



Fire Suppression Plan Review

General

A. Are the shop drawings on the contractor's title block?

Yes No

B. Do the drawings meet the engineer design documents?

Yes No

C. Is the applicable code (NFPA 13, 13R, 13D, 14, 20) and edition correct and shown on the drawing?

Yes No

D. Site drawing indicating point of service from City main included?

Yes No

E. Do the drawings show dimensions and diameter of each pipe?

Yes No

F. Do the drawings show risers locations and dimensions?

Yes No

G. Have details of hangers, valves, sprinkler arrangement been provided?

Yes No

System Type

Wet Pipe Dry Pipe Deluge Pre-action

A. Where the pipe cannot be maintained above 40°F, have adequate freeze protection provisions been included (NFPA 13)?

Yes No

B. Is the type of system appropriate for the specified application (NFPA 13)?

Yes No

C. Are dry-type valve rooms heated and lighted (NFPA 13)?

Yes No

D. Does the system have an electronically monitored alarm valve or water flow device (NFPA 13)?

Yes No

Hazard Classification

Light Ordinary I Ordinary II Extra High-Pile Storage

A. Does the hazard classification correspond to the potential fuel load (NFPA 13)?

Yes No

B. Is the design density consistent with NFPA 13 classifications (NFPA 13)?

Yes No

C. Are the sprinkler zones less than the maximum permitted (NFPA 13)?

Yes No

Hydraulic Calculations

A. Are hydraulic calculations included?

Yes No

B. Is the date of flow test within 1 year?

Yes No

C. Is hydraulic nodal information shown on drawings?

Yes No

D. Is the calculated zone the most hydraulically demanding (NFPA 13)?

Yes No

E. Does the zone contain the correct number of heads (NFPA 13)?

Yes No

F. Do the calculations use the correct C Factor (NFPA 13)?

Yes No

G. Does the supply curve exceed the system demand?

Yes No

Sprinklers

A. Are quick response (QR) sprinklers used on light hazard occupancy (NFPA 13)?

Yes No

B. If applicable, does the dry system have uprights or return bends with pendants (NFPA 13)?

Yes No

C. Is the distance between sprinklers less than or equal to 15 ft (NFPA 13)?

Yes No

D. Is the area of coverage per sprinkler less than the maximum permitted (NFPA 13)?

Yes No

E. Are the sprinklers less than 7'-6" from a wall unless by small room exception allowing up to 9' (NFPA 13)?

Yes No

E. Do obstructions such as columns and beams have additional heads for coverage?

Yes No

G. Do the soffits that require which obstruct discharge have adequate coverage?

Yes No

H. Have provisions been made to drain all parts of the system (NFPA 13)?

Yes No

I. If there are elevator shafts or chutes, are they sprinkler protected (NFPA 13)?

Yes No

J. Are all concealed spaced sprinkler protected unless excluded by NFPA 13?

Yes No

K. If there are vaults, are they protected in accordance with NFPA 323?

Yes No

L. If there are commercial hoods, are they protected in accordance with NFPA 96?

Yes No

Standpipes/Mains

A. If the building exceeds 2 stories and more than 50' in height, or exceeds 30' to the highest occupiable floor, is a Class III system installed ?

Yes No

B. Does the standpipe have 2-1/2" hose valves with 1-1/2" reducers (NFPA 14)?

Yes No

C. Does each Class III standpipe system contains at least two FDC's on opposite sides of the building?

Yes No

D. Is the FDC located within 100' of the nearest hydrant (NFPA 14)?

Yes No

E. Does each FDC have a check valve inside the building (NFPA 13)?

Yes No

F. If a standpipe is required, do the fire hose valves provide coverage within 100' of hose and 30' of spray (NFPA 14)?

Yes No

G. Are the fire hose valves located at the intermediate landings of the stairs (NFPA 14)?

Yes No

H. If a combination standpipe is used in a high-rise, does each floor have separate control valve and flow switch (NFPA 13)?

Yes No

I. Is the dedicated standpipe riser at least 4" and combination risers at least 6" in diameter (NFPA 14)?

Yes No

J. Does the most remote riser have a 2- 1/2" outlet on the roof (NFPA 14)?

Yes No

K. Do stairs with access to the roof have an outlet at the highest landing, and stairs without roof access have roof outlets (NFPA 14)?

Yes No

L. Do the calculations indicate at least 100 psi at the roof manifold of the most remote riser (NFPA 14)?

Yes No

M. Does the system have pressure-reducing valves for fire hose connections if the pressure exceeds 175 psi (NFPA 14)?

Yes No

N. Does the supply curve exceed the demand when flowing 1000 gpm (NFPA 14)?

Yes No

Fire Pumps

A. Do the drawings indicate installation in compliance with NFPA 20?

Yes No

B. If electric driven, does the fire pump have a reliable power source

Yes No

C. Does the drawing show a fire pump bypass (NFPA 20)?

Yes No

D. Is the fire pump room separated by 2-hour rated construction (NFPA 20)?

Yes No

E. Does the fire pump suction have an eccentric reducer (NFPA 20)?

Yes No

F. Are elbows parallel to horizontal fire pumps at least a distance of 10 times the intake diameter from the pump suction (NFPA 20)?

Yes No

Equipment Submittals

A. Are the products listed or approved for the application (NFPA 13)?

Yes No

B. Do the sprinklers cut sheets correspond with the hydraulic calculations and drawings and do they provide the adequate coverage?

Yes No

C. Are the correct temperatures and orientation specified for each sprinkler?

Yes No

D. Are all control valves and flow indicating devices electronically monitored in accordance with NFPA 72?

Yes No

This document is intended to be a guide and may not contain all requirements needed to obtain permits and approval from the City of DeLand