

2 Struck by falling wood floor joist – Inspection #1121856

A **35 year old male** employee was fatally injured when he was struck in the head from a falling 12 foot long, 2x6 wood floor joist. The company was contracted to preform demolition and asbestos removal for a thirteen story building approximately one hundred years old. The victim was working as part of a demolition crew, on the 9th floor, removing a section of concrete floor on the southern side of the building to make room for a new staircase. On the day of the accident, several crews were working in the building. One crew was cutting the wood floor joists from the 13th floor, and lowering them to the 12th floor. Due to prior floor removal on the 12th floor a temporary plywood floor was built to cover the opening. The 12th floor crew was standing on the temporary platform to receive the joists from the 13th floor before cutting them into smaller pieces for placement in a chute. Another crew, including the victim, was operating a jackhammer and saw on the ninth floor to remove a section of the concrete flooring for the staircase. When the 12th floor crew was unavailable to continue receiving floor joists the 13th floor crew continued to drop floor joist onto the temporary 12th floor platform. The incident occurred when a floor joist penetrated the temporary plywood platform on the 12th floor and continued 35 feet, striking the victim on the ninth floor. First aid and CPR were performed. The victim's hard hat was found approximately 12 feet away with no damage. Due to a depressed skull fracture the medical examiner's report concluded that the victim was not wearing his hardhat at the time of the accident. Personal protective equipment (PPE) audits had been conducted and verbal warnings were given by the general contractor, however, no disciplinary action had taken place on pervious PPE violations.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

Citation 1 Item 1

29 CFR 1926.100(a)	Employees working in areas where there was a possible danger of head injury from impact, or falling or flying objects, from electrical shock and burns, where not protected by protective helmets: In that the employee working on the 9 th floor was not wearing his hardhat at the time of the accident and was struck by a falling 2/6 floor joist.
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Citation 1 Item 2a

29 CFR 1926.502(d)(16)(iii)	Personal fall arrest systems, when stopping a fall, were not rigged such that an employee could not free fall more than 6 feet nor contact any lower level: In that the employee had two 6 foot lanyards attached to his body harness then attached to a rope grab allowing for approximately 7 feet 7 inches of free fall.
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Citation 1 Item 2b

29 CFR 1926.503(a)(1)	The employer did not provide training for each employee potentially exposed to fall hazards to enable each employee to recognize the hazards of falling and the procedures to be followed in order to minimize these hazards: In that the employee's fall protection consisted of a body harness with two 6 foot lanyards attached to each other than attached to a grope grab.
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Citation 1 Item 3

29 CFR 1926.850(h)	Debris was dropped through holes in the floor without the use of chutes into an areas not properly barricaded with warning signs and that debris handling above should not be happening while employees below removing it: In that there was not a barricade and signage in place to warn employees of falling debris.
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Citation 1 Item 4

29 CFR 1926.850(i)	Floor openings, not used as material drops, were not covered with a material substantial enough to support the weight of the load to be imposed: In that the floor opening cover built on the 12 th floor was constructed of 23/32 plywood and did not have the strength to withstand the impact of falling floor joists.
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Citation 2 Item 1

29 CFR 1926.850(a)	An engineering survey was not performed by a competent person to determine the conditions of the framing, floors and walls and the possibility of unplanned collapse of any portion of the structure prior to permitting employees to start demolition operations: In that a survey on the structural elements was not conducted prior to the demolition of internal walls, ceilings and floors.
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Citation 2 Item 2

29 CFR 1926.851(c)	In a multistory building, stairwell(s) being used were not properly illuminated by either natural or artificial means: In that the first and second story stairwell did not have a lighting system installed and were not illuminated.
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Photo 1 of 1 – Photo shows the location of the jackhammer and hardhat