

MIOSHA Fact Sheet

Electrical Safety: Power Line Clearances



Electricity is such a familiar part of our surroundings that it often is not treated with the respect it deserves. Electrocutation is one of the leading causes of fatalities in the construction industry. MIOSHA has investigated six (6) fatal electrocutions in construction in the 5-year period of 2015 through 2019. There are several Construction Safety and Health Standards that address power line safety, each having specific requirements for minimum clearances and protection. It is imperative you know which rules apply!

Cranes are required to maintain a minimum of **20 feet** clearance from energized electrical power lines that are 350KV or less and **50 feet** if the power lines are more than 350KV. Reference Construction Safety and Health Standard Part 10. [Cranes and Derricks \(michigan.gov\)](http://michigan.gov), specifically rules: 1926.1408-1926.1411.

Excavators are required to maintain a minimum clearance of **10 feet** or as stipulated in Table A., unless traveling with no load, then see Table B. Reference Construction Safety Standards Part 15. [Excavators, Hoists, Elevators, Helicopters, and Conveyors \(michigan.gov\)](http://michigan.gov).

Aerial Work Platforms must maintain a minimum clearance distances of **10 feet**. Reference Construction Safety Standard Part 32. [Aerial Work Platforms \(michigan.gov\)](http://michigan.gov), specifically Rule 3209(1).

Metal Ladders are a recognized danger around power lines! No part of the person's body or the metal ladder can be closer than **20 feet** to power lines. (Reference Part 11. Construction Safety and Health Standard [Fixed and Portable Ladders \(michigan.gov\)](http://michigan.gov), Rule 1124(7)).

Scaffolds have specific minimum clearance distances from energized parts. The minimum clearance distance for uninsulated electrical lines is **10 feet**. For insulated lines up to 300 volts, the minimum clearance distance is **3 feet**. Reference: Construction Safety and Health Standard Part 12. [Scaffolds and Scaffold Platforms \(michigan.gov\)](http://michigan.gov), Rules 1212(4), 1212(5) and 1212(6).

Other Tools, Material and Mobile Equipment – e.g., paint rollers, long-handled cement finishing floats, metal framing, metal roofing materials, gutter forklifts, dump trucks, concrete pump truck booms and loaders are required to maintain a minimum clearance of **10 feet** from power lines. Reference: Construction Safety and Health Standard Part 1. [General Rules \(michigan.gov\)](http://michigan.gov), Rule 115(4).

How to Avoid Contact with Power Lines

- Look for overhead power lines prior to beginning job.
- Erect and maintain elevated warning lines and/or signs to identify power line locations.
- Stay at least 10 feet away from overhead power lines.
- Contact MISS DIG and property owner for buried power line locations.
- Until confirmed with utility company, assume that overhead lines are energized.
- Re-route, de-energize and visibly ground lines, or use other protective measures when working near power lines.
- Use non-conductive ladders when working near power lines and maintain minimum clearances.

If you need additional assistance, please contact the Construction Safety and Health Division at 517-284-7680 or the Consultation Education and Training Division at 517-284-7720. Construction Safety and Health Standards and other information can be viewed on the MIOSHA website at www.michigan.gov/miosha.

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