14-Foot Fall with a 15-Foot Rope

A 41- year-old construction worker suffered a severe traumatic brain injury when he fell approximately 14 feet and hit his head on the concrete below. The worker had been installing floor trusses on the second story of a multi-family home when the incident occurred. His foreman and co-worker were on site when it happened and heard, but did not see, the fall.

Photo of incident scene showing the opening the worker fell through while installing floor trusses.

They found the injured worker lying on the concrete of the home's garage floor, breathing but barely conscious. What else did they find? He was still connected to the rope and harness of his fall arrest system – which was anchored to a beam.

The sad irony of this incident - although the worker was wearing fall protection, the rope was too long, and it couldn't stop his fall. The foreman had warned him about the length of the rope a week before the incident.

The worker suffered multiple skull fractures, brain hemorrhaging, and a fractured spin. A year after the incident, the victim was still in rehabilitation for his brain injuries and required 24-hour living assistance.

Final Word

What could have prevented this incident? Aside from the obvious – using a shorter rope – here are a few more recommendations:

1. Use an aerial work platform or scaffold where possible – if a work platform had been used in this incident, the worker could have been standing on the platform and not the beam edge.
2. Reduce exposure to falls by placing and securing plywood over the already installed trusses to create a walking/working surface to which an anchor can be secured for a personal fall restraint system.
3. Put in place a disciplinary plan and enforce it. Using the wrong PPE or using the right PPE in the wrong way should be part of the disciplinary plan. It may not always work, but in many cases it could be enough of a deterrent for employees to stop and think before making the same mistake twice.