READY TO INSPECT — FIELD CHECKLIST

VAV terminal unit annual maintenance checklist

The annual VAV terminal unit 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 balancing or controls tech on the annual, coordinating with the building automation system. When: Once a year, tied to the air-side service so the box calibration is verified against a known supply pressure at the air handler.

Preparation

- [ ] Balance report and box schedule on hand
  Latest test and balance report and the design box schedule on hand, so each box's minimum, maximum and heating airflow is set to a known target.
  No photo required
- [ ] Occupants told which ceilings open and when
  Owner and floor occupants told the zones and times the ceilings come open, furniture and finishes below protected before any tile is lifted.
  No photo required

Airflow calibration

- [ ] Flow sensor calibrated and min/max verified
  Controller airflow reading checked against a balancing instrument, minimum and maximum setpoints confirmed and reset to the design schedule.
  2 photos required
- [ ] Damper control response tuned
  Box driven through a full call and observed settling without hunting, actuator timing and control loop behaving across the range.
  1 photo required
- [ ] Inlet static read at maximum flow
  Inlet static at the box read at maximum airflow and compared with the manufacturer's minimum operating pressure, starved boxes reported to the air-side team.
  1 photo required
- [ ] Flow pickup and sensing tubing blown clear
  Pickup ports and tubing blown clear of dust, brittle tubing replaced, connections made to the high and low ports the right way round.
  1 photo required

Reheat coil and valve

- [ ] Reheat coil cleaned and airside checked
  Coil face inspected and cleaned, fins straight, no leaks at the connections, condensate path clear where applicable.
  No photo required
- [ ] Hot-water valve and actuator serviced
  Two-way or control valve stroked full range, actuator seating and opening, coil bled of air, electric heat elements and limits tested where fitted.
  No photo required

Controller and sound

- [ ] Controller points and BAS mapping verified
  Space temperature, airflow and command points matching the BAS graphic, occupied and unoccupied modes proven, no overrides left in place.
  1 photo required

- [ ] Box checked for excessive noise at high flow
  Box driven to maximum airflow and listened to at the diffusers, no roar, whistle or damper chatter carrying into the space.
  1 photo required
- [ ] Zone sensor compared with a reference thermometer
  Space sensor reading compared with a calibrated thermometer beside it, offset corrected in the controller, sensor clear of drafts and direct sun.
  1 photo required
- [ ] Controller power locked out before terminals open
  Controller transformer and any electric heat circuit locked out and tagged under the site's procedure before an enclosure cover comes off or wiring is touched.
  1 photo required
- [ ] Controller and actuator wiring terminations tight
  Controller terminals, transformer and actuator leads checked tight and labelled, no chafed cable where it enters the box.
  1 photo required

Return to service

- [ ] Box repowered and settling confirmed on the trend
  Covers and tiles back, locks removed by the person who hung them, box powered and trended after release to show airflow settling at setpoint.
  1 photo required
- [ ] Final box settings recorded for the owner
  Final minimum, maximum and heating airflow, sensor offset and open deficiencies recorded against the box tag and sent to the owner.
  No photo required