SAFETY STANDARDS FOR FALL PROTECTION IN STEEL ERECTION, CONSTRUCTION INDUSTRY 16 VAC 25-145

16 VAC 25-145-10 Application of Regulation

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): Nonmandatory guidelines for complying with §1926.760 (c)(3); the provisions of 16 VAC 25-145 shall take precedence.

16 VAC 25-145-20 General Requirements

A. Except as provided by subsection 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 16 VAC 25-145-30 and 16 VAC 25-145-40

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respectively.

16 VAC 25-145-30 Connectors

- Each connector shall:
- Be protected in accordance with 16 VAC 25-145-20 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 16 VAC 25-145-20, than to have freedom of
 movement to avoid accidental or inadvertent contact with structural members
 being hoisted to be placed and connected into position;
- Have completed connector training in accordance with 16 VAC 25-175-1926.761; 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 16 VAC 25-145-20 A.

16 VAC 25-145-40 Decking

- A. The use of controlled decking zones is prohibited.
- B. Each employee working at the leading edge of decking operations shall be

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protected in accordance with 16 VAC 25-145-20 A 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 16 VAC 25-175-1926.750 through 16 VAC 25-175-1926.761, (Subpart R) Appendix A.

E. Each employee working in a leading edge decking operation shall have completed training in accordance with 16 VAC 25-175-1926.761.

F. Unsecured decking shall not exceed 3,000 square feet (914.4 m 2).

<u>G.</u> 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.

16 VAC 25-145-50Illustration of the Use of Control Lines to Demarcate Leading EdgeDecking Operations: Non-mandatory Guidelines for Complying with 16 VAC 25-145-40 D

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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; and
- 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:

- 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)