907.3.2 Single- and multiple-station smoke alarms. Single-and multiple-station smoke alarms shall be installed in existing Group R occupancies in accordance with Sections 907.3.2.1 through 907.3.2.3.

907.3.2.1 General. Existing Group R occupancies not already provided with single-station smoke alarms shall be provided with approved single-station smoke alarms. Installation shall be in accordance with Section 907.2.10, except as provided in Sections 907.3.2.2 and 907.3.2.3.

907.3.2.2 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in Group R-2, R-3 or R-4, or within an individual sleeping unit in Group R-1, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.

2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

907.3.2.3 Power source. In Group R occupancies, single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are permitted to be solely battery operated: in existing buildings where no construction is taking place; in buildings that are not served from a commercial power source; and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

Q: Do the provisions of Section 907.3.2 in the 2003 International Fire Code require smoke alarms to be installed in all existing one- and two-family dwellings?

A: No. The retroactive smoke alarm provisions of the International Fire Code are only applicable to existing one- and two-family buildings constructed under the International Building Code and classified in Group R-3 by that code. They do not apply to detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress constructed under and within the scope of the International Residential Code.

The ICC Board of Directors, in originally approving the development of the International Residential Code, indicated that it is to be a stand-alone code for the construction of detached one- and two-family dwellings and townhouses not more than three stories in height. All the provisions for new construction that affect those buildings are regulated exclusively by the International Residential Code and are not to be regulated by any other International Code. Therefore, detached one- and two-family dwellings and multiple single-family dwellings within the scope of the International Residential Code that are not regulated in occupancy Group R are not required to comply with the provisions of the International Fire Code.