



Issued by Brown University Fire Safety Office
Box 1914
Phone: 401-863-3462
Fax: 401-863-3417

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Brown University Fire Safety Office Fire Alarm & Sprinkler Installation Requirements

1. Fire alarm plans and specifications shall be delivered to the Fire Safety Office for review and approval prior to any submittal to the City of Providence Telecommunications Division.
2. Fire alarm equipment specifications and installation methods shall be in accordance with the current version of the Rhode Island Fire Safety Code, the National Electrical Code (NFPA 70), and any standard referenced by these codes.
3. Every electrical or fire alarm contractor installing, upgrading, maintaining or testing fire alarm equipment in any University building shall be licensed by the State of Rhode Island to perform such work.
4. Fire alarm equipment manufactured by *Fire Control Instruments* (FCI) is the University standard and shall be used for all new installations and equipment upgrades. Any exceptions to be approved by the Fire Safety Office.
5. Fire alarm panel installation guidelines:
 - The fire alarm control panel shall be of sufficient size to accommodate all wiring in a neat and workman-like manner.
 - The control panel shall be mounted in a heated location near the front entrance of the building.
 - Provide adequate space to accommodate the swing of the fire alarm panel door.
 - Provide a 110 VAC duplex electrical receptacle within 10 feet of the fire alarm control panel, and provide 110 VAC for a short haul modem at the FACP.
 - For each new addressable fire alarm system, provide two “short-haul” modems, and a 4-wire, category 5 cable from the fire alarm panel to the telephone equipment room in the building. Also provide two “dry pair” telephone lines to transmit data from the building telephone equipment room to the telephone equipment room in the basement of Faunce House (the BUPS dispatch office).
6. Municipal connections:
 - Each municipal alarm connection will be made using a Gamewell master box mounted inside the building, in close proximity to the fire alarm control panel.
 - The master box shall be grounded to the street side of the building water meter.
 - All master boxes will use ¼ second timing.

- Contact the Electrical Division of Facilities Management to determine where the connection to the municipal loop will be made.

7. Fire alarm system standards

- Fire doors in any “rated” stairway or corridor shall be equipped with magnetic door holders controlled by the fire alarm control panel. Any exceptions to this shall be approved by the Fire Safety Office.
- When Supplementary Notification Appliance Circuits (SNAC’s) are installed, the ability to silence devices on that circuit shall be provided by a switch in the fire alarm control panel.
- Smoke detectors are NOT to be installed until the final cleanup has been completed by the General Contractor.
- Addressable detection devices shall be marked with the device’s unique address using “p-touch” style labels (or equivalent).
- Software labels for addressable detection devices shall reference the room number closest to that device, or note a compass direction. Example: a smoke detector in the hall near room 207 would be labeled “Hallway near Room 207”; a pull station near the north end of a second floor hallway should be labeled “2nd Floor Hallway – North”.
- “As Built” drawings will be submitted to the Fire Safety Office.

8. Sprinkler Specifications

- All sprinkler specifications, layouts and flow calculations shall be submitted to FM Global for review and comment at the 90% drawing stage. A copy of the submittal cover sheet(s) as sent to FM Global will be sent to the Fire Safety Office.

9. Pre-tests and Final tests

- The process for pre-testing a fire alarm system is detailed in the Rhode Island state fire code. A Brown Fire Safety Officer shall be present to witness every fire alarm pre-test.
- Before a pre-test is scheduled with the Fire Safety Office, the installer and the Brown Project Manager shall assure that the fire alarm installation is complete, all auxiliary functions operate and the fire alarm panel is clear of troubles.
- Either the installing contractor or the fire alarm equipment supplier shall provide qualified personnel to perform the pre-test and the final acceptance test. Other licensed contractors shall be present to test auxiliary functions (elevator capture, fan shut-down, sprinkler flow, etc).
- During the pre-test, all smoke detectors shall be tested with smoke from a smoke - generating device.

- The Brown Fire Safety Office will schedule the final fire alarm inspection with the Providence Telecommunications Division, only after the pre-test has been successfully completed.

END OF SECTION