

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
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**Burglar Alarm Panels and Smoke Detectors**

**Code:** 2002 Fire Prevention Code

**Date:** December 2005

**Section:** 907.1.2

**Question #1:**

Can smoke detectors be added to a burglar alarm panel that has been listed for residential service within a business?

**Answer:**

No, Section 907.1.2 requires equipment to be listed for the purpose for which they will be used.

Standards used to list the individual panels include UL 985 for residential use and UL 864 for commercial use. Because of the differences in the testing standards, residential-listed panels are allowed in one and two family homes (Group R-3) and Group R-4 Adult and Child Care facilities addressed by Section 907.2.9.2. Otherwise, the alarm panel is required to be listed in accordance with UL 864 for commercial use.

It should be noted that the practice of installing residential burglar alarm systems within businesses is common and outside the scope of the fire prevention code. However, once smoke or heat detectors are installed on the residential panel, the assembly becomes within the scope of the fire code and subsequently a violation.

**Question #2:**

Can the smoke detector/residential panel combination be installed in businesses not required by the code to be equipped with an automatic or manual alarm system?

**Answer:**

No, Section 901.4.2 states that non-required systems are allowed to be installed provided they comply with the code. The concern is for non-compliant equipment that provides a false appearance of something it is not.

**Keywords:**

NFPA 72, fire alarm, heat detectors,