

Case 132. 23-year-old Hispanic construction laborer was killed when he fell from wooden building roof trusses that collapsed during installation.

A 23-year-old Hispanic construction laborer was killed when he fell from wooden building roof trusses that collapsed during installation. The decedent was a member of a 5-person crew who were installing 75-foot trusses for a second story addition on a church. One crewmember was operating the boom truck and four members (one of whom was the decedent) were setting the trusses. The truss setting operation began from the middle of the building with the boom truck set up on the south side of the building. There were two truss styles, T-01 and T-03. Twenty-eight trusses had been set working from the north to the south. These trusses were toe-nailed/braced. A determination was made that a series of T-01 and T-03 trusses were not set in the correct position and required relocation. The crew removed the toe-nail support from the trusses requiring relocation prior to attaching the crane. Several T-01 trusses were lifted up and over existing trusses and positioned to the south side of the building. It is unknown if the trusses were braced/toe-nailed after repositioning. The T-03 trusses were moved south of their incorrect position. When the trusses were relocated, there was no strong back-type bracing to prevent collapse in a northerly direction, which was the direction of the collapse. The incident occurred during the re-setting of the third T-03 truss to its new position. It is assumed that the truss was setting on location and tension released from the boom truck cable. The west shackle was disconnected from the rigging and showed no signs of becoming disconnected on its own. The west shackle ended up in the basement indicating that it might have been thrown. The east shackle was still connected after the truss collapsed. The decedent was located on the east side of a truss and was found by another worker on site pinned under five trusses. 911 was called and the decedent was transported to a local hospital where he was declared dead. Due to the limited English skills of the workers on site, limited information about the incident details was acquired.

MIOSHA Construction Safety and Health Division issued the following alleged Serious and Other-than-Serious citations to the employer:

SERIOUS:

ACT 154 PUBLIC ACT OF 1974, 408.1011(a).

Furnish to each employee employment and a place of employment, which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to the employee.

Employer did not provide a place of employment free from recognized hazards. Hazards resulted in employee fatality and multiple injuries to other employees.

A. Wood trusses improperly braced to prevent failure. Trusses measured approximately 75 ft in length with a 6/12 roof pitch and 2/12 pitch bottom chord. Trusses not braced as specified by manufacturer, BCSI-B2 or as specified by qualified engineer.

B. Wood trusses rigged improperly for placement. Truss rigging not in accordance with BCSI-B1. Trusses are being lifted with only tow attachment points.

Acceptable methods of abatement, among others, would be to follow the requirements of BCSI Truss replacement guide or follow the procedures specified by a qualified engineer.

OTHER-THAN-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 if an emergency occurs.
- (h) Instruction in the steps or procedures to be followed in case of an injury or accident or other emergency.

Employer not communicating safety program to Spanish speaking employees. Company safety program in English language only.

