Introduction

When work is performed on elevated surfaces such as roofs, or during construction activities, protection against falls frequently must be considered. Fall arresting systems, which include lifelines, full body harnesses, and other associated equipment, are often used when fall hazards cannot be controlled by railings, floors, nets, and other means. These systems are designed to stop a free fall of up to six feet while limiting the forces imposed on the wearer.

Scope and Application

Fall protection is required for most construction activities by the Occupational Safety and Health Administration (OSHA) whenever the work is performed in an area that is six feet higher than its surroundings. Exceptions to this rule include work done from scaffolds, ladders and stairways, derricks and cranes, and work involving electrical transmission and distribution. Also excluded is the performance of inspections, investigations, or assessments of existing conditions prior to the beginning or after the completion of construction.

Program Description

Fall protection is required whenever work is performed in an area six feet above its surroundings and can generally be provided through the use of guardrail systems, safety net systems, or personal fall arrest systems. Where it can be clearly demonstrated that the use of these systems is infeasible or creates a greater hazard, a fall protection program that provides for alternative fall protection measures may be implemented.

Fall Protection Systems

A variety of systems may be chosen from when providing fall protection. These systems include:

- **Guardrails**: Standard guardrails consist of a top rail, located 42 inches above the floor, and a mid-rail. Screens and mesh may be used to replace the mid-rail, so long as they extend from the top rail to the floor.
- **Personal Fall Arresting Systems:** Components of a personal fall arresting system include a full body harness, lanyard, lifeline, connector, and an anchorage point capable of supporting at least 5000 pounds.
- **Positioning Device Systems:** Positioning device systems consist of a harness rigged to allow work on a vertical surface, such as a wall, with both hands free.
- **Safety Monitoring by a Competent Person:** This system allows a trained person to monitor others as they work on elevated surfaces and warn them of any fall hazards.
- **Safety Net Systems:** These systems consist of nets installed as close as possible under the work area.
- **Warning Line Systems:** Warning line systems are made up of lines or ropes installed around a work area on a roof. These act as a barrier to prevent those working on the roof from approaching it edges.
- **Covers:** Covers are fastened over holes in the working surface to prevent falls.

**Additional Precautions**

Protection should also be provided from falling objects. Work surfaces should be kept clear of material and debris by removal at regular intervals. Toeboards should be used to prevent objects from being inadvertently kicked to a lower level. When necessary, canopies should be provided.

**Prohibited Devices**

**Effective January 1, 1998** full body harnesses will be required for use with all personal fall arresting systems. **Body belt use will be prohibited.** Also effective on that date, **only locking-type snaphooks** can be used as part of a fall arresting system.

**Training**

Training must include the following:

- How to recognize and minimize fall hazards
- The nature of the fall hazards in the work area
- Use, operation, and limitations of fall protection systems
- The user's role in fall protection systems
Roles and Responsibilities

Department

- Identify areas where fall protection is needed.
- Obtain or develop fall protection systems.
- Ensure workers are trained.

Supervisors

- Know when fall protection is necessary.
- Provide workers with fall protection devices.
- Ensure workers use fall protection devices.

EHS

- Assist in identification of areas where fall protection is needed.
- Assist in worker training.

Individual

- Attend training.
- Know when fall protection is necessary.
- Use fall protection systems.

For More Information

- Contact the USC Employee Safety Coordinator at 777–5269.
- A copy OSHA's regulation, Fall Protection, 29 CFR 1926 Subpart M, is available through EHS or the OSHA website.