

F.A.C.E. INVESTIGATION REPORT

Fatality Assessment and Control Evaluation Project

FACE #97-NJ-086-01
Iron Worker Dies After Falling 17 Feet
While Building a Roof



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TO: Division of Safety Research
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FROM: Fatality Assessment and Control Evaluation (FACE) Project
New Jersey Department of Health and Senior Services (NJDHSS)

SUBJECT: FACE Investigation #97-NJ-086-01
Iron Worker Dies After Falling 17 Feet While Building a Roof

DATE: August 19, 1998

SUMMARY

On September 21, 1997, a 44-year-old iron worker was fatally injured after falling through a roof opening of a building under construction. The incident occurred while the victim and his co-workers were laying steel roof decking sheets at the site of a new retail store. The crew had finished decking a section of the roof and was covering up a roof opening when the victim apparently slipped or tripped into the opening. He fell 17 feet to the concrete floor below and died of his injuries the next day. NJDHSS FACE investigators concluded that, to prevent similar incidents in the future, these safety guidelines should be followed:

- ! Employers should consider using fall protection during steel erection activities.

- ! Employers should develop, implement, and enforce a comprehensive employee safety program.

INTRODUCTION

On September 23, 1998, an OSHA compliance officer notified NJ FACE of a work-related fatal fall that occurred on September 21. A FACE investigator went to the incident site on the same day but was unable to do a full investigation because the employer was not at the site. The investigator spoke briefly with an employee of the general contractor and an area police officer. Other information was obtained from the employer, the OSHA investigation file, and the police and medical examiners' reports.

The employer was a small construction company that specialized in ironwork and had been in business for four years. The company employed eight non-union workers at the time of the incident. The company did not have a job training program and hired employees who had previous construction experience and/or labor union training. The victim was a 44-year-old Canadian iron worker who had worked for the company for about six months. He had been working only a few days at this job when the incident occurred.

INVESTIGATION

The incident occurred outdoors at the construction site of a new shopping center. The victim and his co-workers were laying panels of corrugated steel decking on the roof of a new store. This was a large, single-story building with a steel truss-supported roof. Before starting work, a stack of steel decking panels had been placed on top of the metal roof trusses near the edge of the building. The victim and a second worker stood on the roof and placed a layer of the 23-foot long, 3.5 foot wide decking panels on the trusses, which were tack welded into place. This provided a working surface for placing the subsequent panels. Moving forward from this starting point, the workers placed further rows of decking that were tack welded by a second crew working with them. They kept laying panels until a large section of the roof had been completed.

At about 3:50 p.m., the workers had finished a large section of the roof and walked back to where the stack of decking panels had been put on the trusses. All the panels had been removed from the stack, leaving an opening that needed to be covered. As the victim and coworker pulled a panel to the opening, the victim may have slipped or tripped and fell into it. He tried to grab onto a truss but missed, falling 17 feet and striking his head on the concrete floor. His coworkers quickly came to his aid and called 911. The police and EMS arrived to find him unresponsive and requested a helicopter to airlift him to the regional trauma center. He was admitted with severe head injuries and died the next day at 10:03 a.m.

CAUSE OF DEATH

The county medical examiner determined the cause of death to be from “blunt force trauma to head and chest.”

RECOMMENDATIONS & DISCUSSIONS

Recommendation #1: Employers should consider using fall protection during steel erection activities.

Discussion: The employer was not required by OSHA standards to use fall protection as they were working less than 25 feet from the ground. However, the FACE project recommends that steelworkers should use fall protection whenever possible. An suggestion is to preset static lines in the work area for workers to tie themselves off to. With proper planning, many steel erection activities can be fully protected while giving the worker the mobility to do the job safely and quickly.

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

Discussion: FACE recommends that employers should emphasize worker safety by developing, implementing, and enforcing a comprehensive safety program to reduce or eliminate hazardous situations. The safety program should include, but not be limited to, the recognition and avoidance of fall hazards and include appropriate worker training. The following sources of information may be helpful in developing a safety program and obtaining information on safety standards:

U.S. Department of Labor, OSHA

Federal OSHA will provide information on safety and health standards on request. OSHA has several offices in New Jersey that cover the following areas:

Hunterdon, Middlesex, Somerset, Union, and Warren counties.....(732) 750-4737
Essex, Hudson, Morris, and Sussex counties.....(973) 263-1003
Bergen and Passaic counties.....(201) 288-1700
Atlantic, Burlington, Cape May, Camden, Cumberland, Gloucester,
Mercer, Monmouth, Ocean, and Salem counties.....(609) 757-5181

NJ Public Employees Occupational Safety and Health (PEOSH) Program

The PEOSH act covers all NJ state, county, and municipal employees. The act is administered by two departments; the NJ Department of Labor (NJDOL) which investigates safety hazards, and the NJ Department of Health and Senior Services (NJDHSS) which investigates health hazards.

Their telephone numbers are:

- NJDOL, Office of Public Employees Safety(609) 633-3896
- NJDHSS, PEOSH Program.....(609) 984-1863

NJDOL Occupational Safety and Health On-Site Consultative Program

Located in the NJ Department of Labor, this program provides free advice to private businesses on improving safety and health in the workplace and complying with OSHA standards. For information on how to get a safety consultation, call (609) 292-0404, for a health consultation call (609) 984-0785. Requests may also be faxed to (609) 292-4409.

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. Their address and telephone number is: NJ State Safety Council, 6 Commerce Drive, Cranford, NJ 07016. Telephone (908) 272-7712

Internet Resources

Information and publications on safety and health standards can be easily obtained over the internet. Some useful sites include:

- www.osha.gov -The US Department of Labor OSHA website.
- www.cdc.gov/niosh/ - The CDC/NIOSH website.
- www.state.nj.us/health/eoh/peoshweb/peoshome.htm -The NJDHSS PEOSH website.
- www.dol.gov/elaws -USDOL Employment Laws Assistance for Workers and Small Businesses.

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