READY TO INSPECT — FIELD CHECKLIST

Snow melt system annual maintenance checklist

The annual snow melt 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 manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The hydronic service tech or the licensed electrician on the annual service, matched to whether the slab is fluid-heated or electric. When: Once a year in the off-season, when the fluid can be tested and topped or the electric circuits can be de-energized for insulation and ground-fault testing.

Shutdown and lockout

- [ ] Owner told the system is down for its annual service
  Owner's facility staff told the slab will not melt during the service and when it returns to automatic, so no one relies on it in an early storm.
  No photo required

- [ ] Every heating source and circuit locked out before the service
  Controller, pumps, heat source and each branch locked, tagged, tried dead. Powered checks (pump, heat, mixing, GFEP, controls): covers on, people clear, locks off by whoever hung them, re-locked.
  1 photo required

Hydronic fluid and pump

- [ ] Glycol concentration and condition tested
  Freeze protection of the mix measured against the design low temperature, fluid checked for pH or inhibitor breakdown and topped with the correct glycol, not water.
  No photo required

- [ ] Circulator pump and manifold zone flow serviced
  Pump running without cavitation or seal weep, system purged of air, each manifold loop set and confirmed for balanced flow.
  No photo required

- [ ] Heat source and heat exchanger checked
  Boiler or heat exchanger reaching supply temperature under load, no scaling or fouling starving the snow-melt loop, expansion and make-up in order.
  No photo required

- [ ] Mixing or injection control proven on the slab supply
  On hydronic, the mixing valve or injection pump holding slab supply at the design temperature and return warm enough to protect the heat source, checked with the loop running.
  No photo required

Electric circuits and protection

- [ ] Slab heating circuits tested for continuity and insulation
  Each mat or cable circuit read for continuity and insulation resistance against the manufacturer's expected values, no branch open or leaking to ground.
  No photo required

- [ ] Ground-fault equipment protection functionally tripped and reset
  GFEP device tripped with its test function and confirmed to reset, contactors and connections checked for heat with the slab energized.
  No photo required

- [ ] Cold lead junction boxes opened and checked on electric
  On electric, with the branch re-locked, each junction box at the slab edge dry inside, splices and ground connections intact, gaskets and conduit seals sound.
  No photo required

Controls and sensors

- [ ] Sensor resistance read against the manufacturer's table
  Slab sensor read at the controller and compared with the manufacturer's table at a measured slab temperature, moisture sensor and its heater tested per the instructions.
  1 photo required

- [ ] Cutoff, run-on and any idle settings recorded from the controller
  Cold weather cutoff, after-run time and any idle slab temperature the controller has read off, compared with the design sequence and filed, any change explained.
  1 photo required

- [ ] Control panel relays, contactors and terminals checked
  With the system re-locked, contacts free of pitting and burning, terminals checked tight with any found loose tightened, no heat marks on wiring or the panel back.
  1 photo required

Freeze protection and integrity

- [ ] Freeze protection and drainage verified before winter
  Exposed piping, sensors and drains protected, hydronic loops holding pressure or electric slab megger clean, whole system left ready for an automatic call.
  1 photo required

- [ ] Locks removed and the system started through a full melt call
  Covers refitted, locks removed by whoever hung them, a simulated melt call run with every zone warming, then the controller returned to automatic for the season.
  1 photo required

- [ ] Service readings filed as next year's baseline
  Glycol freeze point, insulation resistance, GFEP results and controller settings filed against the system, compared with last year's, and gaps reported to the owner.
  No photo required