


<b>TECHNICAL BULLETIN</b> <b>CITY OF RALEIGH, N.C.</b> <a href="http://www.raleighnc.gov">www.raleighnc.gov</a>				<b>OFFICE OF THE FIRE MARSHAL</b>		
Subject		Bulletin #		SECTION	PAGE	EFFECTIVE DATE
<b>Duct Detectors connected to Fire Alarm Panels</b>		TB-6		NCFPC	1 of 2	7/1/2006
				PREPARED BY Office of the Fire Marshal		

1.0 **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.

2.0 **Organization(s) Affected**

Raleigh Fire Department (Operations, Plan Review, Fire Protection, and Fire Prevention Divisions), Fire Alarm Installation and Maintenance Companies.

3.0 **References**

NCFPC (Current adopted edition)

4.0 **Definitions**

Unless otherwise expressly stated, the following definitions shall, for the purposes of this technical bulletin, have the meanings as shown in 4.0.

4.1 False alarms, also called nuisance alarms, is the reporting of an emergency, causing unnecessary panic and/or bringing resources (fire apparatus) to a place where they are not needed.

4.2 Supervisory Alarm is a priority 2 alarm transmitted to a Listed Central Station (CS) where the CS operator notifies the protected premise and the subscriber list of the supervisory alarm. The fire department is dispatched to priority 1 alarms only.

5.0 **Requirements**

5.1 Duct Detectors shall be installed to cause a supervisory signal (priority 2) at the fire alarm control panel (FACP) in all new systems installed after July 1<sup>st</sup> 2006. Alarm, Supervisory, and Trouble Signals shall be monitored offsite at an approved central station monitoring station.

5.2 Duct Detectors added to existing systems that have other duct detectors installed to cause a fire alarm (priority 1) at the FACP shall be installed to cause a fire alarm (priority 1) consistent with the existing system throughout the building.

5.3 Property's having nuisance alarms (un-needed fire apparatus dispatch) shall upon order by Raleigh Fire Department (Office of Fire Marshal), reconfigure all duct detectors installed at the property to cause a supervisory alarm (priority 2) at the FACP. Alarm, Supervisory, and Trouble signals shall be monitored offsite at an approved central station monitoring station.

5.4 The maximum time allowed for the detection of smoke is 200 seconds. Detection time starts with the smoke machine's discharge of smoke and stops with the operation of the detector. HVAC Supply detectors can be tested with the return detector disabled.

6.0 **Goal:**

6.1 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.

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