



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



Revised October 6, 2010 Process #

Project Name:

1	<u>All submitted shop drawing for review, shall be accompany by the Miami-Dade Fire rescue approved life safety shop drawing, set of architectural, structural and the shop drawing shall be review and stamp approved by the engineer of record per Florida Statue 61q15-32-004</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 2006, section 1-14.4				
4	Submit two sets of plans completely assembled and collated. The title block shall indicate the project's name, address and the name, license number, and address of the fire protection contractor. All sheets shall be secured and shall be numbered consecutively. The shop drawings shall comply with the minimum requirements of NFPA 13, 2002 edition, section 14.1.3 or it will be an automatic disapproval.				
5	Rework plans resubmitted 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	We only review installations shop drawings from licensed fire protection contractors; we will not review conceptual drawings from architects or engineers. Drawings shall illustrate a detail fire protection system. The pipes 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, we review 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. Its location shall be indicated in 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, 2002 edition section 14.3, 14.3.1,14.3.2, 14.3.3 and 14.3.4				
11	Fire protection systems with 50 sprinklers or more shall be sign and seal by a FI. P.E. The P.E stamp shall be located next to the title block.				
12	Provide a symbol legend and complete sprinkler schedule including the manufacturer ID (sin) number, number 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, soffits' 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, an original Engineer of Record approved stamp and a copy of Florida Administrative Code # 61G15-32.003 (1) (2) (5) AND Florida Administrative Code # 61G15-#2.004 (2) (a-j), a-j section shall be incorporated in the mechanically reproduced shop drawings.				
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 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. 13-202-8.5.2				
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 2002 edition section 8.14.19.4.3				
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, 2002 edition section 8.14.19.4.2.				
22	If flex heads are proposed, hydraulic calculations are required. The contractor shall indicate in 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 that the new or existing ceiling was installed according to ASTM C635 and ASTM C636; the documentation shall be incorporated in the shop drawing so it can be mechanically reproduced				
24	All control valves shall be electronically supervised as required by NFPA 101 and the Florida Fire Prevention Code.				



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25	The minimum drawing size Miami-Dade 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. (13-2002-8.15.1.1.4.1) A pressure gauge shall be provided on both sides of the valve.				
28	Pressure reducing valve 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 tee 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 2002, edition section 8.15.2.4.2.				
33	The pocket rule does not apply to residential sprinklers. Ceiling pockets less than 32 square feet do not require sprinkler protection NFPA 13-2002. 8.5.7				
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 test at system demand (see NFPA 13 2002). 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 2002 section 8.1.1 subsection #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, due to the fact the a sign shall be provided by the F.D.C with the system demand (NFPA 14 2003 section 6.7 subsection #4) and shall be field tested per NFPA 14, 2003, section 11.5.2				
39	Standpipe systems are required for buildings over 30 feet high (Florida Building Code) and buildings over 3 stories and higher.				
40	Trapeze hangers shall comply with NFPA 13 2002. 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				
42	For general storage NFPA 13, chapter 12 only applies to roof slope 2/12(16.7%) or less. For non- storage application if the slope exceeds 2/12 (16.7%) the area shall be increased 30%				
43	The contractor shall describe in detail how the design criterion was determined and it shall be incorporated in the general notes.				
44	Upright ESFR sprinklers shall be attach to a sprig so its deflector be located seven (7) inches above the pipe. NFPA 13 2002 section 8.12.5.3.2				
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 station. 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 discharge to the suction side of the fire pump the contractor shall verify that all pipes, fittings, valves, backflow prevention valves, underground pipe and fittings are rated to the pressure that the relief valve will discharge.				
49	NFPA 20, 200,3 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				