

Electrical Safety Inspection Report - Industry Vetted

Template Information

Template ID	electrical-safety-inspection-report
Version	v1.0
Language	English (en)
Number of Check Items	48
Source	https://layeraudit.com
Revision Date	2026-10-27
Description	Description: This checklist was developed by our Industry Expert Partners and provides a detailed Electrical Safety Inspection Report. It covers critical checks on electrical panels, wiring, grounding, LOTO compliance, equipment safety, temporary power, PPE & training, lighting, and high-voltage systems.

Audit Information (to be completed during audit)

Audit Date	
Auditor	
Area / Department	
Escort	

Instructions

1. This template contains 48 check items. Record results in the 'Checklist' worksheet.
2. The source does not define fixed pass/fail options. Fill in results according to your own criteria (e.g. Pass / Fail / N.A.).
3. Scores, conclusions and signatures are entered manually in the 'Scoring & Sign-off' worksheet.
4. For photos or other evidence, enter the evidence number in the 'Notes / Evidence No.' column and archive photos by number.
5. Check item numbers are renumbered consecutively. The mapping to the source rows is recorded in '编号对应表.xlsx' in the delivery package.

Electrical Safety Inspection Report - Industry Vetted — Checklist

No.	Section	Check Item	Result	Notes / Evidence No.
1	Electrical Panels & Disconnects	Electrical panels and disconnects are accessible with a minimum of 36 inches of clearance.		
2	Electrical Panels & Disconnects	Panel covers, doors, and breakers are intact and free from damage or missing components.		
3	Electrical Panels & Disconnects	Circuit breakers are properly labeled and legible.		
4	Electrical Panels & Disconnects	Circuit breakers show no signs of overheating or arcing.		
5	Electrical Panels & Disconnects	Panel enclosures are free from missing knockouts and exposed live components.		
6	Electrical Panels & Disconnects	Electrical disconnects are marked, functional, and show no unauthorized modifications.		
7	Electrical Panels & Disconnects	Insulating mats (IS:15652-2006 approved) are provided at all electrical panels.		
8	Wiring & Cables	Electrical wires are properly secured, protected, and free from physical damage.		
9	Wiring & Cables	No exposed, frayed, or deteriorating wires are present.		
10	Wiring & Cables	Flexible cords and power strips are rated for industrial use and not used as permanent solutions.		
11	Wiring & Cables	Plenum-rated cabling is used in ceiling spaces when not enclosed in conduit.		
12	Wiring & Cables	Conduits, cable trays, and raceways are properly installed and free from obstructions or excessive dust accumulation.		
13	Grounding & Bonding	Machines, enclosures, and equipment are properly grounded and bonded.		
14	Grounding & Bonding	Grounding conductors are intact, securely connected, and free from corrosion.		
15	Grounding & Bonding	Temporary power sources are properly grounded to eliminate shock hazards.		
16	Grounding & Bonding	Grounding and bonding connections are inspected periodically for integrity.		
17	Grounding & Bonding	Grounding rods and bus bars are properly installed and securely connected where required.		
18	Lockout/Tagout (LOTO) Compliance	LOTO procedures are followed before electrical maintenance is performed.		
19	Lockout/Tagout (LOTO) Compliance	LOTO devices are available, clearly labeled, and in use when required.		
20	Lockout/Tagout (LOTO) Compliance	Authorized personnel receive regular LOTO training and refresher courses.		
21	Lockout/Tagout (LOTO) Compliance	Energy isolation points are clearly identified and remain accessible.		
22	Lockout/Tagout (LOTO) Compliance	No instances of bypassing or failing to follow LOTO procedures are observed.		
23	Equipment & Machinery Electrical Safety	Electrical connections on machinery are properly secured with no exposed wiring.		
24	Equipment & Machinery Electrical Safety	Motor control centers (MCCs) are properly labeled and well maintained.		
25	Equipment & Machinery Electrical Safety	Emergency stop buttons (E-stops) function correctly and remain accessible.		
26	Equipment & Machinery Electrical Safety	Electrical interlocks and safety relays on machinery are operational and effective.		
27	Equipment & Machinery Electrical Safety	VFDs and enclosures are free from overheating, dust buildup, and signs of failure.		
28	Equipment & Machinery Electrical Safety	Portable ladders used within the limited approach boundary are of non-conductive type.		
29	Temporary & Portable Power	Extension cords, power strips, and temporary power sources are in good condition and undamaged.		
30	Temporary & Portable Power	Extension cords are routed safely, avoiding high-traffic areas and pinch points.		

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No.	Section	Check Item	Result	Notes / Evidence No.
31	Temporary & Portable Power	Temporary power connections are properly rated and installed per OSHA/NFPA standards.		
32	Temporary & Portable Power	Ground fault circuit interrupters (GFCIs) are used for all portable tools and temporary power systems.		
33	Temporary & Portable Power	Portable generators and power distribution panels are safely located and properly grounded.		
34	Personal Protection & Training	Only qualified personnel perform electrical work.		
35	Personal Protection & Training	Employees working near electrical systems are provided with appropriate PPE (insulated gloves, arc flash suits, dielectric footwear, eye protection).		
36	Personal Protection & Training	Employees receive training on electrical safety and hazard recognition.		
37	Personal Protection & Training	Arc flash labels are clearly visible and properly marked on equipment.		
38	Personal Protection & Training	Insulated tools and PPE are available, well maintained, and in good condition.		
39	Lighting & Emergency Systems	All work areas, especially those near electrical panels and machinery, are adequately illuminated.		
40	Lighting & Emergency Systems	Exit signs and emergency lighting are functional and properly maintained.		
41	Lighting & Emergency Systems	Emergency exit pathways are free from obstructions and clearly marked.		
42	Lighting & Emergency Systems	Emergency backup power systems (UPS, generators) are regularly tested and operational.		
43	Lighting & Emergency Systems	Battery backups for emergency lighting are replaced and maintained as needed.		
44	Transformer & High-Voltage Equipment Safety	Transformers and high-voltage equipment are properly ventilated and free from obstructions.		
45	Transformer & High-Voltage Equipment Safety	High-voltage areas are clearly marked with appropriate warning signage.		
46	Transformer & High-Voltage Equipment Safety	High-voltage cables are securely routed and protected from mechanical damage.		
47	Transformer & High-Voltage Equipment Safety	High-voltage disconnect switches are accessible and labeled for emergency use.		
48	Transformer & High-Voltage Equipment Safety	Substation and high-voltage enclosures are properly secured against unauthorized access.		
	Sign Off	Additional notes		

Electrical Safety Inspection Report - Industry Vetted — Scoring & Sign-off

Sign-off

Inspector signature	
Shift supervisor signature	
Line supervisor signature	