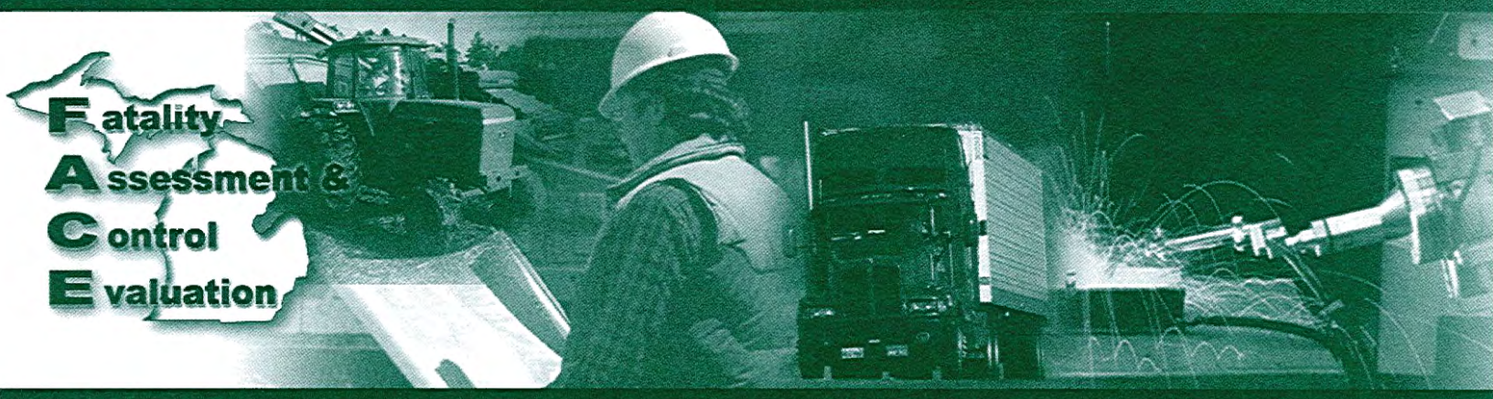
MICHIGAN

Fatality Assessment & Control Evaluation



Prevention through comprehensive research and investigation

INVESTIGATION/RESEARCH

STOP FATAL FALLS IN CONSTRUCTION

Because of the 264 or more deaths each year from falls in construction in the U.S., OSHA began an initiative to reduce fall related deaths (www.osha.gov/stopfalls/). In Michigan, since 2001, 119 of the 328 (36%) deaths among construction workers were from falls. Sixty eight of the 119 (57%) of the fatal falls were the types of falls highlighted in the OSHA Fall Prevention Initiative: 33 falls from a roof edge or through a roof opening, 24 falls from a ladder, and 11 falls from a scaffold. The most common heights of all construction falls were 10-19 feet (28 deaths), 21 deaths were from less than 10 feet. Specialty trade contractors were most likely to have a fatal fall; roofing (31), structural steel (11), framing and painting (16) and masonry (7). Individuals who died from a fall from a height of greater than 6 feet were either not equipped with or were not properly using fall protection equipment (i.e., a harness was worn but the lanyard was not attached to an anchor point).

IN ORDER TO PREVENT SIMILAR INCIDENTS IN THE FUTURE

- **Plan** ahead to get the job done safely. **Decide** how the job will be done, what tasks will be involved, and what safety equipment is needed. *A ladder or stepladder may not be the best option.* Ask these questions before deciding on a ladder:
  - Will I have to hold heavy items while on the ladder? Is the elevated area high enough that it would require a long ladder that can be unstable? Will I be working from this height for a long time? Do I have to stand on the ladder sideways in order to do this work?
  - If you answer yes to any of the questions, consider using something other than a ladder such as a scissor lift or a scaffold.
- **Provide** the right equipment and **Ensure** it is used correctly. Construction activities have different work heights requiring the implementation and use of fall protection systems (e.g. guardrail, safety net, personal fall arrest system (PFAS), warning line). Consult MIOSHA Construction Standards for more information. If using a **PFAS** (anchorage connector; body wear; and connecting device)**, calculate the fall distance** prior to implementation (See Figure 1).
- **Train** workers in hazard recognition and in the care and safe use ladders, scaffolds, and fall protection system(s), and other equipment they'll be using on the job in accordance with applicable MIOSHA standards.

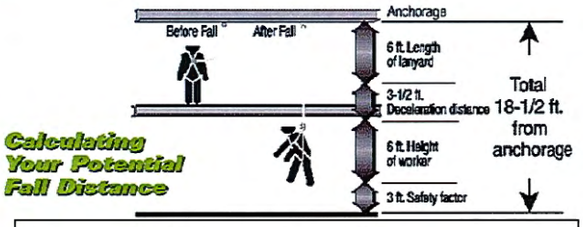


Figure 1. Fall distance calculation example. Courtesy of Alpine Fire and Safety Systems Inc.

DID YOU KNOW?

- Falls are the leading cause of death in Construction in Michigan and the US.
- Workers on steep roofs (greater than 4 in 12) must use either guardrails, nets, or a personal fall arrest system.
- Free fall distance when using a personal fall arrest system is limited to a maximum of 6 feet.
- When using a personal fall arrest system, a rescue plan is required that will provide a means to retrieve someone who has fallen and is suspended by their harness and lanyard. Calling 911 is not considered a rescue plan.

MSU Occupational and Environmental Medicine:
www.oem.msu.edu/
MIOSHA Construction Safety and Health Standards:
www.michigan.gov/mioshastandards
OSHA Fall Prevention Campaign:
www.osha.gov/stopfalls/
Fall Protection: Responding to Emergencies:
www.lni.wa.gov/wisha/publications/FallProtectionEmergencies.pdf

Hazard Alert #16 – 5/23/13

TO REPORT A NEW WORKPLACE FATALITY TO MIOSHA

1.800.858.0397

MICHIGAN FATALITY ASSESSMENT & CONTROL EVALUATION

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