

# Cal/OSHA electrical – low voltage 600v or less

## Procedures for working on low voltage systems and equipment.

Electrical work on low voltage systems of 600v or less must be performed by a qualified and competent electrician.

Prior to starting work on exposed live equipment a supervisor must determine it necessary to work live.

The supervisor must communicate all hazards and work procedures to the employee and provide suitable personal protective equipment, safe guards and ensure proper use of safe guards and PPE.

Employees must treat all equipment and conductors as live until tested and proven to be de-energized

# Lockout and Tag Out of Hazardous Energy.

This practice sets guidelines for preventing personal injury and/or property damage due to unexpected energization (movement of machinery during repair, maintenance or testing). It is important to isolate the energy source before work commences. A locking device performs the lock out and Danger – Do Not Operate tags identify the item.

Multin Electric Inc. will ensure the work activity is performed safely. All equipment is treated as live until tested, locked out and verified by a competent employee. Work cannot be performed until an authorized employee ensures the following procedures are followed.

Notifying all involved personnel.

Shutting off and locking out of the system disconnecting means using an approved lockable device or disconnecting the equipment from the wiring system to prevent the possibility of unintended reenergization.

Effectively discharge or block the possibility of stored energy accidently discharging from mechanical, electrical or gravitational sources.

Lock out devices are tagged with the name of employee responsible for the lock out and the work being performed.

#### **Barriers**

Approved suitable temporary barriers or barricades must be installed at all access points when enclosures containing live equipment are accessible to workers other than authorized employees. Sufficiently rated barriers and safe guards will be provided to prevent accidental contact with live parts. All exposed live equipment must be tagged, barricaded or protected by a suitable means to prevent incident. When work on a live system is completed all temporary protective equipment and barriers must be removed by an authorized employee and permanent barriers and covers reinstated. A trained and competent employee must determine structures supporting electrical equipment have sufficient guying or bracing before workers are allowed to work on or climb the structures.



### **Tools**

Insulated tools must meet ASTM F 1505-01 specifications

Conductive measuring tapes, ropes or other measuring devices must not be used near exposed equipment. Conductive fish tapes cannot be used in raceways connected to exposed live equipment unless suitable barriers are applied to protect accidental contact.

### **PPE**

Eye protection- approved eye protection is supplied and utilized by employees

Rubber gloves – Insulated gloves must be worn for voltages in excess of 250 volts to ground. These gloves must adhere to ASTM D 120-02a and ASTM f 496-02a. Electrical retests cannot exceed 6 months for insulated gloves and 12 months for insulated sleeves.

Signature:	Date:
On Ha	September 19, 2017