

Carpenter Falls through Floor of Two-Story Garage

INCIDENT FACTS

REPORT #: 71-230-2022s

REPORT DATE: November 21, 2022

INCIDENT DATE: March 10, 2022

WORKER: 33 years old

INDUSTRY: New single-family housing construction

OCCUPATION: Carpenter

SCENE: Residential garage under construction

EVENT TYPE: Fall



A 33-year-old carpenter fell through the floor of the room over a garage while he was installing OSB sheathing. He had worked with his two brothers for about a month as part of a three-person crew.

The carpenter and his brothers were doing leading edge work to install the floor above the garage. He was laying floor sheeting while one brother was taking measurements and the other was busy cutting the sheeting. They finished framing the room and installing the roof trusses about a week before.

He went down a ladder to the ground floor to get some nails. After coming back up the ladder, he started nailing down a sheet. Shortly after, he fell through the joists of the unfinished floor along with a sheet of OSB to the concrete 14 feet below. Despite working close by, neither brother saw him fall. He was not wearing a personal fall protection harness when he fell. He died the next day at the hospital.

After the incident, the brothers demonstrated to investigators how they tied-off their fall protection lifeline ropes by wrapping them around roof trusses. They did not have fixed or temporary anchors installed. Investigators determined their method of tying off was inadequate since diagonal truss braces are not rated for that. Investigators also found that the employer did not have an Accident Prevention Program (APP) and did not develop a fall protection work plan for the project.



Photo 1. View of front of two-story garage the carpenter and his brothers were building.



Photo 2. View of the second story floor joists from inside the garage. The shaded area in the floor joists on the right side of the photo is the pile of OSB sheathing they were using to lay the floor.



Photo 3. View of the floor leading edge and the pile of OSB sheathing they were using to lay the floor.

FATALITY NARRATIVE



Photo 4. View of the inside of the garage in the area the carpenter fell. The distance from the top of the floor joists to the concrete floor measured 14 feet.



Photo 5. Demonstration of how the crew wrapped their fall protection system life line and looped it into itself around a diagonal set of 2x4s installed as one of the truss cross-braces.

Requirements

Employers must:

- Ensure that a fall arrest system, fall restraint system, or positioning device system is provided, installed, and implemented in accordance with this chapter when employees are exposed to fall hazards of six feet or more to the ground or lower level while constructing a leading edge. See [WAC 296-880-30005 \(1\)\(b\)](#)
- Develop and implement a written fall protection work plan including each area of the work place where the employees are assigned and where fall hazards of ten feet or more exist. See [WAC 296-880-10020 \(1\)](#)
- Develop a formal accident-prevention program, tailored to the needs of the particular plant or operation and to the type of hazard involved. See [WAC 296-155-110 \(2\)](#)

Recommendations

- Frequently remind workers of the need to use fall protection 100% of the time they are at risk of falls.
- Develop policies and train workers to:
 - Tie-off to approved fixed or temporary anchors only. Wood beams of roof trusses are not designed to support fall protection systems.
 - Not store raw materials like OSB over floor joists or other areas where fall hazards exist.

Resources

- [Fall Protection Work Plan Template](#) [Spanish version](#)
- [Fall Protection Basics for Construction Activities](#)

This narrative was developed to alert employers and workers of a tragic incident 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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