

A 60 year old male was **crushed by a concrete wall panel** that weighed approximately 4,560 lbs. The employer was contracted to cut out and re-caulk the joints between architectural precast concrete panels, as well as joints between other surfaces located on the exterior of the building, at ground level, along the sidewalk, and in the area leading to the underground parking garage and loading dock.

The ground leading to underground parking in the loading dock was sloped approximately 8.5 degrees, and the heights of the architectural panels varied as a result, but ranged between approximately 109 inches and 144 inches tall. The victim removed the caulking from the perimeter joints around the 3 sections of architectural precast panels closest to the underground garage area, before beginning the process of removing the caulking from the joints around the architectural precast panel closest to the road. He worked at ground level and then used an 8ft Werner stepladder to cutout the caulking that could not be reached from the ground. He set the ladder up at the left side of the architectural precast panel and removed caulking within reach above the panel from the ladder. He worked towards the top right side of the panel and repositioned the ladder once. During the process, he straddled the stepladder and used the cross-bracing on the rear of the ladder to extend and reach additional caulking. Shortly after removing most of the remaining caulking and while straddling the stepladder, the architectural precast concrete panel became unstable and started to move. He noticed the movement and tried to dismount the ladder. The architectural precast panel detached from the underlying cast in place concrete structure, falling on and crushing him as he attempted to get out of the way.

It was determined that the architectural precast panel had originally been attached in 2 places; however, issues were identified with both connection points. A corroded metal bracket was observed above the concrete and beneath the capstone on the left side. Differences were also observed on the panel where connecting components had been installed. The top edge of the panel had 2 pieces of 90-degree metal angle embedded in it. The top right side of the precast panel had a metal bracket with a wedge anchor attached to the embedded metal angle; however, the top left side of the panel did not have any additional items connected to the metal angle.

There were no signs or indications that the connections had failed, and the victim could not have reasonably anticipated that removing the caulking would cause the architectural precast panel to become detached. The victim had successfully removed the caulking around 3 adjacent sections of architectural precast panels immediately prior to the incident without issue.

**Citation(s) as Originally Issued**

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

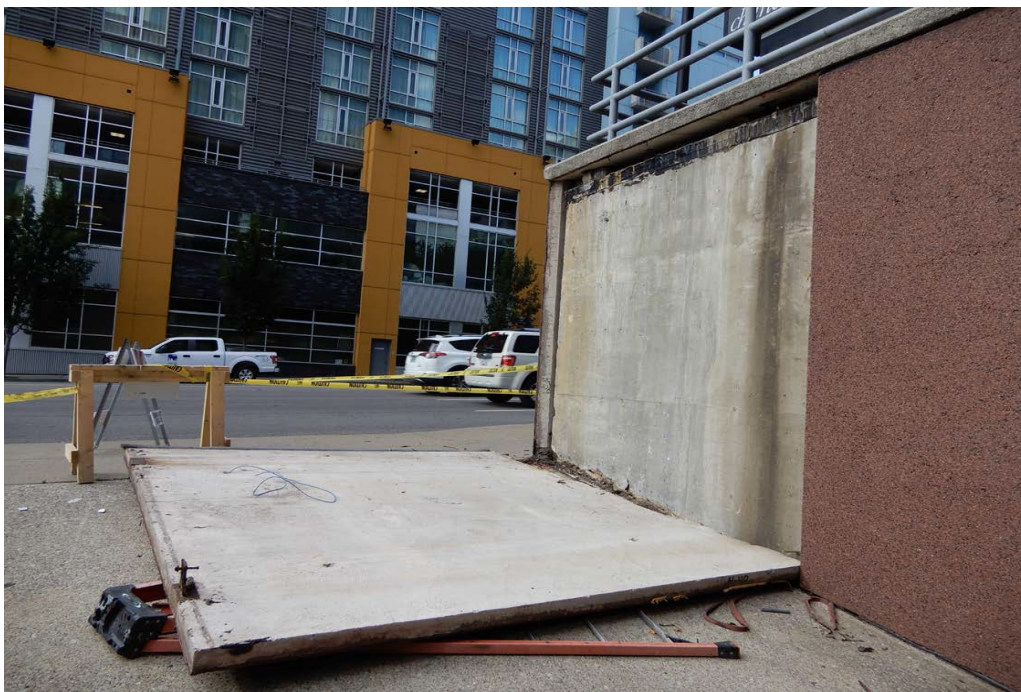
**Citation 1 Item 1**

**Type of Violation: Serious**

**\$1,500**

**29 CFR 1926.1053(b)(4):** A ladder was used for purposes other than the purpose for which it was designed:

In that an 8 foot Werner step ladder was being used incorrectly by an employee who was straddling the top of the ladder and using both the steps on the front and the cross bracing on the rear section of the ladder while cutting out and removing caulk from joints around an architectural precast concrete.



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