

FIRE SPRINKLER CHECKLIST - NFPA 13, 2016

<p>Fire Marshal's Office</p>  <p>Plan Review</p>	<p style="background-color: yellow; text-align: center;">CONTRACTOR MUST COMPLETE THIS FORM AND THE CHECKLIST</p> <p>NEW: <input type="checkbox"/> REVISION: <input type="checkbox"/> TENANT FINISH: <input type="checkbox"/> RETROFIT: <input type="checkbox"/></p> <p>Project Name: _____</p> <p>Address: _____</p> <p>City: _____ Zip: _____ Bldg./Suite: _____</p> <p>Phone: (____) ____ - _____ Permit #: _____</p> <p>GENERAL BUILDING INFORMATION</p> <p>Occupancy Classification: _____ Square Feet: _____</p> <p>Contractor: _____ License# _____ Expiration Date: _____</p> <p>Phone: (____) ____ - _____ Email: _____</p> <p>Type: Wet: <input type="checkbox"/> Dry: <input type="checkbox"/> Pre-action: <input type="checkbox"/> Combination: <input type="checkbox"/></p> <p>CURRENT VENDOR: YES: <input type="checkbox"/> NO: <input type="checkbox"/> Total heads: _____</p>
Provide the Sheet Number or enter NA = Not applicable/Existing	
PROVIDE A SYMBOL WITH THE CORRESPONDING CHECKLIST ITEM # ON THE DRAWING	SHEET #
1) Upload the checklist, drawings, submittal data, calculations, and signed "Owners Certificate" in LAMA into one combined file. [4.3]	
2) Declaration of Applicable Current Codes: IFC/IBC 2018, NFPA 13 (2016)	
3) Certificate of Competency or PE seal including original signature	
4) Use a common scale (1/8" = 1' is preferred) and provide a graphic scale	
5) Location key map and north arrow in order to define the location of work within a building	
6) Label all rooms and specify hazard class per area [5.1]	
7) Provide a legend for system components and sprinkler heads: Quantity (total page & total project), SIN #, Make, Type, Sensitivity, K-Factor, Diameter, Temp Rating, and Max spacing [6.2.2]	
8) Provide a copy of the FIRE LINE APPROVED utility plan stamped by CFR for new sprinkler systems; Show location of FDC; PIV and related supply as required on site plans [6.7]	
9) Provide an accurate riser detail	
10) Details of system i.e. density, hazard classification, commodities, etc.	
11) System protection area of limitations [8.2]	
SPRINKLER COVERAGE (8.5) / SYSTEM / RISERS / FDC / PIV (8.1.1)	
12) Basic Requirements: Verify spacing, location and position of sprinklers [8.1]	
13) Provide dry sprinklers heads for coolers/freezers [8.3.2.5 (10)]	
14) Exempt locations [2018 IFC Section 903.3.1.1.1]	
15) Provide total square footage for area protected by fire sprinkler system [8.2]	
16) Show ceiling heights and branch line elevations with deflector positions. [8.5.4; 8.5.6]	
17) Identify small room rule (S.R.R.) locations and dimensions for light hazard areas only [8.6.3.2.4]	
18) Show PRV locations and settings (i.e. PRV ≤ 165 psi). [8.16.1.2]	
19) Show main drain diameter and discharge location [8.16.2.4.2]	
20) Show method of freeze protection and include details [8.16.4.1]	
21) Identify the FDC piping, pipe size, check valve location, and ball drip. [6.8 & 8.17.2]	
22) Provide inspectors test, auxiliary drains and remote drains [8.16.2.1]	
23) Provide a method for flushing at systems demand when a backflow device is required [8.17.4.5.1]	
24) Provide hanger detail for each hanger used and show spacing per table [9.2.2.1]	

25) Provide details and note to secure the end of branch lines when static pressure is >100 psi [9.2.3.4.4]	
26) Cloud ceiling must comply with [8.15.24]	
27) A water flow alarm shall be provided on every sprinkler system having more than 20 sprinklers [8.17.1.1]	
28) Control valves shall be of the indicating type. Such valves shall be sealed, locked, and electronically supervised in the open position [8.17.1.4]	
29) Double Check Detector Assemblies shall be above ground in a hot box [CPWS Requirement]	
OBSTRUCTIONS, CONCEALED SPACES, AND SPECIAL SITUATIONS	
30) Identify ceiling pockets, stairways (void spaces under), elevators/hoist way, exterior projections, electrical/mechanical/janitorial rooms, overhead doors, storage/warehouse rooms [8.15.1-11]	
31) Identify deflector to deck and ceiling construction type, insulated or non-insulated and provide slopes of ceilings [8.5.4; 8.5.4.1.3; 8.6.4]	
32) Identify the clearance between the deflector and the top of the storage/contents of the room. [8.5.6]	
33) Identify obstructions to sprinkler discharge pattern development. [8.5.5.2 & 8.7.5]	
34) Skylights shall comply with [8.5.7] can be omitted in skylights not exceeding 32 ft ² in area	
35) Identify obstructions > 4' on plans including ductwork, open grate floors, show coverage as required [8.5.5.3.1]	
36) Identify temperature restrictive areas, hanging heaters or other heat producing devices; provide a general note [8.3.2.1]	
37) Identify all canopies, loading docks or similar areas; provide a general note [8.15.7.1]	
CONSTRUCTION AND MATERIALS	
38) Breezeway Crossings: Require a P.E. / F.P.E. stamp, job specific, worse case crossing calculations per permit. Include UL number for penetration details. Multiple calculations may be required.	
39) Show all pipe materials, schedules, pipe sizes, cut lengths, and routing to include changes in elevations [23.1.3]	
40) Provide documentation to support that all materials, system components and hardware are listed for fire service or intended use [23.1.3; 6.1; Table A.6.1.1]	
41) Provide a listed detail for penetrations & identify any fire walls, fire barriers or partitions [23.1.3]	
42) Provide elevation drawings showing ceiling/floor slope and construction and incorporate sprinkler system: multiple elevation drawings maybe required [8.5 and 23.1.3]	
43) Provide a detail showing exposed dry barrel length (min. 2" from face of fitting to insulation) [Table 8.4.9.1 (a)]	
DRY/PREACTION SYSTEM	
44) Provide capacity in gallons for dry pipe systems [7.2]	
45) Identify the time requirement for water delivery of dry system [7.2.3.6]	
46) Identify the slope and direction of slope for sprinkler piping [8.16.2]	
47) Show the location of remote drains where required [8.16.2.5.3]	
48) Show type and location of alarms and valves for pre-action, dry or deluge pipe valve [23.1.3]	
HYDRAULIC CALCULATIONS - REQUIRED FOR NEW or MODIFICATION OF 20 OR MORE SPRINKLER HEADS	
49) All remote areas are clearly defined & call out the design data for the remote area	
50) Water demand requirements and design areas are clearly marked for the applicable areas (occupancy hazard/special design) [11.1.4]	
51) Remote areas with 30% increase: Dry pressure & ceiling slope greater than 2 in 12 [11.2]	

52) Provide a map locating flow/static hydrants, elevation, date, and witness of the flow test within 12 months of submittal. Flow test 2018 IFC APPENDIX B standards	
53) Provide the backflow model and meter [23.1.3]	
54) Provide static pressure, residual pressure, and flow of the water supply [23.1.3]	
55) Provide elevations of the hydrant, the base of the riser, sprinklers, and junction points 23.1.3]	
56) Hydraulic reference points must be shown; include the test hydrant, meter, and backflow [23.1.3]	
57) Provide details of the hydraulic placard that will be posted on the riser and include all hazards [25.5.2]	

- The above is not an all-inclusive list; all applicable codes must be met.
- All non-applicable items must be documented on the plans.
- All components are required to be listed for the intended use.
- *Information for storage areas to include: Type of storage, class type (I-IV and group A plastics), max storage height, ceiling height, method of packaging, shelving/piled methods, encapsulated or non-encapsulated, and fire sprinkler design requirements or current hydraulic placarding.*

Flow Test Date: _____ 24 hr. Test Date: _____

Static: _____ psi Residual: _____ psi Pitot: _____ Flow: _____ GPM

Design Density/Area: _____ GPM/ _____ ft²

Comments:

Plan Reviewer: _____

Title: _____

Date: _____

Revision: 03/21/22