



063: OSHA Violations to Avoid, Part I

Electrical wiring methods, components

OSHA is essentially referring to violations of the NEC in terms of the electrical system components that pose a hazard to people. The concern is unsafe working conditions, not unsafe acts. Here are some pertinent items.

- **GFCIs missing in required areas.** Use a GFCI where the NEC requires. For example, outdoor receptacles or receptacles located near a sink. Become familiar with NEC Article 210.
- **Wiring hanging on raceway.** Don't use raceway as a support for speaker wiring or any other kind of wiring.
- **Disconnect not within site of a motor.** You must ensure any motor has a disconnect within sight of itself.
- **E-stops not installed on conveyors.** When you construct a conveyor system, ensure you install emergency stops buttons, not regular off switches. E-stops have large "smash me" mushroom heads, while stop switches are normally recessed.
- **Multiwire circuit violations.** When sharing a neutral, follow NEC 210.4 requirements.

Electrical, general requirements

OSHA is essentially referring to violations of the NEC in terms of general electrical hazards that pose a hazard to people. The concern is unsafe working conditions, not unsafe acts. Here are some pertinent items.

- **Unbonded electrodes.** Electricity always seeks to get back to the source. A ground rod that is not bonded back to main bonding jumper at the service entrance is not "ground." Assuming it is can be lethal.
- **Overloaded circuit panels.** This ranges from too many conductors per terminal to too many circuits in the panel. This typically happens after a series of add-ons.
- **Inaccurate circuit panel directories.** Ensure the directories are filled out with meaningful, accurate information. This kind of violation can hamper rescue efforts or even get rescue workers killed.
- **Covers missing from boxes, receptacles, and enclosures.** Don't leave openings in enclosures. Use blanks where a breaker no longer fills a slot or a switch no longer occupies a slot in a multi-switch cover.

Fall restraints

Inspect your safety harness. Look for fiber damage, pulled stitches, or frayed edges. Examine D-rings, grommets, rivets, buckles, tongues, and straps.

Inspect your lanyard. Look for fiber damage, pulled stitches, or frayed edges. Inspect the snaphooks, carabineer, and any other mechanisms. If it is a retractable lanyard, ensure the back nuts and rivets are tight. If it is a retractable lanyard, test for smooth operation and proper locking.

Inspect your anchorage points. Do not attach to guardrails, C-clamps, ladders, conduit, light fixtures, rebar, plumbing, roof stack, or any object that you aren't sure can support your weight plus the force of your fall.

Discussion leader duties for this session:

Be familiar with your company's safety policies. Take a walk, looking for unsafe acts by members of your crew. Keep a record of those unsafe acts and use them as examples during the discussion session.

What this Safety Talk covers:

The electrical safety situations that get the most OSHA citations, and precautions to take to avoid those citations. This is Part 1 of 2.

Discussion notes :

