READY TO INSPECT — FIELD CHECKLIST

VRF system annual maintenance checklist

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

Who runs it: The VRF service tech on the annual, with sections isolated as needed and the manufacturer's service tool on the system. When: Once a year, the pass that reaches the fouling on the coils and blower wheels, opens the branch controllers, walks the full refrigerant-line insulation and functionally tests the leak detection the quarterly only eyeballs.

Outdoor and indoor cleaning

- [ ] Outage agreed and occupants told of cleaning and alarm tests
  Outage set with the owner, occupants under each head told how long it is off, rooms with leak detection warned before its alarm test, and floors below covered.
  No photo required
- [ ] Every circuit feeding the section being opened locked and tagged
  Outdoor modules, indoor unit circuits and any branch box feed locked out, zero voltage proven. For tests: panels on, people clear, locks off by whoever hung them, re-locked before hands go back in.
  1 photo required
- [ ] Outdoor coils deep-cleaned and fans serviced
  All coil slabs cleaned through the full fin depth, fins combed, fan motors and blades checked, amp draw within nameplate, drainage confirmed after rinse.
  2 photos required
- [ ] Indoor head coils, blower wheels and drains cleaned
  Heads opened, coils and blower wheels cleaned of biofilm and dust to restore airflow, pans scrubbed and re-pitched, drain lines and condensate pumps flushed and proven flowing.
  2 photos required

Branch controllers and refrigerant piping

- [ ] Branch controller internals and condensate serviced
  Branch controller boxes opened, valves and connections checked for oil residue signaling a leak, condensate pan and drain within the box cleaned and re-pitched, insulation resealed.
  No photo required
- [ ] Refrigerant-line insulation inspected end to end
  Full insulated line route walked from the outdoor unit through the branch controllers to the heads, gaps, splits and UV or physical damage resealed, no bare line sweating at penetrations or long runs.
  1 photo required

Electrical and communication

- [ ] Power terminations torque-verified at the outdoor unit and boxes
  Lugs at each outdoor module, its disconnect and any branch box terminal block torque-verified to the manufacturer's value, re-torqued only where found loose, no heat marks.
  1 photo required
- [ ] Transmission wiring and shield checked at each terminal block
  Communication wiring tight at the outdoor unit, any branch box and a sample of heads, shield terminated as the manufacturer's wiring diagram shows, no chafe or taped splice.
  1 photo required

Detection, charge and controls

- [ ] Outdoor power restored and crankcase warm-up held before start
  Panels closed, tools and people clear, locks removed by whoever hung them, outdoor power held on for the manufacturer's crankcase warm-up before a compressor is commanded.
  No photo required

- [ ] Refrigerant leak detection functionally tested where required
  Where required, each leak-detection sensor bump-tested or calibrated per the manufacturer's instructions, alarm and any interlocked ventilation or shutdown proven, sensor placement still correct for the room.
  No photo required

- [ ] System operation, charge awareness and addressing verified
  System driven in heating and cooling under load, operating data read on the service tool and compared to the manufacturer's figures with a shortfall treated as a leak to find, every head confirmed addressed and communicating, firmware and network as intended.
  1 photo required

- [ ] Charge label on the outdoor unit matched to the system record
  Factory and field-added charge written on the outdoor unit label read and matched to the service record, any undocumented change flagged to the owner.
  1 photo required

- [ ] Recovery, repair or weigh-in by a certified refrigerant technician
  Leak repair, recovery, evacuation or refrigerant weighed in handled by a certified refrigerant technician, the amount added or removed entered on the label and system record.
  No photo required

Return to service

- [ ] Heads back on the owner's schedules with no fault standing
  Grilles and panels latched, each head on its normal schedule and mode at the controls, and no test override or active error left behind.
  No photo required

- [ ] Annual service record filed by system and head address
  Operating data, cleaning notes, leak-detection results, charge changes and deferred repairs recorded by system and head address as next year's baseline.
  No photo required