

Fatality Narrative

Sheet Metal Worker Falls Through Opening in Roof*

Industry: Plumbing, heating, and air-conditioning contractor **Release Date:** August 19, 2003
Occupation: Lead sheet metal worker **Case No.:** 03WA029
Task: Setting roof curbs **SHARP Report No.:** 71-13-2003
Type of Incident: Fall through opening in roof

On July 9, 2003, a lead sheet metal worker for a HVAC contractor was on the roof of a building preparing to set roof curbs for a ventilation system when he fell 32 feet through an opening in the roof. In order to install the ventilation fans above a welding shop, carpenters had cut 3 openings in the building's roof, each measuring 5'10" x 5'3" and installed small curbing around them. The openings had been covered with plywood siding and the roof membrane placed over the cover and loosely nailed. The covers were nailed loose enough that a person could pop them free by hand. The victim went on to the roof to install larger curbs as part of a three-man crew. Two workers on a lower roof level were to lift the curbs up to the victim. They pushed the first curb up to the higher roof level and the victim pulled it up. When they pushed the next two curbs up they got no response from the worker above. They went up to the higher roof level to look for him. They found that a cover had been removed from one of the openings and their coworker had fallen into the opening and landed on the floor 32 feet below. It is not known why the cover had been removed from the opening at that time.

Requirements/Recommendations

(! Indicates items required by law)

- Work should be done in a manner that does not expose workers to fall hazards. Lifting the curbs to the roof should have been done with the opening still covered or prior to the openings being cut.
- ! When working in the vicinity of temporary roof openings, precautions must be taken to protect the worker, such as, using guardrails, safety nets, or a fall prevention/arrest system.
- ! Temporary roof openings must be securely covered and labeled clearly with a sign "Hole".
- ! Materials used to cover roof openings must be capable of supporting twice the weight of employees, tools, and materials that may be placed on them.
- ! Employers must train workers who are required to work near roof openings to recognize and appropriately deal with fall hazards (e.g. guard the opening or use the appropriate fall protection system).
- Routine, daily communication should be developed between subcontractors and the general contractor to allow everyone to understand the stage of the project and potential hazards that may have been created.
- Roof openings should be designed far enough from the edge of the roof to not expose the worker to two fall hazards at the same time.

State Wide Statistics: This was the 24th work-related fatality in Washington State during the year 2003 and was the 2nd fatal fall from elevation in construction of the year.

**This bulletin was developed at the Washington State Department of Labor and Industries to alert employers and employees in a timely manner of a tragic loss of life of a worker in Washington State. We encourage you to consider the above information as you make safety decisions for or recommendations to your company or constituency. The information in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.*

Developed by the Washington State Fatality Assessment and Control Evaluation (FACE) and Washington Industrial Safety and Health Act (WISHA) Programs at the WA State Dept. of Labor & Industries and the Federal Occupational Safety and Health Administration. For more information, contact the Safety and Health Assessment and Research for Prevention (SHARP) Program, 1-888-667-4277, <http://www.Lni.wa.gov/sharp/face>.