



**Hillside Fire Department
Fire Prevention Bureau**

523 N. Wolf Road
Hillside, Illinois 60162
708-547-8684

***Fire Alarm Systems
Plan Review Checklist***

Date: _____

Permit Number: _____

Business Name: _____ Address: _____

Fire Alarm System Submittal Requirements:

- A1 A Fire Alarm System application is required to be completed and submitted with your plans.
- A2 A minimum of four sets of plans is required to be submitted.
- A3 A complete set of manufacturers cut sheets on all devices and appliances are required to be submitted.
- A4 A plan review Fee shall be submitted with your plan review.

Fire Alarm Monitoring Requirements: NORCOMM Only Wireless

- B1 The Fire Alarm shall be monitored in accordance with NFPA 72.
- B2 The method of fire alarm monitoring, signal transmission, and alarm monitoring company, shall be provided on the plan review submittal form.
- B3 Digital Alarm Communicators requires a wireless only system. A U.L central station is required, NORCOMM.
- B4 Institutional use group occupancies, as defined in the international building code shall utilize wireless only monitoring.

Fire Alarm Control Panel Requirements:

- C1 A smoke detector is required in the room that has the fire alarm control panel, when ambient conditions prohibit the use of a smoke detector; a heat detector shall be permitted.
- C2 Access to the fire alarm control panel is required 24 hours a day, 365 days a year. A lock box is required to be located by HFD.
- C3 The Fire Alarm System shall be separate from any other non-fire protection type system, i.e. burglar, etc.
- C4 A 4-inch Red Lens, strobe light and white and general alarm is required on the exterior of the building to indicate water flow (above FDC.)
- C5 The Fire Alarm Control Panel room shall be properly labeled, minimum 4" letters, "FACP," on the door to the room.
- C6 The primary power for the Fire Alarm Control Panel shall be on a separate circuit on the electrical breaker panel.
- C7 Battery calculations shall be submitted, 60 24 hours are required.
- C8 The Fire Alarm Control Panel shall be properly grounded.
- C9 The Fire Alarm Control Panel shall be installed in an approved weatherproof enclosure. Cut sheets on the enclosure is required prior to installation.
- C10 The room, closet or enclosure, where the fire alarm control panel is located shall be climately controlled to properly maintain heat. The heater shall be thermostatically controlled.
- C11 The Fire Alarm System shall be properly zoned. A separate zone shall be provided per floor, per the following devices, smoke detectors, sprinkler water flows, tampers, manual alarm boxes, and other approved type of detection or fire suppression systems. A zone list shall be provided and approved, prior to installation.
- C12 A zone map shall be provided, showing a floor plan and device locations. The zone map shall be posted by the Fire Alarm Control Panel and the Annunciator Panel.

Fire Alarm Annunciator Panel Requirements:

- D1 A Fire Alarm Annuciator Panel is required and shall be located in accordance with HFD. The Panel shall be located to be visible from the exterior of the building.
- D2 The zones on the panel shall be permanently marked.
- D3 Fire Alarm Annunciator Panel shall have all of the functions of the Fire Alarm Control Panel.

Audible and Visual Device Requirements:

- E1 Audio/Visuals are required in all common areas of the building. Visual devices shall be installed in washrooms, kitchens/break rooms and conference rooms.
- E2 Audio/Visual alarms shall be heard throughout the buildings. This will be evaluated on the final inspection.
- E3 Visual devices shall be installed in all examination rooms and treatment rooms.

- E4 All required notification devices shall be of the audible and visual type. Mechanical horns or bells and emergency voice/alarm communications systems are prohibited. However, manual live voice override systems will be allowed provided the audio visual devices reactivate automatically upon completion of any live voice message. Audio sound levels shall meet NFPA 72 chapter 4-3.
- E5 Fire Alarm system is fully addressable, a white lens, 4-inch strobe light, used to annunciate an alarm condition, shall be installed on the exterior of each tenant space and multi-family unit located in the building.

Use Group R-4 Assisted Living facilities

- E6 Visuals are required in all dwelling units.

Use Group – Multi-Family Attached

- E7 One Audio/Visual device in each dwelling unit located in the area of the bedrooms.

Manual Devices:

- F1 Pull Stations shall be required at all exits and at the entrance to any stairwell on every story of the building.
- F2 Pull Stations are required within 5' of the door.

Automatic Detection Devices/Sprinkled buildings:

Use group M – Mercantile/S-1, S-2 Storage Buildings/U – Utility Buildings /F-1, F-2 Factory and Industrial Buildings

Use Group A-1, A-2, A-3, A-4 & A-5 Assembly/B - Business

- G1 A smoke detector is required at the top of all stairwells.

Use Group E – Education

- G1 A smoke detector is required at the top of all stairwells.
- G2 A smoke detector is required in all day care sleeping rooms.
- G3 Smoke detectors are required on both sides of the fire doors in corridors, if they have hold open devices installed.

Use Group H – Hazardous

- G4 Smoke detection shall be installed in rooms or areas where highly toxic compressed gases are stored or used.

G5 Smoke detection shall be installed in rooms or areas where class I, II and III Organic Peroxides are stored.

G6 Smoke detection shall be installed in areas storing liquid and solid oxidizers.

Use Group I-2, I-2 Institutional

G7 Smoke detection is required in all corridors.

G8 Smoke detection is required in all waiting areas open to the corridor.

G9 Smoke detection is required in all laundry, trash and storage rooms

G10 Smoke detection is required in all sleeping patient rooms.

G11 Smoke detection is required outside of each sleeping areas.

G1 Smoke detection is required at the top of all stairwells.

Use Group I-3 Institutional

G12 Smoke detection is required throughout resident housing areas including but not limited to, sleeping areas, day rooms, group activity spaces and other common spaces.

Use Group I-4 Institutional

G7 Smoke detection is required in all corridors.

G8 Smoke detection is required in all waiting areas open to the corridor.

G9 Smoke detection is required in all laundry, trash and storage rooms.

G13 Smoke detection is required in all sleeping rooms.

G14 Smoke detection is required outside of each sleeping areas.

G1 Smoke detection is required at the top of all stairwells.

Use Group R-1 Residential hotels/motels

G7 Smoke detection is required in all corridors.

G15 Smoke detection is required in all common areas.

G8 Smoke detection is required in all waiting areas open to the corridor.

G16 Smoke detection is required in all guest rooms in the sleeping areas and in every room in the path of egress from the sleeping area and the door of the guest room or suite.

G1 Smoke detection is required at the top of all stairwells.

Use group R-2 Apartments, Boarding Houses, dormitories – attached multi-family, & two family Dwelling units exceeding 2500 square feet.

G7 Smoke detection is required in all corridors.

G15 Smoke detection is required in all common areas.

- G8 Smoke detection is required in all waiting areas open to the corridor.
- G17 Smoke detection is required in all dwelling units.
Exception: Apartments and attached multi-family
- G1 Smoke detection is required at the top of all stairwells.

Use group R-4 Assisted Living facilities

- G7 Smoke detection is required in all corridors.
- G8 Smoke detection is required in all waiting areas open to the corridor.
- G9 Smoke detection is required in all laundry, trash and storage rooms.
- G18 Smoke detection is required in all Electrical closets.
- G1 Smoke detection is required at the top of all stairwells.

Automatic Detection Devices/Unsprinkled buildings:

- G19 Detection is required throughout the building in all accessible areas.
Exception: spaces above suspended ceilings and closets under 24 square feet, with the least dimension on one side of 3 feet.

Use Group Multi-family Attached

- G20 Heat detectors are required in attics, one on each level, Laundry, Furnace rooms and Garages.
- G21 An Audio/Visual device is required one in each dwelling unit, located in the area of the bedrooms.

Duct Smoke Detectors

- H1 Duct Smoke Detectors shall:
- Shut down the HVAC unit, when activated
 - Have a remote LED and Test Switch Station located on the wall no higher than 6 feet by the unit switch red in color.
 - Have a separate zone on the fire alarm control panel
 - Be installed on all units over 2000 CFM and be located on the return side of the HVAC unit.
 - The location shall be shown on the zone map and posted by the FACP & FAAP
- H2 Duct Smoke Detectors, when activated in a fully sprinklered building, shall send a trouble signal to the fire alarm control panel.

Fire Alarm Inspections & Certification Required

- I1 Final acceptance and performance test

- 12 Rough wire inspection (Not required in all instances)
- 13 A certificate of Completion is required to be provided at the time of inspection

Additional Requirements

Fire Alarm System Plan Review Results

Approved

Not Approved

Completed By: