OREGON MILITARY DEPARTMENT	NUMBER: AGP-99.200.12
ADJUTANT GENERAL PERSONNEL	EFFECTIVE: 10.2.2025
SUBJECT: Fall Protection	

APPLICABILITY:

This policy and the procedures contained herein are applicable to state employees.

AUTHORITY/REFERENCE: OAR 437-003-1501, OMD Policy 99.200.11 Aerial Lifts, OMD Policy 99.200.10 Ladders, OSHA 29 CFR 1926

PURPOSE:

The purpose of this policy is to protect employees from occupational injuries by implementing and enforcing safe work practices and appointing a competent person(s) to manage fall protection.

DEFINITIONS:

Anchorage: A secure point of attachment for lifelines, lanyards, or deceleration devices.

Authorized Person: Someone approved or assigned by the employer to perform a specific duty or to be at a specific location at the jobsite.

Body belt: Strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline, or deceleration device.

Body harness: Straps that may be secured about the person in a manner that distributes the fall-arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with a means for attaching the harness to other components of a personal fall arrest system.

Certified Person: Someone who has passed exams from an accredited organization related to the work that they will perform.

Connector: A device that is used to couple (connect) parts of a personal fall arrest system or positioning device system together.

Competent Person: Designated by the employer, one who can identify existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them,

including a stop work order. A competent person is one who has: experience in a specific area of expertise; has demonstrated competence; and has the authority to make safety-related changes.

Controlled Access Zone: 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.

Deceleration device: Any mechanism, such as a rope, grab, ripstitch lanyard, specially woven lanyard, tearing lanyard, deforming lanyard, or automatic self-retracting lifeline/lanyard, which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limits the energy imposed on an employee during fall arrest.

Deceleration distance: The additional vertical distance a falling person travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which a deceleration device begins to operate.

Guardrail system: A barrier erected to prevent employees from falling to lower levels.

Hole: A void or gap two (2) inches (5.1 centimeters) or more in the least dimension in a floor, roof, or other walking/working surface.

Lanyard: A flexible line of rope, wire rope, or strap that generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.

Leading edge: Leading edge means the unprotected side and edge of a floor, roof, or formwork for a floor or other walking/working surface (such as deck) which changes location as additional floor, roof, decking or formwork sections are placed, formed or constructed.

Lifeline: 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), that serves as a means for connecting other components of a personal fall arrest system to an anchorage.

Low slope roof: A roof having a slope of less than or equal to 4 inches of vertical rise for every 12 inches horizontal length.

Opening: A gap or void 30 inches (76 centimeters) or higher and 18 inches (46 centimeters) or wider, in a wall or partition through which employees can fall to a lower level.

Personal fall arrest system: A system including but not limited to an anchorage, connectors, and a body harness used to arrest an employee in a fall from a working level.

Positioning device system: 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 backwards.

Qualified Person: Has the knowledge to design and supervise the installation of the fall protection systems used on that jobsite (The difference between a Qualified Person and a Competent Person is that a Qualified Person might have more technical expertise but would not necessarily have expertise in hazard recognition or the authority to correct identified hazards).

Rope grab: A deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest a fall.

Safety monitoring system: A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.

Self-retracting lifeline/lanyard: A deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under minimal tension during normal employee movement and which, after onset of a fall, automatically locks the drum and arrests the fall.

Snaphook: A connector consisting of a hook-shaped component with a normally closed keeper, or a similar arrangement, which may be opened to permit the hook to receive an object and, when released automatically, closes to retain the object.

Steep roof: A roof having a slope greater than 4 inches of vertical rise for every 12 inches horizontal length.

Toeboard: A low protective barrier that prevents material and equipment from falling to lower levels and which protects personnel from falling.

Unprotected sides and edges: 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 meter) high.

Walking/working surface: 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. Does not include ladders, vehicles, or trailers on which employees must be located to perform their work duties.

Warning line system: A 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 belt, or safety net systems to protect employees in the area.

A Certified, Authorized or Qualified Person does not equate to a designation as a Competent Person.

GUIDANCE:

CONTROLLED ACCESS ZONES:
Only authorized employees are permitted to enter controlled access zones and areas from which guardrails have been removed. All other workers are prohibited from entering controlled access zones.

Controlled access zones shall be defined by control lines consisting of ropes, wires, tapes, or equivalent material, with supporting stanchions, and shall be:

- Flagged with a high-visibility material at six (6) foot intervals;
- Rigged and supported so that the line is between 30 and 50 inches (including sag) from the walking/working surface;
- Strong enough to sustain stress of at least 200 pounds;
- Extended along the entire length of an unprotected or leading edge;
- Parallel to the unprotected or leading edge;
- Connected on each side to a guardrail system or wall;
- Erected between six (6) feet and 25 feet from an unprotected edge, except in the following cases:

    - When working with precast concrete forms: between six (6) feet and 60 feet from the leading edge, or half the length of the form being erected, whichever is less; or
    - When performing overhand bricking or related work: between ten (10) feet and 15 feet from the working edge.

EXCAVATIONS:

Fall protection will be provided to employees working at the edge of an excavation that is six (6) feet or deeper. Employees in these areas are required to use the fall protection systems as designated in this policy.

- Excavations that are six (6) feet or deeper shall be protected by guardrail systems, fences, barricades, or covers;
- Walkways that allow employees to cross over an excavation that is six (6) feet or deeper shall be equipped with guardrails.

FALL PROTECTION SYSTEMS:

Covers:

- All covers shall be secured to prevent accidental displacement;
- Covers shall be color-coded or bear the markings “HOLE” or “COVER”;
- Covers located in roadways shall be able to support twice the axle load of the largest vehicle that might cross them;
- Covers shall be able to support twice the weight of employees, equipment, and materials that might cross them.

Guardrail Systems:

Guardrail systems shall be erected at unprotected edges, ramps, runways, or holes where it is determined that erecting such systems will not cause an increased hazard to employees. The following specifications will be followed in the erection of guardrail systems. Top rails shall be:

- At least ¼ inch in diameter (steel or plastic banding is unacceptable);

- Flagged every six (6) feet or less with a high visibility material if wire rope is used;
- Inspected by Competent Person as frequently as necessary to ensure strength and stability;
- Forty-two (42) inches (plus or minus three (3) inches) above the walking/working level;
- Adjusted to accommodate the height of stilts, if they are in use.

Midrails, screens, mesh, intermediate vertical members, and solid panels shall be erected in accordance with the OSHA Fall Protection Standard.

Gates or removable guardrail sections shall be placed across openings of hoisting areas or holes when they are not in use to prevent access.

Personal Fall Arrest Systems:

Personal fall arrest systems shall be issued to and used by employees, as determined by a Competent Person, and may consist of anchorage, connectors, body harness, deceleration device, lifeline, or suitable combinations. Personal fall arrest systems shall:

- Limit the maximum arresting force to 1800 pounds;
- Be rigged so an employee cannot free fall more than six (6) feet or contact any lower level;
- Bring an employee to a complete stop and limit the maximum deceleration distance traveled to three and a half (3 ½) feet;
- Be strong enough to withstand twice the potential impact energy of an employee free falling six (6) feet (or the free fall distance permitted by the system, whichever is less);
- Be inspected prior to each use for damage and deterioration; and
- Be removed from service if any damaged components are detected.

All components of a fall arrest system shall meet the specifications of the OSHA Fall Protection Standard and shall be used in accordance with the manufacturer's instructions.

- The use of non-locking snaphooks is prohibited.
- Dee-rings and locking snaphooks shall:
    - Have a minimum tensile strength of 5000 pounds; and
    - Be proof-tested to a minimum tensile load of 3600 pounds without cracking, breaking, or suffering permanent deformation.
- Lifelines shall be:
    - Designed, installed, and used under the supervision of a Competent Person;
    - Protected against cuts and abrasions; and
    - Equipped with horizontal lifeline connection devices capable of locking in both directions on the lifeline when used on suspended scaffolds or similar work platforms that have horizontal lifelines that may become vertical lifelines.

- Self-retracting lifelines and lanyards must have ropes and straps (webbing) made of synthetic fibers, and shall:

    - Sustain a minimum tensile load of 3600 pounds if they automatically limit free fall distance to two (2) feet; or
    - Sustain a minimum tensile load of 5000 pounds (includes ripstitch, tearing, and deforming lanyards).

- Anchorages must support at least 5000 pounds per person attached and shall be:

    - Designed, installed, and used under the supervision of a Competent Person;
    - Capable of supporting twice the weight expected to be imposed on it; and
    - Independent of any anchorage used to support or suspend platforms.

Positioning Device Systems:

Body belt or body harness systems shall be set up so that an employee can free fall no farther than two (2) feet and shall be secured to an anchorage capable of supporting twice the potential impact load or 3000 pounds, whichever is greater. Requirements for snaphooks, dee-rings, and other connectors are the same as detailed in this policy under Personal Fall Arrest Systems.

Safety Monitoring Systems:

In situations when no other fall protection has been implemented, Competent Person(s) shall monitor the safety of employees in these work areas. The Competent Person(s) shall be:

- Competent in the recognition of fall hazards;
- Capable of warning workers of fall hazard dangers;
- Operating on the same walking/working surfaces as the employees and able to see them;
- Close enough to work operations to communicate orally with employees; and
- Free of other job duties that might distract them from the monitoring function.

No employees other than those engaged in the work being performed under the Safety Monitoring System shall be allowed in the area. All employees under a Safety Monitoring System are required to promptly comply with the fall hazard warnings of the Competent Person(s).

Warning Line Systems:

Warning line systems consisting of supporting stanchions and ropes, wires, or chains shall be erected around all sides of roof work areas.

- Lines shall be flagged at no more than six (6) foot intervals with high visibility materials.
- The lowest point of the line (including sag) shall be between 34 and 39 inches from the walking/working surface.
- Stanchions of warning line systems shall be capable of resisting at least 16 pounds of force.
- Ropes, wires, or chains must have a minimum tensile strength of 500 pounds.

- Warning line systems shall be erected at least six (6) feet from the edge, except in areas where mechanical equipment is in use. When mechanical equipment is in use, warning line systems shall be erected at least six (6) feet from the parallel edge, and at least ten (10) feet from the perpendicular edge.

TASKS AND WORK AREAS REQUIRING FALL PROTECTION

Unless otherwise specified, Competent Person(s) shall evaluate the worksite(s) and determine the specific type(s) of fall protection to be used in the following situations.

Framework and Reinforcing Steel:

Fall protection will be provided when an employee is climbing or moving at a height of over 24 feet when working with rebar assemblies.

Hoist Areas:

Guardrail systems or personal fall arrest systems will be used in hoist areas when an employee may fall six (6) feet or more. If guardrail systems must be removed for hoisting, employees are required to use personal fall arrest systems.

Holes:

Covers or guardrail systems shall be erected around holes (including skylights) that are six (6) feet or more above lower levels. If covers or guardrail systems must be removed, employees are required to use personal fall arrest systems.

Leading Edges:

Guardrail systems, safety net systems, or personal fall arrest systems shall be used when employees are constructing a leading edge that is six (6) feet or more above lower levels. An alternative Fall Protection Plan shall be used if a Competent Person(s) determines that the implementation of conventional fall protection systems is infeasible or creates a greater hazard to employees. All alternative Fall Protection Plans for work on leading edges shall:

- Be written specific to the jobsite needs;
- Include explanation of how conventional fall protection is infeasible or creates a greater hazard to employees;
- Explain what alternative fall protection will be used for each task;
- Be maintained in writing at the jobsite by a Competent Person; and
- Meet the requirements of 29 CFR 1926.502(k).

Overhand Bricklaying and Related Work:

Guardrail systems, safety net systems, personal fall arrest systems, or controlled access zones shall be provided to employees engaged in overhead bricklaying or related work six (6) feet or more above the lower level. All employees reaching more than ten (10) inches below the

walking/working surface shall be protected by guardrail systems, safety net systems, or personal fall arrest systems.

Precast Concrete Erection:

Guardrail systems, safety net systems, or personal fall arrest systems shall be provided to employees working six (6) feet or more above the lower level while erecting or grouting precast concrete members. An alternative Fall Protection Plan shall be used if a Competent Person determines that the implementation of conventional fall protection systems is infeasible or creates a greater hazard to employees. All alternative Fall Protection Plans for precast concrete erection shall:

- Be written specific to the jobsite needs;
- Include explanation of how conventional fall protection is infeasible or creates a greater hazard to employees;
- Explain what alternative fall protection will be used for each task;
- Be maintained in writing at the jobsite by a Competent Person; and
- Meet the requirements of 29 CFR 1926.502(k).

Residential Construction:

Guardrail systems, safety net systems, or personal fall arrest systems shall be provided to employees working six (6) feet or more above the lower level on residential construction projects. However, certain tasks may be performed without the use of conventional fall protection if the Competent Person has determined that such fall protection is infeasible or creates greater hazards to employees. The Competent Person shall follow the guidelines of 29 CFR 926, Subpart M, Appendix E in the development of alternative Fall Protection Plans for residential construction projects.

Roofing:

Low-Slope Roofs:

Fall protection shall be provided to employees engaged in roofing activities on low-slope roofs with unprotected sides and edges six (6) feet or more above lower levels. The type(s) of fall protection needed shall be determined by the Competent Person, and may consist of guardrail systems, safety net systems, personal fall arrest systems, or a combination of a warning line system and safety net system, warning line system and personal fall arrest system, or warning line system and safety monitoring system. On roofs 50 feet or less in width, the use of a safety monitoring system without a warning line system is permitted.

Steep Roofs:

Guardrail systems with toeboards, safety net systems, or personal fall arrest systems will be provided to employees working on a steep roof with unprotected sides and edges six (6) feet or more above lower levels, as determined by Competent Person.

Wall Openings:

Guardrail systems, safety net systems, or a personal fall arrest system will be provided to employees working on, at, above, or near wall openings when the outside bottom edge of the wall opening is six (6) 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. The type of fall protection to be used will be determined by the Competent Person.

Ramps, Runways, and Other Walkways:

Employees using ramps, runways, and other walkways six (6) feet or more above the lower level shall be protected by guardrail systems.

PROTECTION FROM FALLING OBJECTS:

When guardrail systems are in use, the openings shall be small enough to prevent potential passage of falling objects. The following procedures must be followed by all employees to prevent hazards associated with falling objects:

- No materials (except masonry and mortar) shall be stored within four (4) feet of working edges;
- Excess debris shall be removed regularly to keep work areas clear;
- During roofing work, materials and equipment shall be stored no less than six (6) feet from the roof edge unless guardrails are erected at the edge;
- Stacked materials must be stable and self-supporting;
- Canopies shall be strong enough to prevent penetration by falling objects;
- Toeboards erected along the edges of overhead walking/working surfaces shall be:
    - Capable of withstanding a force of at least 50 pounds; and
    - Solid with a minimum of three and a half (3½) inches tall and no more than one quarter (1/4) inch clearance above the walking/working surface.
- Equipment shall not be piled higher than the toeboard unless sufficient paneling or screening has been erected above the toeboard.

ACCIDENT INVESTIGATIONS:

All incidents that result in injury to workers, as well as near misses, regardless of their nature, shall be reported and investigated. Investigations shall be conducted by Competent Person as soon after an incident as possible to identify the cause and means of prevention and to eliminate the risk of reoccurrence. In the event of such an incident, the Fall Protection Policy (and alternative Fall Protection, if in place) shall be reevaluated by a Competent Person to determine if additional practices, procedures, or training are necessary to prevent similar future incidents.

RESPONSIBILITIES:

Employer:

It is the responsibility of the Oregon Military Department (OMD) to provide fall protection to affected employees; ensure that all employees understand and adhere to the procedures of this policy; and follow the directions provided by the agency.

Manager:

It is the responsibility of the program manager to implement this policy by:

- Performing routine safety checks of work operations;
- Enforcing safety policies and procedures;
- Correcting any unsafe practices or conditions immediately;
- Ensuring employees are provided training in fall hazards and the use of fall protection systems;
- Maintaining records of employee training, equipment issued, and fall protection systems used on-site;
- Informing the AGP Safety Manager of the designated competent person.
- Investigating and documenting all incidents that result in injury.

Employees:

It is the responsibility of all employees to:

- Understand and adhere to the Fall Protection Policy;
- Follow the direction of the supervisor and competent person;
- Bring any unsafe or hazardous conditions and practices to the attention of your supervisor and the competent person;
- Report any incident that causes injury.

TRAINING:

All employees who may be exposed to fall hazards are required to receive training on how to recognize such hazards, and how to minimize their exposure to them. Employees shall receive training as soon after employment as possible, and before they are required to work in areas where fall hazards exist.

A record of employees who have received training as well as the training dates shall be maintained by the supervisor and a copy sent to the Adjutant General Personnel (AGP) Safety Manager. Training of employees shall include:

- Nature of the fall hazards employees may be exposed to;
- Workers must be trained to be thoroughly familiar with the fall protection they use or intend to use and should be trained to properly and thoroughly inspect their equipment;

- Correct procedures for erecting, maintaining, disassembling, and inspecting fall protection systems;
- Use and operation of controlled access zones, guardrails, and personal fall arrest systems, safety nets, warning lines, and safety monitoring systems;
- Role of each employee in the Safety Monitoring System (if one is used);
- Limitations of the use of mechanical equipment during roofing work on low-slope roofs (if applicable);
- Correct procedures for equipment and materials handling, and storage and erection of overhead protection;
- Requirements of the OSHA Fall Protection Standard, 29 CFR 1926, Subpart M;
- Requirements for reporting incidents that cause injury to an employee.

Additional training shall be provided on an annual basis, or as needed, when changes are made to this Fall Protection Program, an alternative Fall Protection Plan, or the OSHA Fall Protection Standard.

Competent Person:

Training requirements for a competent person shall include:

- The nature of fall hazards in the work area.
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems that will be used.
- The use and operation of the fall protection systems that will be used such as:
  - Guardrails;
  - Personal fall arrest;
  - Safety nets;
  - Warning lines;
  - Safety monitoring;
  - Personal fall restraint;
  - Positioning devices;
  - Other appropriate protection to be used.
- The role of each employee when a safety monitoring system is used.
- The restrictions in the use of mechanical equipment during roofing work.
- The correct procedures for handling and storing equipment and materials and erecting overhead protection.
- Employees' roles in the fall protection work plan.

EMERGENCY RESCUE AND RETRIEVAL:

OR-OSHA requires employers to give prompt rescue to workers who fall, either through self-rescue or outside rescue. When a fall protection plan is required, it must include provisions for prompt rescue.

Self-rescue equipment shall be securely attached to the harness and be accessible to the employee in the event of a fall. Employee should be trained in self-rescue techniques and be able to perform self-rescue in the event of a fall.

EQUIPMENT INSPECTION:

- Fall protection equipment and systems must be inspected for wear, damage, or deterioration prior to each use, after an incident, and when the system is relocated, or altered.
- Reference the manufactures equipment inspection, cleaning criteria and document the inspection findings.
- Maintain the inspection record until the equipment or system is permanently removed from service.
- Maintain a list of model and serial numbers of fall protection equipment and systems for identification in manufacturer's recalls.

INQUIRIES/QUESTIONS: Questions pertaining to this guidance may be directed to AGP State Safety Office at (503) 428-3549.

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