

City of Roanoke Fire-EMS Information Bulletin



Repairs and/or alterations to fire protection systems

ISSUE / QUESTION:

- 1) Is a permit required to reprogram a fire alarm system?
- 2) Is a permit required to replace like-for-like fire alarm components during repair activity?

DISCUSSION:

The IFC does not use the term “*repair*”. It uses “*modify*” and “*maintenance*”. IFC 105.1.1 states that permits are required to “...*install or modify systems and equipment...*”. Further, IFC 105.7.5 states “...*Maintenance performed in accordance with this code is not considered a modification and does not require a permit.*”

The 2009 IBC (Section 105.2) lists exemptions where permits are NOT required. There is specific language regarding repairs and maintenance. Note the limits of what is exempted from electrical permits in 105.2- “*minor repair work, including the replacement of lamps...*”. Also note that under 105.2.2 Repairs, “...*electrical wiring or mechanical or other work affecting public health or general safety*” requires a permit. Repairs to a fire alarm system would clearly fall under the general safety heading.

INTERPRETATION:

Answer to question #1: Under IFC 105.1.1 and 105.7.5, changing the programming of a fire alarm system is considered a modification to the system and would require a fire alarm permit.

Answer to question #2: Replacing like-for-like equipment is not typically considered to be a modification, as the existing design and specified equipment hasn’t changed. The maintenance exclusion doesn’t clearly address this activity either, as 901.4 and 907.9.5 require that the system be maintained “*in an operable condition at all times*”, but does not speak to permit requirements for repairs (major or minor). Therefore, our conclusion is that repairs resulting in like-for-like equipment (same make and model) would not require a fire alarm permit. All other equipment replacement would require a permit.

ADDITIONAL INFORMATION:

IBC 105.1 Required.

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

IBC 105.2 Work exempt from permit. (Excerpt only, entire section is not reprinted)

Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following: Electrical: Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

IBC 105.2.1 Emergency repairs.

Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

IBC 105.2.2 Repairs.

Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

IFC 105.1.1 Permits required. Any property owner or authorized agent who intends to conduct an operation or business, or install or modify systems and equipment, which is regulated by this code, or to cause any such work to be done shall first make application to the fire code official and obtain the required permit.

IFC 105.7.5 Fire alarm and detection systems and related equipment.

A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

IFC 901.4 Installation. Fire protection systems shall be maintained in accordance with the original installation standards for that system. Required systems shall be extended, altered or augmented as necessary to maintain and continue protection whenever the building is altered, remodeled or added to. Alterations to fire protection systems shall be done in accordance with applicable standards.

IFC 907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures and new fire alarm systems including replacement of existing fire alarm control panels being installed in existing structures. The requirements of Section 907.3 are applicable to existing buildings and structures.

For the purposes of this section, fire walls shall not be considered to create a separate building.

Buildings required by this section to be provided with a fire alarm system shall be provided with a single fire alarm system unless otherwise approved by the fire code official.

IFC 907.9.5 Maintenance, inspection and testing.

The building owner shall be responsible to maintain the fire and life safety systems in an operable condition at all times. Service personnel shall meet the qualification requirements of NFPA 72 for maintaining, inspecting and testing such systems. A written record shall be maintained and shall be made available to the fire code official.