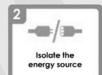
Working Safely Around Electricity Infographic

# Lockout/Tagout (LO/TO)

LO/TO was the eighth most cited OSHA violation in 2013, accounting for 12% of US fatalities. One amputation in the workplace caused by failure to LO/TO will cost\* directly over \$60,000 and indirectly over \$2 million.

Four steps to isolating equipment during Lockout/Tagout.









#### According to OSHA each year proper LO/TO:

Safeguards

3 MILLION
People

Prevents 120 Deaths 50,000 Injuries

#### Arc Flash

The most common clothing item that workers fail to use as last protection against an Arc Flash burn are gloves.

Skin temperature for curable burn	176°F
Skin temperature causing cell death	205°F
Ignition of clothing	752°-1,472°F
Metal droplets from arcing	1,832°F
Surface of sun	9,000°F
Arc terminals	35,000°F

One curable burn injury from Arc Flash at a workplace DIRECTLY COSTS' \$40,000 & OVER \$150,000 INDIRECTLY



Flash suit protects skin and face



Respirator protects from inhalation of toxic substances



Flame retardant hat for head protection



Hearing protection from Arc Flash explosion



Gloves can prevent electrocution

### NFPA 70E

The intent of NFPA 70E, regarding Arc Flash is to provide guidelines — starting with most preferred, to the last line of defense — that will limit injury of second degree burns.



Eliminate the Hazard



Lockout the hazard - or isolate it



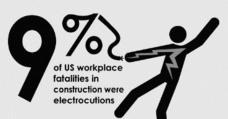
Educate, training, and upkeep of visual communication is required



The last line of defense is personal protection equipment (PPE)

## Cable and Wire Marking

Prevention of serious injuries or fatalities starts with identifying electrical energy sources. Cable markers and tags are identifiers critical to safety.



One electric shock injury
DIRECTLY COSTS\* OVER \$100,000
& INDIRECTLY OVER \$215,000

Source: <a href="https://www.graphicproducts.com">https://www.graphicproducts.com</a>