Laborer Falls 12 Feet through Barn Roof

Industry: General contractor

Task: Making repairs to Barn Roof

Occupations: Laborer

Type of Incident: Fall
In September of 2016, a 54-year-old construction laborer fell 12 feet to his death when he stepped on a portion of the metal roof of a dairy cow barn and it gave way.

It was his first day on the job working for his employer, a small general contractor. Investigators were unable to determine his construction work experience. A dairy farm owner hired the employer to do remodeling and make repairs around the dairy. For the past several years, the employer had done work around the farm.
On the day of the incident, the victim and another laborer were working on a damaged barn roof. They were to replace the badly deteriorated metal roof peppered with rusty, pitted areas and damaged trusses.

A year earlier, dairy workers had placed plastic sheeting on the roof as a temporary fix to prevent rain from coming through the damaged roof. The victim and the other laborer were prepping the 3/12 pitch roof for repairs by removing the plastic sheeting. The employer and the laborers were aware of how severely damaged the roof was. The employer did not require or provide fall protection and told the laborers to walk on the purlins, not the damaged metal roofing.

The laborers spent the morning and early afternoon working on the roof at heights varying from 7 feet at the eaves to 20 ½ feet at the roof peak. At approximately 3 p.m., the victim stepped on a metal roof panel that gave way under his weight, causing him to fall and land on concrete 12 feet below. He died of head injuries at the scene.
Incident scene showing the cow barn. The victim stepped on a portion of the metal roof and it gave way and he fell 12 feet, landing on concrete.
Incident scene showing part of the cow barn metal roof that gave way when the victim stepped on it and fell through, landing 12 feet below.
Section of metal roof that gave way when stepped on by the victim.
Requirements

Ensure that all surfaces on which employees will be working or walking on are structurally sound and will support them safely prior to allowing employees to work or walk on them.

See 296-155-24605(1)
Requirements

Ensure that the appropriate fall protection system is provided, installed, and implemented when employees are exposed to fall hazards of 10 feet or more to the ground or a lower level while engaged in roofing work on a low-pitched roof.

Requirements

Develop and implement a written fall protection work plan including each area of the workplace where the employees are assigned and where fall hazards of 10 feet or more exist.

See WAC 296-155-24611(2)

Conduct walk-around safety inspections at the beginning of each job and at least weekly thereafter.

See WAC 296-155-110(9)
Recommendations

Develop and implement a safety and health plan based on a job hazard analysis (JHA) for each task workers are assigned to do.
Resources

Job Hazard Analysis,
Washington State Department of Labor & Industries.

www.lni.wa.gov/Safety/Topics/AToZ/JHA/
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.