

Tips for Successful Approval of a Fire Alarm System in NYC

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IMPORTANT INFORMATION

This guide is made available by the Fire Department City of New York ("FDNY") as a courtesy. It does not represent all filing requirements for any given FDNY application. Though every effort will be made to update this guide continuously, always check New York City Fire Code, Building Code, Zoning Resolution, or any other applicable rules, regulations, or policies for specific legal or procedural requirements.

Questions about the Fire Alarm Plan Submission and Inspection process may be directed to the Bureau of Fire Prevention Customer Service Center by emailing FDNY.BusinessSupport@fdny.nyc.gov, or by dialing 311 and asking to be connected to the FDNY Customer Service Center.

Planning a Fire Alarm Installation

The purpose of this document is to assist anyone that may be installing a Fire Alarm System in the City of New York.

Following the recommendations in this guide will help you achieve compliance with FDNY Fire Alarm Plans Review and Inspection process and avoid common filing errors.

Planning during each stage of the Fire Alarm installation is critical to successful completion: Fire Alarm Plan Submissions, Plan Review and approval, and the Fire Alarm Inspection.

Note: The average duration from Plan Submission to final Fire Alarm Inspection/Approval is currently approximately twenty to twenty-four weeks. Please plan accordingly.

Completing a Fire Alarm Installation

- 1) Confirm that a Fire Alarm System is required at your location. Consult <u>Department of Buildings</u> for more information
- 2) Hire a New York State registered design professional holding either a Professional Engineering License or a Registered Architect's license.
- 3) Your registered design professional will evaluate the type of occupancy you have and determine the type of Fire Alarm System you need in accordance with the New York City Building Code.
- 4) Your registered design professional must create fire alarm plans for the system, as described above (#3).
- 5) Your registered design professional must complete all filing documents, including the <u>TM-1</u> which can be downloaded from <u>FDNY Business</u>. Follow the instructions provided to complete the form.
- 6) The following forms and supporting documents are required and must be filed online at FDNY Business:
 - a. Fire Alarm plans certified by a registered design professional.
 - b. TM-1 application.
 - c. Valid Certificate of Occupancy or approved Schedule A obtained from the Department of Buildings.
 - Note: If item "c" above is not available, you must obtain a Letter of No Objection

for use and occupancy type from the New York City Department of Buildings.

d. Other forms may be required. Please follow instructions on TM-1.

Questions regarding filing fees and/or document processing fees should be addressed with FDNY Business Customer Service Center.

Filing fees and document processing can be paid online at <u>FDNY Business</u> (if filed online) or by check or money order (must contain FDNY Business Record ID or FPIMS account number).

NYC Fire Department (FDNY)
Bureau of Fire Prevention
9 MetroTech Center, Attn: Cashier's Unit (1st Floor)
Brooklyn, NY 11201

- 7) Once all forms and supporting documents have been completed and received, the initial review will begin. This review can take up to 8 weeks.
- 8) If the FDNY approves plans, an email notification will be sent. The email will contain instructions on how to retrieve your approved plans.

If FDNY **does not** approve plans, an email notification will be sent. The email will contain instructions on how to view the disapproved plans and objections. Corrected/revised plans and applications and additional supporting will need to be uploaded to FDNY Business for an additional review.

Note: Filing fee is not required if re-submitted within 6 months of the objection date.

- 9) Once plans are approved, you must hire a New York City Licensed Electrician / Fire Alarm Vendor who holds an FDNY-issued Fire Alarm Company Certificate and begin the installation process. It is important that you use only FDNY-approved Fire Alarm Installation, Inspection and Testing Services.
- 10) Once successfully installed, the system must be inspected and acceptance-tested in accordance with NFPA 72 (as modified by NYC Building Code Appendix Q) by or under the direct supervision of a registered design professional trained and knowledgeable in fire alarm system design or by a company which is FDNY-approved for Fire Alarm Installation, Inspection and Testing services as referenced above.

Once the Fire Alarm system is successfully installed and tested, you <u>must</u> have it inspected by the FDNY. To arrange this inspection, bring your approved Fire Alarm plans to the Fire Alarm Inspection Unit at 9 MetroTech Center, Brooklyn NY on Tuesdays or Thursdays between 9:00 am and 12:00 pm.

How To Avoid Fire Alarm Plan Review Objections

Make sure:

- to submit a copy of Certificate of Occupancy or approved Schedule "A" that matches the use shown on the drawings. If these two documents are not available, obtain a Letter of No Objection (LNO) from the Department of Buildings (DOB).
- to submit the Letter of Approval for the existing fire alarm system for additions and/or modifications to an existing fire alarm system.
- to submit <u>FDNY Variance Letters</u> and/or <u>DOB Construction Code Determination (CCD1s)</u>
 as part of the package for complete review. Make sure the letter/documents are
 embedded in the drawings.
- to complete and sign the Fire Alarm Plan Examination form TM-1 Application.
- the floor numbers on the riser diagram, floor plans, TM-1 Application, match the floors shown on the Certificate of Occupancy or Schedule "A".
- the designation of the marketing and construction floors follow the guidelines in
 <u>Technology Management Bulletin # 11/2011</u> if the actual floor identification (marketing
 floor designation) differs from the Certificate of Occupancy or Schedule "A."
 - The "Work on Floor(s)" section on the TM-1 Application must indicate the construction floor designation as indicated on the Certificate of Occupancy or Schedule "A."
 - The Job Description section on the TM-1 application must include a statement indicating the correlation between construction and the corresponding marketing floors.
 - The floor plans and riser diagram must identify both the construction and marketing floor designations.
- the job description on the TM-1 application matches the scope of work shown on the drawings
- the scanned copy of the original approved drawings and TM-1 Application, or a copy of Letter of Defect or Violation Order is submitted when submitting a Post-Approval Amendment (PAA).
- to provide legible digital plans containing the digital seal and signature of the design professional. Design specifications/notes and room/plan labels must also be legible.
- to define all symbols used for fire alarm devices in the legend.
- the locations of all fire alarm devices are shown on the floor plans, including Fire Alarm Control Panel/Fire Command Station, central office connection, Data Gathering Panels, power supplies, initiating devices, notification appliances, primary and/or secondary power components (FDS/ATS) etc.

- to provide the primary (and secondary, where applicable) power, grounding configurations on the riser diagram, and floor plans in accordance with NYC Electrical Code (EC) 2011 and NYC Building Code (BC) Chapter 27. The grounding from cold water main/building steel shall be connected to the main fire alarm service disconnect switch, and all other fire alarm equipment shall follow equipment grounding requirements as detailed in NYC EC 2011 section 760.33.
- the quantity of fire alarm devices on the riser diagram matches the quantity on the floor plans.
- to provide an Input/Output Matrix that is specific to the designed fire alarm system, including specific devices and functions of the system. Functions or devices that are not provided shall not be included in the matrix.
- to provide a complete floor plan showing the location of the partial plan (if providing a partial floor plan).
- to indicate the class of circuits and levels of survivability on the riser diagram as required by BC 907.1.1.
- to provide the square foot area of all mechanical equipment, electrical, transformer, telephone equipment, and similar rooms to verify smoke detection requirements of BC 907.2.9 (in Group R-2 occupancies with a height of 75 feet or less).
- to provide a single manual pull station located in an area that is not accessible to the public as per BC 907.2 Exception #2.
- to include a statement if Post-Fire Smoke Purge is not required as per the exceptions in BC 916.1.
- to file Fire alarm systems for Group R-2 occupancies separately from other occupancy groups.
- to provide an elevation plan for buildings that are in close proximity to a high rise building or underground building, showing the height of the building for both above and below grade from the lowest level of Fire Department vehicle access to the slab of the highest occupied floor.
- to provide the total square foot area of floors and/or fire areas when fire alarm requirements are based on the area of the occupancy or fire area.
- to comply with ALL objections before resubmission. If there is an issue with an objection, contact the plan examiner beforehand.
- to provide correct/applicable <u>DEP Asbestos forms ACP-5/7/21</u>
- to provide Landmark certification as required.
- to open PAA for applications filed and approved under DOB PW-1 application prior to filing for Amendment at FDNY under LL-195.

Scheduling Your Fire Alarm Inspection

Below is a checklist of items which should be completed before you schedule your Inspection:

- Central Station monitoring connection with the approved monitoring center must be active.
- All building safety functions must be operational. Elevators must be programmed for automatic recall. Fireman's Service must be functional. Fans must shut down as required.
- Primary / Secondary Power to Fire Alarm control panel must be permanent.
- Fire Sprinkler System must be operational
- If a Post Approval Amendment is submitted, it requires approval from Fire Alarm Plans Examination.
- Fire Alarm Control Panel must be permanently installed and free of alarm, supervisory, or trouble.
- Fire Alarm installation must be 100% complete.
- When you are ready to schedule the inspection, complete and submit an Inspection request, form B-45.

Preparing for the Fire Alarm Inspection

To avoid delays or cancellations to Fire Alarm Inspections, be sure to have the following readily available <u>during</u> the inspection:

- a minimum of one <u>certified fire alarm technician</u> (holding Certificate of Fitness S97 or S98),
 plus adequate onsite staffing to conduct Fire Alarm test.
- radios must be available for communication.
- a licensed plumber or other knowledgeable staff must be present to flow water for water flow device testing.
- an elevator mechanic or person knowledgeable in accessing, operating, and testing elevators must be present and allow the top of shaft access.
- ancillary equipment such as a ladder, tools, canned smoke must be present.
- building occupants and personnel aware of testing in order to minimize disturbance.
- access to all rooms and or areas of the building.
- all required documents for FDNY Inspector to review. An A-433, TM-1, monitoring contract, as-built diagram, approved FD plans, and other related paperwork.

General Tips to Avoid Defects

Below is a checklist of the Top-10 ways to avoid objections and/or violations with Fire Alarm plan reviews and Inspections.

- 1. Submit as-built riser diagram as per 3RCNY R105.01 (C)(2)(A)(3) & (4).
- 2. Submit an amended form A-433 signed and sealed by the licensed electrical contractor
- 3. Submit a copy of the central station monitoring agreement and an executed TB-60 application.
- 4. Submit a letter of approval for the base building fire alarm system that the devices are connected.
- 5. Provide/install smoke detection in mechanical equipment, electrical, transformer, telephone equipment, or similar room as required by code.
- 6. Be sure smoke detector(s) are not located in a direct airflow or closer than 36 in. (910 mm) from an air supply diffuser or return air opening.
- 7. Arrange for CO detector located at the source of CO-producing equipment to shut down that source.
- 8. Submit a Post-Approval Amendment (DOB PAA) to revise the job description to include CO detection to match the actual installation.
- 9. Arrange for the fan(s) greater than 2000 cfm to shut down upon activation of any automatic alarm as required by code.
- 10. Arrange for the elevator to recall upon activation of waterflow or any elevator associated smoke or heat detector.