



City of Novi
Fire Protection Plan Submittal
FIRE ALARM SYSTEMS

The purpose of this document is to inform and educate contractors submitting fire alarm shop drawings for review by either the City of Novi or one of our Third Party Reviewing Consultants of what is expected on the plans. The intent is to expedite the review and permitting process resulting in a quicker permit issuance, timely installation, and successful inspection.

A minimum of three complete sets of plans and supporting documents shall be submitted for review (4 sets when being submitted to a third party reviewer). This will allow one set to be returned to the applicant.

Not all submittals will require all of the following items and other submittals may require items not included on this list. Designers/Applicants should contact the Novi Building (248-347-0415) or Fire Prevention Bureau (248-349-2293) with questions.

1. All submittals must have a transmittal with the following information:
 - Project name and address
 - Contractor company name, contact name, address, phone and fax numbers
 - Owner name, contact name, address, phone and fax numbers
 - Architects name, contact name, address, phone and fax numbers
 - A written description or scope of the project
2. For projects that are being designed by an Architect or another Design Professional, the Registered Design Professional in Responsible Charge (i.e., the Architect of the tenant build-out) must review the shop drawings and provide four signed & sealed (original signature & seal required) deferred submittal statements on their letter head that indicates the following:

MBC (106.3.4.2)

“As the Registered Design Professional in Responsible Charge for this project, I have reviewed this deferred submittal as required by the current Michigan Construction Codes and it is my professional opinion that the submitted information has been found to be in general conformance with the design of the building”.
3. In addition to the deferred submittal statements (above), all documents must be either signed and sealed by a Michigan Registered Professional or signed by a NICET Certified Technologist (Level III or IV). If the NICET option is being used, provide a current copy of the Technologist’s certificate.
4. The alarm system shall be connected to an approved UL listed central station, or remote supervising station.
5. Submittals shall include, but not be limited to, the following:
 - a. A floor plan to a workable scale and of sufficient clarity to indicate the location, nature and extent of the work proposed.
 - b. Point of compass.
 - c. The codes and referenced standards that it is designed to including the edition.
 - d. The floor plan shall indicate the use of all rooms.
 - e. Locations of all alarm initiating devices, notification appliances, main fire alarm control panel, power booster panels, and alarm control and trouble signaling equipment.
 - f. A device-to-device wiring shall be shown with the circuits labeled.

- g. Full function remote annunciation panel (or main FACP) located at the front/main entrance.
 - h. A riser diagram showing the power connection, means of communicating to the monitoring station, all initiating devices, and notification appliances circuits.
 - i. Conductor type and sizes. The end-of-line resistor locations shall be shown on the floor plans.
 - j. Battery calculations for the main FACP, dialer, and all power booster panels.
 - k. Voltage drop calculations for all notification appliance circuits.
 - l. Manufacturer data sheets for all equipment being installed.
 - m. Details of ceiling heights and construction type.
 - n. The interface of all fire safety control functions.
 - o. A revised Symbol Legend; indicate the manufacturer, model number and quantity of each device being installed.
 - p. A note on the plan indicating that the exterior horn/strobe device is the weather-proof type.
 - q. A note on indicating that wall-mounted visual alarm notification devices will be mounted with their bottoms between 80 and 96 inches AFF. ICC/ANSI A117.1 (702.3.3.1).
 - r. A note indicating that manual pull stations will be mounted with their levers between 42 and 48 inches AFF. MBC (907.3.2).
 - s. A note indicating that listed protective covers will be provided for the manual pull stations.
 - t. All wire types & sizes.
 - u. A sequence of operations or input/output matrix. Alarm, trouble & supervisory must be differentiated.
6. Duct detectors shall shut down the HVAC unit it is connected to immediately or as required by manufacturer and shall produce a supervisory signal at the fire alarm control panel.
7. A water flow monitoring fire alarm system shall have at the minimum:
- a. Listed FACP at an approved location with a smoke detector above it.
 - b. All water flow switches and tamper switches monitored.
 - c. One manual pull station at an approved location.
 - d. One exterior horn/strobe above the FDC and one interior horn/strobe at an approved location.
8. When required by Section 907 of the MBC, fire alarm notification appliances shall be installed in all public and common areas.
9. All occupied areas shall have a minimum alarm sound pressure level of 15 dBA above the ambient sound level and a minimum of 60 dBA.

General Notes:

- A signed Record of Completion (NFPA 72 Form) must be submitted at the time of inspection.
- This system is subject to a rough electrical inspection approval by a City of Novi Electrical Inspector prior to scheduling an acceptance test.
- Prior to commencing any work, the Contractor must obtain a permit from the City of Novi.

Inspections:

- All fire alarm work is subject to a rough wiring approval by the Electrical Inspector prior to the work being concealed. Contact the Novi Building Department at 248-347-0415 to schedule this inspection,
- All fire alarm system installations and modifications are subject to a full fire alarm acceptance test in accordance with NFPA 72. Contact the Novi Fire Department Fire Prevention Bureau at 248-349-2293 to schedule this inspection.