

F a t a l i t y A s s e s s m e n t & C o n t r o l E v a l u a t i o n

Prevention through comprehensive research and investigation

INVESTIGATION/RESEARCH

FALLS FROM SCAFFOLDS CAN BE PREVENTED

Since 2001, **21 Michigan workers have died while working on/from a scaffold.** Sixteen of the workers who died fell from the scaffold, two were electrocuted when an object they were working with touched overhead power lines, and three were struck by the scaffold as it fell to the ground. Two examples of workers who died due to a fall:

- A painter placed a ladder on top of a baker scaffold. He fell 20 feet when the scaffold collapsed. He sustained fatal head injuries.
- A heating and cooling technician was installing ductwork in a garage working from a 5-foot high mobile scaffold. He fell to the concrete floor sustaining a fatal head injury.

Plan Ahead. Provide Right Scaffold. Train Everyone.



IN ORDER TO PREVENT SIMILAR INCIDENTS IN THE FUTURE

- **Train! Train! Train!** The scaffold designer and employees who erect, disassemble, move, operate, repair, maintain, inspect or work on the scaffold **must be trained** to recognize scaffold hazards, understand its design criteria, its maximum intended load-carrying capacity, and its intended use.
- **Plan for and Provide fall protection** for employees erecting/dismantling scaffold.
- **Use properly graded lumber** (1,500 psi fiber stress value) to **fully plank** scaffold.
- **Install ALL guardrails and toe boards** when the work platform is 6 or more feet above the ground.
- **Place** scaffolds on base plates AND mudsills. **Confirm** scaffold is plumb and level.
- **Ensure a competent person inspects** the scaffold for visible defects **before each work shift** as well as after any occurrence that could affect its structural integrity.
- **Check for proper access** to the scaffold. **DO NOT climb cross-braces.**
- **Prohibit use of ladders/make-shift devices** to increase working height of scaffold. **DO NOT stand on guardrails.**
 - Ladders may be used on a large area scaffold where an employer has satisfied the criteria in MIOSHA Part 12, Rule 1210(15).
- **DO NOT** intermix scaffolds, frames or components of different manufacturers unless: (1) the components fit together properly, without force, (2) the use of dissimilar metals will not reduce strength, and (3) the design load capacities are maintained.

DID YOU KNOW?

- You must verify that the scaffold can support four (4) times the maximum intended load.
- Ladder jacks are the least safe of all staging types and should not be used over 20 feet in height.
- Scaffolds should be tied to the structure using #9 wire or tie-in devices.
 - The first vertical tie to the building should be at the maximum height of 4 times the narrowest base dimension.
 - Additional ties should not exceed 26 feet vertically.
 - Maximum horizontal distance between ties should not exceed 30 feet.

MSU Occupational and Environmental Medicine website: www.oem.msu.edu/

MIOSHA Construction Safety Standard, Part 12, Scaffold & Scaffold Platforms: www.michigan.gov/mioshastandards

OSHA "Stop Falls" Fall Prevention Campaign: www.osha.gov/stopfalls/

Center for Construction Research and Training: <http://stopconstructionfalls.com/>

Hazard Alert #15

TO REPORT A NEW WORKPLACE FATALITY TO MIOSHA

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MICHIGAN FATALITY ASSESSMENT & CONTROL EVALUATION

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