READY TO INSPECT — FIELD CHECKLIST

Grounding and bonding system quarterly maintenance checklist

A quarterly grounding system round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. Work is commonly verified against NEC (NFPA 70), NETA maintenance testing standards. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The electrician or maintenance tech on the quarterly electrical round. When: Every quarter, walked with the service and panel round since a compromised ground shows up as noise and nuisance trips there first.

Before the round

- [ ] Plumbing, gas and electrical work since the last round reviewed
  Work orders for piping, meter, service or panel work since the last round listed, so the bonds near that work get a closer look on the walk.
  No photo required
- [ ] No ground or bond disconnected on the live system
  Nothing lifted, unbolted or loosened to check it; a loose or damaged connection is tagged and reported for repair under an outage, not remade live.
  No photo required
- [ ] Panel covers opened only under the energized-work procedure
  Any cover taken off to reach a ground bar removed only as the site's energized-work procedure allows, PPE from its arc-flash risk assessment, and refastened before moving on.
  No photo required

Connections and bonding

- [ ] Visible ground connections and bonding jumpers checked
  Grounding electrode conductor, main bonding jumper and equipment bonds present and connected, jumpers across meters and dielectric unions in place where required.
  2 photos required
- [ ] Ground bar terminations inspected
  Each lug tight and single-conductor unless rated otherwise, no loose or corroded connections on the ground/neutral bar in accessible panels.
  1 photo required
- [ ] Grounding electrode conductor traced from service to electrode
  Conductor continuous along its visible run, any splice made by exothermic weld or irreversible connector, no bolted splice or break along the way.
  1 photo required
- [ ] Gas piping bond checked where gas is piped in
  Bonding conductor and clamp on the metal gas piping present and tight, not removed or left hanging after a meter, appliance or piping change.
  No photo required
- [ ] Wall ground bar checked where the room has one
  Bar fastened firmly, each conductor on its own lug and identified, no bare stray ends or empty lugs where a conductor belongs.
  No photo required
- [ ] Telecom grounding busbar noted in passing
  Primary or secondary bonding busbar (TMGB or TGB) seen where the round passes it, its bond to the electrical ground present; its own inspection belongs to the telecom contractor.
  No photo required

Corrosion and damage

- [ ] Clamps and exposed conductors checked for corrosion
  Ground clamps at rods, water main and steel free of heavy corrosion, conductor bright and sound at the connection, not eaten away under the clamp.
  2 photos required

- [ ] No conductors damaged, cut or removed
  Exposed grounding and bonding runs intact, none cut for other work, pulled loose, or missing where a connection was clearly meant to be.
  1 photo required

- [ ] Conductor supports and physical protection checked
  Exposed runs fastened along their length and sleeved or guarded where traffic, carts or mowers could strike them, with no guard broken or missing.
  1 photo required

Access

- [ ] Ground test wells and access points located and clear
  Test wells and inspection points found, lids removable, connections inside reachable so the ground can actually be tested when the testing firm comes.
  No photo required

Findings and records

- [ ] Defects reported to the owner with their locations
  Each missing bond, loose lug or corroded clamp reported with its room or electrode and the photo, so repair is scheduled under an outage.
  No photo required

- [ ] Round logged for the annual test comparison
  Condition at each electrode, bond and ground bar logged by location, so the testing firm's visit starts from this quarter's record.
  No photo required