

Case 82. 18-year old male construction laborer died when a steel joist girder he was preparing to be lifted by a crane fell onto him.

On July 15, 2004, an 18-year-old male construction worker was killed when a steel roof truss that was standing vertically on “relatively flat” stabilized gravel tipped over onto the midsection of his body. It was his second day on the jobsite. The beam he was working with weighed approximately 2250 pounds and was 50 feet long by 5 feet high by 91/4 inches wide. A coworker was using a rough terrain forklift to set the beam in a vertical position. No bracing or support system was used to keep the beam from falling. The job foreman demonstrated to the victim how to plumb column steel and told him to get out of the way if a girder starts to fall. The crane operator lowered the ball and hook and the victim removed two web slings from the hook and then raised the ball out of the way. The victim threw one sling over the top of the girder. While placing the second sling, the girder began to wiggle and it started to fall. The victim didn’t or couldn’t get out of the way and the girder fell onto him, pinning him. The victim had been employed by this company for two weeks and was not a trained or qualified rigger. Emergency personnel transported the victim to a local hospital where he was pronounced dead.

MIOSHA issued the following Serious citations to the employer:

Serious:

GENERAL RULES, PART 1, RULE 114(2).

An accident prevention program shall, as a minimum provide for all of the following:

- (a) Designation of a qualified employee or person with responsibility to administer the program
- (b) Instruction to each employee regarding the operation procedures, hazards, and safeguards of tools and equipment when necessary to perform the job.
- (c) Inspections of the construction site, tools, materials, and equipment to assure unsafe conditions that could create a hazard are eliminated.
- (d) Instruction to each employee in the recognition and avoidance of hazards.
- (e) Instruction to each employee who is required to handle or use known poisons, toxic materials, caustics, and other harmful substances regarding all of the following:
 - (i) The potential hazards.
 - (ii) Safe handling.
 - (iii) Use
 - (iv) Personal hygiene.
 - (v) Protective measures.
 - (vi) Applicable first aid procedures to be used in the event of injury
- (f) Instruction to each employee if known harmful plants, reptiles, animals, or insects are present regarding all of the following:
 - (i) The potential hazards.
 - (ii) How to avoid injury.
 - (iii) Applicable first aid procedures to be used in the event of injury.

- (g) Instruction to each employee who is required to enter a confined space regarding all of the following:
 - (i) The hazards involved.
 - (ii) The necessary precautions to be taken.
 - (iii) The use of required personal protective equipment.
 - (iv) Emergency equipment.
 - (v) The procedures to be followed in an emergency occurs.
- (h) Instruction in the steps or procedures to be followed in case of an injury or accident or other emergency.

INSTANCE A

No inspection of the construction site to eliminate unsafe conditions. Employee rigging joist girder 50 feet long x 5 feet high x 9¼ inches wide without being braced or supported to prevent from falling.

INSTANCE B

No instruction to employee in the recognition and avoidance of hazards when rigging joist girder 50 feet long x 5 feet high x 9¼ inches wide in the northwest section of jobsite. Employee attempting to rig unsupported girder to be hoisted with crane.

Serious:

HANDLING AND STORAGE OF MATERIALS, PART 8, RULE 818(1).
Material shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse during storage or transit.

Steel girder 50 feet long x 5 feet high x 9¼ inches wide was not blocked or otherwise secured to prevent from falling. Employees erecting structural steel joist girders in column line 1 and 2 in the north end of jobsite. Employee attempting to rig girder with web slings when girder fell, crushing employee.

Serious:

STEEL ERECTION, PART 26, RULE 2609(3).
Safety latches on hooks shall not be deactivated or made inoperable, except in either of the following situations:

- (a) When a qualified rigger has determined that the hoisting and placing of purlins and single joists can be performed more safely by doing so.
- (b) When equivalent protection is provided in a site-specific erection plan.

Safety latch deactivated on hook used when hoisting joist girders with mobile crane. Structural steel members being hoisted into place exposing connectors working from self-propelled elevating work platforms to the possibility of load becoming disengaged in the north west section of jobsite column line 1 and 2.