OSHA
Steel Erection Safety Standard
(Subpart R, 1926.750-1926.761)

On August 13, 1998, a proposed Fall Protection standard for steel erection work (Subpart R) was published in the Federal Register. The final rule was published on January 18, 2001 and will go into effect on January 18, 2002. This important fall protection standard will update the current regulations that have been in effect for over 25 years.

Current Steel Erection Standards
The current OSHA fall protection standard for steel erection work is very general in nature, typically not requiring fall protection until 25 foot or higher. Presently OSHA 1926.750-1926.752 requires nets to be used at 25 feet and above (when scaffolds are not used) and floor planking to be used (within two stories or 30 feet, whichever is less) below tiers of beams on which any work is being performed. The current standard also requires employees to be protected by safety belts when gathering and stacking temporary floor planking and when working on float scaffolds.

Who is affected by the new standard?
The new standard will apply to employees engaged in the erection, alteration, and/or repair of steel in single and multi story buildings, bridges, and other structures where steel erection occurs. This includes hoisting, connecting, welding, bolting, and rigging structural steel, steel joist and metal buildings as well as installation of metal deck, siding systems, misc. metals and ornamental iron.

The new standard will not cover work on electric transmission towers, communication towers, broadcast towers and water towers or tanks (the new standard will cover those working on the structure that supports the tank).

The current OSHA Subpart M standard (Construction Industry) does not apply to steel erection work, in terms of when and where to use fall protection.

Overview of Fall Protection Requirements
The new standard has specific fall protection requirements. Most steel erection work will be covered by a 15-foot trigger height.

Exceptions are:
1.) Connectors working at heights between 15 feet and 30 feet. (Connectors are the “first people up at height, placing and connecting steel members)
2.) Workers engaged in decking in a controlled decking zone (CDZ) at a height between 15 feet and 30 feet. (Some work in CDZ does require fall protection.)
Major points of Subpart R – Fall Protection Section

15-foot trigger height for most workers, 30 foot trigger height for connectors.

Connectors working between 15 feet and 30 feet must be given the means to tie-off. Connector determines when/if to tie-off.

Forms of fall protection include perimeter safety cables, guardrails, nets, and personal fall arrest or fall restraint systems.

Controlled decking zones (CDZ) may be established over 15 feet and up to 30 feet where metal deck is being installed.

Training – Qualified person to train exposed workers in fall protection and to train exposed workers engaged in special, high-risk activities.

The guardrails, nets, personal fall arrest systems and fall restraint systems specified in Subpart R must conform to the criteria set forth in Subpart M (1926.502).

Major points of Subpart M criteria include:
(This criteria would apply to Subpart R)

Full body harness only for fall arrest.

1,800 pound maximum arresting force.

Anchor points support 5,000 lbs. or provide 2:1 safety factor minimum when part of complete, engineered system.

Six foot maximum free fall distance (exceptions do apply).

Horizontal lifelines shall be designed, installed, and used under supervision of a qualified person, which maintains a safety factor of at least two.

Summary
With the release of this standard, the steel erection industry will be regulated by a more detailed, up-to-date standard. This particular standard, which was created through the negotiated rulemaking process, is expected to prevent many deaths and lost workday injuries every year.