MIAMIBEACH

Building Department Plan Review Checklist
Discipline: Fire - Sprinker System

Permit No.

Yes	No	N/A	Comment Ref	Description	Code Reference
				FIRE SPRINKLER PLAN REVIEW:	
				General	
			FSP - 1	**Are sprinkler plans signed & sealed by a Florida Registered Engineer? (required if the scope is greater than 49 heads)**	F.S. 633
			FSP - 2	**Is the applicable code and edition correct and shown on plans?**	City of MB
			FSP - 3	**Does the Site drawing indicate the point of service from City main, and locations of the Backflow Preventer, Post Indicator Valve and Fire Hydrants?**	City of MB
			FSP - 4	**Is the backflow shown on the plans the correct type?**	City of MB
			FSP - 5	**Do the plans show pipe dimensions and diameter?**	City of MB
			FSP - 6	**Do the plans show riser locations and dimensions and is the riser accessible?**	City of MB
			FSP - 7	**Is the outside bell shown on the plans?**	NFPA 13
			FSP - 8	**Are the hanger locations, hanger detail, valves and sprinkler layout clearly shown on the plans?**	NFPA 13
			FSP - 9	**Are the water flow devices and tamper switches shown on plans? (Including those required at the Backflow and PIV)**	NFPA 13
			FSP - 10	**Is the inspector's tests shown on the plans and is it remote from riser?**	NFPA 13
			FSP - 11	**Is the location of the FDC shown on the plans and complies with distance to hydrant?**	NFPA 13
			FSP - 12	**Does the FDC has 7.5 ft clearance on each side?**	NFPA 1
				System Type	
			FSP - 13	**Is it noted that where a pipe cannot be maintained above 40 F that adequate freeze protection provisions will be included?**	NFPA 13
			FSP - 14	**Is the type of system appropriate for the specified application?**	NFPA 13
			FSP - 15	**Does the system have an electronically monitored alarm valve or water flow device?**	NFPA 13
			FSP - 16	**Is there 100% sprinkler protection?**	NFPA 13
				Hazard Classification	
			FSP - 17	**Does the hazard classification correspond to the potential fuel load?**	NFPA 13
			FSP - 18	**Is the design density consistent with code classifications?**	NFPA 13
			FSP - 19	**Are the sprinkler zones less than the maximum size permitted?**	NFPA 13
				Hydraulic Calculations	
			FSP - 20	**Are hydraulic calculations and fire flow test results within 6 months included?**	NFPA 13
			FSP - 21	**Is hydraulic nodal information shown on plans?**	NFPA 13
			FSP - 22	**Is the calculated zone (design area) the most hydraulically demanding?**	NFPA 13
			FSP - 23	**Does the zone contain the correct number of heads?**	NFPA 13
			FSP - 24	**Do the calculations use the correct C factor?**	NFPA 13
			FSP - 25	**Does the supply curve exceed the system demand?**	NFPA 13
			FSP - 26	**Do the drawings appear to match the hydraulic calcs?**	NFPA 13

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				FIRE SPRINKLER PLAN REVIEW(cont):	
				Sprinklers	
			FSP - 27	**Is there a legend identifying type of head, temperature rating, etc.?**	NFPA 13
			FSP - 28	**Is temperature rating adequate for the environment?**	NFPA 13
			FSP - 29	**Have corrosion resistant heads been specified for all exterior locations?**	NFPA 13
			FSP - 30	**Are quick response sprinklers used on light hazard occupancy?**	NFPA 13
			FSP - 31	**If applicable, does the dry system have uprights or return bends with pendants?**	NFPA 13
			FSP - 32	**Is the distance between sprinklers less than or equal to 15 ft.?**	NFPA 13
			FSP - 33	**Is the area of coverage per sprinkler less than the maximum permitted?**	NFPA 13
			FSP - 34	**Are the sprinklers less than 7'-6" from a wall unless by exception small room allowing up to 9'?**	NFPA 13
			FSP - 35	**Do obstructions such as columns and beams have additional heads for the required coverage?**	NFPA 13
			FSP - 36	**Have additional heads been provided where the soffits obstruct sprinkler discharge?**	NFPA 13
			FSP - 37	**Have provisions been made to drain all parts of the system?**	NFPA 13
			FSP - 38	**If there are elevator shafts or chutes, are they sprinkler protected?**	NFPA 13
			FSP - 39	**Are all concealed spaced sprinkler protected unless excluded by code?**	NFPA 13
			FSP - 40	**If there are vaults, are they protected in accordance with code?**	NFPA 232
				Standpipes/Mains	
			FSP - 41	**If the bldg exceeds 2 stories and more than 50' in height, or exceeds 30' to the highest occupiable floor, is a standpipe Class I system installed?**	NFPA 14
			FSP - 42	**Does the standpipe have 2-1/2" hose valves with 1-1/2" reducers?**	NFPA 14
			FSP - 43	**Does the FDC have a check valve?**	NFPA 14
			FSP - 44	**If a standpipe is required, do the fire hose valves provide coverage within 200' of hose?**	NFPA 14
			FSP - 45	**Are the fire hose valves located at the intermediate landings of the stairs?**	NFPA 14
			FSP - 46	**If a combined system is used in a high-rise, does each floor have a separate control valve and flow switch?**	NFPA 14
			FSP - 47	**Is the dedicated standpipe riser at least 4" and combination risers at least 6" in diameter?**	NFPA 14
			FSP - 48	**Does the remote riser have two 2-1/2" outlet on the roof?**	NFPA 14
			FSP - 49	**Do stairs with access to the roof have an outlet at the highest landing, and stairs without roof access have an outlet on the roof?**	NFPA 14
			FSP - 50	**Do the calculations indicate at least 100 psi at the roof manifold of the most remote riser?**	NFPA 14
			FSP - 51	**Does the system have a pressure reducing valves for fire hose connections and sprinkler line if the pressure exceeds 175 psi?**	NFPA 14
			FSP - 52	**Is there a test riser for PRV's and are the sizes shown?**	NFPA 14
			FSP - 53	**Does the supply curve exceed the demand when flowing 1000 gpm?**	NFPA 14
			FSP - 54	**Does standpipe show a minimum residual pressure of 100 psi at remote and adequate volume for each standpipe?**	NFPA 14

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				SPRINKLER PLAN REVIEW(cont.):	
				Fire Pumps	
			FSP - 55	**Do the drawings indicate the installation of the fire pump in compliance with the code?**	NFPA 20
			FSP - 56	**Does the fire pump room contain adequate drainage?**	NFPA 20
			FSP - 57	**Does the fire pump room have adequate emergency lighting?**	NFPA 20
			FSP - 58	**If electric driven, does the fire pump have a reliable power source?**	NFPA 20
			FSP - 59	**If a secondary power supply is required, has it been provided?**	NFPA 20
			FSP - 60	**If diesel driven, does the fire pump have sufficient fuel, battery, and exhaust capacity?**	NFPA 20
			FSP - 61	**Does the drawing show the required fire pump bypass?**	NFPA 20
			FSP - 62	**Is the fire pump room free of exposures and separated by 2-hr rated construction?**	NFPA 20
			FSP - 63	**Does the fire pump room have sprinkler protection?**	NFPA 20
			FSP - 64	**Does the fire pump suction have an eccentric reducer?**	NFPA 20
			FSP - 65	**Are elbows parallel to horizontal fire pumps at least a distance of 10 times the intake diameter from the pump suction?**	NFPA 20
			FSP - 66	**Is the Fire Pump Room free from any electrical or plumbing conduits running through it?**	NFPA 20
				Equipment Submittals	
			FSP - 67	**Are the products listed or approved for the application?**	City of MB
			FSP - 68	**Do the sprinklers cut sheets correspond with the hydraulic calcs and drawings and do they provide the adequate coverage?**	City of MB
			FSP - 69	**Are the correct temperatures and orientation specified for each sprinkler?**	City of MB
			FSP - 70	**Are all control valves and flow indicating devices electronically monitored?**	City of MB

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				UNDERGROUND MAIN REVIEW:	
				Hydrants	
			UG - 1	**Does the site plan show public hydrant location? (150' from the Siamese connection of the bldg)**	NFPA 24, 13
				Point Of Connection	
			UG - 2	**Is the point of connection clearly marked near the tap to the public main?**	NFPA 24, 13
				Private Main	
			UG - 3	**Is the private main designed, installed and tested per code?**	NFPA 24, 13
			UG - 4	**Has the underground piping been routed to avoid running under driveways and/or buildings?**	NFPA 24, 13
			UG - 5	**Does the plan show or note depth of cover to be at least 30"?**	NFPA 24, 13
				Dead End Mains	
			UG - 6	**Are hydrants installed on at least a 6" main if looped system; or an 8" main if not looped system?**	NFPA 24, 13
			UG - 7	**Are mains designed to avoid dead-end mains exceeding 600' if it is less than 10' in diameter?**	NFPA 24, 13
				Type Of Pipe	
			UG - 8	**Does the plan indicate the type of pipe to be used?**	NFPA 24, 13
				Joints	
			UG - 9	**Does the plan show details of joints to be used; restraints, thrust blocks, etc?**	NFPA 24, 13
			UG - 10	**Does the plan show details for hydrant installations?**	NFPA 24, 13
			UG - 11	**Does the plan show sectional valves installed in large system at every 6 hydrants**	NFPA 24, 13
			NOTE 1:	**ARCHITECTS/DESIGNERS MUST DESIGN TO THE ADOPTED CODE AND NOT TO THIS CHECK LIST**	
			NOTE 2:	**ADDITIONAL ITEMS CAN BE ADDED TO THE CHECKLIST FROM TIME TO TIME. UPDATED CHECKLIST WILL BE POSTED ON THE WEBSITE**	