READY TO INSPECT — FIELD CHECKLIST

Makeup air unit (MAU) annual maintenance checklist

The annual makeup air 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 HVAC service lead, ideally with the kitchen exhaust balanced on the same visit. When: Once a year, before the heating season, so the burner is proven and the tempered-air delivery is set before cold outdoor air reaches the kitchen.

Heat section

- [ ] Burner and heat exchanger inspected and combustion checked
  Direct-fired burner ports clean with an even flame, or indirect heat exchanger free of cracks and soot, gas pressure set per the rating plate.
  No photo required
- [ ] Discharge air temperature verified across the burner range
  Tempered supply temperature measured and compared against setpoint as the burner modulates, no cold spots or overshoot.
  No photo required
- [ ] Flame supervision proven on gas-fired units
  Flame signal read against the burner manual's range; manual valve shut mid-cycle and reopened only once the control has locked out and the main valve is confirmed shut, then reset per that manual.
  No photo required
- [ ] Burner and freeze safeties tripped and each shown to act
  High limit, airflow proving, gas pressure and discharge low-limit switches tripped by the manufacturer's method, each shown to stop the burner or the unit, then reset.
  No photo required
- [ ] Supply air sampled for combustion products on direct-fired units
  Analyzer reading taken downstream of the burner and compared with the manufacturer's limit and last year's value, profile plates adjusted if it has climbed.
  No photo required

Airflow and balance

- [ ] Supply airflow measured against exhaust demand
  Delivered airflow read against the total hood exhaust so the kitchen is held slightly negative to adjacent spaces without being starved of makeup air.
  2 photos required
- [ ] Building pressure checked at a door with the hoods running
  Space pressure confirmed with all exhaust on; doors swing and latch normally, no whistling gaps or backdrafting appliances.
  1 photo required

Lockout and electrical

- [ ] Kitchen told cooking stops while the MAU is locked out
  Kitchen manager and owner told before the lock goes on that an interlocked hood can't run while the MAU is down, so cooking stops until the unit is back.
  No photo required
- [ ] Every MAU feed locked and tagged after the running tests
  Gas shut and tagged on gas units, a start tried; the bearing run under load uses the procedure's temporary release (doors shut, clear, locks off by their owner), then re-locked.
  1 photo required
- [ ] Starter contacts, overload and terminals checked under lockout
  Contactor faces free of pitting, overload set to the motor nameplate, terminal torque verified or resistance measured and re-torqued only where found loose, no heat discoloration.
  1 photo required

- [ ] Interlock relay or current switch located and its wiring traced
  Device that starts the unit with the exhaust fan found with its enclosure dead, labeled and matched to the controls drawing, so the interlock path is on record.
  1 photo required

Mechanical

- [ ] Fan bearings inspected for play and noise
  Bearings checked for shaft play and run listened to under load, greased per the schedule, set screws tight.
  1 photo required
- [ ] Blower wheel and cabinet interior cleaned
  Wheel cleaned of grease buildup that throws it out of balance, drain pan and cabinet interior left clear.
  1 photo required
- [ ] Guards refastened and locks removed by the tech who hung them
  Belt guard and access doors secured, gas valve reopened on gas units, each lock and tag taken off by its owner, and the unit restarted for the controls check.
  1 photo required

Controls

- [ ] Full start-to-stop control sequence exercised
  Interlock, damper end-switch proving, burner enable and fan operation walked through in sequence, each step confirmed at the controller.
  2 photos required