



CHECKLISTS TO KEEP YOU ORGANIZED

Commercial Inspection Checklists

Commercial electrical systems require detailed inspections to maintain safety and proper operation. We designed seven different checklists to help you complete thorough inspections—and they're all rolled into one handy PDF.

1. General safety and compliance

- ☐ Technicians are wearing insulated gloves, flame-resistant clothing, and safety glasses appropriate for high-voltage environments. For some inspections, arc-rated face shields or suits may be necessary.
- ☐ PPE is in good condition and rated for the higher voltage and current levels common in commercial systems.
- ☐ Hard hats and hearing protection are worn in environments with heavy machinery or high noise levels.
- ☐ Arc flash hazard labels are visible and legible on electrical panels and large commercial equipment.
- ☐ Technicians are trained in advanced arc flash safety protocols, and proper signage is prominently displayed.
- ☐ Arc-rated PPE and tools are used when working near or on energized commercial components.
- ☐ Outlets, panels, and wiring meet NEC standards for commercial installations.
- ☐ Circuits are clearly labeled, and grounding systems are installed and maintained per NEC standards.
- ☐ Circuit breakers and fuses are rated for the higher loads typically found in commercial properties.
- ☐ Inspection reports are complete, accurate, and securely stored for future reference, including documentation of commercial equipment performance.
- ☐ Permits, compliance documents, and certifications required for commercial operations are up to date and accessible.
- ☐ Repairs or deviations from standard procedures are documented with an emphasis on their impact on commercial operations.

2. NEC compliance

- ☐ All electrical systems and components meet NEC standards.
- ☐ For specialized equipment, all electrical panels, outlets, and switches are labeled with installation and operating instructions.
- ☐ Grounding systems and bonding connections are compliant with NEC guidelines.
- ☐ Conduit sizing and placement follow NEC rules for commercial installations.
- ☐ Check for proper sizing of conductors and overcurrent protection devices according to [NEC Article 310](#) and [240](#).

3. Current ratings and openings

- ☐ Check interrupting current ratings on circuit breakers and fuses to verify they can safely interrupt fault currents.
- ☐ Assess short-circuit current ratings to confirm compatibility with the system load and fault conditions.
- ☐ Check for proper coordination of overcurrent protective devices to ensure selective tripping.
- ☐ Verify the available fault current at the service entrance and distribution points.
- ☐ Look for proper closure of unused openings in panels and junction boxes to prevent exposure to energized components.
- ☐ All electrical devices and conductors are rated for the current they're carrying.

4. Contamination and damage

- ☐ Panels and enclosures are free of dust and moisture that could affect performance.
- ☐ There's no wear or corrosion to components and wiring.
- ☐ Identify any electrical equipment that needs to be cleaned, repaired, or replaced.
- ☐ There are surge protection devices for sensitive electronic equipment.
- ☐ The areas around electrical components aren't exposed to any chemicals or contaminants.
- ☐ There are no signs of overheating or arcing in switchgear and motor control centers.

5. Mounting and ventilation

- ☐ Electrical panels and transformers are level and securely mounted.
- ☐ There are no blockages or restrictions in ventilation openings that could lead to overheating.
- ☐ Supports and mounting brackets are rated for the weight and type of equipment.
- ☐ Installations comply with NEC rules on spacing and ventilation. Some equipment, like transformers, may have clearance requirements that differ from general NEC rules.

6. Terminations and splices

- ☐ Splices are properly insulated and connected securely to prevent electrical hazards.
- ☐ Splices are compatible with the wire size and type used in the system.
- ☐ All terminations are rated for the operating temperature of the connected equipment.
- ☐ All terminations are made with listed lugs or connectors appropriate for the conductor material (copper or aluminum).
- ☐ Check that torque specifications for terminations are followed to prevent overheating or loose connections.
- ☐ Anti-oxidation compounds are properly applied to aluminum conductors and terminations.
- ☐ All splices and connectors use UL-listed materials.

7. Clearances and directories

- ☐ Working space clearances meet NEC requirements, including the distance from walls.
- ☐ The space and headroom around electrical equipment is easily accessible for inspection.
- ☐ Circuit directories are complete and accurate, with clear labels for each circuit.
- ☐ The access to electrical panels and disconnects is unobstructed and clearly marked.