

Parcel ID # \_\_\_\_\_

Application Date: \_\_\_\_\_



**FIRE PLAN REVIEW  
CHECKLIST**

CONTRACTOR                      MAILING ADDRESS                      EMAIL                      PHONE #                      FAX#

JOB ADDRESS                      LOT #                      SUBDIVISION

OWNER                      MAILING ADDRESS                      ZIP                      PHONE #

ARCHITECT / ENGINEER'S NAME                      MAILING ADDRESS

**CHECKLIST TYPE:** (Check one below)

NEW: \_\_\_\_\_ ADDITION ALTERATION REPAIR/REPLACE REMOVE

**USE TYPE:**     SINGLE     MULTI FAMILY     DUPLEX     COMMERCIAL     OTHER: \_\_\_\_\_

**CONSTRUCTION TYPE:**     STEEL     CBS     FRAME

**BUILDING NEW CONSTRUCTION PLAN REVIEW**

**FIRE ALARM SYSTEMS PLAN REVIEW**

**FIRE SITE PLAN REVIEW**

**FIRE SUPPRESSION PLAN REVIEW**

**FIRE UNDERGROUND MAIN PLAN REVIEW**

**REVISION**

**ADDITIONAL/ALTERATION PLAN REVIEW**

**APPLICABLE BASE CODES**

- Florida Fire Prevention Code, 8th Edition
- NFPA 1, Fire Code, Florida 2021 Edition
- NFPA 101, Life Safety Code, Florida 2021 Edition
- NFPA 13, 2019 edition
- NFPA 72, 2019 edition
- Town of Indian River Shores Fire Prevention Code, Chapter 96
- Other standards adopted under F.A.C. 69A-3.012

## BUILDING NEW CONSTRUCTION PLAN REVIEW

### GENERAL REVIEW

- Drawings signed and sealed.
- Fire Department Site Access – See Fire Site Plan Review Checklist.
- Underground Main Design Documents – See Fire UG Main Plan Review Checklist.
- Fire Sprinkler Design Documents – See Suppression Plan Review Checklist for BLD permits.
- Fire Alarm Design Documents – See Fire Alarm Review Checklist.
- Fire Extinguishers.
- Special Hazards Suppression System.
- Lock Box at Main Entrance.

### NFPA 101 - LIFE SAFETY CODE

- Occupant Load; Signage.
- Number of Exits: Remoteness: Arrangement: Capacity; Rating.
- Changes in Elevation – Ramps.
- Exit Doors – Delay egress; Access Control; Hold Open Devices.
- Doors, Rating, Panic Hardware, Width.
- Travel Distance.
- Common Path of Travel.
- Dead End Corridors.
- Stair Details-riser, run.
- Handrails.
- Guards.
- Stair Rating and Fire Doors.
- Stair Discharge to Public Way.
- Exterior Stairs – Separation, Protection.
- Aisles.
- Corridor Rating and Fire Doors.
- Corridor Width: Doors Opening Into.
- Emergency Lighting.
- Exit Signs.
- Vertical Openings: Atriums, Escalators.
- Protection from Hazardous Areas.
- Smoke Detectors Required?
- Fire Alarm System Required?
- Sprinkler System Required?
- High Rise Building.
- Stair Pressurization.

## **FIRE SITE PLAN REVIEW**

### FIRE DEPARTMENT ACCESS

- Drawings signed and sealed.
- FD access 20' clear width, 13'-6" height.
- Coordination with hydrants and FDC.
- Turnarounds for dead ends 150' or more in length.
- Cul-de-sac min. inside diameter 36' and the min. outside diameter 60'.
- FD access min. right hand turn radius 25'.
- If the building set back more than 150' from the paved FD access, provide a fire lane.
- If the building over 30' in height and setback more than 50' from the paved FD access, provide a fire lane.
- Gates provide sufficient access width (20') and height (13'-6").
- Automatic fence installed on 24-hour occupied structures; optical sensors.
- Fence obstruction to hydrants, hose lay distance, FDC, egress path.

## **FIRE UNDERGROUND MAIN PLAN REVIEW**

### NFPA 24 - UNDERGROUND MAINS

- Engineer design documents are signed and sealed.
- Shop drawings have only minor changes from engineered documents.
- Hydrants – distance to FDC, curb face, structures.
- Hydrants – clearance 7'6" front/sides and 4'; rear.
- Color coding statement for hydrants.
- Point of connection clearly marked and shown as private from this point onward.
- Plans must state UG main installed and tested per NFPA 24, 200 psi.
- Dead-end mains pipe size and distance.
- Pipe not installed under buildings.
- Cover depth minimum of 30".
- Pipe size, diameter, and type.
- DR 14 for fire service only, DR 18 for combination use only if provided
- documents state that pipe will withstand testing for 200 psi.
- Details of joints, restraint, thrust blocks, and hydrants.
- Corrosion protection on buried metallic parts.
- Electronic supervision of backflow control valves.
- Sectional valves every 6 hydrants.
- Water supply analysis for large, complex systems.

## ADDITIONAL/ALTERATION PLAN REVIEW

### GENERAL REVIEW

- Drawings signed and sealed.
- Key Plan indicating scope of work and existing systems.
- Substantial Improvement; Change of Use.
- Fire Department Site Access – See Fire Site Plan Review Checklist.
- Underground Main Design Documents – See Fire UG Main Plan Review Checklist.
- Fire Sprinkler Design Documents – See Suppression Plan Review Checklist for BLD permits.
- Fire Alarm Design Documents – See Fire Alarm Review Checklist.
- Fire Extinguishers.
- Existing Systems Shown.
- Special Hazards Suppression System.
- Lock Box at Main Entrance.

### NFPA 101 - LIFE SAFETY CODE

- Occupant Load; Signage.
- Changes in Elevation – Ramps.
- Number of Exits: Remoteness: Arrangement; Capacity; Rating.
- Exit Doors – Delay egress; Access Control; Hold Open Devices.
- Doors, Rating, Panic Hardware, Width.
- Travel Distance.
- Common Path of Travel.
- Dead End Corridors.
- Stair Details-rise and run.
- Handrails.
- Guards.
- Stair Rating and Fire Doors.
- Stair Discharge to Public Way.
- Exterior Stairs – Separation, protection.
- Aisles.
- Corridor Rating and Fire Doors.
- Corridor width: Doors Opening Into.
- Emergency Lighting.
- Exit Signs.
- Vertical Openings: Atriums, Escalators.
- Protection from Hazardous Areas.
- Smoke Detectors Required?
- Fire Alarm System Required?
- Sprinkler System Required?
- High-Rise Building.
- Stair Pressurization.

## **FIRE ALARM SYSTEMS PLAN REVIEW**

### FIRE ALARM PLAN

- Check for proper License and Insurance.
- Shop drawings sealed by engineer.
- Reference to NFPA 72 and 70.
- Location of FACP or annunciator panel clearly accessible/visible from entry.
- Smoke detector located at panel.
- Point to Point wiring, EOL device shown.
- Proper spacing/coverage/location of spot detectors (heat & smoke).
- Proper spacing/coverage/location of beam detectors.
- Proper location of duct detectors.
- Proper spacing and location of pull stations.
- Proper location of detectors associated with door holders.
- Proper location of detectors associated with stair pressurization.
- Proper spacing/coverage/location of notification appliances.
- Add condition that audible notification be checked during inspection.
- Sprinkler flow switches monitored.
- Sprinkler tamper switches monitored.
- Fire pump monitored.
- Battery calculations.
- Device legend.
- Fla. Accessibility notification requirements met.
- Emergency forces notification.
- Elevator control room, shaft, and recall.
- Special systems, VESDA, etc.
- Apartment smoke detectors, every floor-bedrooms-sleeping area (hallway).
- Show smoke evacuation sequence of operation.
- Fire Department lock box at main entrance.

# FIRE SUPPRESSION PLAN REVIEW

## GENERAL

- Are the shop drawings on the contractor's title block?
- Do the drawings meet the engineer design documents?
- Do the drawings show dimensions and diameter of each pipe?
- Do the drawings show risers locations and dimensions?
- If the new structure is greater than 5000 sq ft in area, do the drawings contain an automatic fire sprinkler system (City of Orlando Fire Code)?
- If there are over 49 heads in scope of work, are the sprinkler design drawings signed and sealed by Florida registered engineer?
- Is the applicable code (NFPA 13, 13R, 13D, 14, 20) and edition correct and shown on the drawing?
- Site drawing indicating point of service from City main included?
- Have details of hangers, valves, sprinkler arrangement been provided?

## SYSTEM TYPE

- Wet Pipe, Dry Pipe, Deluge or Pre-action?
- Where the pipe cannot be maintained about 40oF, have adequate freeze protection provisions been included (NFPA 13)?
- Is the type of system appropriate for the specified application (NFPA 13)?
- Are dry-type valve rooms heated and lighted (NFPA 13)?
- Does the system have an electronically monitored alarm valve or water flow device (NFPA 13)?

## HAZARD CLASSIFICATION

- Light, Ordinary I, Ordinary II, Extra or Storage?
- Does the hazard classification correspond to the potential fuel load (NFPA 13)?
- Is the design density consistent with NFPA 13 classifications (NFPA 13)?
- Are the sprinkler zones less than the maximum permitted (NFPA 13)?

## HYDRAULIC CALCULATIONS

- Are hydraulic calculations included?
- Is the date of flow test within 1 year?
- Is hydraulic nodal information shown on drawings?
- Is the calculated zone the most hydraulically demanding?
- Does the zone contain the correct number of heads (NFPA 13)?
- Do the Calculations use the correct C Factor (NFPA 13)?
- Does the supply curve exceed the system demand?

## SPRINKLERS

- Are quick response (QR) sprinklers used on light hazard occupancy (NFPA 13)?
- If applicable, does the dry system have uprights or return bends with pendants (NFPA 13)?
- Is the distance between sprinklers less than or equal to 15 ft (NFPA 13)?
- Is the area of coverage per sprinkler less than the maximum permitted (NFPA13)?
- Are the sprinklers less than 7'-6" from a wall unless by small room exception allowing up to 9' (NFPA 13)?
- Do obstructions have additional heads for coverage?
- Do the soffits that require which obstruct discharge have adequate coverage?
- Have provisions been made to drain all parts of the system (NFPA 13)?
- If there are elevator shafts or chutes, are they sprinkler protected (NFPA 13)?
- Are all concealed spaced sprinkler protected unless excluded by NFPA 13?
- If there are vaults, are they protected in accordance with NFPA 232?
- If there are commercial hoods, are they protected in accordance with NFPA 96?

## STANDPIPES/MAINS

- If the building exceeds 2 stories and more than 50' in height, or exceeds 30' to the highest occupied floor, is a Class III system installed (City of Orlando Fire Code)?
- Does the standpipe have 2-1/2" hose valves with 1-1/2" reducers (NFPA 14)?
- Does each Class III standpipe systems contain at least two FDC's on opposite sides of the building (City of Orlando Fire Code)?
- Is the FDC located within 100' of the nearest hydrant (NFPA 14)?
- Does each FDC have a check valve inside the building (NFPA 13)?
- If a standpipe is required, do the fire hose valves provide coverage within 100' of hose and 30' of spray (NFPA 14)?
- Are the fire hose valves located at the intermediate landings of the stairs (NFPA 14)?
- If a combination standpipe is used in a high-rise, does each floor have separate control valve and flow switch (NFPA 13)?
- Is the dedicated standpipe riser at least 4" and combination risers at least 6" in diameter (NFPA 14)?
- Does the most remote riser have two a 2-1/2" outlet on the roof (NFPA 14)?
- Do stairs with access to the roof have an outlet at the highest landing, and stairs without roof access have roof outlets (NFPA 14)?
- Do the calculations indicate at least 100 psi at the roof manifold of the most remote riser (NFPA 14)?
- Does the system have pressure-reducing valves for fire hose connections if the pressure exceeds 175 psi (NFPA 14)?
- Does the supply curve exceed the demand when flowing 1000 gpm (NFPA 14)?

## FIRE PUMPS

- Do the drawings indicate installation in compliance with NFPA 20?
- Does the fire pump room contain adequate drainage (NFPA 20)?
- Does the fire pump room have adequate emergency lighting (NFPA 20)?
- If electric driven, does the fire pump have a reliable power source (City of Orlando Fire Code)?
- If diesel driven, does the fire pump have sufficient fuel, battery, and exhaust capacity?
- Does the drawing show a fire pump bypass (NFPA 20)?
- Is the fire pump room separated by 2-hour rated construction (NFPA 20)?

## EQUIPMENT SUBMITTALS

- Are the products listed or approved for the application (NFPA 13)?
- Do the sprinklers cut sheets correspond with the hydraulic calculations and drawings and do they provide the adequate coverage?
- Are the correct temperatures and orientation specified for each sprinkler?
- Are all control valves and flow indicating devices electronically monitored in accordance with NFPA 72 (City of Orlando Fire Code)?