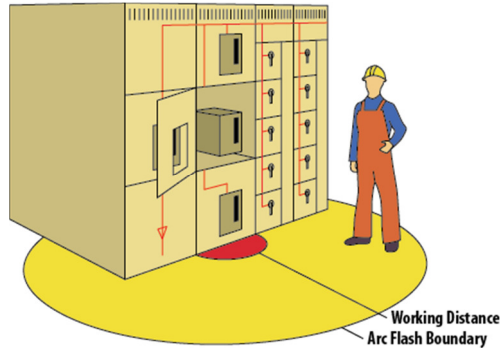




# ARCO SAFE TOOL BOX TALKS

## Electrical – Safe Work Practices

1926 Subpart K, Electrical



Arc Flash is when electricity jumps (arcs) between two points through the air, resulting in explosion of light, heat and sound (think lightning). Because of this hazard OSHA has several requirements for the work area around live electrical equipment to protect the electrician and the surrounding workers.

Above is diagram showing the two most important zones. The Arc Flash boundary **MUST** be flagged/taped off work is being conducted. This distance can be from 3-12 feet depending on the voltage (see table K-2 in 1926.403). If you are inside this area you need to have the appropriate arc flash PPE (different depending on the voltage of the equipment). **Arc flashes can burn in excess of 32,000 degrees!**

**NOTE: YOU CAN COMPLETELY ELIMINATE RISK OF ARC FLASH  
BY COMPLETELY DE-ENERGIZING THE EQUIPMENT!**

If it has been determined it is infeasible to de-energizing the equipment before conducting work the following must be completed before work even starts.

- employer must fill out an energized work permit,
- worker must be qualified and wear appropriate PPE,
- only insulated tools may be used for the work,
- a job briefing must be conducted on the procedures to be followed,
- procedures must be documented in the safety manual,
- area needs to be flagged at the appropriate distance to keep other workers away