Working Near Skylights Meeting Kit

When working on a rooftop, an uncovered hole would immediately be recognized as a hazard.

Skylights can seem to pose less of a fall risk, as the opening is covered with glass or plastic. However, most skylights are not designed to bear the weight of an individual leaning or falling. Both glass and plastic are breakable and are not an appropriate safety measure.

SKYLIGHT SAFETY

Skylights come in a variety of materials including glass, plastic, polycarbonates or a combination of these materials. They are designed to withstand the forces of nature like heavy rain, hail or snow. However, many are not designed to withstand a worker’s bodyweight.

Plastic skylights can deteriorate with time and exposure to sunlight and various environmental contaminants. This is why under law; unprotected skylights are treated as a fall hazard.

A thorough risk assessment and analysis of potential hazards should be carried out before work commences. The condition of any skylights, whether or not they are appropriately shielded to prevent falls, and the possibility of installing guardrails or skylight barriers should all be noted.

Ensure that all workers are trained appropriately in the use of all equipment and can recognize and control all hazards. Workers must also be supervised appropriately and trained in the procedures for installing, maintaining, inspecting, and taking apart all fall protection equipment and systems.

Skylights are a common feature in both industrial or commercial buildings and homes that can help illuminate darker areas and add

architectural flair and style. However, it is possible to install the right safety measures for skylights that will not compromise the style or aesthetics of a space. The lack of proper skylight barriers poses a serious risk for construction or maintenance workers, and can result in permanent and impairing injuries or death.

GENERAL INDUSTRY SOLUTIONS

The requirements for general industry and construction are slightly different, so it is essential that to identify which standard applies to the type of work being done.

Types of fall protection for protecting skylights:

Skylight Screens. Mesh skylight screens come in a variety of sizes, shapes and materials. The more durable and weather-resistant screens are made of stainless steel, galvanized steel, or aluminum. Skylight screens can be attached to a building without compromising the integrity or aesthetics of the opening itself. Some designs allow for a non-penetrating clamp-on securing system.

Rooftop Guardrails. Permanent or temporary guardrails can be easily erected around a skylight. OSHA requires a minimum height of 42 inches for all rooftop guardrails. There are a variety of systems available. Some systems utilize rails that fasten into counterweight bases with a pin, while others are collapsible and don’t need to be fastened into substrates.

Personal Fall Arrest Systems. A personal fall arrest system “means a system used to arrest an employee in a fall from a walking-working surface. It consists of a body harness, anchorage, and connector. The means of connection may include a lanyard, deceleration device, lifeline, or a suitable combination of these” (1910.140).

WORKERS NEED TO BE AWARE OF SKYLIGHT FALL HAZARDS

Determine the proper protection and install it before further maintenance work is done on your roof.

Establish a safety plan to work around skylights just as you would for fall protection in any other project.

Workers should take the following steps to protect themselves from falls through skylights and roof and floor openings:

- Never sit on, lean against, or step on a skylight or any covering placed over a hole in a roof or floor. The material may not support your weight.
- Guard or securely cover all holes you have created or uncovered before you leave the work area. Other workers might not notice an uncovered hole and fall through.
- Ask your supervisor for safety procedures to follow when covering or guarding a hole.
- Always use a personal fall arrest system (PFAS) that includes a full-body harness, lanyard, connectors, and appropriate anchorage points (tie-offs) when working over an unguarded or uncovered opening more than 6 feet above a lower level—for example, while you are installing a skylight or ventilation unit in an opening that cannot be guarded or covered.
- If you use a PFAS, inspect it daily and report any damage or deficiencies to your supervisor. Tie off only to those anchorage points that your employer has identified as safe.
- Immediately tell your supervisor about any unguarded skylights, roof or floor openings, or other fall hazards in your workplace.
- Participate in all safety and heath training programs offered by your employer.
- Follow safe work practices identified by your employer.
- Ask your employer for instructions if you do not know how to perform your job safely.

MORE WORKER SAFETY TIPS

If the assigned task has your workers within six feet of a skylight, workers must take specific safety steps:

- Securely installing a mesh guard over each skylight.
- Securely installing a screen under the skylight.
- Securely installing guardrails around each skylight.
- Placing a net or other covering over the skylight.
- Use of a suspension harness when your workers are installing the barriers or have no option to cover the skylights.

When removing a skylight, workers must place a specifically designed floor covering strong enough to hold at least 400 pounds over the opening. Workers must also securely mount the covering to the roof.

FINAL WORD

Most skylights by design are not capable of bearing the weight of a worker. Despite many regulations and safety measures, injury and death in the workplace occur from falls from heights.