

Duct smoke detector annual maintenance checklist

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

Who runs it: The facilities lead attending with the fire alarm technician and the HVAC tech, recording what happens when the detector is actuated, while the technician performs the code-required test. When: Once a year, coordinated so the air handler can be run and shut down for the test and the monitoring station is on test before the detector is actuated.

Actuation observed

- ☐ **Functional actuation witnessed at the detector**
Detector actuated by the technician with the manufacturer's test method or introduced smoke, alarm LED seen latching and the correct point annunciating. 2 photos required
- ☐ **Sampling proven under airflow where the method requires it**
Actuation performed with the fan running where the test method calls for it, so the detector is proven to sense in moving air and not just at a dead magnet contact. 1 photo required

Fan shutdown and reset

- ☐ **HVAC fan-shutdown interface observed on actuation**
Supply or return fan seen shutting down and any associated damper moving to its safe position when the detector actuates, matching the sequence of operation. 2 photos required
- ☐ **Detector and unit restored after the test**
Detector reset from the remote station, panel returned to normal, air handler restarted and confirmed running in auto rather than left in hand. 1 photo required

Documentation

- ☐ **Results recorded on the building side**
Which detectors were actuated, the fan-shutdown result and any deficiency the technician calls out logged with a photo and a date on the site record. 1 photo required