Carpenter Saved From Potentially Fatal Fall

Incident:

In May 2015, a Washington State carpenter learned just how important it is to always use the right fall protection on the job.

The carpenter and a coworker were removing plywood forms that were 2 feet tall and 12 feet long from around the concrete caps on top of a series of 24-foot retaining wall panels. The carpenter was using a 5-foot crowbar to pop the plywood off of the concrete, a job that can only be done manually. He had been on the jobsite for about a month, but had over 15 years of experience in the industry. His coworker was an apprentice.

By around 3:30 in the afternoon, they had already removed the forms from 300 feet of wall and were working on the last form of the day. The carpenter was attempting to remove the plywood, but when he pulled back on the crowbar, the form didn’t come off. Instantly, the bar sprung back with enough energy to catapult him over the side of the wall, exposing him to a more than 25-foot vertical drop.

A fall from this height would have been catastrophic, or even deadly. Thankfully, the carpenter was using a fall-protection system that was rigged to stop his fall at just 2 feet over the wall. He was even able to self-rescue by pulling himself back up onto the top of the wall.

Fall Protection Requirements

- Employers must ensure that the appropriate fall protection system is provided, installed, and implemented when employees are exposed to fall hazards of 10 feet or more to the ground or lower level when working on any surface that does not meet the definition of a walking/working surface. See WAC 296-155-24611(1)(c)
- Employers must develop and implement a written fall protection work plan including each area of the work place where the employees are assigned and where fall hazards of 10 feet or more exist. See WAC 296-155-24611(2)(a)(i-vii)
- Prior to permitting employees into areas where fall hazards exist, the employer must ensure employees are trained and instructed in the items described in WAC 296-155-24611(2)(a)(i-vii). See WAC 296-155-24611(2)(b)
- All components of personal fall arrest systems, personal fall restraint systems and positioning device systems must be inspected prior to each use according to manufacturer’s specifications for mildew, wear, damage, and other deterioration. Defective components shall be removed from service if their function or strength has been adversely affected. See WAC 296-155-24605(2)(a)
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Training:

Just one week before the incident, the carpenter’s employer, a general contractor in business for over 30 years, had done special training in fall safety as part of the 2015 Safety Stand-Down to Prevent Falls in Construction. The company brought in a consultant from the Department of Labor & Industries who did an onsite inspection and talked with them about challenges and solutions concerning fall protection. Later, they held a barbeque where they discussed the importance of having and following a fall protection work plan. Just one day before the incident, a crew supervisor had coached the carpenter on fall protection.

Usually, the company provides fall protection harnesses for their workers, but the carpenter had brought his own when he was hired. Safety specialists at the company inspected the harness to make sure it was appropriate and in good condition before allowing him to use it on the job.

The company’s safety manager stated that company practice is to celebrate success, educate on failures, and promote what works. They want employees to follow safety rules not because they are rules, but “because someone is waiting for you at home.”

In this case, following fall protection safety rules meant that one worker was able to make it home to those who were waiting for him.

Resources:

- Fall Protection Basics for Construction Activities
  www.lni.wa.gov/IPUB/414-154-000.pdf
- Fall Protection, Fall Restraint & Fall Arrest
  www.lni.wa.gov/Safety/Topics/AtoZ/fallprotect/
- Fall Protection Equipment Inspection Form
  stopconstructionfalls.com/wp-content/uploads/2014/04/Fall-Protection-Equipment-Inspection-Form.pdf

Retaining wall where the carpenter was removing plywood forms from the concrete caps on the top of the wall on the day of the incident. The “X” indicates the area where he was working when he fell.