

Marietta Fire Department

Fire Marshal's Office  Plan Review	Fire Alarm Checklist¹ Job Name: _____ Address: _____ Bldg: _____ Suite: _____ City: _____ Zip: _____ Responsible Party: _____ Phone: _____ Fire Alarm Company: _____ Building Permit #: _____ GENERAL BUILDING INFORMATION: Occupancy Type _____ Occupant Load _____ New System <input type="checkbox"/> Tenant Remodel <input type="checkbox"/> Replacement <input type="checkbox"/> Fire Sprinkler System Present Y <input type="checkbox"/> N <input type="checkbox"/> Voice Evacuation Y <input type="checkbox"/> N <input type="checkbox"/> Special Locking Arrangements ² Y <input type="checkbox"/> N <input type="checkbox"/> Fire Pump Present Y <input type="checkbox"/> N <input type="checkbox"/> IFC 510/Two-way Radio Communications Enhancement Sys Present Y <input type="checkbox"/> N <input type="checkbox"/>		
✓ = Pass, X = Fail, NA = Not applicable			Status
DRAWING SUBMITTAL REQUIREMENTS			
1) IN PDF (Please do NOT submit paper) - Provide one (1) set of drawings, one (1) set of the equipment technical data sheets, voltage drop calculations, battery calculations, and a copy of the scope of work letter and a copy of this form [7.2.1]			
2) Drawings must be to scale with a graphic scale (1/8" = 1 ft scale is preferred) [7.4.5]			
3) Label all rooms [7.4.5]			
4) Provide legend/key for all fire alarm components and include the quantities; the fire alarm symbols must comply with the 2012 edition of NFPA 170 [7.2.3]			
5) Indicate the person responsible for the system design on the drawing [7.2.2]			
6) Provide a copy of the low voltage with name, license #, and original signature of license holder on the drawings [10.5.1]			
7) Provide a riser diagram [7.2.1(2)]			
8) Provide a sequence of operation in an input/output matrix [7.2.1(4)]			
9) Provide a wire legend (specify wire type and size), show point to point system wiring, EOLR locations Note: SLC, NAC or other circuits shown in different colors is preferred [7.4.8]			
10) Provide penetration details for fire barrier/walls or smoke barriers; must indicate if wiring is in a plenum space			
11) Show the location of FACP and remote power supplies with smoke detectors ³ [7.4.5(9)]			
12) Show the location of the documentation cabinet for new fire alarm systems [7.7.2]			
13) Show the location of the Knox Box and the fire alarm annunciator; annunciator must be within 10 ft of the main fire department entrance [10.18.3.2 (AHJ)]			
14) Provide a general note regarding compliance with circuit identification, accessibility, mechanical protection, and overcurrent protection [10.6.5]			
INITIATING DEVICES			
15) Show the location of manual fire alarm boxes; within 5 ft of exit doors [17.15.9.4]; provide additional manual fire alarm boxes every 200 ft of travel [17.15.9.5]			
16) Show the location of smoke detectors where required by NFPA 72 and/or NFPA 101; Note: To minimize the probability of false alarms non-required smoke detectors should not be installed [17.7.1.7]			
17) Show the location of detectors in air duct systems; Note: Detectors located in air ducts shall report as supervisory only [17.7.5.5]			
18) Show the location of other smoke sensing detectors (i.e. beam detectors or air sampling smoke detectors) [7.3.5]			
19) Show the location of smoke detectors for the operation of smoke dampers [7.4.5(7)]			
20) Show the location of heat detectors in elevator shafts with sprinklers and where required by code or due to weather conditions [17.6.1]			
21) Show the interface with the kitchen hood/suppression system [17.14]			
22) Show the location of sprinkler flow switches for electronic monitoring [17.13]			
23) Show the location of other automatic extinguishing systems (i.e. clean agent system or foam system) [17.14]			
24) Show the location of all tamper switches for electronic monitoring of all sprinkler control valves including the PIV [17.17.1]			
25) Provide pressure supervisory signal-initiating device and off-normal signal for pressure increases and decreases for dry-pipe sprinkler system [17.17.2.2.2]			

26) Provide monitoring of fire pump per NFPA 20 to include pump running, loss of phase and phase reversal [23.8.5.9]	
27) When equipped, provide monitoring of two-way radio communication enhancement system for circuit integrity, antenna malfunction, signal booster failure, low battery upon 70% depletion of the 12-hour operating capacity, loss of normal ac power, failure of critical element [2018 IFC 510.4.2.5]	
NOTIFICATION APPLIANCES	
28) Provide audible notification to attain 15 dB above the average ambient sound level throughout the building or space [14.4.4.1]. Do not exceed 85 dB. Note: The required sound level must be noted on the drawing and documentation per NFPA 72: 7.3.4.3 must be provided ⁴	
29) Provide audible notification at a minimum of 75 dB measure at the pillow level in sleeping areas [18.4.6.1] Note: Audible appliances must be provided in every sleeping area to attain the required sound level and frequency waveforms ⁴	
30) Provide audible notification that produce low frequency alarm signals in sleeping and living areas [18.4.6.3 & A18.4.6.3(2)]	
31) Where required by the enforcing authority; governing laws, codes, or standards; or other parts of this Code, ADS assignments shall be submitted for review and approval. [18.4.11.4]	
32) Provide a note on the drawing to state the intelligibility of the voice evacuation system will meet the requirements of NFPA 72 Chapter 18 [24.4.2.2.2 & 24.4.2.2.3]	
33) Show the location of visible appliances (strobes) and indicate the candela rating [18.5]	
34) Show the height of strobes mounted on the wall [18.5.5.1]	
35) Indicate the ceiling height for ceiling mounted strobes [18.5.5.4]	
36) Provide strobe spacing in rooms per Table 18.5.6.4.1(a) and Figure 18.5.5.6.1 or Table 18.5.5.6.1 (b) [18.5.5.6.1]	
37) Provide a note on the drawing regarding strobe synchronization where two or more strobes are in the same field of vision [18.5.5.6.7]	
38) Locate strobes in corridors not more than 15 ft from the end of the corridors and not more than 100 ft between strobes [18.5.5.5] Note: Corridors exceeding 20 ft in width must use the spacing requirements of NFPA 72: 18.5.5.6	
39) Provide strobes in sleeping areas where required per Table 18.5.5.8.3 [18.5.5.8.1]	
EMERGENCY CONTROL FUNCTION INTERFACES	
40) Provide initiating devices in areas for elevator recall as required by ANSI/ASME A17.1/CSA B44 [21.3]	
41) Provide lobby smoke detector within 21 ft of the centerline of the elevator bank for elevator recall [21.3.5]	
42) Provide smoke detectors in sprinkled hoistways [21.3.6] Note: Smoke detectors shall not be installed in unsprinklered elevator hoistways unless they are installed to activate the elevator smoke relief equipment	
43) Show the location of all doors on hold opens with compliant smoke detector location per NFPA 72: 17.7.5.6 [21.8] Note: Smoke detectors for door release to only report as a supervisory signal	
44) Show the location of electrically locked doors (i.e. access controlled doors, etc) [21.9]	
SUPERVISING STATION ALARM SYSTEMS	
45) Provide a note on the drawing stating how the fire alarm system will be monitored by a supervising station for electronically monitored sprinkler systems and in buildings or occupancies required to have emergency forces notification; refer to the Life Safety Code for emergency forces notification requirements; provide technical data on equipment [Chapter 26]	

¹ Based on NFPA 72, 2019 edition/120-3-3, this is not an all-inclusive list, all applicable codes must be met

² Special locking arrangements include access control doors, delayed egress locks, and elevator lobby exit access door assemblies

³ A key plan must be maintained at each FACP and the sprinkler riser room where multiple FACP's on the premises are connected to a single flow switch

⁴ An audible sound level test report is required to be provided to the Fire Inspector

Notes: _____

Reviewer: _____

Date: _____
DOC: Fire Alarm Checklist -01/03/2020