



POWER LINE SAFETY AWARENESS

Power lines account for the largest share of electrocution fatalities in the construction industry.

Considering the work electricians do, this may be hard to believe, but in fact about 2 of every 3 electrocutions involve non-electrical workers. Underlying contributing factors often include lack of awareness, lack of understanding, and/or lack of necessary safety precautions & training.

As an entry level worker in the steel and metal building industry:

It is important that you understand:

- These lines carry lethal voltages.
- Electricity can arc from the lines to a grounded object. So, contact with the lines is not necessary.
- Arcing distance will increase with line voltage, weather (esp. wet/humid), and quality of ground.
- It's not just the top lines (primaries) that are dangerous. Any line coming into or out of a transformer poses danger.



Understand that YOU CAN BE ELECTROCUTED if you:

- Touch any part of an energized object (crane/equipment, load line, rigging, hoisted object, tag line, etc.). If you do, a potentially deadly flow of electricity is likely to pass through your body to ground, a grounded object, or object at a different voltage.
- Try to rescue a person in contact with an energized object.
- Try to step, walk, or run away from an energized object in proximity to you (35 ft., possibly more).



A few things to remember...

There is much more to learn about power line safety, but for now...

- LOOK UP & LIVE – Prior to work, identify the location of power lines on or near you. Look for lines at the start of each day – circumstances can change.
- ASSUME WORST CASE – Presume all power lines are energized and uninsulated (unless confirmed otherwise by the power line owner).
- MAINTAIN CLEARANCE – Maintain a minimum of 10 ft. clearance between energized power lines up to 50 kV and any equipment, which can include personnel lifts, cranes, forklifts, ladders, scaffolds, & heavy equipment. (Greater clearances may be required for lines over 50 kV, if line voltage is unknown, or per project requirements.)
- AVOID CONTACT IS NOT A PLAN – Where required clearances cannot be maintained, arrangements will need to be made to have the lines de-energized & grounded, relocated, or protected with an appropriately-rated dielectric cover. This will involve project leadership, but you need to know that, “just be careful and avoid contact” is NOT an acceptable plan.

