Fall Hazards and Falls from Heights

What's at Stake?

New York Post – Two construction workers fell, one fatally, at an under-construction building development in Manhattan's Hudson Yards, only hours after another worker plunged to his death in a separate incident in lower Manhattan.

According to authorities, the workers at the Hudson Yards site fell about 35 feet while operating a forklift cage that collapsed. A 45-year-old worker was found with severe body trauma and pronounced dead at the scene. His co-worker, a second 45-year-old worker, suffered trauma to his head and body, and was rushed to Bellevue Hospital but in stable condition, police stated.

About five hours earlier, worker Juan Chonillo, 43, of Queens, fell from the 29th story of an under-construction high-rise in the Financial District, to the top of a 1st floor scaffolding, authorities said. The father of five apparently missed the clipping to a security hook and plunged from the shaking platform he was on while erecting building materials, workers at the site said.

The news reports above indicate that falls can happen anytime, at any worksite, and should be among the top safety concerns for workers on the job.

What's the Danger?

Fall hazards are present at most worksites and workers are exposed to these hazards daily. A fall hazard is anything at your worksite that could cause you to lose your balance or support, and result in a fall – specifically a fall from heights. Some of the major working conditions that contribute to fall hazards include unprotected edges of raised work surfaces (ex: roofs), unsafe scaffolds, working over water, and ladder risks.

Unprotected Edges

- One of the most common hazards of roofing is unprotected sides and edges.
- Falls to a lower level are also a major cause of fatalities in construction in general.
- Improperly covered or protected floor holes and openings are another common fall hazard. It is easy to step into one if you’re carrying something that blocks your view; or is partially hidden by a shoddy cover; or to step back and fall because you forgot or didn’t know there was an unprotected edge behind you.

Inadequate Scaffolds

- Working with heavy equipment and building materials on the limited space of a scaffold is difficult. Without fall protection or safe access, it becomes hazardous.
- Most workers injured in scaffold accidents blame the accident on factors like planking or support giving way, or to lack of guardrails or another type of fall protection.
- The most frequent hazards include lack of fall protection, scaffold access, use of aerial lifts without a harness and lanyard, platform construction and improper worker training.

Unsafe Ladders

- Factors that contribute to falls from ladders are ladder slip (top or bottom), overreaching, slipping on rungs/steps, defective equipment and improper ladder selection.
- Risky ladder misuse includes not having a portable ladder extend 3 feet above the landing, no worker training, and improper use of the top of stepladders.

How to Protect Yourself

As a rule, fall protection is required for heights of six feet (3 meters) or more for construction work. However, regardless of the fall distance, protection must be provided when working over dangerous equipment and machinery. Ensure your fall protection is right for the work you are doing, in good condition, and you're using it properly.

- The three main methods of fall protection are guardrails, safety nets, and personal fall arrest systems.
- Of course, it's better to prevent a fall using guardrail systems and the like, versus stopping or arresting a fall using fall protection and nets.
    - Safety nets are designed to catch you and break your fall. They must be placed as close as possible under the working surface, but never more than 30 feet below.
    - A personal fall arrest system consists of an anchorage, connectors, and a full-body harness that work together to break your fall.

- Remember, your employer must provide protection to prevent falls. Here are some things they should do to prevent fall hazards and falls:
    - Develop a written fall protection plan.
    - ID fall hazards before each project and during daily walk-arounds.
    - Eliminate the need for fall protection by rescheduling the task, isolating the task, or changing the task.
    - Confirm fall protection equipment is appropriate to the task, in good condition and used properly.
    - Regularly conduct fall prevention training and cover the specific fall hazards and PPE required to work safely.
    - Conduct regular inspections of fall protection equipment as set by manufacturer recommendations and federal, state, or provincial requirements.
    - Emphasize fall hazards unique to the site, such as

open floor holes or shafts, riser penetrations and skylights, or water hazards.

Final Word

Fall hazards are extremely common, but with proper training, active fall controls like guardrails, and general fall prevention awareness, falls can be avoided.