

INCIDENT FACTS

REPORT #:

71-188-2019

REPORT DATE:

November, 22 2019

INCIDENT DATE:

June 6, 2017

VICTIM:

47 years old

INDUSTRY:

Roofing contractors

OCCUPATION:

Roofer

SCENE:

Commercial warehouse roof

EVENT TYPE:

Fall



The arrow shows the skylight the roofer fell through. The warning line system used is shown to the left of the skylight.

[For a slideshow version, click here.](#)



Roofer Falls 30 Feet through Skylight

SUMMARY

A 47-year-old roofer was cleaning the roof of a commercial warehouse when he fell through a skylight. He had worked six years for a roofing contractor that does roofing, cleaning, and maintenance work on commercial building roofs.

On the day of the incident, he was a member of a six-person crew cleaning and removing debris from a commercial warehouse roof. Workers were using leaf blowers and brooms to sweep debris, which they then shoveled into plastic bags for removal. The flat roof measured 200 feet by 320 feet; it had 97 unprotected skylights.

The supervisor, who was also the safety monitor, was standing about 20 feet from the victim when he saw him stepping backward toward a skylight. The supervisor yelled "skylight!" to warn him. The victim, who had been talking with a coworker, caught his foot on the skylight frame and stumbled backward. The coworker reached out to grab him, but was unable to. The victim fell onto the unprotected plastic dome skylight cover, which broke, and he fell through the skylight. He landed 30 feet below on a concrete floor.

Investigators found: **1)** Inappropriate fall protection was used. Safety monitor and warning line systems should not be used when unprotected skylights are present. Though warning lines must be used around unprotected sides and edges of a low pitch roof work area. **2)** The employer did not protect skylights. **3)** The building owner did not protect skylights.

REQUIREMENTS

- Employers must ensure that employees exposed to fall hazards of 4 feet or more while engaged in work, other than roofing or leading edge work, on low pitched roofs use one of the following: fall restraint system; fall arrest system; positioning device system; safety monitor and warning line system; or safety watch system. See [WAC 296-155-24609\(7\)\(b\)](#)
- Whenever there is a danger of falling through an unprotected skylight opening, or the skylight has been installed and is not capable of sustaining the weight of a 200 pound person with a safety factor of 4, employers must provide standard guardrails on all exposed sides in accordance with [WAC 296-155-24615\(2\)](#) or the skylight must be covered in accordance with [WAC 296-155-24615\(3\)](#). See [WAC 296-155-24609\(4\)\(d\)](#)

RECOMMENDATIONS

FACE investigators concluded that, to help prevent similar occurrences:

- Building owners should install protective guards or screens over skylights or install guardrails to prevent falls through skylights by maintenance or other personnel who may enter the roof.
- Employers should provide skylight safety nets and train employees how to use them.
- State building code officials should consider including a provision in the building code that would require all skylights in new or renovated buildings to either have a protective cover or be of sufficient strength to prevent a worker from falling through.

RESOURCES

- Preventing Falls of Workers through Skylights and Roof and Floor Openings. NIOSH www.cdc.gov/niosh/docs/2004-156/default.html
- Preventing Falls through Skylights Video (in English and Spanish). California Dept. of Public Health www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/FACE/Pages/SkylightAction.aspx



Skylight the roofer fell through.