

**North Carolina Department of Labor  
Division of Occupational Safety and Health  
Raleigh, North Carolina**

Field Information System

Operational Procedure Notice 121B

**Subject:** Steel Erection Standard

**A. Purpose:**

This notice establishes North Carolina's policy for Steel Erection effective January 18, 2002, when North Carolina enacts OSHA's revised Steel Erection Standard, Subpart R of 29 CFR 1926, "Occupational Safety and Health Standards for the Construction Industry."

**B. Scope:**

This policy applies to construction activity throughout North Carolina.

**C. References:**

- *North Carolina Register*, January 2, 2002, 13 NCAC 07F .0201 "Construction."
- 29 CFR 1926, "North Carolina Occupational Safety and Health Standards for the Construction Industry," with amendments through February 1, 2001.
- Federal Register, Vol. 66, No. 12, January 18, 2001, pages 5196-5280, Final Rule: Safety Standards for Steel Erection.

**D. Action:**

OSHNC agencies will conduct training and outreach activities, consultative services, technical assistance and compliance inspections in accordance with the guidelines contained in this OPN.

**E. Effective Dates:**

This OPN cancels and replaces OPN 121A. It is effective on the date of signature and will remain in effect until canceled or revised by the Director. North Carolina adopts verbatim OSHA's new Subpart R of 29 CFR 1926.

**F. Discussion:**

The new standard addresses the hazards that have been identified as the major causes of injuries and fatalities in the steel erection industry. These include hazards associated with working under loads; hoisting, landing and placing decking; column stability; double connections; landing and placing steel joists, and falls to lower levels.

North Carolina state-specific modifications to the new OSHA Subpart R have been proposed as described in the "Notice of Text" published in the *NC Register* dated January 2, 2002. These proposed state-specific standards will not be enforced until promulgated at completion of the legislative rulemaking process, which is not likely to occur before August 2002. In the interim period between January 18, 2002 and promulgation of the North Carolina-specific modifications of the new standard, NCDOL will permit shop-installed shear connectors provided the associated hazard(s) are abated on the construction site.

Employees will be protected from fall hazards of six (6) feet or more to a lower level exacerbated by tripping hazards of shear connectors (*including, but not limited to headed steel studs, steel bars or steel lugs*), reinforcing bars, deformed anchors, or threaded studs attached to the top flanges of steel members such as girders, joists, beams, and beam attachments). Such hazard abatement/ protection from falls may be accomplished by any of the following:

- (1) Shear connectors that project vertically or horizontally across the top flange of a member not being welded or installed until the metal decking or other walking/working surface is in place (field-installed shear connectors).
- (2) All employees working on members with shop or pre-installed shear connectors will be protected from fall hazards greater than six (6) feet by suitable, as defined in 1926.32(s), fall protection systems, including guardrail systems, personal fall arrest systems, or safety nets.
- (3) Shop or pre-installed connectors that project vertically from or horizontally across the top flange of the member will be covered by a temporary decking, metal or wood box until the metal decking, or other suitable walking/working surface, is installed or until final construction covers the shear connectors.

Signed on Original

Jack R. Forshey  
Standards Supervisor

Signed on Original

John H. Johnson  
Director

3/26/02  
Date of Signature