

FALL PROTECTION REQUIREMENTS FOR CONSTRUCTION

There are three primary sets of fall protection requirements for construction which are based on the heights and activities which employees are engaged in. The different heights at which fall protection is required are: 1) 6 feet (See Subpart M which deals with general fall protection); 2) 10 feet (See Subpart L--Scaffolds); and 3) 15 or 30 feet (See Subpart R--Steel Erection.). The height at which fall protection is required depends upon the type of surface/platform the employee is on or what type of activity in which they are engaged. There are also requirements that employees be protected from trips and falls regardless of the height. Conventional types of fall protection, which may be used to protect employees from falls, are Guardrail Systems, Covers, Personal Fall Arrest (PFA) systems (Note that after January 1, 1998 a safety belt may not be used as part of a PFA) and Safety Nets.

Six Feet--Subpart M--Fall Protection--1926.500-503.

Employees exposed to a fall of 6 feet or greater must be protected. Subpart M is applicable to the majority of fall hazards in the construction industry. With some exceptions it applies to all fall hazards except those from scaffolds and for employees engaged in steel erection.

- The exceptions from Subpart M are:
 - 1926.500(a)(1). Employees making an inspection, investigation or assessment of workplace conditions prior to the actual beginning of the work or after all construction has been completed are not required to have any fall protection.
 - 1926.500(a)(2)(ii),(iii),(iv),(v) and (iv). Certain fall related hazards are covered by: Subpart N (Cranes and Derricks), Subpart R (Steel Erection), Subpart S (Tunneling), Subpart V (Power Distribution and Transmission covered under 1926.105) and Subpart X (Ladders and Stairways).
- There are two hazards for which fall protection is required regardless of the distance an employee can fall. They are:
 1. **HOLES**--Fall protection must be provided if employees can fall, more than 6 feet to a lower level, through a hole and protection must be provided to prevent employees from tripping or stepping into holes as long as they are at least 2 inches or more in size in their smallest dimension. [See 1926.501(b)(4) and 1926.754(e)(2)]
 2. **WORKING ABOVE OR ADJACENT TO DANGEROUS EQUIPMENT**--Fall protection is required, regardless of the height, when employees are working above or adjacent to dangerous equipment. (See 1926.501(b)(8))
- There are five types of work activities that Subpart M permits/or requires employers to use alternatives to conventional fall protection. They are:
 1. **OVERHAND BRICK LAYING OPERATIONS**--Employees engaged in overhand bricklaying, and operations directly related to overhand bricklaying, can be protected by a Controlled Access Zone. (See 1926.501(b)(9))
 2. **PERFORMANCE OF ROOFING WORK ON LOW SLOPED ROOFS**--In addition to standard fall protection employers may use a warning line system/safety monitor option. Certain designated employees can work outside a warning line, set either 6 feet or 10 feet in from the edge of the roof. If the roof is less than 50 feet wide only a safety monitor is required. (See 1926.501(b)(10))
 - 3-5. **PRECAST CONCRETE ERECTION (1926.500(b)(12)), LEADING EDGE CONSTRUCTION (1926.501(b)(2) AND RESIDENTIAL CONSTRUCTION (1926.501(b)(13))-- **** (See the following note on Residential Construction.)**** Where an employer can demonstrate it is infeasible to use conventional fall protection they may implement a "Fall Protection Plan." (See 1926.502(k))

Note---OSHA Instruction STD 3.1, Interim Fall Protection Compliance Guidelines for Residential Construction. The Instruction provided additional leeway relative to fall protection for employer engaged in residential construction. Guidance as to what constitutes residential construction is in the OSHA Instruction. It reads as follow:

For purposes of this instruction, an employer is engaged in residential construction where the working environment, materials, methods and procedures are essentially the same as those used in building a typical single-family home or townhouse. Residential construction is characterized by:

- Materials: Wood framing (not steel or concrete); wooden floor joists and roof structures.
- Methods: Traditional wood frame construction techniques

In addition, the construction of a discrete part of a large commercial building (not the entire building), such as a wood frame, shingled entranceway to a mall, may fit within the definition of residential construction. Such discrete parts of a commercial building would qualify as residential construction where the characteristics listed above are present.

For the purposes of interim compliance guidance under this directive, the term "residential construction" applies to structures where the working environment, and the construction materials, methods, and procedures employed are essentially the same as those used for typical house (single-family dwelling) and townhouse construction. Discrete parts of a large commercial structure may come within the scope of this directive (for example, a shingled entrance way to a mall), but such coverage does not mean that the entire structure thereby comes within the terms of this directive.

Ten Feet--Subpart L--Scaffolds--1926.450-454.

Employees on scaffolds, with the exception of employees engaged in the erection and dismantling supported scaffolds, must be provided with fall protection when the distance they can fall exceeds 10 feet. This is regardless of the size of the scaffold. Any conventional form of fall protection may be used except where specified otherwise. (The standard requires that fall protection for certain scaffolds, such as a ladder jack scaffold, be in the form of a personal fall arrest system (PFA). Some scaffolds, such as single point and two point suspension scaffolds are required to have fall protection that consists of a PFA and a guardrail system.)

- As of September 2, 1997, a "competent person" must determine whether it is feasible to provide fall protection for employees erecting and dismantling "supported" scaffolds. (Note-- Employees erecting and dismantling suspended scaffolds are required to be provided with fall protection at all times. The fall protection criteria that must be followed is in Subpart M.)

! A scaffold is any temporary elevated work platform.

Fifteen and Thirty Feet-Subpart R-Steel Erection-1926.750-761.

All employees engaged in steel erection activities, including connectors and decking crew, shall be protected from falls consistent with the following:

! Any employee who is on a walking working surface with an unprotected side or edge more than 15 feet above the next level must be provided with fall protection.

! There are two exceptions, they are connectors and decking employees working in a controlled decking zone (CDZ). This exception is limited to 30 feet or TWO Stories which ever is less.

! **NOTES:**

1. Subpart M does not apply to steel erection activities.
2. The term "steel erection" means the construction, alteration or repair of steel buildings, bridges and other structures, including the installation of metal decking and all planking used during the process of erection.
3. The phrase "Steel erection activities" include hoisting, laying out, placing, connecting, welding, burning, guying, bracing, bolting, plumbing and rigging structural steel, steel joists and metal buildings; installing metal decking, curtain walls, window walls, siding systems, miscellaneous metals, ornamental iron and similar materials; and moving point-to-point while performing these activities.
4. The term "Connector" means an employee who, working with hoisting equipment, is placing and connecting structural members and/or components.
5. The term "Controlled Decking Zone" (CDZ) means an area in which certain work (for example, initial installation and placement of metal decking) may take place without the use of guardrail systems, personal fall arrest systems, fall restraint systems, or safety net systems and where access to the zone is controlled