

Roofer Dies After 25 Foot Fall From a House Roof

DATE: October 25, 1991

SUMMARY

On May 1, 1991, a 42 year-old roofer died after falling 25 feet from a house roof. The incident occurred while the victim was preparing to nail a course of shingles on the edge of the roof. NJDOH FACE investigators concluded that, to prevent similar occurrences in the future, the following guidelines should be implemented:

- *A job hazard analysis should be performed by roofing employers and workers before beginning any job.*
- *Use appropriate fall protection on all work at heights.*

INTRODUCTION

On May 2, 1991, NJDOH FACE personnel learned about this work-related fatal fall from a newspaper article and reported the fatality to the area OSHA safety supervisor. The site was visited with an OSHA compliance officer that same day. No workers were present at the incident site during our visit. OSHA supervisors later determined that OSHA had no jurisdiction in this investigation because the victim was the sole proprietor of his business.

The victim was the sole owner of an odd job contracting company that had been in business for three years. Because of our inability to communicate with his co-workers (one spoke limited English and one did not respond to our requests for an interview), we were unable to obtain information about the incident or the victim's work history. Additional information on the incident was obtained from the police report, the medical examiner's report, and from a newspaper article.

INVESTIGATION

The day of the incident was a clear spring day. At 7:30 a.m., the victim and two co-workers began installing roofing shingles on the side roof of a multi-family house. The two-story home is located in a residential area. At approximately noon, the victim was working on the south side of the roof nailing the first course of shingles along the edge of the roof. The two co-workers were laying shingles on the north side of the roof.

There were no witnesses to the fall. Police were summoned to the area by an area resident because of what was thought to be the sound of gun shots. Apparently the "gun shots" were the sound of the victim

falling 25 to 30 feet with his tool belt and hitting the asphalt driveway. The two workers saw the police car pull into the driveway and, only then, observed the victim lying supine on the driveway, obviously severely injured. A mobile intensive care unit arrived soon after and the victim was declared dead at the scene.

CAUSE OF DEATH

The county medical examiner determined that death was caused by a fractured skull with laceration of the brain.

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: A job hazard analysis should be performed by roofing employers and workers before beginning any job.

Discussion: The hazard analysis should ideally be done by the employer and workers together. Including all workers in this process fosters increased awareness of hazardous conditions and a greater likelihood of safe work practices.

Recommendation #2: Use appropriate fall protection on all work at heights.

Discussion: Based on the job hazard analysis, roofers should use appropriate safety equipment to prevent falls from heights. The specific job site and its hazards determine which equipment is appropriate. Types of fall protection include catch platforms, personal lifeline systems, and safety nets. Some advantages and disadvantages of the different systems include:

Catch platforms: Catch platforms are gangways equipped with guardrails and toeboards set on the edge of a roof to catch workers who may be falling or rolling down the roof's slope. Catch platforms, such as scaffolding set on the edge of a roof, have the advantage of guarding a number of workers who would otherwise have to be guarded with individual lifelines.

Catch platforms may only be used on low pitched roofs with a slope under 4 in 12 inches.

Personal lifeline systems: This system attaches the worker to an anchorage point on the roof with a system of belts, lanyards, and lifelines. Properly set, this system can provide fall protection to workers at all times and is appropriate for steep roofs. However, personal lifeline systems must be carefully planned prepared. The federal OSHA standard 29 CFR 1926.104 (b) and (c) requires that both anchorage points and lifelines must be capable of supporting a 5400 pound static load.

Safety nets: Personnel nets are nets surrounding the perimeter of a roof that are designed to catch and hold a falling worker. Nets are useful in situations where a large number of workers need to be protected, during long term projects, or where other methods of fall protection are not practical. Safety nets are difficult to set up and may not be practical for most roofing work.

Catch platforms are the most appropriate form of protection for most roofing jobs of this type. Equipment should be chosen with each specific job in mind. For example, some roofs may be equipped with safe anchorage points able to withstand the stress of a falling worker who is wearing a belt or harness attached to a lanyard. Other roofs may have no safe anchorage for this type of fall prevention. A steep roof may require different types of equipment than one with a low pitch. It is also vitally important that equipment suppliers also provide training on how to use the equipment. Safety equipment is not "safe" unless appropriately used.

It is extremely important that roofers obtain correct advice about methods of ensuring safe working conditions and adhering to all OSHA standards. Because it is difficult for a small businessperson to obtain this type of information, the following sources may be helpful:

U.S. Department of Labor, OSHA

On request, OSHA will provide information on safety standards and requirements for fall protection. OSHA has several offices in New Jersey which cover the following areas:

Hunterdon, Union, Middlesex, Warren and Somerset Counties (908) 750-4737
Essex, Sussex, Hudson and Morris Counties (201) 263-1003
Bergen and Passaic Counties (201) 288-1700
Atlantic, Gloucester, Burlington, Mercer, Camden, Monmouth,
Cape May, Ocean, Cumberland and Salem Counties (609) 757-5181

NJDOL OSHA Consultative Services

This organization, located in the New Jersey Department of Labor, will provide free advice for business owners on methods of improving health and safety in the workplace and complying to OSHA standards. The telephone number is (609) 292-3922.

New Jersey State Safety Council

The NJ Safety Council provides a variety of courses on work-related safety. There is a charge for the seminars. The address and telephone number is:

NJ State Safety Council
6 Commerce Drive
Cranford, New Jersey 07016
Telephone (908) 272-7712

Other Sources

Building trade organizations and labor unions are a good source of information on suppliers of safety equipment and training. Suppliers of roofing and building materials may be able to refer roofing contractors to suppliers of fall protection equipment.

REFERENCES

1. Code of Federal Regulations 29 CFR 1926, 1989 edition. U.S. Government Printing Office, Office of the Federal Register, Washington DC. pp 105
2. Best's Safety Directory, 1990. published by A.M. Best Company, Oldwick, New Jersey

To contact [New Jersey State FACE program personnel](#) regarding State-based FACE reports, please use information listed on the Contact Sheet on the NIOSH FACE web site. Please contact [In-house FACE program personnel](#) regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.