

EXCELSIOR FIRE DISTRICT

24100 SMITHTOWN ROAD



SHOREWOOD, MN 55331

Plan Review Check List Fire Alarm System

- Alarm system must be installed according to NFPA 72, 2010 Edition, National Fire Alarm and Signaling Code.
- Label the door that accesses the area with alarm panel "Alarm Panel" with min. 2 inch letters
- Smoke detectors properly located
- Pull stations in E and I occupancies must be covered with pull station covers
- All pass words, silence codes, directions, and alarm operations for the alarm system should be posted/mounted for the Fire District
- Annunciator is required at the main entrance
- Annunciator must be addressable and be descriptive
- Zone(s) map posted by the main entrance
- The fire alarm system must be on its own circuit and the circuit breaker must be identified in red "FIRE ALARM CIRCUIT"
- In residential homes it is highly recommends the sprinkler system be connected to a horn and strobe to alert occupants and neighbors when the sprinkler system is activated. Preferably the horn and strobe should be mounted on the exterior of the residence with the most visibility.
- A horn and strobe is required on a commercial buildings
- Horn and strobes installed where required by Fire District
- The water flow alarm in a commercial building and residential homes must be set to sound between 45 and 60 seconds after water flow begins
- All dampers/ duct detectors must be tested with the inspector present

Exterior

- Address must be visible and legible-front and back doors. Contact the Fire district for lettering size.
- Have proper fire lanes & fire department access areas marked. Verify locations and other details with the Fire District.
- Post "No Parking Fire Lane" signs. Verify locations with the Fire District
- All Fire District apparatus shall have clearance under canopies and overhangs. Contact Fire District for measurements.
- All Fire Department connections must have fire district approved caps

- Install horn & strobes in proper locations. Contact the Fire District for Information
- Install impact protection for gas meters and /piping
- Install a Knox Box in a Fire District approved location. Forms are available through the Fire District.
- Provide all keys to locked doors, pad locks, elevators rooms, and panels.
 All keys must be permanently labeled and/or tagged and provided to the Fire District
- Order enough Knox box decals for every exterior door
- New construction and additions must provide a plan with the locations of all exposures 100 feet from the building

Exits/Egress

- Hallways and area an egress must be the proper length and width
- Hallway and corridors must maintain the proper width at all times
- Dead ends must be in compliance and properly marked
- Exits and emergency lighting must be properly located
- Occupancy load must be posted in A and E occupancies. Contact the Fire District for calculation and sign location
- Adequate number of exits must be in all areas
- Exit doors must be openable from the inside and have proper hardware installed
- There must not be any type of latch on exit doors
- All corridors must be hour rated
- Evacuations diagrams showing two ways out must be posted in A and E occupancies

Electrical Equipment

- Hour rated doors must be installed
- Mark a 30 inch line around all the electrical panels
- Proper wiring and connections must be used during installation and maintained at all times
- Junction boxes must be covered
- All switch, outlet, and cable plates must be in place
- All electrical devices must be in place

Fire Sprinkler Systems

Commercial

- Fire sprinkler systems must be installed according to NFPA 13, 2010 Edition, Standard for the Installation of Sprinkler Systems.
- Permanently label the interior and exterior door(s) on the room with the "Sprinkler Riser" or "Riser Room"
- Exterior entrance to Fire Sprinkler Riser Room preferred
- The fire sprinkler system must be tested before occupancy and tested and tagged annually thereafter
- Fire sprinkler coverage must be adequate
- Fire sprinkler must be below and above overhead doors
- Fire sprinkler control valves must be locked out or have tamper protection
- Consider fire sprinkler head locations in storage rooms. Design to allow the storage to be kept 18 inches away from the sprinkler heads.
- Spare fire sprinkler heads for each type of fire sprinkler head must be present in Fire Sprinkler Head Box
- Fire sprinkler system installed to NFPA 13 requirements and NFPA 14.1.3
- Fire sprinkler riser must be in a heated locked room
- Mark 3 foot line around the fire sprinkler riser
- Vertical openings and shafts must be protected
- Eaves sprinkled if required for occupancy
- Hazardous (incidental use) areas must be separated/sprinkled
- Stand pipes must be properly located if required
- Fire Hatch(s) in proper location if required
- FDC location in proper location. Consult the Fire District for location
- FDC labeled permanently and posted in proper location if required
- Fire Department Connections (FDC) 2 inch pipe or less a single FDC is allowed.
- Fire Department Connection 3 inch or more requires a Siamese FDC
- Install metal caps or covers on Fire Department Connections. No plastic covers are allowed.
- No locking Fire Department Connections are allowed unless owner provides FDC key and a Knox box at the FDC.
- FDC must have 3 feet of clearance from obstructions
- Hood system installed properly and tested. Shut off must be present
- Class K fire extinguisher must be mounted in commercial kitchens having a hood system
- Fire Extinguishers must be readily accessible and mounted (travel distance 75') or have a fire sprinkles system
- The staff must receive fire extinguisher training annually

• Fire rated construction required

Residential

- Fire sprinkler system must be installed to NFPA 13D, 2002 Edition, Installation of Sprinkler Systems One-and Two Family Dwellings and Manufactured Homes or NFPA 13R, 2010 Edition Standards for the installations of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height requirements
- The fire sprinkler system must be tested before occupancy
- Sprinkler coverage must be adequate
- Consider fire sprinkler head locations in storage rooms and closets.
 - Design to allow the storage to be kept 18 inches away from the fire sprinkler heads
- Spare fire sprinkler heads for each type of fire sprinkler head must be present in Fire Sprinkler Head Box
- Solenoid allowed and required on a residential well system unless they are a multipurpose system
- No shut off on residential riser unless they are a multipurpose system
- Residential fire sprinkler systems shut off must be installed before the meter
- Fire calking must be used in fire rated walls/ceilings around all holes, voids etc...
- The Excelsior Fire District recommends the installation of an interior alarm that will sound when a fire sprinkler head is activated.
- On a residential sprinkler system it is highly recommended that the sprinkler system be connected to a horn and strobe to alert occupants and neighbors when the sprinkler system is activated. Preferably the horn and strobe should be mounted on the exterior of the residence with the most visibility. The horn and strobe must activate between 45-60 seconds after water flows in commercial and residential buildings.

Interior

- Fire calking must be used in fire rated walls/ceilings around all holes, voids etc...
- Hour rated doors must be installed on mechanical, boiler, elevator, electrical rooms
- All roof accesses must be permanently labeled
- Interior finishes must be acceptable

- Shut off valves present on gas appliances and marked properly when required
- Combustion air supply/venting present
- Waste trap in mechanical room properly installed

Hazardous Materials

- Rooms/areas properly labeled/identified
- Hazardous materials identified permanently from an exterior door
- Acceptable quantities for occupancy
- Separation of incompatible materials
- Hazardous materials properly stored and leak protection where required
- MSDS sheets accessible, location identifies and copies provide to the Fire District

Storage

- Mechanical, boiler, elevator, and electrical room doors permanently labeled and "No Storage" sign posted
- Mark a 3 foot line around the fire sprinkler riser
- Mark an 18 inch line below sprinkler heads in storage spaces
- Unprotected attics or below stairs post a permanent "no storage" signs
- Flammable/Combustible Liquids quantities over 10 gallons must be stored in a cabinet recognized by a certification agency

General

- If available please provide an electronic floor/building plans to the Excelsior Fire District
- Senior or special needs care facilities, a floor plan must be mounted/posted for near the main entrance for the Fire District
- Senior or special needs care facilities, an updated list of occupants with special needs must be accessible to the Fire District for emergency purposes
- Any special information must be permanently posted

Contact the Excelsior Fire District for any questions or clarifications Fire Inspector Kellie Murphy-Ringate, 952-960-1692 or kmurphyringate@excelsiorfire.org

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