Carpenter Falls 13 Feet when Pump Jack Scaffold Collapses

Industry: Siding Contractors
Task: Installing siding on residence
Occupation: Carpenter
Type of Incident: Fall from scaffold
In June of 2015, a 54-year-old carpenter suffered two broken legs when the pump jack scaffold he was working from collapsed and he fell 13 feet.

The incident occurred at a two-story residence where siding was being installed. The employer, who usually works by himself, hired the carpenter and another worker for this job. The carpenter had over 10 years’ experience. At the beginning of the job, five days before the incident occurred, the employer and the injured worker erected a pump jack scaffold. This aluminum scaffolding system had three 24-foot poles and a 24-foot plank. The employer owned the scaffold. Both the employer and the injured worker had experience setting up and working from scaffolds.

On the day of the incident, the carpenter was standing on the scaffold plank 13 feet off the ground when first the right and then the center pole separated from the building causing the scaffold to collapse and the carpenter to fall to the ground. He was hospitalized with two broken legs and underwent multiple surgeries.

Over nine months later he is still undergoing rehabilitation and is unable to work. An investigation determined:

• The scaffold was incorrectly set up. Finishing and roofing nails were used to secure the bracing to the roof instead of the screws required by the scaffold manufacturer.
• A competent person was not involved in the erection and inspection of the scaffold.
• A personal fall arrest system was not used by the injured worker. There were anchor points on the roof that could have been used.
Incident scene showing the collapsed aluminum pump jack scaffold. The right and center poles separated from the building.
Bracing was secured with finishing and roofing nails that failed. The scaffold system manufacturer specified that a specific type of screw (minimum 3-inch type AB or equivalent) be used to secure bracing to a structure.
Requirements

• **Make sure scaffolds are erected, moved, altered, and dismantled by qualified persons.** This should be done only when the work is:
  - Supervised and directed by a competent person qualified in scaffold erection, moving, dismantling, or alteration; and
  - Done by experienced and trained employees selected by the competent person.

  See [WAC 296-874-20004](#).

• **Inspect scaffolds and scaffold components.** A competent person must inspect for visible defects before each work shift and after anything that occurs that could affect the scaffold’s integrity.

  See [WAC 296-874-20034](#).
Requirements

• **Pump jack scaffolds.** Secure poles to the structure using rigid triangular bracing or the equivalent located at the top, bottom and other points as necessary.

  See [WAC 296-874-40032(3)](http://example.com).

• **Provide fall protection on scaffolds.** Protect employees on a scaffold more than 10 feet above a lower level from falling by providing either a personal fall arrest system or guardrails.

  See [WAC 296-874-20052](http://example.com).
Erect scaffold systems according to the manufacturer’s requirements.

The manufacturer of the incident scaffold requires that bracing be secured with a minimum of 3-inch type AB screws or the equivalent. Consensus standard ANSI A10.8-2011 Safety Requirements for Scaffolding also states that this screw type and length, or the equivalent, be used.
Resources

Scaffolds 296-874 Washington Administrative Code (WAC)
www.lni.wa.gov/safety/rules/chapter/874/

Scaffolds. Washington State Department of Labor & Industries
www.lni.wa.gov/Safety/Topics/AtoZ/Scaffolds/Default.asp

This bulletin was developed to alert employers and employees of a serious traumatic injury to a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the injury.