READY TO INSPECT — FIELD CHECKLIST

Steam humidifier annual maintenance checklist

The annual steam humidifier 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 IMC, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The HVAC service tech on the annual humidifier service. When: Once a year, sized around the descaling. Mineral buildup is what drops output and cooks the electrodes, and the safeties need an actual trip the quarterly glance skips.

Isolation

- [ ] Unit drained through its own cycle before lockout
  Manual drain run from the controller so the tank or cylinder and its lines are empty, and any heated water or steam given time to cool before the unit is opened.
  No photo required

- [ ] Power, control, gas or steam supply and water isolated and tagged
  Every feed locked and tagged, water valved off. Before the safety tests: closed up and refilled, people clear, locks lifted by whoever hung them, then re-locked before hands go back in.
  1 photo required

Descale and internals

- [ ] Cylinder replaced or tank descaled to bare metal
  Disposable cylinder swapped, or the evaporating tank opened and descaled, electrodes or heaters cleared of the mineral shell that drops output and overheats the element.
  3 photos required

- [ ] Fill cup, level device and valves rebuilt or cleared
  Fill cup, float or conductivity probe cleaned of scale, fill and drain valves rebuilt or cleared so water level and end-of-cycle drain are accurate again.
  2 photos required

- [ ] Terminals and heater, electrode or burner control wiring checked
  Contactor or relay faces, terminals and heater, electrode or burner control leads free of pitting and heat marks, lugs torque-verified and re-torqued only where found loose.
  1 photo required

- [ ] Gas burner or steam-to-steam exchanger checked on those types
  Gas-fired: burner, igniter, flue and combustion checked as the manufacturer directs. Steam-to-steam: exchanger, steam valve and trap checked for scale and leaks.
  No photo required

- [ ] Wetted parts cleaned and disinfected to the hygiene procedure
  Tank or cylinder housing, fill and drain piping and drain pan scrubbed of biofilm and flushed to the manufacturer's hygiene procedure, with no cleaning chemical left to reach the steam.
  1 photo required

- [ ] Feed water hardness or conductivity tested ahead of the unit
  Supply sampled at a tap ahead of the isolation valve and compared with the manufacturer's limits for this type, any drift reported to the owner or the water treatment contractor.
  1 photo required

Dispersion and duct

- [ ] Dispersion tube pulled, cleaned and absorption path checked
  Tube removed and ports cleared, duct downstream checked for wetting or corrosion and the absorption distance still clear of coils, filters and turns.
  2 photos required

- [ ] Dispersion mounting, duct seal and duct drain checked
  Tube or manifold brackets secure, the duct wall penetration sealed, and any duct drain pan below the dispersion flowing to its trap.
  1 photo required

Controls and safeties

- [ ] Building operator warned before the airflow and limit trips
  Owner or building operator told before the air handler is stopped for the proving test, and users of any space with a critical humidity need told the unit goes offline.
  No photo required

- [ ] High-limit, airflow proving and humidistat calibrated and tested
  Duct high-limit and airflow proving switch functionally tripped to confirm they cut steam, humidistat compared against a reference reading and adjusted.
  2 photos required

- [ ] Water level and leak safeties seen to cut fill or output
  High-water, low-water or leak safety for this type exercised as the manufacturer describes, fill or output seen to stop and the alarm shown on the controller.
  1 photo required

Return to service

- [ ] Covers refitted, locks cleared and the unit run on a call
  Cabinet and duct access panels closed, locks removed by whoever hung them, water and power restored, unit left in auto and making output on a real call.
  1 photo required

- [ ] Annual findings logged beside last year's service
  Descale extent, parts renewed, water test result and each safety trip result entered so next year's service compares against them.
  No photo required