

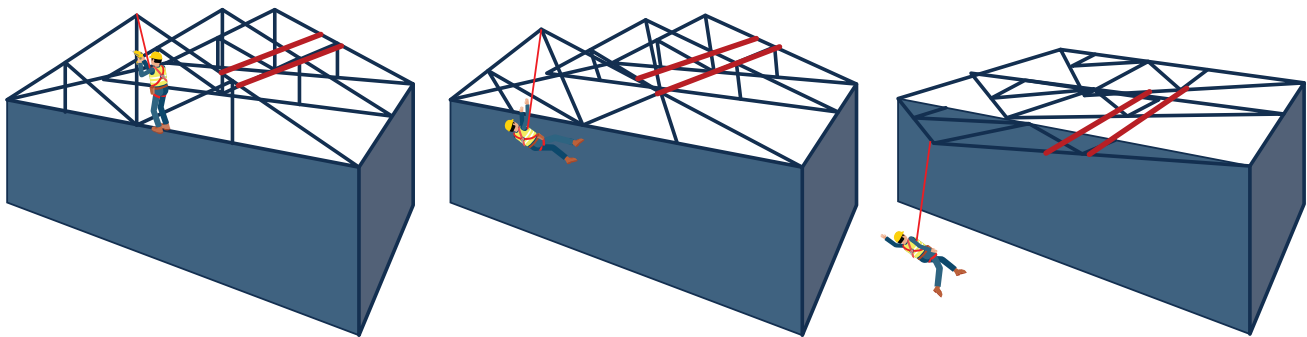


# SAFELY INSTALLING ROOF TRUSSES

Roof trusses are the highest parts of a house frame, and workers installing them can fall and be seriously injured or even killed. For contractors, it may be difficult to comply with OSHA requirement to use fall protection while installing trusses 6 feet or more above a lower level. Below are methods and resources that employers can use to prevent fall-related injuries during truss installation.

## WHY PERSONAL FALL ARREST SYSTEMS MAY NOT WORK

Personal fall arrest systems (PFAS) are the most widely used form of fall protection in residential construction, but they might not be suitable when workers begin installing roof truss sections because there may not be a stable place to attach an anchor. Trusses are designed to support weight from the top down. Until trusses are properly attached and braced or sheeted, they are weak if pulled from the side and subjected to lateral force.



PFAS need strong anchor points that can hold the sudden weight of a falling worker. An anchor with a single connection point, such as a strap anchor or a bolt-on anchor, will not protect a falling worker who is attached to a single truss.

# SOLUTIONS



## SCAFFOLDS

Scaffolds can be placed on a structure's interior or exterior and can provide a stable working platform. The scaffold's guardrail system provides fall protection to workers and, with the addition of toe boards, falling object protection can be provided to the areas below. When bracket scaffolds are used on a structure's interior, the exterior wall can limit employee exposures to fall hazards. Exterior bracket scaffolds can also be used for installing roof trusses and other rooftop construction activities. To ensure safe use and appropriate load limits for bracket scaffold systems, workers should always follow the manufacturer instructions or consult a qualified person.



## AERIAL PLATFORMS

Depending on the building's layout and the tasks involved, lifts (aerial, scissor, etc.) may be options for setting trusses. Lifts provide a stable, elevated platform from which workers can operate. Workers must follow all safety procedures and conduct all operations from inside the lift basket.



## LADDERS

Platform and step ladders can provide a stable, elevated platform from which to work. It is important to always use the right type of ladder for the job and according to manufacturer recommendations.



## FALL PROTECTION ANCHORS

Spreaders can act as anchors for personal fall arrest systems. A spreader braces the trusses and distributes arresting forces across several trusses and should be used according to manufacturer instructions. It is important to refer to the truss manufacturer's instructions and have a qualified person determine if trusses will meet strength requirements for a PFAS.

## ADDITIONAL RESOURCES

- [wcf.com](http://wcf.com)
- **Washington State Fall Protection – Trusses Video:** [https://www.osha.gov/video/wa\\_fallprotection/wa\\_fallprotection\\_truss.html](https://www.osha.gov/video/wa_fallprotection/wa_fallprotection_truss.html)
- **OSHA Guidance Document:** <https://www.osha.gov/doc/guidance.html>
- **OSHA Fact Sheet:** <https://www.osha.gov/Publications/reducing-falls-installing-roof-trusses-factsheet.pdf>
- **Protecting Roofing Workers:** <https://www.osha.gov/Publications/OSHA3755.pdf>
- **Fall Protection for New Home Construction:** <https://www.ot.wustl.edu/fptech/index.htm>