Ironworker Killed When Rebar Cage Collapses*

Industry: Structural Steel and Precast Concrete Contractors
Task: Installing rebar cage
Occupation: Journey level ironworker
Type of Incident: Struck by falling object

On February 19, 2009, a 23-year-old journey level ironworker died when a rebar cage collapsed. The victim worked for a structural steel erection contractor. The contractor was hired to perform steel rebar assembly and installation on the site of a new commercial office building. The job site work crew was erecting a steel rebar cage weighing about 5,600 lbs as part of a column structure. It measured 20x56 inches and 30 feet tall. They had previously erected 11 similar cages. The rebar cage was braced using 2x4’s nailed together and attached to the building floor. A tower crane placed the cage into position and then released the cage. The victim and another crew member were climbing the cage to make adjustments to the rebar and set the braces. Both workers had fall protection gear and were working on the same side of the cage when the crew noticed the cage began to lean. The crew attempted to reconnect the crane to the cage, but before they were able to one of the 2x4 braces failed and the cage collapsed. The victim was struck by the falling rebar cage and died of blunt force injury of the head at the scene. The other worker escaped without injury.

Requirements

! Ensure that reinforcing steel for columns, walls, and similar vertical structures is guyed or supported to prevent collapse. See WAC 296-155-680
! Make sure your accident prevention program (APP) addresses hazards and abatement methods when installing reinforcing columns, walls, and similar vertical structures. See WAC 296-155-110
! Ensure that the inspection of rigging and equipment is done by a qualified rigger. See WAC 296-155-329 and WAC 296-155-330

Recommendations

✓ Use bracing that is in good working order. Frequently inspect and replace defective equipment and material.
✓ Make sure that bracing and guying are able to support the forces imposed.
✓ Ensure that loads are secured and will not inadvertently become displaced when released.
✓ A qualified person should design methods of bracing reinforcing steel when being placed into position.
✓ A competent person should determine if additional methods must be used to support reinforcing steel beyond guying and bracing.

State Wide Statistics: This was number 5 out of 65 work-related fatalities in Washington State during 2009, and was number 1 out of 7 construction-related fatalities.

*This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and 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.

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