



CHECKLISTS TO KEEP YOU ORGANIZED

Electrical Inspection Checklist

When performing an electrical inspection in a home or commercial facility, it's important to focus on everything from general safety measures to specific components like wiring, outlets, and appliances. We designed four different checklists to help you complete thorough inspections—and they're all rolled into one handy PDF.

1. Residential inspection

General safety and compliance

- Technicians wear insulated gloves, flame-resistant clothing, and safety glasses
- PPE is in good condition and rated for the applicable voltage
- Hard hats and hearing protection are worn in the appropriate environment
- Technicians are trained in arc flash safety protocols
- Proper signage is displayed
- Technicians are using arc-rated PPE and tools near energized components
- Outlets, panels, and wiring comply with NEC requirements
- Circuits are properly labeled and systems are grounded (NEC 250)
- Breakers/fuses are appropriately rated for connected loads (NEC 240)
- Inspection reports are complete, accurate, and stored for later reference
- All permits and compliance documentation are available and up to date
- Repairs, upgrades, and deviations from SOPs are documented

Electrical panel

- Panel main amperage rating matches incoming wires (NEC 310)
- Panel directory is complete, accurate, and clearly labeled
- Panel enclosure is free of rust, water, corrosion, or physical damage
- Busbars and main lugs show no discoloration or heat damage
- No double-tapped breakers are present unless specifically approved
- Panel capacity is adequate for current electrical demand
- Grounding and bonding connections are tight and secure (NEC 250)
- Whole-house surge protection is installed or recommended if absent
- Sub-panel feeders are properly sized and protected (NEC 240/310)
- Working clearance around the panel meets NEC 110.26 requirements
- Panel brand is checked for recalled or hazardous models

- Breakers trip and reset properly during testing
- No breakers show signs of wear, overheating, or nuisance tripping
- Identify panels nearing their limit and recommend upgrades
- Wiring and outlets**
 - Cords are routed safely away from walkways and tripping hazards
 - Wires have intact insulation with no exposed conductors (NEC 310)
 - Wiring is protected in conduits or raceways where required
 - Outlets and switches operate correctly and provide proper power
 - Circuit tester confirms correct polarity and grounding
 - Outlets are not warm or hot to the touch
 - GFCI protection is installed in required wet locations (NEC 210.8)
 - Outlets and switches show no burn marks, cracks, or discoloration
 - No loose wiring connections are present
 - Cords are not frayed, pinched, or damaged
 - No cords are routed under rugs or carpets
- GFCI/AFCI protection**
 - All GFCI outlets and breakers trip properly using test buttons (NEC 210.8)
 - Plug-in tester confirms downstream GFCI protection
 - GFCI protection is installed in kitchens, bathrooms, garages, basements, and outdoor areas
 - AFCI breakers function properly during testing (NEC 210.12)
 - Dual-function AFCI/GFCI breakers are installed where required
 - AFCI breakers are sealed and neutral wires are secure
 - Circuits needing AFCI protection don't share a neutral wire (NEC 210.8)
 - Frequently tripping breakers are investigated for arc faults or ground faults
 - Outdoor and wet-location outlets use weatherproof while-in-use covers
- Lighting**
 - Bulbs match fixture wattage ratings
 - Non-IC-rated fixtures maintain proper insulation clearance
 - Dimmer switches operate smoothly without buzzing or flickering
 - No loose or faulty lighting connections are present
 - Fixtures show no rust, damage, or loose components
 - LED upgrades are recommended where appropriate for energy efficiency
- Appliance and cord safety**
 - High-power appliances use appropriate heavy-duty plugs
 - Appliances operate correctly during testing
 - Appliance cords and components show no damage
 - No scorch marks or overheating signs are visible near plugs or outlets
 - Major appliances are plugged directly into outlets where appropriate

- Extension cords are not used improperly with permanent appliances
- Homeowners are advised to remove plugs safely without pulling cords
- Smoke detectors, carbon monoxide, and fire prevention**
 - Class C fire extinguisher is accessible and properly rated for electrical fires
 - Detectors are tested and batteries are replaced if needed
 - Detectors are installed in required locations
 - Flammable materials are stored away from electrical equipment
 - AFCI protection is installed where required for fire prevention (NEC 210.12)
- Outdoor electrical inspection**
 - Fixtures and outlets have weatherproof covers and seals
 - Outlets are protected by GFCI devices (NEC 210.8)
 - Equipment is properly grounded (NEC 250)
 - Wiring shows no exposure, cracking, or deterioration
 - Electrical connections are secure and protected from weather

2. Rough-in electrical inspection

- Wire gauge matches circuit requirements (NEC 310)
- Boxes are secured and at the correct height (NEC 314)
- Wiring is properly stapled and supported per the NEC
- All circuits are labeled at the panel
- Dedicated circuits for required appliances (kitchen, laundry, bathroom)
- AFCI/GFCI protection circuits roughed in per code (NEC 210.8 / NEC 210.12)
- Low-voltage wiring (data, coax, speaker) is separated from line voltage
- Grounding system is complete and accessible (NEC 250)
- Permits are posted and visible for the inspector

3. Final electrical inspection

- All devices (outlets, switches, fixtures) are installed and operational
- Cover plates installed on all boxes (NEC 314)
- Panel directory is completed and accurate
- GFCI/AFCI devices tested and functioning (NEC 210.8 / NEC 210.12)
- Smoke/CO detectors installed and tested
- Outdoor fixtures weatherproofed
- Load calculations verified against panel capacity
- All required labels and signage in place

4. Commercial electrical inspection

- General safety and compliance**
 - Technicians are wearing PPE for high-voltage environments

- PPE is in good condition and rated for commercial voltage/current levels
- Hard hats and hearing protection are worn in loud environments
- Arc flash hazard labels are visible/legible on panels and equipment
- Technicians are trained in advanced arc flash safety protocols and proper signage is prominently displayed
- Arc-rated PPE and tools used when working near/on energized components
- Outlets, panels, and wiring meet NEC standards for commercial installations
- Circuits are labeled and grounding systems installed/maintained (NEC 250)
- Circuit breakers and fuses rated for higher commercial loads (NEC 240)
- Inspection reports are complete, accurate, and securely stored
- Permits, compliance documents, and certifications are up to date
- Repairs or deviations from SOPs are documented
- NEC compliance checks**
 - All electrical systems and components meet NEC standards
 - Panels, outlets, and switches labeled with installation/operating instructions
 - Grounding systems and bonding connections are compliant (NEC 250)
 - Conduit sizing and placement follow NEC rules for commercial installations
 - Check for proper sizing of conductors and overcurrent protection devices (NEC 240/310)
- Switchgear and distribution panel inspection**
 - Switchgear and distribution panel inspection
 - Open working clearance around electrical boxes/enclosures (NEC 110.26)
 - Lugs and connection points are tight and free of heat damage
 - Panel directory is accurate, easy to read, and up to date
 - Breakers and fuses match the building plans and are correct size (NEC 240)
 - All unused holes in the cabinet or box are sealed up with proper plugs
 - Inspect any cooling fans and clean or replace the air filters
- Emergency and exit lighting**
 - Exit signs and emergency lights are securely mounted and properly aimed
 - All lights turn on immediately when test button is pressed for 30 seconds
 - Charging light is on with no battery swelling, leaks, or rust
 - Annual record of the full 90-minute battery test
 - No lightbulbs are burned out and all exit signs are fully lit
- Grounding, bonding, and surge protection**
 - Connections to ground rods or pipes are tight and undamaged (NEC 250)
 - Main bonding jumper wire is properly installed in main panel (NEC 250)
 - All metal conduits, boxes, and building steel connect securely (NEC 250)
 - Surge protector light confirms the device is still active and working
 - Wires connecting the surge protector are as short and straight as possible

- Current ratings and openings**
 - Current ratings on circuit breakers and fuses verify they can safely interrupt fault currents (NEC 240)
 - Short-circuit current ratings confirm compatibility with system load and fault conditions (NEC 240)
 - Proper coordination of overcurrent protective devices to ensure selective tripping (NEC 240)
 - Available fault current at service entrance and distribution points
 - Proper closure of unused openings in panels and junction boxes to prevent exposure to energized components (NEC 314)
 - Electrical devices/conductors are rated for their current (NEC 310/240)
- Contamination and damage**
 - Panels and enclosures are free of dust and moisture
 - No wear or corrosion to components and wiring
 - Identify electrical equipment that needs cleaning, repair, or replacement
 - Surge protection devices for sensitive electronic equipment
 - Areas around components aren't exposed to chemicals/contaminants
 - No signs of overheating or arcing in switchgear and motor control centers
- Mounting and ventilation**
 - Electrical panels and transformers are level and securely mounted
 - No blockages/restrictions in ventilation openings to cause overheating
 - Supports and mounting brackets rated for equipment weight/type (NEC 314)
 - Installations comply with NEC rules on spacing and ventilation
- Terminations and splices**
 - Splices properly insulated and connected securely to prevent hazards
 - Splices compatible with wire size and type used in the system (NEC 310)
 - All terminations rated for operating temperature of connected equipment
 - All terminations made with listed lugs or connectors appropriate for the conductor material (copper or aluminum)
 - Torque specifications for terminations are followed to prevent overheating
 - Anti-oxidation compounds are properly applied to aluminum conductors and terminations (NEC 310)
 - All splices and connectors use UL-listed materials
- Clearances and directories**
 - Working space clearances meet NEC 110.26 requirements
 - Space and headroom around equipment is accessible (NEC 110.26)
 - Circuit directories are complete, accurate, and clearly labeled
 - Access to electrical panels and disconnects is unobstructed and clearly marked (NEC 110.26/NEC 240)