Dropped Objects on the Job Meeting Kit



Dropped objects have been a problem for as long as the force of gravity has existed. In fact, the New York Times published an article in 1903 about dropped objects in which it said: “Dozens of placards posted at various places on the bridge caution the iron workers to use great care in the handling of tools, to avoid dropping them into the river.”

DANGERS/HAZARDS

People Below

While the most obvious person at risk when objects are dropped is the one underneath, the worker using the tool also can be at risk, as his knee-jerk reaction may be to catch or go after the falling object, which could cause him to lose his balance and fall.

Physics of Gravity

To determine what kind of force an object falling from a certain height generates, calculations can be done around the physics of gravity.

Objects as small as a bolt can cause serious injury or even death when dropped from a higher level and striking an employee working on the ground. Outside of injuries and deaths, dropped objects are responsible for a large cost to employers due to property damage incidents as well.

DROPPED OBJECTS PREVENTION

Despite OSHA statistics – and the fact that many of these violations could have been prevented with the proper safety equipment – many contractors do not take the necessary precautions to prevent fall-related injuries by providing workers with personal fall protection systems for both the workers and their tools.

A harness for a person acts as the primary component of a personal fall protection system. However, for **Tools,** we typically rely on secondary, passive systems, such as debris nets. We rarely deploy a primary system for tools and equipment.

Most organizations have deployed a fall protection program for workers but have

not deployed a drop prevention program for **Tools and Equipment.** Expanding a fall protection program to include tools and equipment is far easier for companies and employees than creating a new program for drop prevention.

The difference between a fall protection program for humans and fall protection program for tools is only a matter of perspective: **The first saves you; the second saves others.**

Actions to Prevent Dropped Object Incidents

Eliminate the hazard: Remove objects and tools from higher levels, scaffolding, or aerial lifts that do not need to be there.

Engineering controls: Barricade zones below higher work levels to prevent personnel from walking into the line of fire of a dropped object. Install toe boards on higher work levels to make sure objects and tools cannot easily slide off an edge to a lower level.

PPE: Anytime there are overhead hazards present on a jobsite hardhats need to be worn. PPE is always a last line of defense. Wearing a hardhat will only limit the damage a dropped object does, not prevent it from happening.

DROPPED OBJECTS BEST PRACTICES AND SOLUTIONS

Best Practices and Solutions for Organizations When It Comes to Dropped Object Prevention:

1. Expand fall protection programs to include tools and equipment.
2. Provide a competent person to manage the expanded program.
3. Raise awareness of drop hazard identification and mitigation techniques within the workforce.
4. Require risk assessments before performing work with drop hazards.
5. Consider regularly scheduled “hazard hunts” to drive awareness of drop hazards.
6. Consider using tethered tools. These tools either have built-in connection points placed by the manufacturer or can be retrofitted with connection points.
7. Consider using energy-absorbing lanyards, which will reduce the force associated with the dropped tool.
8. Tools that weigh more than five pounds should never be tied-off to a person.
9. If a worker has a tool attached to him and needs to pass it off to a colleague, that colleague can connect to the tool before the passing worker disconnects from it, ensuring the tool is 100 percent tied off and never has the opportunity to become a drop hazard.
10. Employees should be properly trained on how to use tethered tools. They must be taught how to attach a connection point to the tools, use the lanyards properly and respect the weight rating of the lanyards.
11. As a best practice, workers at height should only bring up the tools they need to do their job.
12. Hoist up items and then transfer them over with different lanyards to the workers themselves or to static anchor points. This can be done in a bucket, which can then house the extra tools.
13. There are many buckets, bags and pouches available on the market with

closure systems to dramatically reduce the likelihood of items falling out.
14. A secondary solution to dropped objects are toe boards. Toe boards should be capable of withstanding a force of at least 50 pounds in any downward or outward motion.
15. Green netting that goes over buildings when they are being refaced in areas where there are a lot of pedestrians is the most recognized form, but there also is netting that is put up within the construction project, such as directly under work being done, to help stop objects from falling on workers below.

FINAL WORD

When working in your job area today, look for hazards associated with dropped objects and report them to your supervisor or the safety department to get corrected. For all objects at height – including humans – the focus always should be on preventing things from falling rather than on catching objects, or on limiting the damage after they fall.