



BUILDINGS BULLETIN 2009-022
Technical

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Purpose: This document clarifies the types of work involving an existing fire alarm system, designed and approved under the 1968 building code or prior codes, which are subject to the 2008 NYC Construction Codes.

Related Code Section(s): AC 28-101.4.3
BC 907
BC Q105.1

Subject(s): Fire alarm, ordinary repair; Fire alarm, existing buildings; Fire alarm, alterations

Work involving fire alarm systems installed pursuant to the 1968 Building Code or prior codes in existing buildings shall comply with the following:

1. **Work constituting an ordinary repair.** Any work performed on a fire alarm system, installed pursuant to the 1968 Building Code or prior codes, to maintain it in working order, involving in-kind replacement of devices, including initiating appliance devices (smoke detector, water flow, manual pull station, etc.) or notification appliance devices (audible and visible devices) may be considered an ordinary repair and shall not require a permit. However, all such work shall only be performed by a licensed electrician.

Repair of a control panel or distributed control units (RCU, TTB, DGP, etc.), which was installed under the 1968 Building Code or prior codes, may be considered an ordinary repair and shall not require a permit. In such case, the system's functionality shall be programmed in accordance with the existing approval.

Exception:

Replacement of a fire command center, fire alarm control panel or distributed control units (RCU, TTB, DGP, etc.), which was installed under the 1968 Building Code or prior codes, is **not** considered an ordinary repair and therefore shall be subject to item 2 or 3 of this document, as applicable.

2. **Alterations requiring a work permit.** All work described below in 2(a), (b), and (c) shall require alteration applications and shall only be performed upon the issuance of a permit.
 - a. For an alteration application that does not involve a change of use or occupancy and that does not involve an enlargement of the building requiring an addition of a sub-system(s) to an existing system approved under the 1968 Building Code or prior codes, the fire alarm system's functionality may be programmed in

accordance with the existing approval. However, the portion of the system affected by such alteration shall comply with the 2008 NYC Construction Codes and the following, as applicable:

- i. Newly installed devices, including initiating appliance devices (smoke detector, water flow, manual pull station, etc.) or notification appliance devices (audible and visible devices), shall comply with the 2008 NYC Construction Codes and supervision of such devices is required. Existing functional devices not affected by the scope of work may remain.
 - ii. All new electrical work shall comply with Rules of the Department of Buildings, 1 RCNY 4000-06 (*Fire Alarm wiring and power sources*). Existing functional wiring not affected by the scope of work shall be permitted to remain. (see <http://www.nyc.gov/html/dob/html/reference/rules.shtml>)
 - b. An enlargement of an existing building constructed pursuant to the 1968 Building Code or prior codes may utilize the programming of the existing, approved system's functionality only if the enlarged portion is of the same use or occupancy as the existing building. Any portion of the existing fire alarm system affected by such enlargement shall comply with the 2008 NYC Construction Codes and Items 2(a)(i) and (ii) above, as applicable.
 - c. Where an alteration involves a change of use or occupancy, the programming of the existing fire alarm system's functionality shall comply with the 2008 Construction Codes, unless otherwise reviewed and approved by the Technical Affairs Division of the Department of Buildings. Any portion of the existing fire alarm system affected by such alteration shall comply with the 2008 NYC Construction Codes and Items 2(a)(i) and (ii) above, as applicable.
3. **System replacements requiring a work permit.** For an existing fire alarm system designed and approved under the 1968 Building Code or prior codes that does not function properly and is not repairable within the scope of item number 1 or 2 of this document, or due to the unavailability of approved replacement parts or for any other reason, the entire system may need to be upgraded. An application for a permit must be filed for any replacements to the system. The design and installation of the system replacements shall comply with the 2008 NYC Construction Codes and the following:
 - a. All new electrical work shall comply with Rules of the Department of Buildings, 1 RCNY 4000-06 (*Fire Alarm wiring and power sources*). Existing wiring not affected by the upgrade shall be permitted to remain. (see <http://www.nyc.gov/html/dob/html/reference/rules.shtml>)
 - b. Newly installed replacement devices, including initiating appliance devices (smoke detector, water flow, manual pull station, etc.) or notification appliance devices (audible and visible devices), shall comply with the 2008 NYC Construction Codes and supervision of such devices is required. Existing functional devices not affected by the upgrade may remain.
 - c. Smoke detectors shall be installed in all locations as required for new construction as per section BC 907. (For example: Section BC 907.2 - Item #1: area smoke detector shall be installed in each mechanical equipment, electrical, transformer, telephone equipment or similar room, in elevator machine rooms, and in elevator lobbies, irrespective of room size.)
 - d. The alarm sequence shall comply with section BC 907.2.12.2 and NFPA 72 as modified by Appendix Q as applicable.
 - e. Fire Department communication systems shall comply with section BC 907.2.12.3 for buildings 75 feet or greater in height.
 - f. Existing ventilation systems over 2000 cfm shall be equipped with duct smoke detectors as per sections BC 907.11 and MC 606.2.
 - g. Panels for smoke control systems (post-fire smoke purge, stair pressurization, etc.) shall be required only if such systems exist in the building.