SUU SOUTHERN UTAH UNIVERSITY

# Fall Protection Program

**May 2020**

# Table of Contents

## 1.0 Purpose

These safety standards will apply to any SUU employee working at an elevated location, or otherwise has potential of an injury from falling while performing work activities. These requirements do not apply when an employee is working from a ladder.

## 2.0 Fall Protection Requirement

Each University employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 4 feet or more above a lower level shall be protected from falling by the use of a guardrail system or the use of personal fall arrest equipment.

## 3.0 Guardrail Systems

Guardrail systems, whether permanent or temporary, shall consist of vertical posts with at least a 200 pound non-deflection requirement. The top rail shall have a nominal height of 42 inches, +/- 3 inches and a mid-rail shall also be installed. Mid-rails should be positioned at least half the distance up to the guardrail from the working surface.

If a wooden guardrail system is installed, the top and mid-rails must be installed on the safe-interior side of the vertical posts, not on the fall hazard side of the posts. This is to prevent a person from pushing on the guardrail and having it fall away from the vertical post instead of pushing safely against it for added support.

Certain elevated storage locations are allowed to have movable railings for access, but the railings must be put back into place after items are taken to or removed from the storage area loading zone.

Wire rope is an acceptable replacement for metal or wooden guardrails or mid-rails, as long as they are attached to anchor points that can withstand a 200 pound pulling force and the wire rope is flagged with brightly colored material spaced at least every 2-4 feet.

## 4.0 Personal Fall Arrest Equipment

Rip-stop lanyards shall be the only type of lanyard allowed to be used on campus. Only locking type snap-hooks shall be used.
Horizontal lifelines shall be designed, installed, and used, under the supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.

Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds.

Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached.

The lanyard shall be of a proper length and rigged such that an employee can neither free fall more than 6 feet, nor ever come into contact with a lower level.

The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head.

Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.

Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be immediately removed from service. Any paint spots or fall arrest harness chemical exposure shall disqualify the equipment from any further use, no exceptions.

Personal fall arrest systems shall not be attached to guardrail systems, nor shall they be attached to hoists. Only special tie-off points with the required 5,600 pound shock loading shall be utilized.

When an employee is working at an elevated location, the area directly beneath shall be barricaded to prevent another worker or visitors to campus from being injured by a falling object. If it is necessary for other employees to work beneath activity at an elevated location, hard hat use shall be made mandatory.

## 5.0 Examples of Areas Needing Fall Protection

Open man-holes or hole in floors with a fall potential will always require a permanent or portable guardrail system if the location of the hazard is in areas frequented by the general public or other untrained workers or if any work activity takes place.

Any hole in a wall that exposes employees to a potential fall hazard must also be guarded. An example would be a broken window waiting for replacement glazing to be installed.

Any work activities adjacent to a roof skylight must always have area guarding, or the required use of an employee personal fall arrest system. This protection is necessary to prevent a person from inadvertently backing into and falling through a skylight.

Elevated storage areas with a fall hazard on exposed sides must always have a guardrail system installed. This is not only for employee fall protection but for seismic protection purposes to keep the stored material from falling to a lower lever and possibly injuring building occupants.

The guardrail requirement applies to any open sided floor, platform, ramp, or runway with a fall potential of 48 inches or more.

Standard stairway handrails of 34 inches in height must be provided to the open sides (non-wall side) of any stairway. Any stairway with four or more stairs or a rise of 30 or more inches shall have a stabilizing handrail installed.

## 6.0 Controlled Access Zones

Catwalk and roof areas are to have limited accessibility, with doors or hatches to these areas being secured at all times. Only trained and specific authorized individuals are ever to have access to these tightly controlled areas, and only with management approval.

If any work activities take place outside the confines of a guardrail protected catwalk area, a personal fall protection system must be utilized. This will include the use of a full body harness, a rip-stop lanyard of suitable length, and a tie-off point capable of withstanding a 5,600 pound shock load, or by attachment to a horizontal wire rope life line of the proper capacity.

OSHA provides for a fall protection exemption if and only if certain highly trained individuals are accessing a fall potential area for quick inspection purposes. This is defined as taking 5 minutes or less. Under these circumstances, employee exposure to a fall would be greater having to take a longer time to properly rig a fall protection system. No work can be performed under these special circumstances, only a brief inspection is permitted.

If a longer time to perform a task on a roof necessary, a controlled access zone can be declared by the University. For instance, no tie-off or guardrail system will be necessary if an area on a roof is marked by tape, a painted line, or a temporary warning line system placed at least 6 feet away from any exposed edge of a wall or building parapet and no further than 25 feet away. Highly trained workers can then perform their tasks on a roof, having been trained to never enter the danger zone adjacent to a potential fall hazard area. No special safety considerations need to be taken in areas with a parapet height of 39 inches or more.

Another OSHA approved method of controlled access zone safety is to use an employee monitoring system. One person who is designated as a safety monitor will observe other worker's activities and warn them if they get too close to a fall hazard zone. A safety monitor is prohibited by OSHA from performing any other work activities when serving this function.

## 7.0 Fall Protection Training

Each employee with a potential to be exposed to a fall hazard shall be trained by a competent person in the following areas on an annual basis.

- The nature of fall hazards in the work area
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used

- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and any other fall protection method to be used
- The role of each employee in the safety monitoring system when this system is used
- The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs
- The correct procedures for the handling and storage of equipment at elevated locations
- The role of employees in fall protection plans
- The applicable OSHA standards regarding fall protection requirements

Any un-safe act while working at elevated locations shall be deemed a reason for immediate employee termination.

Any prescription drug use that could impair a person's judgment or normal physical work activities shall disqualify them from working at elevated locations. Supervisors shall immediately be made aware of any issues that might affect worker fall protection safety.

Copies of all employee fall protection training shall be kept in the employee's file for the duration of their employment.