

**ELECTRICIAN//SENIOR ELECTRICIAN**

Ref. Code: E-E-3

| REPAIRING AND REPLACING SITE AND SECURITY LIGHTING |   |   |
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| Activity   | Hazard Identification   | Required Precautions  |
| 1. Driving to and from work site.                  | 1. Motor vehicle accident; striking pedestrians, bicyclists, or individuals using rollerblades. | 1. Wear prescription lenses, if required, and seatbelt. Verify that all equipment on vehicle is secured properly. Stay alert for pedestrians, bicyclists, and individuals using rollerblades.   |
| 2. Using stepladder.                               | 2. Ladder collapsing; slipping/falling from ladder.   | 2. Inspect ladder before use. Use ladder of proper height. Make sure ladder is properly assembled and locked and standing on level ground. Do not exceed weight limit for ladder. Do not stand on top of ladder or on top rung. Have coworker hold ladder.  |
| 3. Using extension ladder.                         | 3. Ladder falling; slipping/falling from ladder.  | 3. Use bucket truck if possible. Inspect ladder before use. Verify that ladder is properly assembled and that it is securely positioned on level ground. Tie safety rope to hold ladder to roof. Use 1'-4' rule. Use OSHA decal to verify that ladder is in the proper position. A second person should be present to secure the ladder at the bottom and make sure the immediate area is safe. |
| 4. Using small bucket truck.                       | 4a. Electric shock; electrocution.  | 4a. Stay clear of power lines, lights, buildings, and tree branches. When working on high-voltage, wear appropriate gloves, sleeve protectors and a long-sleeve shirt or coveralls.   |
|  | 4b. Falling out of the bucket.  | 4b. Wear safety belt. Do not overextend to work as bucket might tip. Do not exceed weight limit for bucket.   |

## ELECTRICIAN//SENIOR ELECTRICIAN

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|  | 4c. Tripping/falling when getting into and out of bucket.                         | 4c. Use grip tape on platform to provide secure footing. In winter, keep platform clear of ice.  |
|  | 4d. Truck tipping over.   | 4d. Do not park truck on steep inclines.   |
|  | 4e. Truck rolling away.   | 4e. Verify that brakes are on and wheels are chocked.  |
| 5. Using large bucket truck.   | 5a. Electric shock; electrocution.  | 5a. Stay clear of power lines and of lights on sides of buildings. Have someone stay on the ground to watch for hazards.   |
|  | 5b. Falling out of bucket.  | 5b. Verify that boom operator is certified. Use outriggers to level truck. Wear safety belt and lifeline. Do not exceed weight limit of 500 lbs. in bucket.  |
|  | 5c. Running into obstacles such as tree branches, power lines, etc.               | 5c. Have grounds crew remove any tree branches that present hazards. Have someone stay on the ground to watch for hazards.   |
| 6. Working in area of vehicular/pedestrian traffic.                              | 6. Worker, ladder, vehicle, or pedestrian being struck by motor vehicle.          | 6. Turn on safety lights.  |
| 7. Using power tools such as drills, generators, sawzalls, hot box, and ram set. | 7a. Electric shock; electrocution.  | 7a. Inspect cord before use. Keep power cord away from work area. Plug tools into GFCI-protected outlets. Do not use electric tools if work area is wet.   |
|  | 7b. Tripping over or cutting power cord.  | 7b. Keep power cord away from work area.   |
|  | 7c. Injury from flying bits of material.  | 7c. Wear safety glasses, and optionally a dust mask, gloves, long-sleeve shirt and/or coveralls.   |
|  | 7d. Drill or saw catching; drill bit breaking; severe lacerations; dismemberment. | 7d. Keep tools in good condition. Inspect tools before use. Verify that guards work properly. Do not put hands near blades. When using tools, make sure you have a good center of gravity and are properly balanced. Hold tools securely with two hands to maintain control. |

## ELECTRICIAN//SENIOR ELECTRICIAN

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|   | 7e. Burning self severely on coil or hot pipe when using hot box to bend pipe.                    | 7e. Wear gloves. Do not touch coil.  |
|   | 7f. Being struck by flying debris or fragments from ram set; debris or fragments embedded in eye. | 7f. Wear safety glasses. Be cautious when using ram set.   |
| 8. Using hand tools such as wire cutters, crimps, socket set, screwdrivers, and wrenches. | 8a. Electric shock; electrocution.  | 8a. Make sure that insulation on tools is in good condition. Turn off power whenever possible.   |
|   | 8b. Cuts, pinches, smashes, punctures, severing of fingers.                                       | 8b. Keep tools in good condition. Inspect tools before use. Ear safety glasses. Work away from yourself. Use normal caution required for all hand tools. |
| 9. Using propane torch.   | 9a. Getting burned.   | 9a. Wear safety glasses and optionally long-sleeve shirt and/or coveralls.   |
|   | 9b. Starting a fire.  | 9b. Do not use torch near flammable objects. Have a fire extinguisher nearby and have a person stand by as firewatch.                                    |
|   | 9c. Burns from dripping rubber or plastic.  | 9c. Do not overheat wire.  |
| 10. Working on energized lights.  | 10. Electric shock; electrocution.  | 10. Shut off power if possible. Be aware of what you are working with. Tape off wires while working.   |
| 11. Changing light bulbs and glass lenses of light fixtures.                              | 11a. Getting cut on glass or sharp edges of light fixture.  | 11a. Handle with caution. Wear gloves.   |
|   | 11b. Getting glass in eyes.   | 11b. Wear safety glasses.  |
| 12. Digging with shovel and pick for repair or new installation.                          | 12. Back strain; overexertion.  | 12. Work safely. Take breaks as needed.  |
| 13. Working on energized relays or contactors inside building.                            | 13. Electrocution.  | 13. Turn off electricity if possible. Use extreme caution when working on anything that is energized.  |

## ELECTRICIAN//SENIOR ELECTRICIAN

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| 14. Working in area of pedestrian traffic.           | 14. Pedestrians knocking over ladders or lights or bumping into worker; pedestrians getting hit with equipment or falling tools, etc. | 14. Secure area using cones and caution tape before beginning work.   |
| 15. Working in area of vehicular/pedestrian traffic. | 15. Worker, ladder, or vehicles being struck by motor vehicle.  | 15. Secure area using cones and caution tape before beginning work. If possible, block off work area using vehicles. Turn on safety lights. |
| 16. Working outdoors in sunny and/or hot weather.    | 16a. Heat exhaustion; sunstroke.  | 16a. Work outside in cooler part of day—morning or early evening. Wear a hat. Drink plenty of water. Take frequent breaks.                  |
|  | 16b. Sunburn; skin cancer.  | 16b. Use sunscreen and wear a hat.  |
| 17. Working outdoors in very cold temperatures.      | 17. Frostbite.  | 17. Wear proper clothing for low temperatures: insulated coveralls, gloves, and hat.  |