READY TO INSPECT — FIELD CHECKLIST

Duct smoke detector quarterly maintenance checklist

A quarterly duct smoke detector 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 NFPA 72, NFPA 90A. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The building engineer or HVAC tech reaching the detector at the air handler on the quarterly round, recording condition rather than performing the actuation test. When: Every quarter, walked with the air-handler check since a fouled detector and a dirty duct show up on the same visit.

Sampling and detector

- [ ] Sampling tube orientation and exhaust tube observed
  Inlet sampling tube spanning the duct with its holes facing into the airflow, exhaust tube fitted, tubes not crushed, loose at the duct wall or plugged.
  2 photos required
- [ ] Detector head and housing cleanliness checked
  Detector head and sampling chamber free of heavy duct dust or grease film, housing gasket seated, cover latched and the sensing chamber not visibly fouled.
  1 photo required
- [ ] Detector status LEDs read at the housing
  Power or normal indicator showing its normal pattern at the housing, with no alarm or trouble LED lit.
  1 photo required
- [ ] Housing mounting, conduit and wiring entries secure
  Housing tight to the duct or its bracket, flexible conduit and fittings secure at the entries, nothing shaken loose by air handler vibration since the last round.
  1 photo required
- [ ] Housing free of tape, bags or covers from nearby work
  No dust bag, tape or plastic left over the housing or its cover by trades working near the unit, so the detector is still sampling duct air.
  1 photo required

Remote station and access

- [ ] Remote test/reset station and LED observed
  Remote station LED in its normal state, station accessible and not painted over or blocked, its location matching the unit it serves.
  No photo required
- [ ] Labeling and access to the detector checked
  Detector and the unit it serves labeled to match, mounting accessible for service, no ductwork or ceiling change that has buried the housing.
  1 photo required

Status and history

- [ ] Detector point checked at the panel for trouble or dirty alerts
  Where the detector is addressable, its point at the panel shows normal with no maintenance, dirty or drift alert, and any alert noted for the annual cleaning.
  No photo required
- [ ] Alarm and trouble history for this detector reviewed
  Work orders and panel events since the last round checked for nuisance trips or troubles on this detector, with repeats flagged to the fire alarm contractor.
  No photo required
- [ ] Air handler status matched to the detector's normal state
  Unit running or off as its schedule calls for, not held off by a latched detector, and not found running with its shutdown wiring disconnected.
  No photo required

Close out the round

- [ ] Ceiling tiles or access doors used to reach it put back
  Any ceiling tile or access door opened to reach the detector closed again, with the housing and any remote station left reachable for the next visit.
  No photo required

- [ ] Findings reported to the owner and the fire alarm contractor
  Fouled heads, misaligned tubes, dark LEDs and blocked access sent to the owner and the fire alarm contractor, with the detector ID and the unit it serves.
  No photo required