Chapter 11 Fall Protection

A. References

a. SPPM, 3.34, Elevated Work Safety. https://policies.wsu.edu/prf/index/manuals/contents-chapter-3/3-34-elevated-work-safety/
b. SPPM, 3.34, Fall Protection Work Plan. https://policies.wsu.edu/prf/documents/2017/10/3-34-fall-protection-work-plan.pdf/
c. WAC 296-880, Unified Safety Standards for Fall Protection https://app.leg.wa.gov/WAC/default.aspx?cite=296-880
d. WSU BPPM 90.01 Records Retention, http://www.wsu.edu/~forms/HTML/BPPM/90_Records/90.01_Safety_Records.htm

B. Appendices

a. Appendix A – Potential Fall Hazard Assessment
b. Appendix B – Fall Protection Plan Form

C. Scope

This chapter establishes fall protection requirements for Environmental Health and Safety (EHS) employees referencing the Unified Safety Standards for Fall Protection https://app.leg.wa.gov/WAC/default.aspx?cite=296-880.

D. Responsibilities:

Supervisors:

- Work sites must be inspected and assessed for potential fall hazards and hazards from falling objects including a visual inspection of all anchorage points prior to use.
- Work sites with fall hazards shall be guarded or equipped with applicable fall protection and/or falling object protection or barricades.
- Fall Protection Work Plans shall be prepared by a Fall Protection Competent Person.
- Personal Protective Equipment requirements will be communicated to employees in accordance with this manual's Chapter 11 Personal Protective Equipment.
- Employees assigned to a job with a Fall Protection Work Plan have the authority to take immediate corrective action to eliminate employee exposure to fall hazards or falling objects.
- The Fall Protection Work Plan content will be communicated to all employees assigned to a job and training will be documented on the form prior to work.
- The Fall Protection Work Plan will be maintained on the job site until the job is completed.
- Equipment inspections will be completed as required.
- Employees are required to participate in fall protection training prior to engaging in work above 4 ft.

Employees:

- Inspect all work sites for potential fall hazards and hazards from falling objects, review workplace-specific fall hazard assessments, and when authorized, document and communicate hazards per this chapter's requirements.
- Inspect all fall protection equipment including anchors prior to use for deterioration and damage.

- Notify supervisor/Lead of any equipment that does not meet inspection requirements.
- When authorized, prepare Fall Protection Work Plans, communicate and document plans to employees assigned to a job, and ensure plans are present at the job site for the duration of the job.
- Use Personal Protective Equipment in accordance with this manual's Chapter 11 Personal Protective Equipment.
- Follow the Fall Protection Work Plan and use the required fall protection equipment and/or system when working in the fall hazard area.
- Participate in fall protection training prior to engaging in work above 4 ft.

E. Training

EHS employees identified as exposed, or potentially exposed to fall hazards receive training. Fall protection training will include the following:

- When fall protection is required;
- Fall protection authorized user, once at the time of hire;
- Fall protection competent person, when required to prepare fall protection plans;
- Job-specific fall-protection instructions, when assigned to a workplace with a related fall protection plan, and
- Re-training will be required when:
  - There have been changes in the workplace, such as new processes and equipment, which render previous training obsolete;
  - Changes in the types of equipment that render the previous training obsolete;
  - When an employee exhibits inadequate knowledge, skill and understanding or non-conforming use of the equipment; and/or
  - When regulatory requirements (DOSH) change.

F. General Requirements

All elevated workplaces of 4 feet or more, except loading docks, must be inspected and assessed for fall hazards and guarded with fall protection and inspected for hazards from falling objects. All workplaces having a fall hazard of 10 feet or more will have a written, site-specific, fall protection plan prepared, communicated to assigned employees and posted at the job site before employees begin work.

Fall Protection Work Plan

The job-specific fall protection plan shall be documented using the standard Fall Protection Plan form, provided in Appendix B. Fall protection plan documents must be retained by the department, and may be modified for similar future work at the same location. The fall protection plan document shall be retained on the job site while work is in progress.

Fall Protection Anchor Point Inspection

The means, methods, and materials used to install fall protection anchor points or devices that will be used by WSU Tri-Cities employees shall be inspected and approved for use by a competent (fall protection) person or by a WA State licensed structural engineer or architect for conformance to the requirements of: https://app.leg.wa.gov/WAC/default.aspx?cite=296-880-400 and to manufacturer's installation instructions.

Appendix A - Fall Hazard Assessment

Building:	
Location:	
Work/Task:	

Assessed By:	**Date:**

Hazard	Yes	No	N/A	Systems Required
1. Parapet walls or guardrails less than 39 inches high?	✔			See Below
a. The answer to #1 is "yes," *and* the distance from the work to the fall hazard is 15 feet or less (low slope roof).				a. Install permanent or temporary guardrail; b. Install 5000 lb. (fall arrest) permanent wall anchors in penthouse walls if concrete**; c. Install fall arrest permanent deck anchors; d. Install horizontal lifeline anchored with fall arrest anchors at each end and at intermediate locations if span exceeds 50 ft. e. Investigate integrity of fixed equipment to determine whether it is capable of serving as fall arrest or four times the intended load (fall restraint) anchor***. f. Encircle penthouse with long lifeline to serve as fall arrest or restraint anchor; g. Use penthouse door jamb as anchor if angle to work area is less than 30o (right or left). h. Use warning line/safety monitor system when working less than 15 ft from fall hazard. i. Use safety watch system if work can be accomplished by 1 person, no mechanical equipment will be used, and a competent person per WAC 296-155-24603 is available to serve as safety watch.
b. The answer to #1 is "yes," and the distance from the roof access hatch to unprotected fall hazards is less than 15 feet (low slope roof).				a. If deck is not slippery, walk directly to nearest anchor and hook up; b. If deck is slippery tie off to the access hatch ladder or stairs with padded lifeline and walk to and connect to the nearest fall arrest or fall restraint anchor; (**Note: employees must not be exposed to a potential free fall of more than six feet, so an intermediate anchor may need to be installed.)** c. Install horizontal lifeline running from anchor at hatch to work area anchor.

Hazard	Yes	No	N/A	Systems Required
c. The answer to #1 is **yes**, and the distance from work area to an **unguarded roof hatch** is 15 feet or less (low slope roof).	☐	☐	☐	a. Shut hatch cover; b. Install permanent guardrail around hatch, with spring-loaded gate; c. Install temporary guardrail around hatch; d. Use warning line/safety monitor system when working less than 15 ft. from open hatch; e. Use fall arrest or fall restraint system to prevent employee from falling down the hatch.
d. The answer to #1 is "yes," and the distance to the fall hazard is less than 15 ft (low slope roof).	☐	☐	☐	Use one of **a-h** in #2 above, and complete and post fall Protection work plan on inside of penthouse door or hatch cover.
2. The distance to an unguarded less than 800 pound rated skylight (low slope roof).	☐	☐	☐	a. Use one of a-h in #2 above; b. Install commercial skylight fall protection screens.
3. The roof pitch exceeds 4:12	☐	☐	☐	a. Use fall restraint system; b. Use Fall arrest system; c. Use positioning device system.
4. Hazardous slopes where employees are exposed to a fall 4 ft or greater.	☐	☐	☐	a. Use fall restraint system; b. Use positioning device system.

*Hazardous Condition means a fall to a lower level of four feet or more.

**If fall protection systems other than guardrails or warning line systems are being used, it is assumed the employee wears a properly-fitted fall arrest harness and connects it to the fall arrest system with a shock-absorbing lanyard (ANSI Z359.1-2007 or most current). Fall arrest systems must be rigged to allow a maximum freefall distance of 6 ft so an employee will not contact lower levels see WAC-296-155-24624, Appendix B.

***If fall protection systems other than guardrails, or warning line, or fall arrest systems are being used, it is assumed the employee wears a properly-fitted fall arrest harness and connects it to the fall restraint system using a non-shock-absorbing lanyard.

Appendix B - FALL PROTECTION PLAN FORM

Job Name:	
Building:	**Location:**
Work Activity:	
Prepared By:	**Date**
This document must be completed by a fall protection competent person, understanding DOSH fall protection requirements and fall protection systems available to WSU. The competent person and all EHS personnel working at heights above 10 feet have the authority to take stop work and take corrective action when workplace hazards are identified. This plan shall be implemented and posted on-site while work is performed.	

Populate the following table sections with a brief description of selected controls.

Work Area Fall Hazards

Leading Edge:
Greater than 4:12 Pitch:
Roof Openings e.g. Hatch/Skylight:
Floor Opening/Edge:
Other:

Overhead Hazard Protection

Warning Signs:
Barricades:
Covered Walkway:
Fencing:
Debris Net:
Other:

Material and Equipment Handling and Storage

Tools and materials stored 6’ away from edge:
Tie downs and Nets:
Loading/Unloading Method:
Other:

Fall Protection Assembly, Maintenance and Inspection

Fall protection devices and systems will be assembled, disassembled, inspected and maintained per manufacturers’ instructions and as instructed by the competent person.
Other (specify):

Injured Worker Response

At minimum, 1 site worker will be CPR/First Aid trained, a first aid kit will be readily available. If worker is injured at elevation, call **911**, evaluate condition of injured worker and provide first aid if needed and safe.

Training and Instruction Confirmation

Employees' signatures below confirm an understanding of workplace fall hazards and the fall protection controls and devices used.

Name	Signature	Date
Competent Person:		