



Virginia Occupational Safety and Health



VOSH PROGRAM DIRECTIVE: 12-253

ISSUED: December 1, 2010

SUBJECT: Virginia Unique Safety Standards for Fall Protection in Steel Erection, Construction Industry, 16 VAC25-145, in lieu of 29 CFR 1926.760(a), 1926.760(b) and 1926.760(c)

A. Purpose.

This directive memorializes the existing Virginia unique Standard for Fall Protection in Steel Erection, 16 VAC25-145. Previously, the Virginia unique Safety Standards was part of the 2002 complete revision to Subpart R of Part 1926. All other requirements under Subpart “R”, Safety Standards for Fall Protection in Steel Erection, other than 16 VAC25-145, are federal identical and are incorporated into VOSH PD 12-251C.

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

B. Scope.

This directive applies to all VOSH personnel.

C. References.

66 FR 37137 (July 17, 2001); OSHA Memorandum 01-04 (July 18, 2001)
16 VAC25-145, Virginia Unique Safety Standards for Fall Protection in Steel Erection (eff. January 15, 2004)

D. Cancellation.

VOSH Program Directive 12-251B (June 1, 2006)

E. Effective Date.

December 1, 2010

F. Action.

Directors and Managers shall ensure that field personnel understand and comply with the standard included in this directive.

G. Expiration Date.

Not Applicable.

H. Background and Summary.

At its October 18, 2001 meeting, the Safety and Health Codes Board adopted most of federal OSHA's revised Safety Standards for Steel Erection at 66 FR 5195 and 66 FR 37137 as §§1926.750 through 1926.761 and the amended §1926.500, covering Fall Protection, with an effective date of May 1, 2005.

Upon the recommendation of the Department, paragraphs (a), (b) and (c) of §1926.760 of the federal rule were not adopted. These paragraphs dealt with fall protection requirements for steel erection workers generally, and, specifically for "Connectors," and employees working in "controlled decking zones" (CDZ).

In the alternative, VOSH sought Board approval at that time to continue to use its administrative policy of enforcing federal identical standards, §§1926.28(a) and 1926.105(a), to provide 10-foot fall protection for steel workers, except for employees working as "connectors." In addition, controlled decking zones (CDZ) would continue to be prohibited. After considering the Department's request to continue its administrative policy of enforcement, the Board chose to memorialize the 10-foot height requirement policy of the Department into regulation so that rather than continue the administrative policy, these changes would be made permanent in regulation at 16 VAC 25-145.

This regulatory language, adopted by the Board and effective on January 15, 2004, **requires protection for steel erection workers from falls from heights starting at 10 feet above a lower level** (i.e., working surface) not at the federal height of 15 feet. VOSH has a **singular exception to the 10-foot fall protection requirement for employees working as "Connectors."** A "Connector" is defined in § 1926.751 as "...an employee who, working with hoisting equipment, is placing and connecting structural members and/or components."

The exception for Connectors is based on VOSH's determination that during the interval when structural steel beams are being hoisted into position for assembly and joining, a greater hazard may exist if Connectors are tied off rather than giving them freedom of movement to avoid accidental contact with the moving steel structural pieces as they are being placed into position for assembly. This language provides Connectors with the option of utilizing a personal fall arrest system or not when steel is being lifted in the air, if they determine that a greater hazard of injury exists from the swinging steel.

Although **controlled decking zones (CDZ) remain prohibited**, the VOSH unique standard provides that access to leading edge decking operations is limited to only those employees engaged in leading edge work, as is provided in the federal standard.

In addition, the boundaries of a leading edge decking operation shall be designated and clearly marked. These requirements provide a means of fall protection by restricting access to a leading edge decking area where a fall distance of up to 30 feet could exist for employees not utilizing a personal fall arrest system or other conventional form of fall protection.

A non-mandatory Appendix to the standard entitled “Use of Control Lines to Demarcate Leading Edge Decking Operations” provides guidance to employers on how to limit access to leading edge decking operations. The draft Appendix is substantially similar to and would replace the current Appendix D to the Steel Erection Standard entitled “Appendix D to Subpart R -- Illustration of the Use of Control Lines to Demarcate Controlled Decking Zones (CDZs): Non-mandatory Guidelines for Complying with §1926.760(c)(3).”

[NOTE: *This unique regulation is consistent with previous VOSH administrative policy whereby 1926.28(a) and 1926.105(a) were enforced to provide 10-foot fall protection for steel workers, except for employees working as Connectors.*]

Courtney M. Malveaux
Commissioner

Attachment: 16 VAC25-145, Virginia Unique Standard for Fall Protection in Steel Erection or refer to: <http://leg1.state.va.us/000/reg/TOC16025.HTM#C0145>

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**16 VAC 25-145, Safety Standards
for Fall Protection in Steel Erection,
Construction Industry**

As Adopted by the
Safety and Health Codes Board

Date: 3 November 2003



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective Date: 15 January 2004

**16 VAC 25-145, Safety Standards for Fall Protection in Steel Erection
in the Construction Industry**

§10 Application of Regulations

Notwithstanding any other provisions to the contrary relating to fall protection and controlled decking zones (CDZ) in the regulation of steel erection in 16 VAC 25-175-1926.500; 16 VAC 25-175-1926.751 through 16 VAC 25-175-1926.759; 16 VAC 25-175-1926.761; and Appendix D to Subpart R- Illustrations of the Use of Controlled Decking Zones (CSZs): Non-mandatory guidelines for complying with §1926.760 (c))(3); the provisions of 16 VAC 25-145 shall take precedence.

§ 20 General Requirements

- A. Except as provided by paragraph C. of this section, each employee engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge of 10 feet or more above a lower level shall be protected from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, positioning device systems or fall restraint systems.
- B. Perimeter safety cables. On multi-story structures, perimeter safety cables shall be installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed.
- C. Connectors and employees working in leading edge decking operations shall be protected from fall hazards as provided in Sections 30 and 40, respectively.

§ 30 Connectors

Each connector shall:

- 1. Be protected in accordance with § 20 of these requirements from fall hazards of 10 feet or more above a lower level; except when structural members are being lifted for connection, when it is considered by the connector to be a greater hazard to utilize fall protection in accordance with § 20, than to have freedom of movement to avoid accidental or inadvertent contact with structural members being hoisted to be placed and connected into position.
- 2. Have completed connector training in accordance with § 1926.761; and
- 3. Be provided, at heights at or above 10 and up to 30 feet above a lower level, with a personal fall arrest system, positioning device system or fall restraint system and wear the equipment necessary to be able to be tied off; or be provided with other means of protection from fall hazards in accordance with subsection 20 A. of these requirements.

§40 Decking

- A. The use of controlled decking zones is prohibited.

- B. Each employee working at the leading edge of decking operations shall be protected in accordance with subsection 20 A. of these requirements from fall hazards of 10 feet or more above a lower level.
- C. Access to the leading edge of decking operations shall be limited to only those employees engaged in leading edge work.
- D. The boundaries of a leading edge decking operation shall be designated and clearly marked. The operation shall not be more than 90 feet (27.4 m) wide and 90 (27.4 m) feet deep from any leading edge. The operation shall be marked by the use of control lines or the equivalent. Examples of acceptable procedures for demarcating can be found in Appendix A.
- E. Each employee working in a leading edge decking operation shall have completed training in accordance with §1926.761.
- F. Unsecured decking shall not exceed 3,000 square feet (914.4 m²).
- G. Safety deck attachments shall be performed from the leading edge back to the control line and shall have at least two attachments for each metal decking panel.
- H. Final deck attachments and installation of shear connectors shall not be performed in areas where leading edge decking operations are being conducted.

§50 Illustration of the Use of Control Lines to Demarcate Leading Edge Decking Operations: Non-mandatory Guidelines for Complying with 16 VAC 25-145-40.C.

- A. When used to control access to areas where leading edge and initial securement of metal deck and other operations connected with leading edge work are taking place, the work area is defined by a control line or by any other means that restricts access.
 1. A control line is erected not less than 6 feet (1.8 m) nor more than 90 feet (27.4 m) from the leading edge.
 2. Control lines extend along the entire length of the unprotected or leading edge and are approximately parallel to the unprotected or leading edge.
 3. Control lines are connected on each side to a guardrail system, wall, stanchion or other suitable anchorage.
- B. Control lines consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:
 1. Each line is rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches (1.0 m) from the walking/working surface and its highest point is not more than 45 inches (1.3 m) from the walking/working surface.
 2. Each line has a minimum breaking strength of 200 pounds (90.8 kg).