

Electric heat trace system annual maintenance checklist

The annual heat trace system service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against NEC (NFPA 70), manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The electrician on the annual service, best done before the heating season. When: Once a year ahead of cold weather, since the trip test and megger take the circuits down and want the cable proven before it is relied on.

Protection and cable tests

- ☐ **Ground-fault protection trip tested per circuit**
Each GFEP device tripped and its trip observed, then reset, so the protection is proven rather than assumed. 1 photo required
- ☐ **Insulation resistance measured on the cable**
Megger reading taken on each circuit and compared against the manufacturer's guidance, a falling value flagged as moisture ingress. 1 photo required

Seals and splices

- ☐ **End seals, tees and power connections opened and inspected**
Terminations opened where practical, seals and splices dry and sound, no corrosion or water at the cable ends, then resealed. 2 photos required

Run integrity

- ☐ **Full-run continuity and cable condition confirmed**
Continuity proven end to end, cable not crushed or nicked under the lagging where it was opened, routing correct at hangers and valves. 1 photo required
- ☐ **Insulation cladding resealed weathertight**
Lagging and cladding put back and sealed against water after inspection, no open seams left over the traced pipe. 1 photo required