FATALITY NARRATIVE

Ironworker Falls 30 Feet through Skylight Roof Opening

INCIDENT FACTS

REPORT #: 71-169-2018s

REPORT DATE: April 23, 2018

INCIDENT DATE: Sept. 22, 2017

VICTIM: 60 years old

INDUSTRY: Structural steel and precast concrete contractors

OCCUPATION: Ironworker

SCENE: New construction concrete water tank storage facility

EVENT TYPE: Fall
A 60-year-old ironworker died when he fell 30 feet through a skylight roof opening.

The victim had 39 years of experience as an ironworker. He had previously worked for his employer, a poured concrete foundation and structure contractor, as a union referral. The job site was a new construction precast concrete building for storage of water tanks.

On the day of the incident, he and other crew members were working on the building’s roof. The victim’s task, which was a normal part of his job, was to weld roof ties to secure the precast roof sections to ensure structural stability. He was using personal fall protection, including a full body harness with a self-retracting lanyard attached to a roof anchor point.
At one point when he was out sight of the crew members, he disconnected from his lanyard. He then began moving the welding equipment to another area. He walked backwards pulling on the welding cable which in turn pulled on the wire feeder case, moving it along.

As he was doing this, he stepped into a 7-foot by 3-foot skylight roof opening, and fell 30 feet to the ground below. As crew members responded, provided aid, and summoned help, the conscious victim told them what he had done.

An employee called 911. An EMS helicopter arrived and took the victim to a hospital, where he died several hours later.
State workplace safety investigators found that the victim was not using his fall protection system, though there were adequate fall protection anchors and lanyards available. The previous day a coworker had seen the victim not using fall protection on two occasions and told him that he needed to tie-off.

Typically, the employer covered skylight openings before workers started work on a roof. In this incident, 3 out of 4 skylight openings were covered, but they did not have enough material on site to cover the opening which the victim fell through.
Photo 1. Skylight roof opening with cover placed on it after the ironworker fell through the opening.
Interior of water tank storage facility:

Photo 2 shows the skylight roof opening with a cover placed after the ironworker fell through. Photo 3 shows the place where the ironworker landed 30 feet below.
Photo 4. Incident scene showing the new construction water tank storage facility where the ironworker fell through a skylight roof opening.
Photo 5. Reenactment of how the ironworker moved his welding wire feeder case by pulling on the welding cable while walking backwards on the building roof prior to falling though the skylight roof opening. The proper way of moving the wire feeder would be to pick it up by its handle.
Requirements

Cover or guard unprotected skylight openings, or use a personal fall arrest system as an equivalent means of fall protection.

See WAC 296-155-24609 (4) (d)
Recommendations

• Workers must use fall protection when required and use it 100% of the time.

• Ensure that employees use fall protection when required and encourage employees to report incidents of employees not using appropriate fall protection systems.

• Perform a daily job site hazard assessment to identify and correct hazards, such as a roof opening.
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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