



Return systems over 2,000 cfm need listed duct smoke detection. Combined supply/return capacity counts. A detector in the wrong place, or a shutdown that never got wired, fails commissioning.

Original Masterbuild PE packet from Daily Code Talk on 2024 IMC 606. Confirm the adopted edition and NFPA 72. This is not a fire-alarm design.

☐ **Duct detectors: UL 268A. Other smoke detectors: UL 268.**

606.2.1: return air systems over 2,000 cfm. Detector in the return duct or plenum upstream of filters, exhaust air, outdoor air, decontamination equipment, and appliances.

☐ **606.2.2: shared supply or return — combined design capacity. If combined exceeds 2,000 cfm, return smoke detection is**

Fan-powered terminals 2,000 cfm or less do not each need detectors if they shut down by an approved method.

☐ **606.2.3: return risers serving two or more stories: detectors at each story where any portion of the return system exceeds**

Install per NFPA 72. Activation shuts down the air system — or switches to smoke-control mode if part of 512. Where a fire alarm is required, duct detectors generally report as supervisory, not fire-alarm, signals.

The fail we see first

Detectors in ducts with velocities outside the listed range (typically 300–4000 fpm) will not detect reliably. The most common commissioning failure is detector activation with the air handler still running.

What to send: AHU/RTU schedule cfm, whether returns are combined, and number of stories on the riser.

Send the comments. Not the County guideline.

Folio (does it start with 30?), process or UP number, and the comments PDF. Masterbuild will say which row is actually open.

masterbuildconsulting.com/send/

+1 (786) 398-6940 · Calendly: 30-minute scoping call

Masterbuild provides engineering services under a written scope. Not a fire-alarm design. Confirm adopted 606. This is not legal advice.