

South Carolina Department of Labor, Licensing and Regulation
Division of Labor
Office of Occupational Safety and Health
Columbia, South Carolina 29211

OSH Program Directive Number 79-1926.28/Subpart R-1/1

Subject: Fall Protection in Structural Steel Erection and Operations.

Standard: Article VII, Sections 1926.28 (a), 1926.104 (a), 1926.105, 1926.451 (a), 1926.500 (c) and (d), 1926.750 and 1926.752, Rules and Regulations, Commissioner of Labor, State of South Carolina.

Cross Reference to Federal Standards: 29 CFR 1926.28 (a), 1926.104 (a), 1926.105, 1926.451 (a), 1926.500 (c) and (d), 1926.750 and 1926.752.

Cancellation: Existing Program Directive Number: 75-1926.28/Subpart R-2/1 Revised is hereby cancelled.

Background: Continuous confusion and uncertainty exist presently over the application of fall protection and related lifesaving equipment and personal protective equipment requirements to steel erection operations. This directive is intended to clarify and to establish a standard interpretation to be enforced by the Division of OSH.

- (a) Personal protective devices and equipment are defined as those devices and equipment designed and utilized for the protection of a single individual and are worn or attached to the individual.
- (b) Lifesaving devices and equipment are those devices and equipment provided for the protection of one or more individuals at any given time.
- (c) Section 1926.28 (a) requires the use of personal protective equipment where the exposure to the hazard indicates a need for such protection.
- (d) Section 1926.104 (a) limits the use of lifelines, safety belts and lanyards to employee safeguarding.
- (e) Section 1926.105 requires the use of safety nets when the work area is more than 25 feet above the ground or water surface or other surface, where ladders, catch platforms, temporary floors, safety lines and safety belts are impractical. Safety nets must be extended 8 feet beyond the edge of the work surface.

- (f) Section 1926.451 (a) requires the use of standard guardrails on all scaffolds more than 10 feet above the ground or floor. (The use of lifelines, safety belts and lanyards are also required when working from suspended scaffolds.)
- (g) Section 1926.500 (c) and (d) require the guarding of wall openings and floors by a guardrail where:
 - (1) The wall opening drop is more than 4 feet;
 - (2) Floors, platforms, runways are more than 6 feet above floor or ground level.
- (h) Section 1926.750 establishes a requirement for temporary and permanent flooring when erecting structural steel and for the use of lifesaving devices when the potential fall distance exceeds 25 feet.
- (i) Section 1926.752 requires the use of lifelines, safety belts and lanyards when working from float scaffolds.

Interpretation:

- a. In view of the above requirements, it is concluded that when the fall distance is ten (10) feet or greater, lifelines, safety belts and lanyards shall be provided and used by persons working in such elevated positions. These personal protective devices are in addition to the lifesaving equipment specifically required by the various paragraphs of the standards.
- b. It is recognized that there are isolated instances when lifelines, safety belts and lanyards would not provide the intended protection for a steel connector. Actually, the safety belts and lanyard could introduce an additional hazard for the steel connector in an area where the tie-off would restrict his movement during the replacement of a moving steel beam. Therefore, an exemption will be permitted whereby the steel connector may unhook his safety belt during, and only during, the actual connecting operation. However, the steel connector will be required to reconnect as soon as the actual connecting operation is concluded. This exemption applies to steel connectors only.

Discussion:

- a. All employees are entitled to safe and healthful working conditions, including protection against falling during steel

erection operations. The basic guidelines on any construction site for fall protection are 1926.500 (d) (1) requiring guardrail protection on any work platform 6 feet or more above adjacent surfaces and 1926.28 (a) requiring protection in any situation where the hazard of falling is reduced by personal protective equipment such as lifelines, safety belts and lanyard in steel erection.

- b. In recognition of the difficulties and complexities of steel erection operations, special consideration must be given to the protective methods. Adequate protection is required and must be provided and used, even on building or work surface perimeters.
- c. Steel erection is determined by the specific operations involved and the work being performed by the employees, not by the type of contractor or the title of the employers and/or employees.
- d. When a Safety Specialist observes an employee exposed to a hazard of falling during steel erection operations, he must determine what, if any, protection has been provided (individual or lifesaving or both), and whether it is adequate for the hazard involved. Some type of individual protection must be provided in every case, except for the steel connector exemption. The Safety Specialist must be careful to cite the most applicable standard and properly document all facts involved. In most cases, photographs should be taken and properly and clearly labeled and identified.

Effective Date: This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.

William M. Lybrand, Director
July 10, 1979