



The National Institute for Occupational Safety and Health (NIOSH)

Promoting productive workplaces
through safety and health research



Roofer Falls to Death From Roof – South Carolina

FACE 9518

SUMMARY

A 36-year-old male roofer (the victim) died after falling 23 feet from a roof to the ground below, striking his head on a flatbed trailer. The victim, a company co-owner, and a laborer were re-roofing a private residence. The men had stripped the old shingles from the lower roof section and installed the roofing felt and two parallel lines of 2-inch by 4-inch toeboards along most of the length of the roof. The men then began to carry the bundles of shingles to the peak of the roof. The victim climbed the roof to the top line of toeboard and walked the toeboard toward the end of the roof away from the upper roof. As the victim approached the end of the toeboard line, a 6-foot section of the toeboard broke off, causing the victim to tumble and fall off the roof. The victim fell to the ground, striking his head on the flatbed trailer. The men climbed down the ladder to assist the victim, but due to the severity of his injuries, no first aid was administered. The emergency medical service (EMS) was summoned from the residence and responded within 10 minutes, along with the police and coroner. The coroner pronounced the victim dead at the scene.

NIOSH investigators concluded that, to prevent similar occurrences, employers should:

- **provide adequate fall protection to employees that are exposed to fall hazards**
- **develop, implement, and enforce a comprehensive written safety program.**

INTRODUCTION

On August 3, 1995, a 36-year-old male roofer (the victim) died after falling 23 feet from a roof to the ground, striking his head on a flatbed trailer. On September 1, 1995, officials of the South Carolina Safety and Health Administration (SCOSHA) notified the Division of Safety Research (DSR) of this fatality, and requested technical assistance. On September 11, 1995, a DSR safety specialist conducted an investigation of the incident. The incident was reviewed with the employer, the coroner, and the SCOSHA compliance officer. Photographs of the incident site immediately following the incident were reviewed and the coroner's report was obtained.

The employer was a roofing contractor that had been in operation for 11 years and employed the 2 owners (including the victim) and a roofer on an as-needed basis. The company had no written safety policy, safety program, safety procedures, or training. This was the first fatality experienced by the employer.

INVESTIGATION

The company had been contracted to re-roof a private residence. A crew consisting of the 2 co-owners (including the victim) and a laborer that worked on an as-needed basis were performing the work. The portion of the roof on which the crew was working was 20-feet long and 352-feet high, with gabled-ended eaves approximately 122 feet above the ground. The roof had a 12:12 pitch. The men accessed the work area by means of a 20-foot-long step ladder. A flatbed trailer had been placed at the front side of the house to catch and haul the old shingles.

The men had been at the site for 2 days and had removed the old shingles on the front side of the roof, applied the roofing felt, and had installed two rows of 2-inch by 4-inch toeboards along the 20-foot length of the roof. The first line of toeboard was installed 52-feet up from the roof eave. The second line of toeboard was installed 62-feet above the first.

On the morning of the incident, the three men were carrying the bundles of shingles to the peak of the roof. The victim carried a bundle of shingles up the ladder on his shoulder and climbed the roof to the top line of toeboard. He then walked out along the toeboard away from the upper roof. As the victim approached the end of the toeboard, a 6-foot-long section of the toeboard broke off, causing the victim to lose his balance and fall off the roof. The victim fell to the ground, striking his head on the flatbed trailer. The men climbed down the ladder to assist the victim, but due to the severity of the victim's injuries, no first aid was administered. The emergency medical service (EMS) was summoned from the residence and responded within 10 minutes, along with the police department and the coroner. The victim was pronounced dead at the scene by the coroner.

CAUSE OF DEATH

The coroner listed the cause of death as massive head trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should provide adequate fall protection to employees that are exposed to fall hazards.

Discussion: 29 CFR 1926.501 (b) (1) states that "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 systems." In this incident personal fall arrest systems were not available and no form of fall protection was used.

Recommendation #2: Employers should develop, implement, and enforce a comprehensive safety program.

Discussion: The development, implementation, and enforcement of a comprehensive safety program should identify, and reduce or eliminate, worker exposures to hazardous situations. The safety program should include, but not be limited to, employing worksite hazard assessments to enable the recognition and avoidance of fall hazards; and providing, and enforcing, the use of appropriate safety equipment such as safety belts and lanyards, or safety nets.

REFERENCES

29 CFR 1926.501 (b) (1) Code of Federal Regulations, Washington, D.C.: U.S. Government Printing Office, Office of the Federal Register.

[Return to In-house FACE reports](#)

Last Reviewed: November 18, 2015

Was this page helpful?

Yes

Partly

No