



Clark County Building and Fire Prevention Field Inspection Division FIELD INSPECTION GUIDELINE

Division:	Inspections	Policy & Procedure:	FIG-M-002
Subject:	Duct Detector Testing	Effective Date:	07/10/2005
Code:	2018 UMC Section 608	Revised Date:	10/01/2020
Proposed:	Matthew Brewer	Approved:	Sam Palmer

Interpretation:

Section 608 of the Mechanical Code gives the requirements for automatic shutoffs of air moving systems. Air moving systems supplying air in excess of 2000 cubic feet per minute to enclosed spaces within buildings shall be equipped with automatic shutoffs. Automatic shutoff shall be accomplished by interrupting the power source of the air moving equipment upon detection of smoke in the main air supply duct served by such equipment. Smoke detectors shall be labeled by an approved agency for air duct installation and shall be installed in accordance with the manufacturer's instructions. Such devices shall be compatible with the operating velocities, pressures, temperatures and humidity of the system.

Where a fire alarm system is required for the building, the smoke detectors required by this section shall be installed in accordance with NFPA72 and be connected to the fire alarm system. The activation of any duct smoke detector will cause a supervisory signal to be indicated at a constantly attended location or will cause an alarm signal.

Field Application:

Prior to Inspection Scheduling: The installing contractor shall verify the duct detectors are installed in the correct position within the duct and in accordance with the manufacturer's installation instructions. Air velocity measurements shall be taken across the detector head or detector housing using a magnehelic gauge. The readings shall be within the listing requirements for the detector. The installing contractor and/or fire alarm contractor shall pre-test each detector to verify proper shut down of the equipment by the use of canned smoke or active smoke through the return.

Duct detector tests shall be witnessed by a Clark County Inspector or an approved third-party agency.

Building Inspector: The contractor shall schedule the duct detector inspection. All testing equipment and materials should be available for the test, including a safe means of access for the inspector to witness the test as it is performed. A copy of the manufacturer's installation instructions should also be available for the Inspector to review.

Due to the time involved with each test, the Clark County inspector is authorized to witness no more than five (5) detectors at a single inspection time, unless otherwise directed by a supervisor or on a pre-scheduled paid overtime basis.

Approved Testing Agency: Tests performed by an approved testing agency shall require completion of an approved testing report, which shall include results for each detector tested. And where applicable, the fire control I.D. and verification of time for receipt of signal to the supervisory station shall be within 90 seconds. Upon successful completion of testing, the contractor shall request a duct detector inspection. The completed report from the approved agency shall be on the job site and made available for the building and fire prevention inspectors at the time of the respective inspections.