OSHA STANDARD INTERPRETATIONS

OSHA requirements are set by statute, standards and regulations. Interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. Enforcement guidance may be affected by changes to OSHA rules.

Clarification on the use of double connections at beams not framing into columns

Standard: 1926.756; 1926.756(a)(1); 1926.756(c)
Date of response: June 1, 2012

QUESTION: Does OSHA standard 1926.756(a)(1) stipulate the use of double connections at beams not framing into columns in spite of the clarification given in OSHA’s May 9, 2006 letter to Mr. Doug Brown?

ANSWER: No, 29 CFR 1926.756(a)(1) does not stipulate the use of double connections at beams not framing into columns. Instead, it requires the ironworker or connector to secure at least two bolts per connection at all initial connections on a structural member before the hoisting line may be removed. The letter you reference ... discusses OSHA standard 1926.756(c). The requirements of 1926.756(a)(1) and 1926.756(c)(1) are separate and distinct.

Section 1926.756(a)(1) establishes beam and column connection requirements during the hoisting and placing of solid web structural members. These requirements must be met before the hoisting line may be removed from structural members, thereby transferring the weight of the structural members from the hoisting device to the structure itself. Section 1926.756(a)(1) does not distinguish between double connections and other kinds of connections. ... Section 1926.756(a)(1) states:

During the final placing of solid web structural members, the load shall not be released from the hoisting line until the members are secured with at least two bolts per connection, of the same size and strength as shown in the erection drawings, drawn up wrench-tight or the equivalent as specified by the project structural engineer of record, except as specified in paragraph (b) of this section [emphasis added].

On the other hand, 1926.756(c) ... establishes specific procedural requirements to ensure that structural stability is maintained during beam attachment under circumstances “[w]hen two structural members on opposite sides of a column web, or a beam web over a column, are connected sharing common connection holes.” OSHA also defines the term “double connection” under 1926.751 (definitions) as “an attachment method where the connection point is intended for two pieces of steel which share common bolts on either side of a central piece.” The use of a double connection is determined by the structural engineer designing the structure and is never “required” by an OSHA standard. However, double connections ... must be made in compliance with 1926.756(c).

In OSHA’s letter to Mr. Brown, we stated that “[s]ection 1926.756(c) by its terms does not apply to double connections made at a beam away from a column.” We explained in our letter that 1926.756(c) “addresses the injuries and deaths of workers caused by the collapse of double connected steel members which occur when the beam ends being connected are not supported by the column at all times.”

James G. Maddux, Director
Directorate of Construction

Excerpted from: