

## Ironworker Falls 72 Feet from Mast Scaffold

**Industry:** Structural steel and precast contractors

**Task:** Welding a beam

**Occupation:** Ironworker

**Type of Incident:** Fall





# ***FATALITY NARRATIVE***

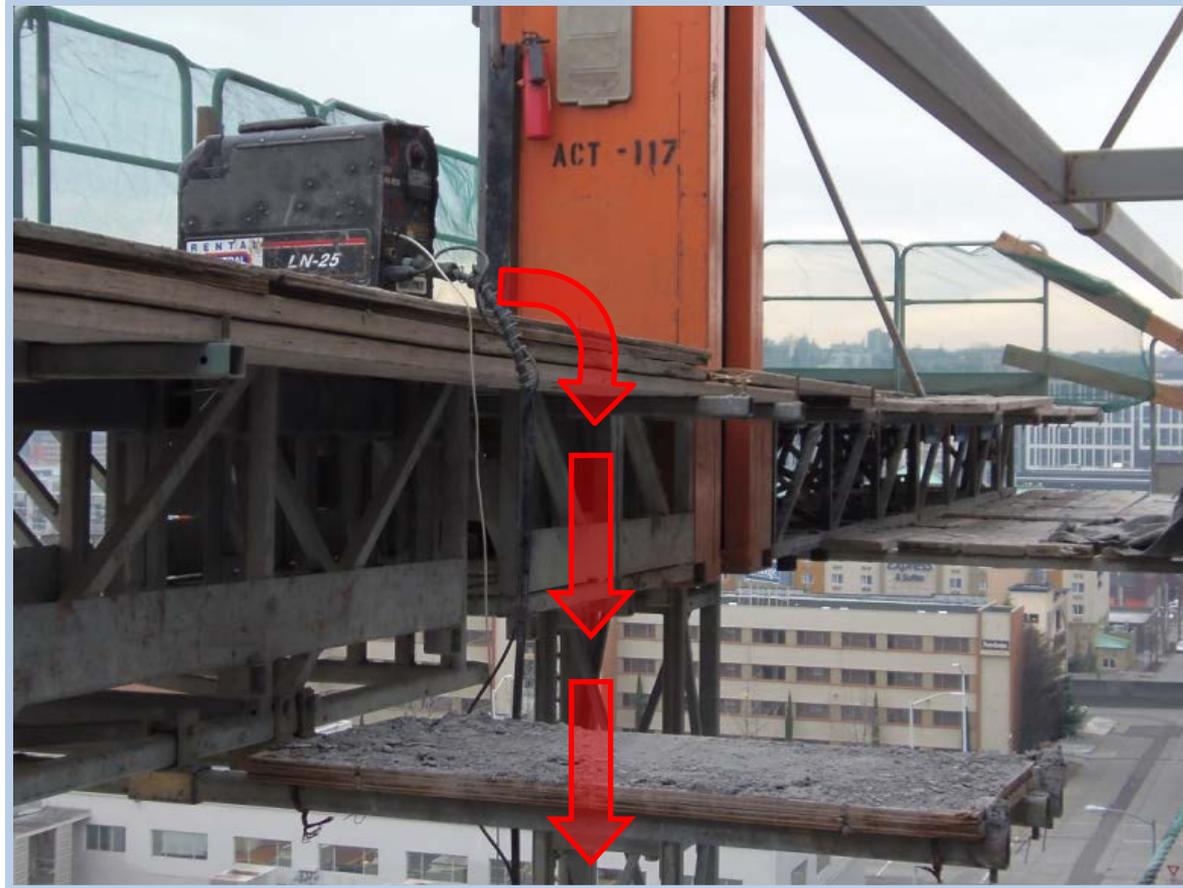
On January 6, 2014, a 34-year-old ironworker died when he fell from a mast scaffold.

The incident happened at a multi-story commercial building construction project site. The victim's employer is a provider of steel erection services and was a subcontractor on this project. The victim had worked as an ironworker for 10 years. He had been with his employer for 11 months; four of these months had been spent at this site.

On the day of the incident, three employees were rigging and welding a tube steel eyebrow beam into place between the building's 9<sup>th</sup> and 10<sup>th</sup> floors. That morning the victim and another employee operated the power-driven twin mast scaffold to raise the work platform to the work area. This type of scaffold is also known as a mast climbing work platform or mast climber. Working from the scaffold, the victim and another employee welded half of the beam into place. The third employee was on the roof rigging the beam sections and signaling the crane operator. After receiving and temporarily attaching the second half of the beam, the victim unhooked his lanyard's pelican hook from the scaffold frame and began walking along the scaffold to where he would have to step down onto a 2'x4' platform in order to access the point to be welded. Two employees observed the victim, who was not tied off, trip over a welding cable and fall into an opening between the building and the scaffold. He fell 72 feet from the scaffold to the concrete road below.



Incident scene showing the building exterior and twin mast scaffold. The red circle in the photo shows the area where the ironworker fell through a 55 inch gap between the scaffold and the building.



Incident scene showing the mast scaffold platform where an ironworker who had disconnected his fall protection was walking and tripped over a welding cable and fell 72 feet to his death.



# *FATALITY NARRATIVE*

Investigators determined, among other things, that:

- the unprotected opening between the scaffold platform and the building was 55 inches;
- neither vertical nor catenary lifelines were available on the section of the scaffold where the victim fell;
- employees were not properly trained in fall protection measures or in the operation and use of the mast scaffold; and
- the scaffold and its components were not inspected by a competent person.



# *FATALITY NARRATIVE*

## Requirements

- **Provide fall protection if a scaffold is too far from the work face.** Provide a guardrail system or have employees use a personal fall arrest system if the distance from the front edge of the scaffold platform to the work face is greater than 18 inches for plastering and lathing work and 14 inches for all other work.

See [WAC 296-874-20054](#).

- **Train employees who work on a scaffold.** Have a qualified person train each employee to: 1) recognize the hazards associated with the type of scaffold they are using, 2) understand the procedures to control or minimize the hazards.

See [WAC 296-874-20072](#).



# *FATALITY NARRATIVE*

## Requirements

- **Inspect scaffolds and scaffold components.** A competent person must inspect for visible defects before each work shift and after anything occurs that could affect the scaffold's structural integrity.  
See [WAC 296-874-20034](#).
- **Fall protection work plan.** Develop and implement a written plan for each area of the work place where employees are assigned and where fall hazards of ten feet or more exist.  
See [WAC 296-155-24611\(2\)](#).



# *FATALITY NARRATIVE*

## **Recommendation**

Project general contractors and subcontractors should coordinate to ensure that work site safety responsibilities are clearly defined, understood, and carried out.



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*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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