

**Case 112. 30-year-old male roofer died when he fell approximately 50 feet from the roof of a school to the concrete floor below.**

On June 6, 2005, a 30-year-old male roofer died when he fell approximately 50 feet from the roof of a school to the concrete floor below. The incident occurred during the roofing of a new auditorium of a high school. The deceased was a member of a 5-person crew. The foreman assigned one crewmember as a “ground man”. The ground man’s duties were to keep other people out of the area where they would be exposed to falling debris. One crewmember was sent to fill a generator on a lower roof. The deceased, coworker #1, and the foreman set up the roof access ladder and took appropriate tools to the 99-foot by 43-foot upper roof to begin work. There were six areas of the roof where no roofing material had been installed leaving the metal decking exposed. These were to have 901/2-inch x 48-inch sections of decking cut and removed and smoke catchers installed over the openings. The smoke catchers were positioned adjacent to each of the areas. The foreman assigned coworker #1 to ensure the metal deck pieces were not going to fall. The deceased was assigned the safety monitoring duties. The incident occurred on the first hole that was cut. The foreman started cutting and had two sides cut when he needed a new blade. The foreman stepped away and set the saw on the roof deck and began removing the old blade from the saw at the same time he asked the deceased to hand him the blade. The deceased turned to retrieve the blade, which was lying on the roof deck behind him. He turned back around with the blade and the foreman reached out for the blade in the direction of the deceased. The deceased stepped forward a few steps onto the partially cut metal deck and fell through the partially cut decking approximately 49 feet to the concrete below. The company had a specific safety plan, including provisions for fall protection for the work at the school. The deceased had attended a management/union sponsored safety training program. The ground man was looking up and saw the deceased fall through the partially cut decking. 911 was called and the deceased was declared dead at the scene.

MIOSHA issued the following 4 Serious citations to the employer:

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.501 (b)(1). Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest system.

No fall protection system in place for employee exposed to fall hazards ranging from approximately 11 feet to 49 feet while performing roofing operations at the school. This employee was sent alone to a roof area known as Zone “B” to fuel a generator. There was no fall protection system in place on this roof level and the employee was exposed to a fall hazard approximately 11 feet to the ground below. This employee also accessed other roof levels alone where there was no fall protection systems in place following an accident. These other roof levels were a means to access the upper roof level known as Zone “A” where the accident had

occurred with gradually higher roofs reaching a maximum height of 49 feet. When he arrived at the upper roof level, there was no one there and he then climbed down from the various roof levels to ground level.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.501 (b)(4)(i). Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 6 feet (1.8m) above lower levels, by personal fall arrest systems, covers, or guardrail systems erected around such holes.

Employees exposed to fall hazards associated with stepping through a partially cut hole on the roof deck of the school, the hole was left unprotected while two employees stepped away from the hole. One employee stepped away to remove a worn blade from a partner saw used to cut the metal decking and the other employee stepped and turned away to retrieve a new blade. This employee turned back around and stepped forward onto the partially cut decking and fell through, approximately 49 feet, to the concrete below. The third employee was squatting at the edge of the partially cut deck hole using a hammer to hold the cut decking in place.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.502(h)(1). Safety monitoring systems [See 1926.501(b)(10)(k)] and their use shall comply with the following:

The employer shall designate a competent person to monitor the safety of other employees and the employee shall ensure that the safety monitor complies with the following requirements:

- (i) The safety monitor shall be competent to recognize fall hazards;
- (ii) The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;
- (iii) The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored;
- (iv) The safety monitor shall be close enough to communicate orally with the employee; and
- (v) The safety monitor shall not have other responsibilities, which could take the monitor's attention from the monitoring function.

The employer failed to protect employees from fall hazards while using a safety monitoring system during roofing operations at the school. The safety monitor was asked to retrieve a saw blade for another employee. While performing this task he was distracted from his monitoring duties. This resulted in the monitor stepping through a partially cut hole in the roof deck and falling approximately 49 feet to the concrete below.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.503(a)(1).

The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards.

The employer failed to provide fall protection training for employee exposed to fall hazards ranging from approximately 11 feet to 49 feet while performing roofing operations at the school. This employee was sent alone to a roof area known as Zone "B" to fuel a generator. There was no fall protection system in place on this roof level and the employee was exposed to a fall hazard approximately 11 feet to the ground below. This employee also accessed other roof levels alone where there were no fall protection systems in place. These other roof levels were a means to access the upper roof level known as Zone "A" with gradually higher roofs reaching a maximum height of 49 feet. This employee worked on the upper roof levels during the installations of the roof systems at different times of the duration of the job.