

NFPA 90A

National Fire Protection Association

NFPA 90A governs how air-conditioning and ventilating systems are built and arranged so the ductwork does not become a path for fire and smoke through a building. It is the standard behind the fire and smoke dampers where ducts cross rated walls and floors, the detectors that shut a system down, and the materials that are allowed to sit inside a return-air plenum.

What it covers

- Duct construction, materials and support
- Fire and smoke dampers where ducts pass through rated barriers
- Duct-mounted smoke detector placement and system shutdown
- Materials permitted inside return-air plenums
- Penetration and sealing of rated walls and floors by ductwork

What a field inspection looks at

- Damper locations photographed at each rated wall and floor the duct crosses, before the ceiling closes on them.
- The access door to every fire and smoke damper shown reachable, not buried behind other trades.
- Duct detector shown mounted in the run it serves, with the run and the detector in one frame.
- Plenum-rated cable and materials photographed in the return space rather than assumed compliant.
- Penetration seals shot as installed where a duct leaves a rated barrier.

Adoption varies by jurisdiction. Confirm the edition your authority having jurisdiction enforces before you run a walk against it.