READY TO INSPECT — FIELD CHECKLIST

Water-source heat pump quarterly maintenance checklist

A quarterly water-source heat pump 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 IMC, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The mechanical or maintenance tech on the quarterly round, reaching each unit through the ceiling access panel or the closet door. When: Every quarter, walked unit by unit so a loaded filter or a weeping hose kit is caught before it shows up as a hot or cold zone complaint.

Access and lockout

- [ ] Zone occupants told and the floor under the access panel covered
  Occupants of the zone told the unit will be off for a short spell, desks and flooring under the ceiling access or closet door covered before the filter comes out.
  No photo required

- [ ] Lock and tag on every circuit feeding the unit
  Unit and any separate heat or control feed locked out, zero voltage proven. Running checks: panels on, people clear, locks off by whoever hung them, re-locked before hands go back in.
  1 photo required

Air side

- [ ] Filter replaced and coil face inspected
  Filter changed and correctly sized, no bypass around the rack, coil face clean behind it with no matting or bent fins visible.
  2 photos required

- [ ] Condensate pan clear and float switch proven
  Pan draining fully with no standing water or growth, trap primed, float switch lifted to confirm it interrupts the unit or alarms, secondary pan dry over occupied space.
  2 photos required

- [ ] Blower running clean and quiet
  Wheel free of build-up, set screw tight, motor mounts sound, no rattle or bearing noise at each speed tap.
  1 photo required

- [ ] Return air path open at the closet louver or ceiling grille
  Return grille, closet door louver or plenum opening to the unit free of stored boxes, blocked louvers or displaced ceiling tile, so the unit is not starved of return air.
  1 photo required

Water side

- [ ] Hose kit, isolation valves and connections dry
  Supply and return hose kits, isolation ball valves and unions free of weeping or drips, no rust trail or wet insulation at the coax connections.
  2 photos required

- [ ] Water connections free of strain, kinks and chafe
  Hoses or hard piping to the unit supported, not kinked, twisted or rubbing on the grid or cabinet edge, and not carrying the weight of the valves.
  1 photo required

- [ ] Loop flow and pressure drop reasonable across the unit
  Supply and return pressures or the pressure drop across the coax read against the balanced value, no sign of a fouling strainer or a throttled autoflow starving the exchanger.
  1 photo required

Operation and controls

- [ ] Unit heats and cools on a call
  Heat and cool each commanded from the thermostat, reversing valve shifting so discharge air changes over, entering and leaving water temperatures moving as expected, no fault on the board.
  1 photo required

- [ ] Lockout history read at the board light or building controls
  Board light read through the cabinet sight hole, or the fault read at the thermostat or building controls, panels left on; any pressure or freeze lockout noted with its cause.
  1 photo required

Close-out

- [ ] Panels and tile back, locks removed and unit left running
  Access panels and ceiling tile refitted, locks removed by whoever hung them, thermostat back on its normal schedule and the unit running on a call with no fault showing.
  No photo required

- [ ] Water readings and lockouts logged by unit tag and zone
  Water temperature split set against the unit schedule and last quarter, plus pressure drop, filter condition and any lockout, entered by unit tag and zone.
  No photo required