READY TO INSPECT — FIELD CHECKLIST

Gas detection system quarterly maintenance checklist

A quarterly gas detection system 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 (mechanical code), the applicable building code, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The controls or mechanical tech on the quarterly round; the field observes and documents, calibration stays with the certified tech. When: Every quarter, because a sensor in a parking area or kitchen sits in dust, grease and moisture and drifts long before anyone smells the problem.

Sensors and heads

- [ ] Design sensor layout and setpoint schedule on hand for the round
  Current design or commissioning drawings showing each head's location, height, target gas and alarm setpoints, so the field can be compared to them.
  No photo required
- [ ] Each sensor located, clear and mounted at the right height for its gas
  Heads unobstructed and undamaged, low for heavier-than-air refrigerant, in the breathing zone for CO, none painted or wrapped.
  2 photos required
- [ ] Calibration-due status read at each sensor or the panel
  Sensor life and calibration-due dates within range, none expired, any past-due head flagged for the tech.
  1 photo required
- [ ] Target gas on each head's label matched to the area it serves
  Label shows the gas the design calls for there: the refrigerant in use in the machinery room, CO or nitrogen dioxide in the garage, combustible gas at appliances.
  1 photo required
- [ ] Sensing face, filter and splash guard checked at each head
  Sensor filter or dust cap clean and fitted, any splash guard or hood the manufacturer supplies in place, no grease, paint or overspray film on the sensing face.
  1 photo required
- [ ] Head mounting, wiring entries and conduit secure
  Head tight to its wall or column, cable or conduit secured at the entry, no damage from vehicles, carts or cleaning equipment since the last round.
  1 photo required
- [ ] Local reading at each head compared with the controller
  Head status light normal and any local display reading the same value the controller shows for that channel, with a mismatch flagged for the tech.
  1 photo required

Controller and alarms

- [ ] Panel in normal state with no active faults
  Controller powered, no trouble or fault indication, alarm setpoints displayed, event log free of unresolved alarms.
  1 photo required
- [ ] Alarm setpoints on each channel compared with the design
  Each channel's alarm levels match the design schedule or commissioning record, none raised or disabled to quiet nuisance alarms.
  1 photo required
- [ ] Horns, strobes and entrance signs intact at each monitored area
  Horns and strobes undamaged and unobstructed, warning signs at the entrances legible, so people outside can tell the space is in alarm.
  1 photo required

Ventilation interlock

- [ ] Occupants, monitoring and the owner told before the test alarm
  Owner, occupants of the zone, any monitoring company or BAS operator and kitchen or plant staff told the alarm will sound, start fans and may close gas shutoffs.
  No photo required
- [ ] Alarm signal drives the exhaust fan and dampers
  On a simulated or test alarm the exhaust fan starts and makeup-air/relief dampers move to their ventilation position, audible/visual alarms activate.
  2 photos required
- [ ] Shutoff valve or equipment stop observed on the test alarm
  Where the design has a gas shutoff valve or equipment shutdown on alarm, it closes or stops on the test signal as the sequence of operations describes.
  No photo required

Return to service

- [ ] Controller reset and every output back to normal
  Panel showing normal, fans and dampers back to their normal sequence, any manual-reset shutoff reopened and appliances relit by a qualified person.
  1 photo required
- [ ] Owner and monitoring told the test is over, findings reported
  Owner and monitoring told the system is back to normal; blocked heads, setpoint mismatches and failed outputs sent to the owner and the certified tech.
  No photo required