

Laborer Falls 24 Feet from Roof Deck

INCIDENT FACTS

REPORT #: 71-193-2020s

REPORT DATE: April 6, 2020

INCIDENT DATE: January 31, 2019

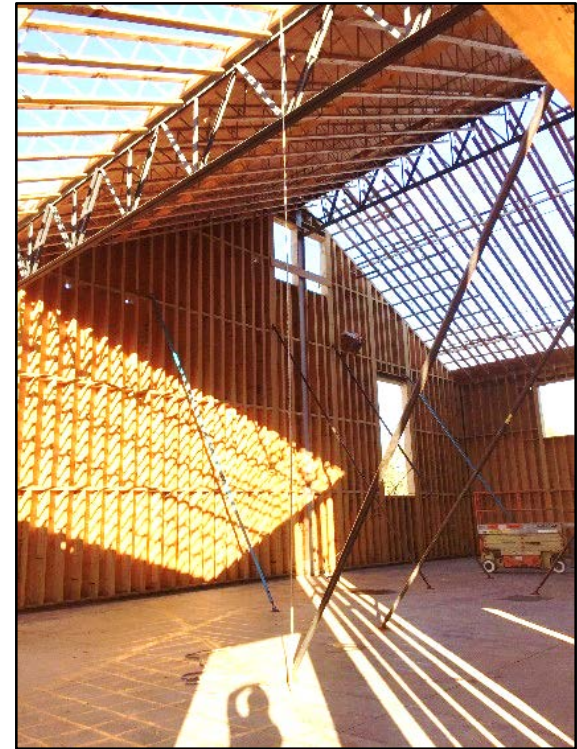
VICTIM: 31 years old

INDUSTRY: Framing contractors

OCCUPATION: Laborer

SCENE: School gymnasium new construction

EVENT TYPE: Fall



A 31-year-old laborer was severely injured when he fell 24 feet from a roof deck, landing on concrete.

He was using a personal fall arrest system, but he had not adjusted the rope grab and there was too much slack in his lifeline.

The laborer was employed by a framing contractor. He had worked for the employer for two years.

On the day of the incident, the laborer was working on the construction a new school gymnasium.

Shortly after 7 a.m. on a cold winter morning, he went on to the partially sheathed plywood roof deck to prepare it for more sheathing installation. The roof deck was covered with frost.

His first task was to use a propane burner torch to melt the frost and dry the deck so that workers could safely work without slipping on the 8/12 pitch roof.

He was wearing a full-body harness with a lanyard and a rope grab attached to a lifeline that was tied-off to a roof anchor point.

Using the torch, he worked his way up the roof. As he did this, he slipped on frost and slid about 20 feet down the roof.

He attempted to arrest his fall by grabbing a roof truss but was unable to. Believing the rope grab on his lifeline would arrest his fall, he did not attempt to hold on to the rope.

He slid over the roof's leading edge and fell 24 feet, landing on a concrete floor. He suffered fractures to his thigh, heel, and wrists.

Investigators found that the laborer had not adjusted his rope grab short enough on the lifeline to arrest his fall.

After the incident, the rope grab resting on the floor had two feet of slack between it and the vertical section of lifeline.

INJURY NARRATIVE



Photo 1. Location where the carpenter fell from the 8/12 pitch roof deck (arrow). The “X” indicates where he landed on the floor.

INJURY NARRATIVE



Photo 2. Incident location with the rope grab (arrow) showing slack in the lifeline.

Requirements

Regardless of work activity, employers must ensure that employees exposed to fall hazards of 4 feet or more while working on a roof with a pitch greater than 4/12 use one of the following systems: fall restraint, fall arrest, or positioning device.

See [WAC 296-155-24609\(7\)\(a\)](#)

Requirements

When stopping a fall, personal fall arrest system must be rigged to allow a maximum free fall distance of 6 feet so an employee will not contact any lower level.

See [WAC 296-155-24613\(d\)\(i\)](#)

Requirements

As part of their accident prevention program, employers must conduct crew leader-crew safety meetings at the beginning of each job, and at least weekly thereafter. These safety meetings must be tailored to the particular operation.

See [WAC 296-155-110\(5\)](#)

Recommendations

- Employers should train workers to inspect and use fall protection properly to ensure safety.
- In order to stay safe, workers using rope grabs need to continually take the slack out of their lifelines as they work.

This bulletin was developed to alert employers and employees of a serious traumatic injury 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 injury.

Developed by the Washington State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), Washington 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 grant# 5U60OH008487). For more information visit www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face.