A 25 year old male employee fell 20' through insulation covering a skylight opening to the concrete floor below.

Chitwood Construction hired this contractor to remove existing metal panels and skylights then install new metal roofing panels covering the openings left by the skylights at a warehouse building. The warehouse roof length measured 126 (East to West) and 80 wide (North to South) with a pitch of 1:12, where the highest point separated the north and south sides of the roof. There was a total of eight skylights measuring 4'x4' and one skylight measuring 3'x3'. The skylights were installed when the building was built in 1966. The warehouse is an active warehouse that supplies the attached store and customer orders. The exterior of the warehouse is made up of a metal frame and metal panels. In contrast, the warehouse's interior houses several metal shelving racks, an office, and pallets of merchandise on a poured cement floor.

On the day of the incident, according to witnesses, four employees from Iron Core Construction and one laborer from Chitwood Construction were on the roof, installing insulation and metal roof panels. A fifth employee of Iron Core Construction was operating the JLG 400S Man Lift to transport employees and supplies from the ground up to the roof and back down during the project. To accomplish this, sections of the existing metal roof panels would be removed along with the existing skylights. The holes from the removed skylights received 4'x4' cut insulation pieces that were lapped over the holes. Then, a 6'x40' roll of insulation would be rolled out across the refitted roof section. Then, a new metal roof panel would be placed on top of the insulation and screwed down. The four-person crew worked in a line along a 40' section of the roof, screwing down a 3'x40' section metal roof panel. Witnesses reported that the victim was reaching when he fell forward through a hole in the roof approximately 4 feet by 4 feet left where a skylight had been removed. The open hole was covered with two insulation layers and would not have been visible from the roof work area. The employee fell approximately 20 feet landing on the warehouse's concrete floor. This was the third skylight from the rear of the warehouse on the left side facing East.

Interviews revealed that at the time of the accident, fall protection systems were not in place to protect the walking-working surface of the roof at the warehouse. The use of a fall protection system around the skylights could have prevented employees from falling. In addition, there was no fall protection in place to protect employees from falling off the sides of the roof positioned approximately 17 feet above the ground.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

Citation 1 Item 1 Type of Violation: Serious \$1200

29 CFR 1926.453(b)(2)(v): A safety harness with lanyard attached to the boom or basket was not worn by employee(s) working from an aerial lift:

In that (4) employees performing metal roofing installation were not wearing safety harnesses with lanyards attached to the booms or baskets while working from the basket or being transported to the rooftop or back down to the ground.

<u>Citation 1 Item 2</u> Type of Violation: Serious \$1200

29 CFR 1926.503(a)(1): The employer did not provide a training program for each employee who might be exposed to fall hazards. The program did not enable each employee to recognize the hazards of falling and did not train each employee in the procedures to be followed in order to minimize these hazards:

In that employees exposed to fall hazards while working on the roof of a building had not been properly trained by the employer to recognize and avoid potential fall hazards.

Citation 2 Item 1 Type of Violation: Willful-Serious \$54,000

29 CFR 1926.501(b)(4)(i): Each employee on walking/ working surfaces was not protected from falling through holes (including skylights) more than 6 feet (1.8m) above lower levels, by personal fall arrest system, covers, or guard rails erected around such holes.

In that the employer did not ensure that employees were protected from falling through existing skylights or the holes created by the skylights that were removed from the roof approximately 20 feet above the floor level.

The company owner was aware that the skylights and skylight openings were present and admitted that the fall hazard was a concern. The owner showed plain indifference by not providing fall protection to employees working around the skylights and skylight openings.

Citation 2 Item 2 Type of Violation: Willful-Serious \$54,000

29 CFR 1926.501(b)(10): Each employee engaged in roofing activities on low-slope roofs with unprotected sides and edges 6 feet or more above lower levels, was not protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system.

In that there were three employees removing skylights and installing new insulation and metal roofing panels on a warehouse roof without any fall protection, exposing them to a fall hazard of approximately 17' from the edge of the roof to the ground level and approximately 20' from the edges of the skylights to the ground.

The company owner was aware that the fall hazards were present but showed plain indifference by not requiring employees to use it. The owner stated that he didn't think fall protection was needed on the roof because it was flat and that he only required fall protection if the job was dangerous.

<u>Citation 3 Item 1</u> Type of Violation: Other-than-Serious \$1500

TDLWD Rule 0800-01-03-.05(1)(a): Within eight (8) hours after the death of any employee as a result of a work-related incident, the employer did not report the fatality to the TOSHA Division of the Tennessee Department of Labor and Workforce Development.

In that a fatality occurred on 06/03/2023 from a workplace fall hazard and was not reported to TOSHA until 6/05/2023 by the General Contractor.



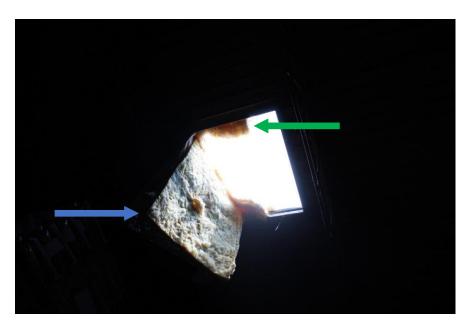


(The warning line system was installed after the incident by Chitwood Construction).

Fall through skylight—Insp # 1675158 Iron Core Construction







Fall through skylight—Insp # 1675158 Iron Core Construction

