

August, 2013
BUILDING DIVISION

INSTALLING A NEW FIRE ALARM SYSTEM OR UPGRADING, REPAIRING OR ALTERING AN EXISTING FIRE ALARM SYSTEM

This bulletin is intended to clarify the permit requirements for installing a new fire alarm system or for upgrading, repairing, or altering an existing fire alarm system in a building where no other construction activity requiring a permit is taking place.

Each fire alarm system shall be designed to meet the requirements of the BC Building Code, which will include device layouts, wiring protection, and interconnections with any other building systems that may be affected. A building permit and an electrical permit are required before installing a new fire alarm system and before making modifications to an existing fire alarm system. Modifications to a fire alarm system may involve changing the type and placement of devices and/or relocating electrical wiring, which could result in new penetrations of an existing fire separation that would need to be properly fire stopped. All altered or added components must be compatible with the existing fire alarm system and must be installed in compliance with all applicable codes and standards. Four sets of sealed, signed and dated fire alarm system drawings with an accompanying Schedule B Letter of Assurance may be required. The installation of a fire alarm system shall comply with the requirements of CAN/ULC-S524 "Installation of Fire Alarm Systems" as specified in the BC Building Code and CAN/ULC-S536 "Inspection and Testing of Fire Alarm Systems" as specified in the BC Fire Code. A fire alarm system is required to be verified by a qualified fire alarm technician as complying with the requirements of CAN/ULC-S537 "Verification of Fire Alarm Systems" as mandated by CAN/ULC-S524 and the Canadian Electrical Code. A copy of the verification report shall be submitted to the Building Official after installation.

When an upgrade to a fire alarm system is not in full compliance with all applicable codes and standards, a Registered Professional will be required to submit a sealed, signed and dated report to the Building Official. The report shall describe how the fire alarm system operates, list all

deficiencies present in the system, and recommend upgrades that will bring the system up to current code requirements. The Registered Professional may also provide an argument justifying why a particular deficiency will not compromise life safety and should not need to be upgraded. The merits of an argument of this nature will be considered on a case by case basis and may not necessarily be accepted.

Note that an existing fire alarm system which does not meet current building and fire code requirements, yet is functioning as originally designed and installed, is not required to be upgraded to meet current code requirements. However, if an existing fire alarm system is out of service due to a fire alarm control unit failure, and a new fire alarm control unit that is not listed as being compatible with the existing system is being proposed, the existing fire alarm system will no longer function as originally designed and installed, therefore, a new code compliant fire alarm system will need to be installed.

If an existing fire alarm system in an occupied building ceases to function due to the failure of a fire alarm control unit that cannot be repaired, immediately notify Surrey Fire Services and establish a fire watch. After the fire alarm system has been repaired, it must be verified by a qualified fire alarm technician and may require the involvement of a Registered Professional.

An electrical permit is not required for maintenance of an existing fire alarm system that only involves replacing devices if the types and positions of the devices do not change.

Building Permit Application Requirements

Please ensure that all required information is submitted at the time of application, including the following list of drawings and documents.

- Completed Building Permit Application form;
- Four (4) sets of sealed, signed and dated electrical drawings with an accompanying Schedule B Letter of Assurance (only a Registered Professional can seal drawings);
- Owner's Authorization form (if the applicant is not the owner); and
- Payment of the building permit fee.

Please consult with Building Division staff (604-591-4441) if further clarification is needed.

Building Code References (from BCBC 2012)

3.2.4.6. and 9.10.1.2. "Commissioning of Life Safety and Fire Protection Systems"

1) Where life safety and fire protection systems are installed to comply with the provisions of this Code or the British Columbia Fire Code, the commissioning of these integrated systems must be performed as a whole to ensure the proper operation and inter-relationship between the systems. (See A-3.2.4.6.(1) in Appendix A)