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**BULLETIN 2000-031-EL/SP**

*Revised June 18, 2015*

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**PUMPS FOR SPRINKLER SYSTEMS IN BUILDINGS SPRINKLERED TO NFPA 13D**

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In accordance with the Vancouver Building By-law (VBBL), NFPA 13D is permitted to be used for the design, construction and installation of sprinkler systems installed in buildings of residential occupancy, buildings of care occupancy, one-family dwellings, two-family dwellings, one-family dwellings or two family dwellings with secondary suites or lock-off units, and laneway houses. (See Articles 3.2.5.12. and 9.37.4.1. of Division B of the VBBL). This bulletin clarifies the electrical requirements for the use of booster pumps in sprinkler systems conforming to NFPA 13D.

There are some buildings sprinklered to NFPA 13D in The City of Vancouver where the water pressure required for the satisfactory operation of the system is achieved by means of a booster pump. NFPA 13D contains installation, design and acceptance requirements for pumps. This pump is not required to be listed as described in NFPA 13D and it is not considered as a fire pump described in the VBBL, the installation of the pump does not have to comply with the requirements for a fire pump in accordance with Section 32 of the CE Code, Part I. However, when the installation of conductors and protection of the pump is selected in conformance with Section 28 of the CE Code, it should be noted that the overload protection shall not be installed for the pump motor.

A completed form (See Attachment “A”) is required in each case when a booster pump is installed to operate a sprinkler system in a building sprinklered to NFPA 13D, and the completed Attachment “A” must be provided to the district electrical inspector.

It is important to note that NFPA 13D requires that operation of a waterflow device or a waterflow alarm check valve must cause an audible alarm signal to sound throughout the dwelling unit in which a flow alarm has been activated. NFPA 13D explains the use of interconnection with a smoke alarm for the waterflow alarm. It is also important to note that the interconnection of the water flow device with the smoke alarm(s) as the acceptable audible device(s) to sound the alarm signal upon activation of the sprinkler system water flow device is permitted provided the smoke alarm(s) conforming to CAN/ULC-S531 is(are) specifically approved for such application and installation of the smoke alarm(s) must be in accordance with manufacturer’s installation guideline.

Note: Bulletin 2000-035-EL contains power supply requirements for electrical components of sprinkler systems installed in buildings sprinklered to NFPA 13R and NFPA 13D.

(Original signed by)

(Original signed by)

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W. White  
MANAGER, TRADES INSPECTION  
DEPUTY CITY ELECTRICIAN

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CHIEF BUILDING OFFICIAL  
DIRECTOR, BUILDING CODE & POLICY

Attachment “A”

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**BULLETIN 2000-031-EL/SP - Attachment "A"**

*Revised June 18, 2015*

**USE OF BOOSTER PUMPS IN SPRINKLER SYSTEMS CONFORMING TO  
NFPA 13D**

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Building Address: \_\_\_\_\_

Electrical Permit No.: EP- \_\_\_\_\_

Booster Pump is installed: \_\_\_\_\_ YES

Pump Ratings: HP. \_\_\_\_\_ KW. \_\_\_\_\_ V. \_\_\_\_\_ AMP. \_\_\_\_\_

Motor disconnecting means lockable in "ON" position is provided: YES  NO

Operation of the pump motor is activated by a contactor having suitable rating expressed in HP and amperes: YES  NO

Lockable circuit breaker for the pump branch circuit is provided: YES  NO

Overload protection is not installed: YES  NO

**Electrical Contractor / FSR Name:**

\_\_\_\_\_  
(Name - Please print)

\_\_\_\_\_  
(Signature)

Sent to D.E.I. \_\_\_\_\_  
(Name - Please print)

Date: \_\_\_\_\_