

**BULLETIN 2000-035-EL/SP**

*Revised April 27, 2016*

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## **POWER SUPPLY REQUIREMENTS FOR ELECTRICAL COMPONENTS OF SPRINKLER SYSTEMS INSTALLED IN RESIDENTIAL BUILDINGS**

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The intent of this bulletin is to clarify the power supply requirements for electrical components of the sprinkler systems installed in the residential buildings and multiple dwelling complexes.

### **BACKGROUND**

The Vancouver Building By-Law (VBBL) requires buildings to be sprinklered, when an automatic sprinkler system in a building is designed, constructed and installed in accordance with NFPA 13, such building must be provided with a fire alarm system and activation of any waterflow device of the automatic sprinkler system must actuate the building fire alarm system; and must send a signal to the fire department in conformance with the VBBL. However the VBBL also allows the use of NFPA 13D and NFPA 13R for the design, construction and installation of the automatic sprinkler systems in certain specific buildings (See Article 3.2.5.12. of VBBL). Sentences 3.2.4.1.(2) and 9.10.18.2.(3) state that in buildings in which a sprinkler system has been installed in accordance with NFPA 13D, a fire alarm system need not be installed. NFPA 13D requires that the operation of a waterflow device must cause an audible alarm signal to sound throughout the building in which the waterflow alarm has been activated, in the City of Vancouver, a smoke alarm installed in accordance with the VBBL is allowed to be interconnected with a waterflow device as a waterflow alarm provided the smoke alarm conforming to CAN/ULC-S531 is specifically approved for such application.

Where the NFPA 13R is permitted to be used for the design, construction and installation of an automatic sprinkler system in a specific building, NFPA 13R requires that an alarm signal must sound on the premises served by the sprinkler system upon actuation of the sprinkler waterflow alarm device activated by the waterflow device. It is important to note that Sentences 3.2.4.1.(1) and 9.10.18.2.(1) respectively require a fire alarm system to be installed in buildings in which a sprinkler system is required by this Part; with the exceptions of Sentences 3.2.4.1.(2)(3) and 9.10.18.2.(3) (4).

### **REQUIREMENTS**

Where applicable, a separate "house panel" with metering equipment that complies with the requirements of Section 6 of the CE Code must be provided to supply power to the fire alarm system and to other relevant sprinkler system components (e.g., booster pump, control panel/circuits, fixed electric heating systems) and etc. This required house panel must be installed in an acceptable location. i.e. A mechanical room provided for operation of the sprinkler system is deemed an acceptable location for the house panel. If electrical consultants and contractors are uncertain about metering requirements with respect to the provisions of BC Hydro's Electric Tariff, they should contact BC Hydro.

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