

Temporary lighting

List temporary lighting locations on site.

Adequate lighting must be provided in areas where workers are present. Entrance and exit spaces must also be illuminated.

Explain dangers

Electricians have been electrocuted while setting up temporary lighting.

Frequent relocation of circuits can loosen connections, break insulation, and create other shock or electrocution hazards.

Steel door frames can become electrified when doors close on wires.

Ladders, pipe, scaffold frames, and other objects can bump stringers, leading to electrical contact and shock.

Dead, missing, or low-wattage bulbs, inadequate power, and blown fuses can leave stairwells, basements, and other areas poorly lit or with no lighting at all, increasing the risk of injury.

Identify controls

- Lighting levels should be at least 55 lux (5-ft candles). That means 150-watt bulbs that are:
 - suspended 2.4 m (8 ft) high and 7.5 m (25 ft) apart OR
 - suspended 3 m (10 ft) high and 6 m (20 ft) apart.
- Lights should be at least 2.4 m (8 ft) off the floor. Do not hang lights by the cord unless they are designed that way.

- Use plastic straps or insulated wiring instead of metal (nails, bare wire, etc.) to secure the lights.
- Bulbs should be installed so that they light as large an area as possible.
- Lights must be protected against damage by accidental contact. Use plastic cages to protect the bulbs.
- Bulbs lower than 100 watts are not recommended. However, if bulb wattage is too high, it may melt the plastic cages.
- Keep branch lighting circuits that feed temporary lighting entirely separate from power circuits, except for a common supply.
- Protect branch lighting circuits by a breaker or fuse with a 15-amp rating. An electrician should connect the circuits directly into a distribution panel. Make sure lockout/tagging procedures are followed before connecting the wiring to the panel.
- Use a GFCI when installing lights in wet locations.
- Don't use temporary lighting circuits as extension cords. If a fuse blows, finding your way to the panel in the dark can be dangerous.
- Make sure that wires do not contact steel doors or steel door frames. Ensure that wires cannot be pinched or cut by doors.

Demonstrate

With your crew, review the following checklist.

- Are work areas well lit?
- Are burned-out bulbs promptly replaced?
- Are they replaced with new bulbs or bulbs taken from another location?
- Are stringers promptly relocated when bulbs are blocked by the installation of new ceilings, ducts, piping, and other features?
- Are lamp holders hard-usage type?
- Are electrical feed lines for sockets supported every 1.4 m (4 ft, 6 in)?