



Duct Smoke Detectors for Control of Smoke Spread

The purpose of this standard shall provide guidance to facilities and fire protection contractors where duct detectors are required and the associated notification signals both evacuation and supervisory.

Purpose

This policy is to reduce or eliminate the nuisance alarms caused by the collection of dust and debris on heating elements and/or inadequate maintenance and cleaning of duct detectors or HVAC units, causing alarms during the heating or cooling cycle of the units.

Scope

To reduce or eliminate nuisance alarms in buildings, which over time conditions occupants to ignore all alarms, knowing that each time it will likely be a false alarm. This action places the building occupants at increased risk, along with the responding firefighters who will have to evacuate and rescue the building occupants in addition to fire suppression.

To reduce or eliminate fire apparatus emergency response to nuisance alarms, which place the fire fighters and citizens of the Town of Brighton at increased risk of injury due to emergency vehicle response to nuisance alarms.

Applicability

If duct detectors are part of the alarm system, their activation shall initiate a shutdown of all applicable HVAC system(s) and a supervisory alarm signal to a constantly attended location or an approved central station.

Activation of the duct detector alone shall not put the building fire alarm system into general alarm

Requirements

§ FCNYS 907.3.1 Duct smoke detectors & § MCNYS 606.4.1 Supervision

Duct smoke detectors shall be connected to the building's fire alarm control panel when a fire alarm system is provided. Activation of a duct smoke detector shall **initiate a visible and audible supervisory signal at a constantly attended location**. Duct smoke detectors shall not be used as a substitute for required open-area detection.

Exceptions:

1. The supervisory signal at a constantly attended location is not required where duct smoke detectors activate the building's alarm notification appliances.
2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.