



APPROVAL

This Fall Protection Program is hereby approved:

Signature _____ **Date** _____

Signature _____ **Date** _____

Signature _____ **Date** _____

Fall Protection Program

1.0 PURPOSE

To establish uniform requirements to ensure that fall protection training, operation, and safety provisions are comply and understood by all affected employees and to ensure equipment relating to personal fall protection is provided, used, and maintained in a reliable condition.

2.0 OVERVIEW

Fall protection is required when there is the potential of falling 4 feet or more to a lower level or when working above hazardous equipment. Hazardous equipment is equipment that a falling person could contact in an event of a fall at an elevated height.

All CSU East Bay employees, contractors, and sub-contractors must comply with the Fall Protection Program at all times while on the University's property.

3.0 TRAINING

- 3.1 EHS or designee will train affected employees and supervisors in the fall protection procedures.
- 3.2 Supervisors and managers will be responsible for ensuring that affected employees received proper training prior to beginning work that exposed them to potential fall hazards. Under no circumstances will an employee be permitted to perform work requiring fall protection devices without completing the University's fall protection training program, regardless of claimed previous experience.
- 3.3 The training program includes classroom instructions and operational training, which consists of pre-operational inspections and usage of the fall arrest and fall restraint equipment.
- 3.4 Topics covered will depend on the employee's job responsibilities.
 - Safe use of personal fall arrest and/or restraint system, which include limitations of the equipment, free fall distance, methods of use, proper anchoring and hook-up, and how to adorn the equipment
 - Inspection and storage of the fall arrest/restraint system
 - Roof fall protection procedures
 - Ladder safety
 - Aerial lift safety
 - Fall prevention/safety procedures when working at elevated height
 - Rescue procedures
 - The University's Fall Protection Program and procedures
- 3.5 Employees will be retrained when there are changes in the workplace rendering the previous training obsolete, changes in the fall protection procedures or equipment, or reasons to believe that the employees need to be retrained (i.e. after an incident, inadequacies in employee's knowledge or use of the fall protection equipment).
- 3.6 Training will be documented.

4.0 RESPONSIBILITIES

4.1 Environmental Health and Safety (EHS)

- 4.1.1 Establish, maintain, and update the Program.
- 4.1.2 Coordinate fall protection training.
- 4.1.3 Review and approve the Fall Protection Work Plan.
- 4.1.4 Assess potential fall hazards and control measures.
- 4.1.5 Approve personal fall arrest/restraint equipment.
- 4.1.6 Inspect or designate other personnel to inspect personal fall arrest/restraint equipment twice annually and document the inspection using the established inspection checklist in Appendix C.
- 4.1.7 Maintain training documentations and inspection records for personal fall arrest/restraint equipment.

4.2 Managers

- 4.2.1 Ensure affected employees received proper training prior to beginning work that exposed them to potential fall hazards (aerial lift training, ladder safety, roof safety, etc).
- 4.2.2 Ensure employees in their department follow all rules and procedures pertaining to fall protection and this Program.
- 4.2.3 Complete and submit Fall Protection Work Plan to EHS for approval before allowing employees to work within 6ft from an unprotected roof's edge.
- 4.2.4 Assess and work with EHS to assess for potential fall hazards and control measures.

4.3 Supervisors

- 4.3.1 Support manager in their department in carrying out the responsibilities described in Section 4.2.

4.4 Employees

- 4.4.1 Understand and follow the procedures and practices developed under this Program.
- 4.4.2 Attend fall protection training.
- 4.4.3 Assess elevated work locations for fall hazards and fall prevention elements prior to beginning work.
- 4.4.4 Notify supervisor/manager prior to beginning work on roof where fall protection is required.
- 4.4.5 Inspect fall protection equipment prior to usage.
- 4.4.6 Inspect ladder and aerial lift prior to usage.
- 4.4.7 Report unsafe conditions to an immediate supervisor and/or EHS.
- 4.4.8 Contact their supervisor if they are unclear on a procedure.

5.0 PERSONAL FALL PROTECTION EQUIPMENT, SYSTEM, AND SAFE PRACTICES

- 5.1 All full body harnesses, rope grabs, connectors (snap hooks, D-rings, carabiner, etc), lifelines, and lanyards shall meet ANSI and Cal OSHA standards for design and safety.
- 5.2 Body belt cannot be used in lieu of a body harness.
- 5.3 Horizontal lifelines shall only be used under the design, installation, and supervision of a qualified person. Cal OSHA defines a qualified person as someone “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.”

- 5.4 Anchorage points used for the attachment of personal fall arrest equipment must have a minimum load capacity of 5,000 lbs per person.
- 5.5 Anchorage points used for the attachment of personal fall restraint equipment shall be capable of supporting 4 times the intended load (4 times employee’s weight plus equipment).
- 5.6 Anchorage points used as part of a fall arrest and/or fall restrain system shall be certified or approved by a qualified person.
- 5.7 When using fall arrest system:
 - 5.7.1 The area below and to the sides of the employee must be free from obstructions that could cause injury during a fall.
 - 5.7.2 The system must be rigged so that an employee cannot free fall for more than 6 feet or contact a lower level.
 - 5.7.3 The lanyard shall be attached to the full body harness at the upper back D-ring (near shoulder’s level).
 - 5.7.4 To reduce the fall arresting force on the body, a shock-absorbing or self-retracting lanyard shall be used.
 - 5.7.5 Always calculate the total distance of a potential fall to ensure sufficient clearance. Total distance=lanyard length + lanyard deceleration or extension distance (or 3.5 ft) + employee’s height + 3ft safety factor.
 - 5.7.6 When possible, do not move more than 30 degrees from the side of the anchorage point to avoid swing fall hazards.
- 5.8 When using fall restraint system:
 - 5.8.1 The system shall be rigged to allow the employee movement only as far as to the sides of the working area or such that there is no possibility of a free fall.
 - 5.8.2 Do not attach a snap hook or carabiner directly to a horizontal lifeline.
 - 5.8.3 No more than one employee may be attached to a single lifeline.
- 5.9 When using a rope grab, the rope grab must be compatible and properly attached to the lifeline.
- 5.10 When using a rope grab in junction with a vertical lifeline (as in ladder climbing application), keep the lanyard or distance between the rope grab and harness as short as possible, and the rope grab as high as possible on the lifeline.
- 5.11 Do not tie knots in lanyards or lifelines, combine them to increase length, or tie them directly to I-beam (Exception: lanyards that are designed to be tied directly to I-beam or loop back). This can greatly reduce their strength.
- 5.12 Do not allow lanyards or lifelines to contact hot, sharp, or rough surfaces.
- 5.13 Never allow the lanyards or lifelines to pass under or entwine arms, legs or any other obstacle.
- 5.14 Never alter or misuse the equipment. Understand and follow the manufacturer’s instructions for each component of the system and the equipment’s limitations.

6.0 PERSONAL FALL PROTECTION EQUIPMENT INSPECTION

- 6.1 Fall protection system components shall be stored away from corrosive materials, oils and solvents, moisture, heat, or any other substance that may cause damage.
- 6.2 Personal fall protection equipment (fall restrain/fall arrest equipment-lifelines, lanyards, carabiners, rope grabs, harnesses) shall be inspected at least twice annually by a competent

person and by the user prior to usage. A competent person is someone who is “knowledgeable of the manufacturer’s recommendations, instructions, and manufactured components and who is capable of identifying existing and predictable hazards in the proper selection, use and maintenance of fall protection.”

- 6.3 Anchorage points shall be inspected by the user prior to usage.
- 6.4 Equipment shall be examined for signs of defect and physical damage. All hardware shall be examined for nicks, cracks, corrosion or distortion.
- 6.5 Any equipment showing sign of defect, damage, deterioration or alteration shall not be used and must be discarded immediately. **Only the equipment manufacturer or supplier can repair or recertify the equipment.**

7.0 RESCUE PROCEDURES

- 7.1 A rescue plan must be in placed when using a fall arrest system. The plan must be specific to the work location and job being performed.
- 7.2 If outside assistance is required (i.e. local fire department), verification and/or prior arrangement must be made to ensure rescuing capability and availability of equipment.
- 7.3 All necessary rescue equipment shall be readily available and inspected for proper operations before starting the work to ensure prompt rescue.
- 7.4 In the event of a fall, the employee must be rescued immediately to prevent suspension trauma.
- 7.5 For tasks where an employee must approach within 6 ft from an unprotected roof’s edge, another employee must be present at all times to notify the proper individuals and activate the rescue plan in the event of a fall.
- 7.6 Another employee is not required to be present at all times for aerial lift operation (articulating boom lift or cherry picker), if the task performed is not in an isolated area. However, in the event of a fall, the employee might not be able to summon for assistance. Another individual must be available to monitor the employee’s status and summon/provide prompt rescue if a fall occurs.
- 7.7 In the event of a fall and the individual is not able to perform a self-rescue:
 - 1.) If the fall is from an aerial lift, if possible and if it’s SAFE to do so lower the individual to ground level by SLOWLY and CAUTIOUSLY lowering the aerial lift.
 - 2.) Elevate another employee to rescue the falling individual.
 - 3.) If outside assistant (i.e. local fire department) is needed, contact University Police Department (UPD) immediately. Dial 911 from any campus phone or (510) 885-3791 if using a cell phone.

8.0 FALL PROTECTION PROCEDURES FOR AERIAL LIFT

- 8.1 The lift’s work platform or basket shall meet all applicable Cal OSHA specifications for design and safety. All articulating boom lift must contain an engineered anchor points with a minimum load capacity of 5,000 lbs per person.
- 8.2 Personal fall arrest equipment shall be used when operating the articulating boom lift.
- 8.3 Personal fall arrest/restraint equipment is not required for the scissor lift and vertical bucket lift. However, safe operating rules must be followed at all times to prevent fall and the lift from tipping over during operation.
- 8.4 Comply with the following procedures at all time:
 - 1. Before operating lift, complete a pre-operation check, which includes the following:

- If there are more than one employees working on the project, ensure that all employees involved had received fall protection and/or aerial lift training.
 - Inspect personal fall arrest equipment and aerial lift prior to using.
 - Ensure fall arrest equipment is properly donned and lanyard is connected to designated anchor point on lift.
 - Gate/chain on lift's platform is closed or secured.
 - Ensure all people in the immediate area are clear.
 - Moving or motorized equipment which could overrun or injure the elevated employee must be shut down or locked out.
2. Before elevating the lift's basket, make sure the lift is on a level surface. Do not raise the basket into the air when on a grade or slope.
 3. Raise and lower the lift smoothly and with caution.
 4. While in motion, do not place any body parts outside the lift's basket. Stand with both feet firmly on the basket's floor. Do not get out of the lift's basket while still elevated.
 5. Never sit, climb or stand on the basket's guardrails or use planks, ladders or other devices to gain elevation.
 6. Make a visual check of all surroundings above and below the lift. Drive/Raise the lift only in the direction of clear, unobstructed view. Be alert to keep clear of overhead hazards such as light fixtures, electrical wires, and telephone line.
 7. Constantly monitor activity of other people and equipment, maintain a safe operating distance.
 8. Maintain a safe distance from obstacles, debris, drop-offs, holes, and depressions.
 9. When travelling, lower the lift's basket to the travelling position.

9.0 PORTABLE LADDERS

- 9.1 All ladders must meet Cal OSHA specifications for design and safety.
- 9.2 Any ladder that shows sign of significant defect/damage or where the ladder safety is compromised shall not be used and shall be immediately tagged out. Ladders that are damaged beyond repair shall be discarded.
- 9.3 Before using the ladder, perform a **Pre-work Check** by inspecting the following:
 1. All parts and fittings on the ladder are secured.
 2. Non-slip surfaces are in place on the ladder rungs.
 3. Gripping safety feet are in place and secured on the ladder.
 4. The footing of the ladder is secured on a firm, level, and non-skid surface and the top of the ladder is placed against a solid, stationary object.
 5. If the ladder has a step to lock the wheels from moving, ensure locking mechanism is functional and set.
 6. The ladder rungs (and employee's hands and shoes) are not greasy, muddy or otherwise slippery.
 7. Door openings near the ladder are fastened open, locked or guarded to prevent the door from opening into the ladder.
 8. Work area is sectioned off, if working near passageway or driveway.
- 9.4 Use 3-point stance and face the ladder when ascending/descending (Exception: where ladder is designed to descend face forward).
- 9.5 Do not over-reach or reposition the ladder while occupied.
- 9.6 Use the 4:1 rule when setting up straight and extension ladders; for every 4 ft of ladder length, the base of the ladder should be 1 ft away from the base of the wall or supporting structure.

- 9.7 When using ladder for roof access, the top of the ladder must extend at least 3 ft beyond the point of support.

10.0 FALL PROTECTION PROCEDURES FOR ROOF

- 10.1 All works shall be restricted to trained and authorized personnel.
- 10.2 If works must be performed during nighttime or when visibility is poor (i.e. fog), sufficient lighting shall be provided.
- 10.3 Prior to working on roof where the employees will be approaching within 6 feet from an unprotected edge, the immediate supervisor or manager must complete and submit a Fall Protection Work Plan to EHS (see Appendix B). The Plan must be reviewed and approved by EHS prior to starting the project and will include a rescue plan.
- 10.4 For tasks where an employee must approach within 6 ft from an unprotected roof's edge, another employee must be present at all times to notify the proper individuals in the event of a fall.
- 10.5 Due to the potential for a swing impact injury against the side of the building and the difficulty of rescue, fall restraint rather than fall arrest shall be used when working within 6 ft from an unprotected roof's edge.
- 10.6 For work along the roof's perimeter, evaluate whether the tasks can be done safely using an aerial lift. If the tasks cannot be performed safely using an aerial lift, fall restraint can be used.
- 10.7 Where personal fall protection equipment is required, a safety monitor shall not be used in lieu of a fall arrest or fall restraint system. A safety monitor can be used in conjunction with a fall restraint system. The safety monitor shall:
1. Be knowledgeable in setting up the fall restraint system and competent in the fall hazards.
 2. Warn employee when it appears that the employee is unaware of a hazard or acting in an unsafe manner.
 3. Be on the same walking/working surface and within visual sighting distance as the monitored employee.
 4. Be close enough to orally communicate with the monitored employee.
 5. Not have other responsibilities which could take their attention from the monitoring function.
- 10.8 Due to the potential fall hazard when working along the roof's edge/perimeter, an assessment shall be made as part of the Fall Protection Work Plan to determine whether a safety monitor is needed.
- 10.9 Overhead protection shall be provided for employees and those who may be in, or pass through, the area below the worksite via toe boards, barricade and warning signs, etc.
- 10.10 Guardrails shall be installed at locations where there is routine need for employees to be within 6 feet from an unprotected roof's edge (routine need means more than 4 times a year). The guardrails shall extend at least 6 ft beyond the areas where the employees are working.
- 10.11 Fall protection is required when approaching within 6ft of a skylight. Fall protection can be provided by one of the following methods: skylight screens, guardrails, covers, or personal fall protection equipment meeting Cal OSHA standards. Exceptions: the manufacturer or a structural engineer has certified that the skylights will support anticipated loads or when the work is of short duration and limited exposure such as measuring and roof inspection, provided that adequate risk control is recognized and maintained. An employee should not stand on a skylight.

- 10.12 Fall protection is required when working on roof with slope greater than 7:12.
- 10.13 When using equipment that is pulled by the operator who walks backwards or motorized equipment on which the operator rides, fall protection is required when approaching within 10 ft from the roof's edge. Equipment shall not be pulled backward on roof with slope greater than 4:12.

11.0 FLOOR AND ROOF OPENINGS

- 11.1 The following safeguards shall be in place whenever possible to avoid situations where personal fall protection equipment is necessary:
 - 1. Work a minimum of 6 feet from the roof's edge.
 - 2. Never leave unprotected floor/roof openings unattended.
 - 3. Cover any floor or roof openings greater than 12 inches in the least horizontal dimension with a protective cover.
- 11.2 Protective covers:
 - 11.2.1 Cover shall withstand a weight of 400 pounds or twice the potential weight of the employees, equipment, or material imposed upon the cover.
 - 11.2.2 Protective covers shall not project more than 1 inch above the floor level and all edges are chamfered to an angle with the horizontal of not more than 30 degrees.
 - 11.2.3 All hinges, handles, bolts, or other parts are set flush with the floor or covered surface.
 - 11.2.4 Protective covers shall be marked in 1 inch letters or larger in height with the following words: **Caution: Floor Opening - Do not remove cover**
- 11.3 Floor and roof openings can alternatively be protected by a standard guardrail system with a toe board.
- 11.4 In absence of a standard guardrail, hatchway cover should be kept closed except when ascending/descending.
- 11.5 Guardrail system shall meet Cal OSHA specifications for design and safety.

12.0 CONTRACTORS

- 12.1 The project manager or party directing the work will ensure the contractors comply with applicable Cal OSHA standards and regulations pertaining to fall protection. Contractors failing to adhere to the provisions of Cal OSHA standards will be asked to terminate their work until their program is brought into compliance.
- 12.2 Prior to starting on work requiring fall protection, the contractor shall submit a copy of their Fall Protection Plan to the project manager. The project manager will review the plan, and consult with EHS if needed, for required provisions.
- 12.3 An effective rescue plan must be developed and implemented specific to the work location and job being performed prior to the start of work. All necessary equipment shall be readily available and in operable conditions should a fall occur.
- 12.4 Where personal fall protection equipment is utilized, another employee should be present at all times to activate the rescue plan or summon for assistance in the event of a fall.
- 12.5 The project manager will assess and inform the contractor of all known hazards relating to the project, including potential fall hazards.
- 12.6 The contractor shall assess hazards and control measures, provide training and equipment for their employees working at height.

13.0 RECORDKEEPING

- 13.1 Training records for training conducted by the department will be maintained by the department. Copies of the records will be forwarded to EHS. Training records will be maintained for 3 years.
- 13.2 Inspection records for personal fall arrest/restraint equipment will be maintained by EHS for one year.
- 13.3 Rating certifications for building anchorage points will be maintained by Planning, Design and Construction (PDC) for the life of the building. Copies of the certifications will be forwarded to EHS.

Appendix A

Personal Fall Protection Equipment Inspection & Usage Guidelines

1. Full Body Harnesses

- 310-400 lb capacity.
- Inspect webbing and stitches for sign of defect and physical damage (cuts, excess wear, tears, knots, brittle spots, holes, melted spots, mold, undue stretching, pulled rivets, and loose, broken, or cut threads).
- Inspect rivets, grommets, D-ring, and buckles for damage; make sure each connection completely closes and locks.
- Look for the “Fall Indicator.” Harness subjects to a fall shall be discarded.

2. Lanyards and Lifelines

- 310-400 lb capacity.
- Design for use by one person at a time.
- Inspect double locking snap hook, impact indicator fold and threads for physical damage. Inspect entire length of lanyard/lifeline.
- Look for the “Load Impact Indicator.” Discard the lanyard if the shock absorber or rip stitch has extended/unfolded or has arrested a fall.
- For retractable lanyard, test lanyard retraction and breaking mechanism.
 - Pull out several feet of lanyard and allow it to retract back into the unit; it should retract.
 - Grasp above the impact indicator and give a sharp pull; it should stop abruptly.

3. How to Wear a Full Body Harness:

1. Hold the harness by the back D-ring and shake to allow all the straps to fall in place.
2. Unbuckle the leg straps, if necessary.
3. Slip on the shoulder straps. The D-ring should be located in the middle of the back between the shoulder blades.
4. Connect legs straps.
5. Tighten all buckles so the harness fits snugly, but allows full range of motion.
6. The chest strap must be in the mid-chest range 6 to 8 inches below the trachea but not below the sternum.
7. Check all buckles to ensure they’re properly connected.
8. Check that all straps are snug and free of twists.
9. Hang the harness by the back D-ring when not in use.

Appendix B Roof Fall Protection Work Plan

FALL PROTECTION WORK PLAN			
Job Location:			
Describe Job Task:			
1.	Identify all potential fall hazards in the work area:		
	<input type="checkbox"/> Open-sided walking/working surfaces (roofs, open-sided floors)	<input type="checkbox"/> Floor openings	<input type="checkbox"/> Hazardous process equipment
	<input type="checkbox"/> Open-sided ramps and runways	<input type="checkbox"/> Skylights	<input type="checkbox"/> Swing fall
	<input type="checkbox"/> Elevated work platforms	<input type="checkbox"/> Wall openings	<input type="checkbox"/> Fall clearance
	<input type="checkbox"/> Ladders	<input type="checkbox"/> Trenches	<input type="checkbox"/> Other :
	Describe the hazard(s):		
2.	Method of fall protection to be used:		
	<input type="checkbox"/> Fall restraint	<input type="checkbox"/> Guardrails	<input type="checkbox"/> Warning line
	<input type="checkbox"/> Fall arrest	<input type="checkbox"/> Horizontal life lines	<input type="checkbox"/> Covers (for holes & openings)
		<input type="checkbox"/> Safety monitor	<input type="checkbox"/> Other:
	Describe:		
3.	Describe procedures for assembly, maintenance, inspection, and disassembly of the fall protection system to be used:		
4.	Describe procedures for handling, storage, and securing of tools and materials:		
5.	Describe methods of overhead protection for employees & those who may be in, or pass through, the area below the work site (i.e. barricading, hard hats required, toe boards, warning signs):		

FALL PROTECTION WORK PLAN

6. Describe methods for promptly rescuing employees in an event of a fall and removal of injured employees:

7. Identify method used to determine the adequacy of attachment/anchorage points:

- | | | |
|---|--|--|
| <input type="checkbox"/> Manufacturer's data | <input type="checkbox"/> Good faith assessment | <input type="checkbox"/> Existing engineering/design documents |
| <input type="checkbox"/> Evaluation by qualified engineer | <input type="checkbox"/> Other (describe): | |

8. List employees who will be performing work under this plan and the date they received fall protection training.

<u>Name</u>	<u>Training Date</u>

Name/title of person provided training:

9. Identify the safety monitor(s) (if used – or N/A):

10. Justify selecting controlled access zone and/or safety monitor (if used – or N/A):

Approvals

Fall Protection Plan Completed By:

Approved By:

Project Manager's Name:

Signature:

Date

Roof Fall Protection Methods

Select the safest, most practical method based on the proposed task and the criteria of use for each method.

1. **Warning lines** and headers offer protection only on monolithic roofs with a 4:12 slope or less. They include ropes or wires with minimum 500 pound tensile strength that are secured to prevent slack uptake between sections. Locate them 6 feet from edge (or 10 ft when walking backward to pull equipment) and flag them visibly every 6 feet. Also, support them to prevent displacement and ensure that they can withstand a vertical or horizontal force of 13 pounds per linear feet.
2. **Guard rails** offer protection on monolithic roofs and stairwells. They include 4 inch high toeboards, 2x4 upright posts spaced 8 feet apart or closer, a 2x4 top rail 42 to 45 inches high, and a 1x6 mid-rail. Use select lumber or equivalent material for rails. The top rail should withstand a force of 13 pounds per linear foot applied vertically or horizontally.
3. **Parapets** are protective walls along the edge. They offer protection on monolithic roofs with slope greater than 4:12 and multiple unit roofs of any slope. Parapet's height must meet height requirement per Cal OSHA standards (42 inches \pm 1).
4. **Personal fall arrest** systems with safety lines need approval from a qualified or competent person. They provide protection by arresting the fall. They offer protection on monolithic roofs with slopes greater than 4:12 and multiple unit roofs with slopes greater than 5:12. Anchor them to the roof. Anchors and lifeline shall support a 5,000 pound dead weight.
5. **Personal fall restraint** systems with safety lines need approval from a qualified or competent person. They provide protection by limiting the approach distance to the roof's edge. Anchors shall support a 1,000 pound dead weight or 4 times the intended load.
6. **Covers** for holes shall withstand a weight of 400 pounds or twice the potential weight of the employees, equipment, or material imposed upon the cover. Include a sign on the cover "Opening – Do Not Remove". Fasten securely.
7. **Catch platforms** include guardrails. Locate them just below eaves near the work area. They should extend 2 feet horizontally beyond the eave.
8. **Safety nets** need approval before use and should extend 8 feet horizontally and not lower than 10 feet below the working surface. They offer protection when personal fall protection is required but impractical. Determine clearances by performing an impact loading test.
9. **Scaffold platforms** offer protection on monolithic roofs or multiple unit roofs with slope of greater than 5:12. Use a fully planked part of a scaffold, locate them near eave level. Do not use nailed bracket, loose tile, loose blocks, stilts, or other unstable materials as platforms or supports.



Appendix C

Personal Fall Protection Equipment Inspection

Full Body Harness

1. Webbing

A. There are no frayed edges, broken fibers, pulled stitches, cuts, burns, or chemical damage. **YES NO**

2. D-Rings

A. The D-Ring pivot freely. **YES NO**

B. There are no distortions, cracks, breaks, rough or sharp edges. **YES NO**

3. Buckles

A. There are no distortions; the buckles are not distorted when attached. **YES NO**

B. The bars are straight. **YES NO**

Lanyard & Lifeline

1. Physical conditions:

A. There are no cuts, burns, corrosion, kinks, frays, discolorations, or worn areas. **YES NO**

B. The diameter of the lifeline is uniform. **YES NO**

C. There are no loose sewing, broken, or damaged stitches. **YES NO**

2. Locking snap & anchorage attachment

A. There are no loose fasteners, bent, cracked, distorted, nicked, or other damages. **YES NO**

B. The keeper seats into the nose without binding. **YES NO**

C. Sufficient force must be exerted to firmly close/open the keeper. **YES NO**

D. The keeper locks prevent the keeper from opening when the keeper closes. **YES NO**

3. Retraction:

A. The lanyard pulls out freely/smoothly. **YES NO**

B. The lanyard retracts all the way back into the unit when released. **YES NO**

4. Braking Mechanism:

A. There is no slippage of the lifeline while the brakes are engaged. **YES NO**

B. Once tension is released, the brakes disengage and the unit retracts. **YES NO**

5. The unit hasn't been subject to fall arresting forces. The impact indicator has not been activated or the shock absorber has not extended/unfolded. **YES NO**

6. Equipment is not altered in any ways. **YES NO**

Carabiners

- | | | |
|---|------------|-----------|
| 1. There are no bent, cracked, distorted components or signs of damage. | YES | NO |
| 2. The carabiner operates freely and the keeper locks automatically and completely when released. | YES | NO |
| 3. The carabiner gate opening action cannot be duplicated by contact made with another object. | YES | NO |
| 4. The unit is not altered in any ways. | YES | NO |

Rope Grabs

- | | | |
|--|------------|-----------|
| 1. The locking cam moves freely and the teeth are not rounded or worn. | YES | NO |
| 2. The rope grab doesn't open unless the release button is depressed. | YES | NO |
| 3. There are no signs of damage and all features are present and operate properly. | YES | NO |

Storage

The equipment is cleaned and properly stored (store in clean, dry area and away from source of damage such as heat, sharp objects, electrical hazard, chemicals, etc.).	YES	NO
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Any equipment listed above that fails the inspection must be tagged and removed from service immediately. All servicing must be done by an approved service technician.

COMMENTS

Inspector's Name (print): _____

Date: _____

Inspector's Signature: _____

APPENDIX D

Portable Ladder Safety Guidelines

Storage and Maintenance

1. Store wooden ladders in well ventilated areas and away from excessive heat or moisture.
2. When storing ladders horizontally, support ladders to avoid sagging and permanent set.
3. Clean ladders after exposure to greases, oil, or other slippery substances.
4. Do not paint ladders so that it covers cracks or defects.

Inspection

1. Inspect ladders before using.
2. Do not use ladders with broken, weak, or missing components.
3. Do not use ladders with corrosion inside of hollow rungs.
4. Do not use ladders with the rungs supported solely with nails or other similar fixing devices.
5. When a ladder is broken or has a defect, do not repair it. Discard it or tag/mark it as “Dangerous, Do Not Use”.

Ladder Purchase

1. Purchase only ladders that:
 - Are designed, constructed and maintained according to OSHA guidelines and standards.
 - Have rungs strung between two rails rather than across a single rail.

Ladder Placement

1. Place each side rail on a level and firm footing.
2. Ensure that the ladder is rigid, stable and secure.
3. Keep area around the top and bottom of ladder clear.
4. Do not support the side rails of the ladder with boxes, loose bricks, or other unstable bases.
5. Ensure that door openings near the ladder are fastened open, locked or guarded to prevent the door from opening into the ladder.

Ladder Usage

1. Only one person at a time may use or work from a single ladder.
2. Always use both hands and face the ladder when ascending or descending.
3. Use only “trestle ladders” to support planks upon which a person will work.
4. Ensure that hands and shoes are not greasy, muddy or otherwise slippery.
5. Section off work area when working near passageway or driveway.

When using a ladder Do Not:

1. Place planks on top of a stepladder.
2. Use metal or wire reinforced ladders near electrical conductors or equipment.
3. Join ladders together to form a longer ladder.
4. Use the ladder as a brace, strut, beam, skid, or any other unintended purposes.
5. Stand or work on the top cap or the step below the top cap of a stepladder.
6. Use ladder to gain access to a roof unless the top of the ladder extends at least 3 ft above the point of support.

Extension Ladders

When placing extension ladder:

1. The horizontal distance from the foot of the ladder to the structure is 1/4 of the ladder's length.
2. The ladder extends 3 feet above the rung on which the person is working.
3. An intermediate landing place is provided for each rise of 20 feet.
4. The ladder rises at least 3 feet above any landing place.
5. The ladder passes through floor openings that are as small as possible.

When securing extension ladder:

1. Fix a board to evenly distribute the load, when resting it against a window frame.
2. Fix them at the top and foot so that they cannot move.
3. When securing a ladder at both the top and bottom is not possible, fix it at the base.
4. If this is not possible, a person should secure it manually against slipping.

When using extension ladders Do Not:

1. Stand or work on the top 3 rungs.
2. Extend it to exceed 44 feet.
3. Use it unless it has a 3 foot overlap with working length of up to 33 feet.
4. Use it unless it has a 4 foot overlap with a working length of 33-44 feet.

Program Revision/Review Log

Revised/Reviewed Date	Revised/Reviewed By	Comments	Approved by
3/7/11	Lyanh Luu	New program	
5/10/12	Lyanh Luu	Revised equipment inspection checklist	
4/12/15	Lyanh Luu	Program reviewed	
6/10/17	Lyanh Luu	Program reviewed	
5/15/18	Lyanh Luu	Reviewed and updated	