WEEKLY SAFETY MEETING

Vol.23 | No.36 | Week of 09-03-24

ARC FLASH

Date:

Job Name:

> *Take time to control hazards, so they don't change the course of your life.*

An arc flash is the sudden release of an enormous amount of electrical energy. The electric current leaves the intended conductor and travels through the air. The result can be a life-altering or life-ending explosion. You simply must take steps to avoid an arc flash.

In just a fraction of a second, an arc flash can produce tremendous amounts of concentrated radiant energy accompanied by a pressure wave of up to 1000 pounds per square foot. Arc flashes produce intensely bright light and noise levels greater than 160 decibels. Molten metal can be sprayed throughout the area, and tools and debris will become deadly shrapnel.

Temperatures in the arc blast can reach 35,000 degrees Fahrenheit, which is about three-and-a-half times as hot as the surface of the sun. The high temperatures of the arc can easily ignite any combustible material nearby, including your clothing. The extreme temperature and burning clothes cause third-degree burns. The heat of an arc flash wouldn't just burn you, it could destroy you.

An arc flash can happen anytime you work on energized equipment. Even if you do your job perfectly, a loose bolt that someone else left in the panel, a faulty component, condensation, or conductive dust could trigger the arc.

When you work on a task where there is even a small potential for an arc flash, you should wear all the necessary PPE. This can include gloves, hearing protection, flame- resistant (FR) clothing, flash hoods, and other necessary protective gear. The PPE you'll need to wear to protect yourself from an arc blast is cumbersome at best. It's a better idea to eliminate the hazard in the first place.

The most effective and foolproof way to eliminate the risk of electric shock or an arc flash is to completely de-energize the equipment that you'll be working on. Use lockout/tagout procedures before you do any work or maintenance on electrical equipment. Working on energized circuits is dangerous and can be deadly. Only qualified persons can work on energized circuits and equipment.

Arc flash safety doesn't only apply to electricians working on live circuits. You could be in danger if you happen to be within 25 feet of the work area. If you are working anywhere near an arc flash, you could suffer electric shock, blast and concussion injuries, possible blindness, injuries from flying objects, hearing loss, burns, or worse. Never enter an arc flash hazard zone unless you're authorized and you're wearing appropriate PPE.

Determining the magnitude of the flash hazard, what protective gear is needed, etc., is complex. But don't ignore the hazard because it seems tricky. If you think there is an arc flash risk, stop working and have the situation evaluated properly. Don't take a chance on an arc flash.

Supervisor Signature:

THERMA
A LEGENCE Company

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Job Name:

Print:	**Signature:**

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