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# Massachusetts Mason Dies in Fall From Construction Site Scaffolding

MASSACHUSETTS FACE 94-MA-01

## SUMMARY

On October 12, 1993, a 53 year old male mason was fatally injured when he fell approximately twelve feet from the second level of an unguarded tubular welded scaffold system. It is not known what the victim was doing at the time of the incident; however, a witness saw him walk to the edge of the scaffold and place his foot on a piece of iron scaffold bracing. He either tripped or lost his balance, and fell to the sand covered asphalt below. The victim was transported to the local hospital where he died approximately two hours later. The Massachusetts FACE Investigator concluded that in order to prevent similar future occurrences, employers should:

- **install guardrails on all open sides of scaffolds which are more than ten feet above ground**
- **ensure that scaffolding is properly erected, maintained, moved, dismantled and/or altered only under the supervision of a competent person**
- **develop and implement a comprehensive safety program that includes, but is not limited to, training in fall hazard recognition and the use of fall protection devices**

## INTRODUCTION

On October 12, 1993, the Massachusetts Department of Labor and Industries notified the MA FACE Project that a 53 year old male mason had fallen to his death on a construction site earlier in the day. An investigation was immediately initiated.

On October 27, 1993, the MA FACE Field Investigator travelled to the incident site and interviewed the construction site field superintendent, who was present on the day of the incident. The death certificate, municipal police report, OSHA information relating to the incident, and employer organization data were obtained during the investigation.

Six to seven of these persons held the same job title as that of the victim. The company had been on the jobsite five and one-half months at the time of the incident. The company employed a designated safety officer at the jobsite who devoted less than twenty-five percent of his time to jobsite safety. While the company did have some written safety policies and procedures in place, it did not have a formal safety and health committee.

The victim was a 53 year old non-union journeyman mason who worked for the company approximately six and one-half months, the latter two months of which were on this jobsite. The victim completed 6,000 hours of masonry related apprenticeship to become a journeyman mason.

## INVESTIGATION

On October 12, 1993, the employer was well into the process of constructing a structural steel and masonry building at a Massachusetts municipal light company. The employees worked through the morning coffee break without incident. Following the morning coffee break, the masonry foreman assigned his masons their respective duties to bring them up to lunchtime.

The victim was instructed to reset an out of plumb vertical plumb line which he and his foreman had set on the previous day. A plumb line is a leaded weight which is dropped on a line for the exact testing of perpendicularity, depth, etc. This aids the mason in ensuring that masonry block or brick is properly and exactly set before any mortar can fully harden. He was also instructed to throw down a partial roll of flashing.

Both chores were to be done from the third (top) level of the scaffolding. No one could attest whether the victim used a ladder or scaled the scaffold framework to attain the upper levels of the scaffolding. Furthermore, although the employer's written safety program included a provision that guardrails be installed on scaffolding erected in excess of four feet, the scaffold system was not guarded on any of its open sides.

The victim apparently completed the tasks and descended to the second level of the scaffolding. A nearby jobsite equipment operator then saw him walk to the edge of the scaffolding and place his foot on a piece of diagonal iron scaffold bracing. In doing this, the victim apparently tripped and/or lost his balance, and fell approximately twelve feet to the sand covered asphalt below.

After immediately summoning emergency medical services, co-workers helped tend to the victim until he was transported to the regional hospital. He died approximately two hours following the incident.

## CAUSE OF DEATH

The medical examiner listed the cause of death as blunt head trauma.

## RECOMMENDATIONS/DISCUSSION

**Recommendation #1: Employers should install guardrails on all open sides of scaffolds which are more than six feet above ground.**

Discussion: Lack of appropriate guardrailing on all open sides and ends of the scaffold was a significant factor in this incident. U.S. Department of Labor OSHA Standard 29 CFR 1926.451 (d)(10) requires guardrails and toeboards to be installed on all tubular welded scaffolds more than ten feet above the ground. OSHA's new Fall Protection Standard,

scheduled for implementation in February 1995, will require guardrailing on scaffolds more than six feet above the ground. Had the scaffold in this incident been properly guarded, the victim would, most likely, not have fallen to his death.

**Recommendation #2: Employers should ensure that scaffolding is properly erected, maintained, moved, dismantled and/or altered only under the supervision of a competent person.**

Discussion: According to OSHA Standard 29 CFR 1926.451 (a)(3), all scaffolds shall be erected, moved, dismantled and altered only under the direction of a competent person. OSHA defines a competent person as an individual who has safety knowledge, and the authorization to take corrective measures to eliminate hazards. A competent person, for example, would be responsible for ensuring that scaffolds are erected with guardrails, toeboards and proper access.

**Recommendation #3: Employers should develop and implement a comprehensive safety program that includes, but is not limited to, training in fall hazard recognition and the use of fall protection devices.**

Discussion: Employers should emphasize safety of employees by developing, implementing, and enforcing a comprehensive safety program that includes, but is not limited to, routine job site hazard surveys, the use of appropriate fall protection, and worker training on the recognition and avoidance of fall hazards. Furthermore, a designated safety person should oversee all aspects of the comprehensive safety program; most OSHA construction standards (29 CFR 1926) require the involvement of a "competent person" in the implementation of safety provisions.

## REFERENCES

Office of the Federal Register: Code of Federal Regulations, Labor 29, July 01, 1991, Parts: 1926.451 (d)(10), 1926.451 (a)(3)

OSHA Preamble and Final Rule for Fall Protection in the Construction Industry, 59 FR 40672, August 9, 1994.

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