

**Case 62. 24-year-old male construction worker died after a 17-foot fall from a two-story house roof edge to the asphalt below.**

On November 22, 2004, a 24-year-old male construction worker died after a 17-foot fall from a two-story house roof edge to the asphalt below. It was his first day of work on this job although he had been self-employed for a few years. He was not a roofer by trade; he was a concrete worker. The crew arrived at approximately 8:00 a.m. to install an ice shield and drip edge along the bare plywood boards at the roof's edge. His coworker had previously installed a scaffold that was two sections high (approximately 13 feet high) at each end of the house and placed an aluminum pick in between the scaffolds. While standing on the pick, he and his coworker could install the ice shield and the first 3-4 rows of shingles. The victim and his coworker climbed onto the scaffold and prepared to install the ice shield. The victim climbed onto the edge of the roof (4-foot elevation change) while his coworker stayed on the scaffold. The victim fell from the roof edge and hit the scaffold, then fell to the ground. The victim and his coworker were working without safety harnesses. A ladder was not used to get to the roof from the scaffold. Emergency assistance arrived and the victim was transported to the hospital where he died.

MIOSHA issued the following Serious citations to the employer:

Serious:

GENERAL RULES, PART 1, RULE 114(1).

An employer shall develop, maintain, and coordinate with employees an accident prevention program, a copy of which shall be available at the worksite.

No accident prevention program developed, maintained, and coordinated with employee.

Serious:

FIXED AND PORTABLE LADDERS, PART 11, RULE 1113(1).

A ladder shall be provided at all personnel points of access if there is a break in elevation of 19 inches (48 cm) or more and if a ramp, runway, sloped embankment, stairway, or personnel hoist is not provided.

No ladder provided for access and egress to west side of roof, approximately 17 feet above grade. Employee exposed to a serious fall when climbing onto roof from scaffold platform 13 feet high x 28 feet long, with a change in elevation of 4 feet.

Serious:

SCAFFOLDS AND SCAFFOLD PLATFORMS, PART 12, RULE R408.41213(1).

A guardrail shall be installed on any open side or end of a scaffold work platform that is 10 (3.1meters) or more feet above the floor or ground, except for any of the following: (a) a boatswain’s chair, (b) a catenary scaffold, (c) a float scaffold, (d) a ladder jack scaffold, (e) a needle beam scaffold.

The guardrail shall be as prescribed in R 408.42150.

No guardrail protection installed along scaffold platform 28 feet long x 13 feet high on the west side of the house. Employee exposed to a serious fall when working on tubular welded scaffold and manufactured pick when preparing to install drip edge and ice shield along edge of roof.

Serious:

SCAFFOLDS AND SCAFFOLD PLATFORMS, PART 12, RULE R408.41217(1).

If wood planks are used for a work platform, then the planks shall be scaffold-grade lumber that has a minimum of 1,500 pounds per square inch fiber stress value. The planks shall be not less than 2 inches by 10 inches. The platform shall consist of a minimum of 2 planks laid side by side. Each platform on all working levels of scaffolds shall be fully planked or decked between uprights were practicable. Spaces between the platform and the uprights shall not be more than 9½ inches. The maximum permissible spans for 2- by 10-inch or wider planks are as follows:

	Material full thickness Undressed lumber				Material nominal thickness lumber			
Working load (P.S.F.)	25	50	62	75	25	37	50	62
Permissible span (ft.)	10	8	7	6	8	7	6	4

Two tubular welded scaffold towers 13 feet high x 7 feet long x 5 feet wide were not fully planked on the west side of the house exposing the employee to a serious injury when working on a single plank and manufactured pick.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.501(b)(11)

Each employee on a steep roof with unprotected sides and edges 6 feet (1.8m) or more above lower levels shall be protected from falling by guardrail systems with toeboards, safety net systems, or personal fall arrest systems.

No fall protection used by employee when working on edge of roof on west side of house, 17-foot eave to ground height and a 6 in 12 roof slope.

Other:

ADMIN RULE 2139, RECORDING & REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES, RULE 1139(1).

Report orally, work-related fatalities or hospitalization of 3 or more employees as described in Rule 408.22110 within 8 hours to the Michigan Department of Labor and Economic Growth, Michigan Occupational Safety and Health Administration.

Employer failed to report death of employee within 8 hours.