

# Fatal Falls through Skylights

## Case Study

Kentucky Fatality Assessment &  
Control Evaluation (FACE) Program



**Kentucky Public Health**  
Prevent. Promote. Protect.



# What is the risk?

62 workers in the construction industry died due to falling through a surface or opening like a skylight in the U.S. in 2021.<sup>1</sup>

Since 1994, 7 construction workers in Kentucky have died due to falling through skylights.

Three of the 7 fatalities occurred during the 10-month period from May 2022 through February 2023.<sup>2</sup>

Let's take a look at a case  
that occurred in Kentucky.

# Roofing Contractor Dies after Falling through Skylight



Photo showing metal roof with fiberglass skylights where the incident occurred.

# Employer and Training

A roofing contractor that specialized in the installation of rubberized coating on low-slope commercial building roofs.

Founded in 2019 and consists of one full-time employer (owner/foreman) and multiple part-time employees who are utilized on an as-needed basis depending on the job.

The company had no written safety program in place. The owner stated that he typically provides verbal safety guidance.

# Worker Information

37-year-old male.

Had worked as a part-time employee for the company since 2020.

Had another full-time position at a manufacturing facility.

# Incident Scene

The incident occurred on the roof of a 19,000-square-foot multi-use commercial building.

The roof is constructed of corrugated metal and measures 27.5-feet on either side and 30-feet at its peak and has a pitch of 1:12.

A total of 30 fiberglass skylights are present within the roof, all original to the construction of the building. The floor inside the building is constructed of concrete.



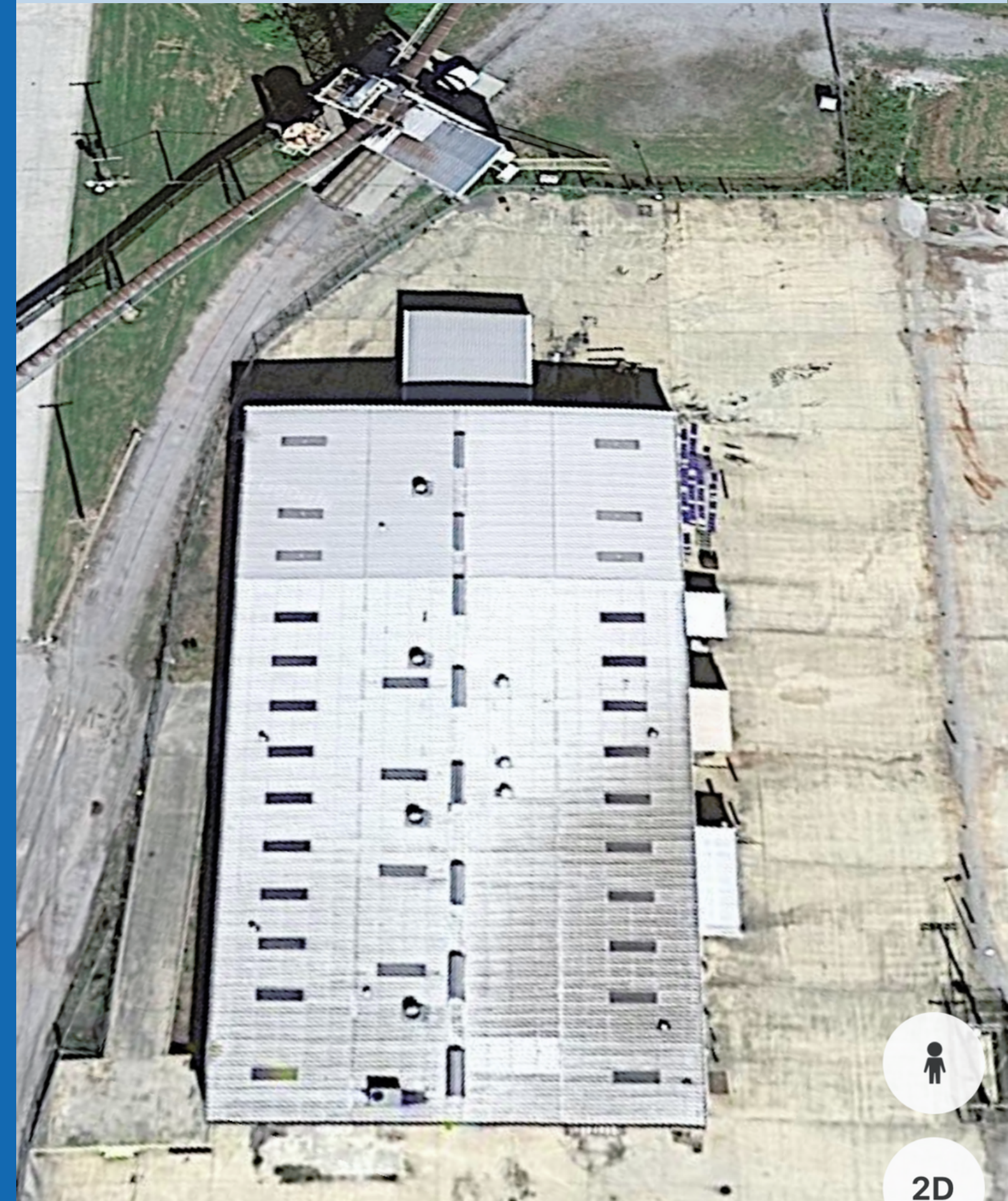
Photo showing metal roof with fiberglass skylights where the incident occurred.

# The Incident

The victim was assisting the job foreman with the installation of a commercial grade rubberized roof coating. According to the foreman, the victim's primary job function was to manage the hose that fed the product to the sprayer.

The job foreman advanced to the roof with his hose and sprayer. The victim remained on the ground during the beginning stages of the application to verify the coating was properly flowing through the hose. The job foreman stated that he had expected the victim on the roof shortly after spraying began.

Google Earth image of building where the incident occurred.





# The Incident

After 15 minutes passed, the foreman realized the victim was not on the roof and stopped to investigate. As the foreman proceeded towards the ladder, he noticed a breach in one of the roof's 30 fiberglass skylights.

The victim had fallen 30 feet through the fiberglass skylight and landed on the concrete surface below. EMS was called and rendered aid, but the victim was pronounced deceased at the scene.



One of the 30 fiberglass skylights present on top of the building where the incident occurred.

# The Incident

A couple of hours later, a relative of the foreman arrived on the scene and went up to the roof to gather the equipment and tools. The family member stepped on and fell through another skylight 30 feet to the concrete surface below.

EMS, who was still on scene from the first incident, rendered aid. The family member was life-flighted to a trauma center for treatment of non-fatal injuries, including multiple broken bones. The family member was released 14 days later and expected to make a full recovery.

**Red Circle**-The skylight involved in the victim's incident.

**Purple Circle**- The skylight involved in the family member's incident.

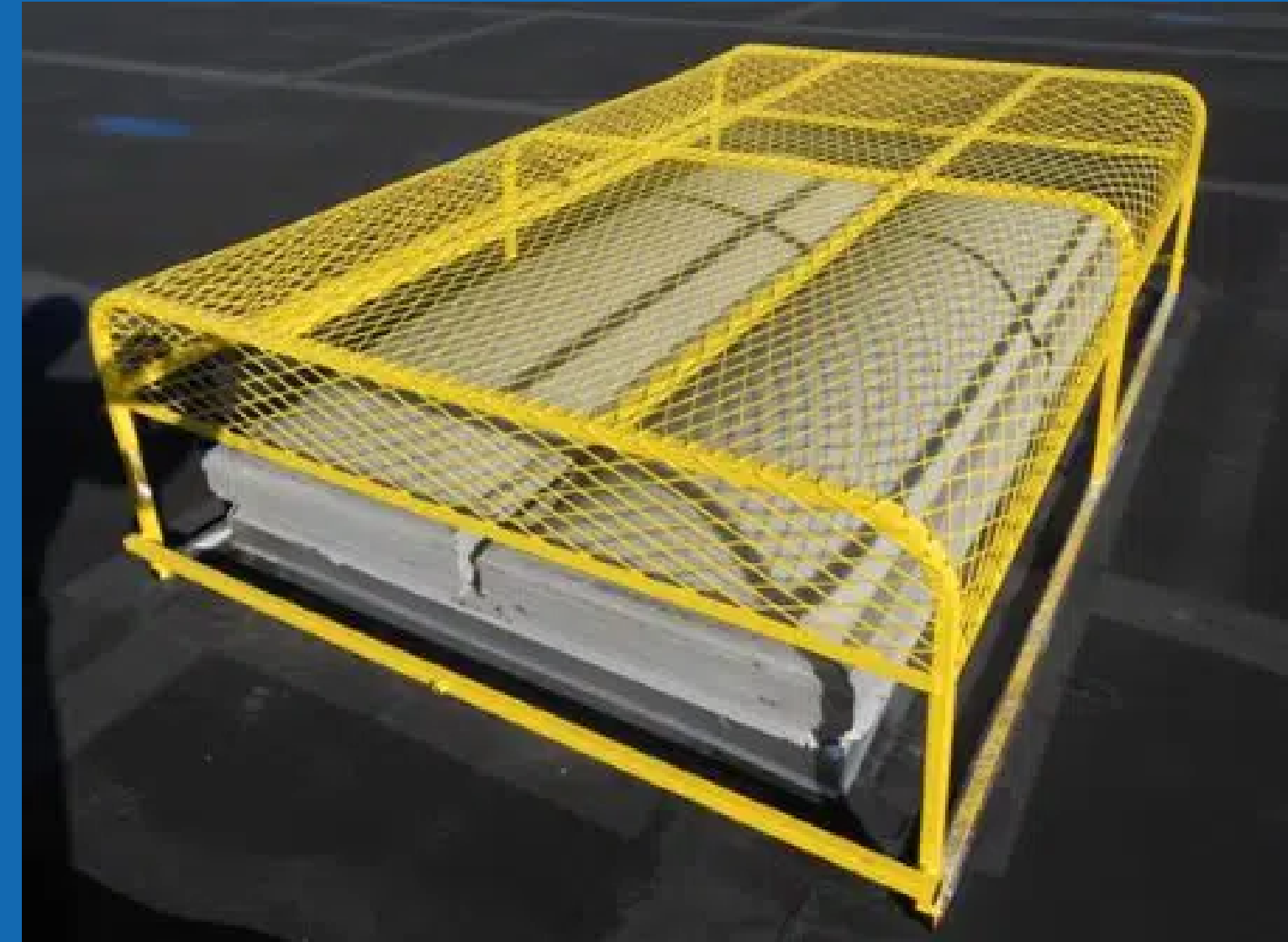


# Requirements

Employees must be protected from falling more than 6 feet through floor holes and skylights by personal fall arrest systems, covers, or guardrail systems erected around such openings. [See 1926.501\(b\)\(4\)\(i\).](#)

Employers must provide a training program for employees who may be exposed to fall hazards. The program should include how to recognize the hazards of falling and should train employees in the procedures to follow in order to minimize fall hazards.

[See 1926.503 \(a\)\(1\).](#)



# Recommendations<sup>3</sup>

Perform a job hazard analysis to identify potential fall hazards and plan control measures.

Prior to beginning a job, ensure that all necessary fall protection systems are in working order.

Conduct frequent scheduled and unscheduled inspections to ensure that a fall protection system is used consistently and correctly.



# Recommendations<sup>4</sup>

Consider prevention through design to “design out” or minimize hazards. Employers can eliminate fall hazards associated with skylights by excluding them from building designs. Facilities with existing skylights can phase out and remove existing skylights in lieu of repairing them, thus eliminating the hazard and future exposure.

[Learn more](#)



# Sources

1. Construction Safety: Prevent Falls through Skylights and Other Openings. (2023, February 21). Safety+Health. <https://www.safetyandhealthmagazine.com/articles/23594-construction-safety-prevent-falls-through-skylights-and-other-openings>.
2. Data source: The Kentucky Fatality Assessment and Control Evaluation (KY FACE) database.
3. Preventing Falls of Workers through Skylights and Roof and Floor Openings. (2004, August). The National Institute for Occupational Safety and Health (NIOSH). <https://www.cdc.gov/niosh/docs/2004-156/pdfs/2004-156.pdf?id=10.26616/NIOSH PUB2004156>
4. Centers for Disease Control and Prevention. (2013, October 9). Prevention through design. National Institute of Occupational Safety and Health. Retrieved April 14, 2023, from <https://www.cdc.gov/niosh/topics/ptd/default.html>



Read the full report of this incident:

[Roofing Contractor Dies after Falling through Skylight](#)

## Contact Us

Kentucky Fatality Assessment and Control Evaluation Program

Kentucky Injury Prevention and Research Center

333 Waller Avenue, Suite 242

Lexington, Kentucky 40504

Phone: (859) 257-4954

[kyfaceprogram@uky.edu](mailto:kyfaceprogram@uky.edu)

<https://kiprc.uky.edu/>



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