipment, and machinery that might be on the cover at any one time.
- Covers must be secured to prevent movement from wind, traffic, equipment, and employees.

Protection from Falling Objects

When work is performed on elevated surfaces, people or equipment, safeguards must be taken to minimize the threat of falling objects. Safeguards may include such devices as toe boards, netting, and canopies:

- Toe boards must:
 - Be 3 ½" high with no more than a ¼ " gap from the walking/working surface
 - Be solid or have openings no more than 1"
 - Be able to withstand at least 50 lbs. of force applied downward or outward along the length of the board
 - Be replaced by paneling or screening in areas where materials, equipment, or debris are piled higher than the top edge of the toe board.
- Guardrail Systems
 - To prevent falling objects, must have no openings or openings small enough to prevent falling objects from passing through.
- Canopies – used to catch falling objects before reaching surfaces below must:
 - Be strong enough to prevent collapse when struck by falling objects
 - Be able to prevent penetration by falling objects

Guardrail Systems

Standard guardrail systems are the preferred protective system when they are feasible. A standard guardrail system consists of a top rail, intermediate rail, and posts. Other than the railing on staircases, the top rail must have a vertical height of 42 inches nominal as measured from the working surface (floor, platform, ramp, etc.) to the top surface of the top rail.[The top rail on a staircase must be

Safety & Loss Prevention

Revision Date: 11/013/2018



positioned between 30 and 34 inches in height, as measured from the forward edge of the stair tread to the upper surface of the top rail.] Top rails must have a smooth surface. The intermediate rail (or mid-rail) must be approximately halfway between the top rail and the working surface. Railing must not constitute a projection hazard.

The railing system must be able to withstand a load of 200 pounds of pressure, applied in any direction at any point on the top rail. Standard guardrail systems must be equipped with a 2-inch high toe-board when persons will be located below.

Using Ladders

Ladders must be used properly in order to mitigate fall hazards when in use:

- Ladders must be ascended and descended while facing the rungs.
- Individuals must use at least one hand to grasp the ladder when progressing up and/or down the ladder.
- Tool belts or other equally effective means must be used to carry equipment up and/or down the ladder. Equipment that is awkward and/or heavy enough to cause a person to lose his/her balance must not be carried up or down a ladder.
- Only non-conductive ladders may be used around live electrical sources.
- Persons working on a ladder must not lean to the side in a manner that would place his/her center of gravity beyond the side rails of the ladder unless the person is also wearing the proper fall protection.
- Portable ladders:
 - Are to be inspected prior to each use to ensure rungs, vertical members, and traction feet (if applicable) are in good working order. Damaged ladders are to be removed from service and either repaired or replaced.
 - Must be placed so footing is firm, level, and stable. If windy or likely to be displaced during use, the top of the ladder must be anchored to the surface being accessed.
 - Must not be placed on top of other objects for additional height.
 - Must be set so the base of the ladder is out from the plane at the front of the access point in a rise to run ratio of 4:1 (1 one foot out for each 4 foot of ladder height to the access point).



Fall Protection Program



- Must extend 3' above the access point, if an extension ladder.
- Must not have more than one person on at a time.
- Must be used in front of a door only if measures are taken to ensure the door use is blocked while the ladder is present.

Training

Employees who perform work activities on elevated surfaces (>6-ft.) must be trained on proper fall protection techniques, equipment, and hazard identification. Fall protection training is available online at the LBCC e-learning web page under LBCC Sites/LBCC Safety Training. It is the responsibility of each employee and his/her manager to ensure training is scheduled, completed, and training records maintained to verify completion.

Training includes knowledge of this fall protection plan in addition to being able to:

- Recognize fall hazards and identify when fall protection is needed;
- Use basic fall protection systems;
- Prevent objects from falling;
- Inspect personal fall arrest systems; and
- Rescue yourself and others from falls.

Employee must complete training prior to engaging in activities on elevated surfaces at any LBCC facility. In addition to retaining records of fall protection training, employees must complete the training completion form/certificate online from the online training interface or contact the Public Safety office to report completion (name, employee ID, title of training, date of training completion, and quiz score) for training completed in a face-to-face session. If the employee's supervisor or the Safety & Loss Prevention Director determine that training received by an employee is inadequate to perform an assigned task safely, or the employee has demonstrated a lack of understanding of this Fall Protection Program, then the employee must be retrained.

Failure of an employee to follow the guidelines of this fall protection plan may result in disciplinary action.

Safety & Loss Prevention

Revision Date: 11/013/2018



Appendix A

Fall Protection Selection Chart

Fall Protection Program



Fall Protection Program



Work Area	Criteria	Guard Rails	Safety Nets	Personal Fall Arrest System	Safety Monitoring System	Positioning Device System	Covers	Fences	Barricades	Equipment Guards	Controlled Access Zone	Warning Lines (Optional)	Toeboards
Unprotected Sides and Edges	4-ft.+ above lower level.												
Leading Edges	4-ft.+ above lower level.												
Hoist Areas	4-ft.+ above lower level.												
Hoist Areas	4-ft.+ above lower level. Portion of guardrail removed and employee must lean over edge through opening.												
Holes	4-ft.+ above lower level.												
Holes	4-ft.+ above lower level. Employee may trip or step into. Objects may fall on employee from above.												
Formwork and Reinforcing Steel	4-ft.+ above lower level.												
Ramps, Runways, and Other Walkways	4-ft.+ above lower level.												
Excavations	4-ft.+ above lower level.												
Excavations	4-ft.+ above lower level. Employee at edge of well, pit, or shaft												
Dangerous Equipment	< 4-ft. above dangerous equipment.												
Dangerous Equipment	4-ft.+ above dangerous equipment.												

Safety & Loss Prevention

Revision Date: 11/013/2018

