



# Miami-Dade Fire Rescue Fire Sprinkler Pre-Submittal Checklist



Revised January 30<sup>th</sup>, 2015 Process #

Project Name:

1	<u>All submitted shop drawings for review shall be accompanied by the Miami-Dade Fire Rescue approved life safety shop drawings, set of architectural and structural. The sprinkler shop drawing shall be reviewed and documented approved by the engineer of record per FAC 61q15-32-001</u>	YES	NO	N/A	LOCATION/ COMMENTS
2	When revamping existing sprinkler systems provide a copy of the previously MDRF approved shop drawing (micro film) other wise it will be an automatic disapproval.				
3	For general information "Review and approval by the authority having jurisdiction shall not relieve the applicant of the responsibility of compliance with the current Florida Fire Prevention code. See the Florida Fire Prevention Code 5 <sup>th</sup> Edition, Section 1-14.4				
4	Submit two sets of plans completely assembled and correlated. The title block shall indicate the project's name and address. The name, license number, and address of the fire protection contractor shall be provided as well. All sheets shall be secured and shall be numbered consecutively. The shop drawings shall comply with the minimum requirements of NFPA 13, 2010 Edition, Section 22.1.3 or it will be an automatic disapproval.				
5	Rework plans submitted for review shall be provided with previous disapproved plans, comment sheets and accompanied with the responses to our comments in letterform or no review will be attempted. Rework drawings without the original approved shop drawings will be an automatic disapproval.				
6	In the general notes, a detailed description of the scope of work and a detailed description of how the design criteria was determined shall be provided or no review will be attempted.				
7	All shop drawings shall be submitted from licensed fire protection contractors only; we will not review conceptual drawings from architects or engineers. Drawings shall illustrate a detailed fire protection system. The pipe and sprinklers shall be located in relation to the walls, columns and obstructions or no review will be attempted. The elevation of the sidewall sprinklers shall be clearly indicated on the shop drawing, an elevation range is not acceptable, and plans are reviewed for obstructions.				
8	In the general notes, indicate if the occupancy was changed; if the occupancy was changed, identify the areas.				
9	The site plan shall provide the following information: 1-location of the FDC, it shall not be closer than 40 ft. from the building or 150 Ft from a hydrant as required by Miami- Dade Fire Marshall. 2- Location of the P.I.V and backflow preventer. The location shall be indicated on the drawing with dimensions; it shall not be closer than 40 Ft from the building and the drawing shall clearly indicate the invert elevation of the underground pipe.				
10	Each hydraulic calculation report shall be accompanied by a Miami-Dade Fire Rescue hydrant flow test dated no more than 12 months from the date the project is submitted for review. The hydrant flow test shall be for the exact address or it will not be accepted. The hydraulic calculation report shall comply with NFPA 13, 2010 Edition, Sections 22.3 and 22.4.				
11	Fire protection systems with 50 sprinklers or more shall be signed and sealed by a FL, P.E. The P.E stamp or seal shall be located next to the title block.				
12	Provide a symbol legend and complete sprinkler schedule including the manufacturer ID (sin) number and amount of each sprinkler used and <u>total number used in the project.</u>				
13	Check the current Florida Fire Prevention Code for the current NFPA standards used for review.				
14	All Contractors' shop drawings shall comply with the chapter named "Plans and Calculations" of NFPA 13 (Current Edition)				
15	All shop drawings shall indicate ceiling heights, soffit elevations, light locations, structural member sizes, structural member elevations and locations of any duct that will interfere with the sprinkler spray. Drawings without this information will be automatically disapproved.				
16	Storage or mercantile projects shall be submitted with an owners' certificate as required by NFPA 13 and original Engineer of Record approved documentation as required by Florida Administrative Code 61G15-32.004.				
17	Sprinklers shall be located in accordance with the NFPA 13 standard or the manufacturer requirements. Attention shall be given to the obstruction rules required by the NFPA standard or the manufacturer specifications.				
18	Check the area of coverage for the sprinkler type used on the project, check the sprinkler location especially next to walls, and review the submitted manufacture's literature. Failure to provide manufacturer literature will be an automatic disapproval. NFPA 13-2010; 8.5.2				
19	All sprinkler systems shall be provided with flushing connections. Branch lines in grid system shall be provided with flushing connections between the cross mains, preferably close to the secondary cross main.				
20	When relocating sprinklers from existing outlets less than one (1) inch in diameter, hydraulic calculations are required per NFPA 13-2010; 8.15.19.4.3.				
21	When relocating sprinklers from hydraulically calculated systems and the system is supplied by city water only, hydraulic calculations shall be provided as per NFPA 13-2010; 8.15.19.5.				
22	If flex heads are proposed, hydraulic calculations are required. The contractor shall indicate on the drawing the length of the flex connection and its equivalent length.				
23	When using flex heads, documentation shall be provided from the ceiling contractor the new or existing ceiling was installed according to ASTM C635 and ASTM C636; the documentation shall be incorporated on the shop drawing i.e.; mechanically reproduced				
24	All control valves shall be electronically supervised as required by NFPA 1 and 101 of the Florida Fire Prevention Code.				



# Miami-Dade Fire Rescue Fire Sprinkler Pre-Submittal Checklist



25	The minimum drawing size Miami-Dade Fire Rescue Department will accept for review is architectural size "D"; 24" x 36" and minimum scale shall be 1/8" = 1'-0"	YES	NO	N/A	
26	A local water flow alarm shall be provided on all sprinkler systems as required by NFPA 13; the bell or strobe shall be located on the same side where the F.D.C is located.				
27	When installing a pressure sustaining valve, pressure reducing valve or main check valve, an indicating valve shall be installed on both sides of the valve as required by NFPA 13-2010; 8.16.1.1.4. A pressure gauge shall be provided on both sides of the valve.				
28	Pressure reducing valves shall comply with NFPA 13 and NFPA 14 requirements.				
29	A pressure-reducing valve chart shall be incorporated in the shop drawing. The chart shall indicate the inlet and outlet static pressure, the inlet and outlet residual pressure and the residual flow.				
30	Dry pendent sprinklers shall be connected to straight tees as required by the manufacturer requirements.				
31	The reduction of hydraulically most demanding area due to the use of quick response sprinklers only applies to chapter 11 (Occupancy Chapter); review the exceptions before applying the rule.				
32	When drain connections located at each floor are tied into a common drain riser, the drain riser shall be one pipe size larger than the largest size drain specified by NFPA 13-2010; 8.16.2.4.7.				
33	The pocket rule is now addressed for residential sprinklers. Comply with NFPA 13-2010; 8.10.8 where ceiling pockets are present.				
34	Fire department connection shall not be connected to the suction side of a fire pump. See NFPA 13.				
35	Means shall be provided downstream of the backflow preventer valves for flow testing at system demand (see NFPA 13 2010; 8.17.4.6.1). A blind flange on the system side of the backflow preventer is not acceptable.				
36	Steel pipe shall not be used for general underground use per NFPA 13.				
37	NFPA 13; 2010 Section 8.1.1 (1), assumes that the premises is fully sprinklered, therefore, the feed main is protected. NFPA 14, 2010, section 6.1.2.2, requires protection for feed mains				
38	Hydraulic calculations shall be provided for manual standpipes. A sign shall be provided by the F.D.C with the system demand (NFPA 14-2010 Section 6.7) and shall be field tested per NFPA 14, 2010; 11.5.2.				
39	Standpipe systems are required for buildings over 30 feet high or buildings more than 2 stories unsprinklered and over 3 stories where sprinklered.				
40	Trapeze hangers shall comply with NFPA 13-2010. A detail shall be provided in the shop drawing and all member sizes and lengths shall be indicated in the detail.				
41	All pipes shall be supported from the top steel. If the contractor decides to support the pipe from the bottom of the structure, submit a letter from the structural engineer stating this method of supporting the pipe is acceptable in accordance with Chapter 9.				
42	For general storage NFPA 13, chapter 12 only applies to roof slope 2/12 (16.7%) or less. For non- storage applications, if the slope exceeds 2/12, (16.7%) the area shall be increased 30%				
43	The contractor shall describe in detail how the design criteria was determined and it shall be incorporated in the general notes.				
44	Where exterior occupiable areas exist under roofs referred as balconies, canopies, terraces or lanais that exceed 55sq. ft., sprinklers may be required. See 13; 8.15.7.5 and consult with the AHJ.				
45	On a combined standpipe and sprinkler system, an individual control valve and check valve shall be provided as per NFPA 14				
46	A listed indicating valve shall be provided at the Standpipe for controlling branch lines for remote hose stations. See NFPA 14				
47	The contractor shall submit fire pump manufacturer literature and it shall indicate clearly the rated capacity of the fire pump and the <u>churn pressure</u> .				
48	When the relief valve discharges to the suction side of the fire pump, the contractor shall verify that all pipes, fittings, valves, backflow prevention devices, underground pipe and fittings are rated to the pressure that the relief valve will discharge.				
49	NFPA 20-2010 does not address in-line vertical pumps, however when designing in-line vertical fire pumps consult manufacturer requirements for the suction side pipe, some manufacturers require 6 times the diameter of straight pipe				