The Hazards of Hoisting and Lowering Tasks

What’s at Stake

Hoisting and lowering objects from one level to another is an everyday task for many operations. But this task is common in another way: It’s a common cause of serious injury and death in the workplace.

What’s the Danger

Materials, tools, debris or equipment falling from above can cause serious harm, including fatal head injuries.

Example

A 39-year-old roofer was part of a crew removing gravel from the roof of a building. The gravel was being loaded into bags, which were then lowered to the victim on the ground by way of rope pulley.

The victim had just returned from buying coffee and snacks for the crew and was bent over to place the refreshments on the ground. His co-workers on the roof mistakenly thought he was ready to resume the task and attached a bag to the pulley’s rope and dropped it over the side of the building. The 40-pound bag of gravel dropped more than three stories and struck the victim on the head while he was still bent over.

Emergency responders were called but on arriving at the hospital, the victim was pronounced dead.

How to Protect Yourself

Here are some ways to perform safe hoisting and lowering tasks:

- Secure the area around the pulley’s fall zone with a barrier to protect workers from suspended loads;
- Learn and use clear verbal and hand signals to effectively communicate all hoisting instructions;
- The “ready” hand signal should have only one meaning: that the worker is ready for the task to begin. Do not begin any movement of the load until each of your co-workers has given this signal;
- Ensure that the rope pulley system you are using is equipped with brakes, allowing workers to stop and suspend a load;
- Set up and dismantle the pulley system properly;
- Inspect the pulley’s components prior to each use;
- Ensure that the weight of the load does not exceed the capacity of the pulley system;
- Attach and un-attach the load safely;
- Never stand below a raised load;
- Wear proper personal protective equipment when using rope pulley systems, such as gloves, hardhats and, if appropriate, fall protection.

Final Word

Be mindful of the hazards associated with hoisting and lowering tasks, and speak to your supervisor if you observe any unsafe conditions or work practices.