

Fall Protection: General Requirements

Many of us risk the danger of falls on the job but don't recognize it. Using ladders and scaffolds becomes second nature. According to Cal/OSHA statistics, 71 people in California died in 2000 from falls. Thirteen fell from ladders; 14 from roofs; and 7 from scaffolds or staging.

This Fact Sheet is an overview of the Cal/OSHA fall protection requirements related to construction, renovation, and maintenance operations on campus. It describes the platform and ladder equipment normally used by departments on campus. The Fact Sheet does not cover heavy construction activities such as structural steel connection and vertical rebar tying. Cal/OSHA standards are different for those activities. For definitions of the types of fall protection equipment mentioned in this Fact Sheet, see the EH&S Fact Sheet, "Fall Protection Equipment and Inspections."

The regulations apply to anyone who is performing maintenance or construction activities and is working on an unprotected platform or ladder at least 7 1/2 feet from the floor.

The regulatory requirements come from Cal/OSHA, the equipment manufacturers, and the American National Standards Institute (ANSI).

Ladders Ladders are most often used for access to another level such as a roof or a tree. When work is to be performed from a ladder more than 7 1/2 feet from the ground, some form of fall protection, like a harness and lanyard, has to be used during the work. Working from a ladder is particularly hazardous because workers can't hold on to the ladder with both hands. In addition, workers may reach or carry tools that upset the center of balance.

Mobile Work Platform or Ladder Stands Railings on a platform are sufficient fall protection if they meet standard guardrail requirements of Cal/OSHA. A harness and lanyard, correctly attached to the platform or other secure structure, are necessary if the railing is not used or is less than 39 inches tall. The harness needs to conform to the Cal/OSHA attachment point load requirement. Contact EH&S for details.

Elevated Aerial Device This category includes boom lifts with attached baskets and equipment with telescoping or articulating arms. The operator must wear fall protection or positioning personal protection equipment (PPE). Guardrails alone are not enough with this type of lift because, when the operator stands within the basket and uses the controls there to move the lift, he could make the basket bounce, and this could catapult him right out of the basket.

To whom the
regulations apply

General fall
protection
requirements



Unusual fall protection situations

Roofing Operations Special rules apply for any activities performed on roofs. Refer to the EH&S Fact Sheet “Fall Protection for Activities on Roofs.”

Elevated Locations Guardrails or other forms of fall protection must be provided for unenclosed, elevated work locations such as

- roof openings
- open or glazed sides of landings
- balconies or porches
- platforms
- runways
- ramps
- working levels more than 30 inches above the floor, ground, or other working areas of a building

Housekeeping Debris and equipment that could cause a slip, trip, or fall must be cleared from working areas.

The Berkeley campus may conduct research involving unusual or one-of-a-kind equipment, structures, or machines. Campus employees, including graduate students, are often required to perform maintenance to upgrade or renovate these devices. All of the Cal/OSHA requirements apply to this kind of work. Purchase and modification of commercially available access equipment (ladders or scaffolds) may be required. Contact EH&S for assistance with access and equipment modifications in order to insure Cal/OSHA compliance and the safety of the people doing the work.

For more specific information regarding fall protection requirements, see the following EH&S Fact Sheets:

- Fall Protection Equipment and Inspection
- Ladder Safety
- Roof Operations and Fall Protection
- Aerial Lift Fall Protection

