

Power supply requirements for:

- a) Electrical components of sprinkler systems installed in single dwellings, and**
- b) Installation of fire alarm system, lighting and emergency lighting triggered by extended path of travel for firefighters.**

This bulletin clarifies power supply requirements for:

- a) the electrical components of sprinkler systems installed in single dwellings, and
- b) the installation of fire alarm system, lighting and emergency lighting triggered by the extended path of travel for firefighters.

This bulletin replaces Bulletin 2000-035-EL/SP.

Single Dwelling

For the purpose of this bulletin, a single dwelling means a dwelling unit consisting of a detached house, one unit of row housing, or one unit of a semi-detached, duplex, triplex, or quadruplex house. (see CE Code)

House Panel

For the purpose this bulletin, a house panel means a dedicated panelboard that provides power supply to the electrical components of sprinkler systems, fire alarm systems or electrical equipment/loads located outside of the dwelling units that is required to be separately metered for electrical power consumption.

Discussion

Where the building is permitted to be sprinklered to NFPA 13D, the City Electrician allows interconnection of a smoke alarm with the waterflow detector of a dwelling unit; provided that the smoke alarm is specifically approved for such application. Circuit connected to smoke alarms must comply with CE Code Rule 32-200.

Where the building is permitted to be sprinklered to NFPA 13R, NFPA 13R requires a waterflow alarm for the sprinkler system to sound on the premises. A house panel is commonly provided to supply power to the electrical components listed for the sprinkler system.

When a 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 (FAS), and activation of any waterflow device (detector) of the sprinkler system must actuate the FAS and must send a signal to the fire department. To provide power supply to the FAS, a house panel is necessary to be installed.

Sentence 9.10.20.3.(1) of the VBBL requires that the fire department access path of travel to be provided to each principal entrance of a building in accordance with Article 3.2.5.5. Sentence 3.2.5.5.(3) of the VBBL specifies specific electrical requirements for the extended paths of travel for firefighters, and for the building provided with extended firefighter path. [Review the VBBL requirements](#)

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Directions

- 1) A house panel must be provided to supply power to:
 - a) electrical components of sprinkler system installed in a building sprinklered to NFPA 13R,
 - b) fire alarm system, or
 - c) lighting and emergency lighting provided for the extended firefighter path.

This house panel is considered as service equipment for the purpose of CE Code Rules 6-200 and 6-202, it must be provided with a meter conforming to Rules 6-402 2) and 6-408 1) and it must be installed in an acceptable location (e.g. electrical room/closet/power kiosk, common/mechanical room).

- 2) In accordance with Article 3.2.4.7. of the VBBL, when an alarm is initiated to the FAS by the waterflow device, notification to the fire department must be provided in conformance with CAN/ULC-S561 (see Article 9.10.18.3.). In accordance with Sentence 3.2.5.5.(3) of the VBBL, the sprinkler systems are required to be monitored by the FAS and by an off-site monitoring service.

For projects associated with a detached house, two/three-unit row house building, duplex, triplex, or quadruplex building; that the FAS is required to be connected to a ULC listed fire signal receiving facility and the following documentation is required to be submitted by the Listed Acceptable Organizations/Qualified Persons to the City: (see [Bulletin 2020-006-BU/EL](#))

- a) FAS Verification report and APPENDIX C, and
- b) ULC Certificate, or document for monitoring of the FAS in accordance with the CAN/ULC-S561 such as the CAN/ULC-S561 APPENDIX C, TEST AND INSPECTION REPORTS.

Note

An annual permit is required for the operation and maintenance of a fire alarm system, and for the inspection, testing and maintenance of the signal transmitting unit. See [BULLETIN 2019-003-EL](#).

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