

Fatality Narrative

Foreman Killed When Collapsing Steel Columns Knock Over Boom Lift*

Industry: Commercial and institutional building construction.

Occupation: Foreman.

Task: Working from boom lift preparing to weld roof truss.

Type of Incident: Struck by/Machine-related/Fall.

Release Date: December 21, 2009.

Case No.: 08WA03201.

SHARP Report No.: 71-88 -2009.

On June 20, 2008, a crew foreman working from an elevated boom lift died when two steel columns tipped over, striking the lift and knocking it over. The 34-year-old foreman worked for 15 years for a company that constructs commercial and industrial buildings. He was supervising a steel erection crew at a job site where a manufacturing facility was being built. The crew was erecting a line of 40-foot tall columns equipped with crane rail sections and upper girders. At the time of the incident the victim was working from the basket of a raised boom lift waiting for a crane operator to set a steel roof truss so that he could weld it in place. Two of the columns and the attached crane rails and girders tipped over, hitting the victim's boom lift, knocking it to the concrete floor. The victim sustained head injuries and died at the scene. An investigation determined that no bracing or guying was used to support the collapsed column and crane rail structure.

Incident scene showing collapsed columns and crane rail structure lying on top of the tipped over boom lift.



Requirements/Recommendations

(! Indicates items required by code)

- ! Obtain and follow an engineer's recommendations for temporarily guying and bracing structural steel members.
- ! All columns must be anchored by four bolts.
- ! Plumbing –up equipment must be installed in conjunction with the steel erection process to ensure the stability of the structure.
- ! Train steel erection crew leads in proper safety procedures.
- Consult an engineer for instruction on proper methods for installation of fabricated structural steel members.
- Develop a steel erection plan and have it reviewed by a competent person or an engineer.

State Wide Statistics: This was the 32nd out of 70 work-related fatalities in Washington State during 2008, and was the 6th out of 18 construction-related fatalities.

**This bulletin was developed at the Washington State Department of Labor and Industries to alert employers and employees of a tragic loss of life of a worker in Washington State. The information in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.*

Developed by the Washington State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), WA State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH). For more information, contact the Safety and Health Assessment and Research for Prevention (SHARP) Program, 1-888-667-4277, <http://www.Lni.wa.gov/Safety/Research/FACE>.