

**Town of
Cave Creek
Building & Fire
Safety Dept.**



Plan Review

Fire Alarm Checklist¹ – NFPA 72, 2016

CONTRACTOR MUST COMPLETE THIS FORM AND THE CHECKLIST

Job Name: _____
 Address: _____ Bldg: _____ Suite: _____
 City: _____ Zip: _____
 Responsible Party: _____ Phone: _____
 Fire Alarm Company: _____ Building Permit #: _____

GENERAL BUILDING INFORMATION:

Occupancy Type: _____ Occupant Load: _____
 New System Tenant Remodel Replacement
 Fire Sprinkler System Present Y N Voice Evacuation Y N
 Special Locking Arrangements² Y N Fire Pump Present Y N

Provide the **Sheet Number** or enter **NA** = Not applicable/Existing

SHEET #

PROVIDE A SYMBOL WITH THE CORRESPONDING CHECKLIST ITEM # ON THE DRAWING

1) Upload the checklist, drawings, equipment technical data sheets, voltage drop calculations, battery calculations, and a scope of work letter to Mobile Eyes [7.2.1]	
2) Drawings must be to scale with a graphic scale (1/8" = 1' 0" scale is preferred) [7.4.2]	
3) Label all rooms, according to their proposed use [7.2.1(3)(c)]	
4) Provide legend/key for all fire alarm components and include the quantities; the fire alarm symbols must comply with the 2018 edition of NFPA 170 [7.2.3]	
5) Indicate the person responsible for the system design on the drawing and provide a low voltage certification with name & license # and include an original signature of the license holder on the drawings [7.2.2]	
6) Provide a NICET or ESA NTS CFAT II certification # and original signature of the NICET license holder on the drawings Note: A certified person is required on the jobsite [Sec. 54-101]	
7) Provide a riser diagram [7.2.1(2)]	
8) Provide a sequence of operation in an alarm input/output matrix [7.2.1(4)]	
9) Provide a wire legend (specify wire type and size), show point to point system wiring, EOLR [7.2.1(12)]	
10) Provide penetration details for fire/smoke barrier/walls; indicate if wiring is in a plenum space	
11) Show the location of FACP and remote power supplies with smoke detectors, when multiple FACP are located on site, 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 [7.4.7]	
12) Fire alarm systems components are allowed to share control equipment or operate as stand-alone subsystems but must be arranged to function as a single system. The method of interconnection is to be by, electrical contacts listed for the load, data communication over SLCs, or other listed methods, and monitored as required by Section 12.6 [23.8.2.3, 28.2.5]	
13) Provide surge protection for all circuits entering/exiting a building [12.2.4]	
14) Show the documentation cabinet for new fire alarm systems [7.7.2]	
15) Show the location of the Knox Box and the fire alarm annunciator; annunciator must be within 10ft of the main fire department entrance [2018 IFC 506.1, 10.18.3.2]	
INITIATING DEVICES	
16) Show the location of manual fire alarm boxes where required by NFPA 101; provide additional manual fire alarm boxes within 200 ft of travel to the nearest manual fire alarm box [17.15.9.4, 17.15.9.5]	
17) Show the location of smoke detectors where required by NFPA 72 and/or NFPA 101	
18) Show the location of air duct detectors, such detectors shall report as supervisory [17.7.5.5]	
19) Show the location of other smoke sensing detectors (i.e. beam detectors or air sampling smoke detectors) [17.7.3.6, 17.7.3.7]	
20) Show the location of smoke detectors for the operation of smoke dampers [17.7.5]	
21) Show the location of heat detectors in elevator shafts with sprinklers and where required by code or due to weather conditions [21.4]	

22) Show the interface with the kitchen hood/suppression system [17.14]	
23) Show the location of sprinkler flow switches required to be monitored [County Ordinance Section 54 and 17.13]	
24) Show the location of other automatic extinguishing systems (i.e. clean agent system or foam system) [17.14]	
25) Show the location of all tamper switches for electronic monitoring of all sprinkler control valves including the PIV [County Ordinance Section 54 and 17.17.1]	
26) 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]	
27) Provide monitoring of fire pump per NFPA 20; include pump running, loss of phase and phase reversal. Diesel pumps shall be monitored [23.8.5.9]	
NOTIFICATION APPLIANCES – AUDIBLE²	
28) Provide audible notification to attain 15 dB above the average ambient sound level throughout the building or space [18.4.4.1] Note: The required sound level must be noted on the drawing and documentation per [Section 7.2.1(10)] must be provided ³	
29) Provide audible notification at a minimum of 75 dB measure at the pillow level in sleeping areas [18.4.6.1] Note: Low Frequency audible appliances must be provided in every sleeping area to attain the required sound level ³ [7.2.1(10)]	
30) Show the location of speakers with wattage tap where the building is required to have a Fire Emergency Voice/Alarm Communication System (i.e. assembly occupancies with 300 or more occupants or high-rise buildings) [D.3.3.6]	
31) Provide a note on the drawing to state the intelligibility of the voice evacuation system will meet the requirements of Chapter 18 [24.4.2.2.1]	
NOTIFICATION APPLIANCES – VISUAL	
32) Show the location of visible appliances (strobes) and indicate the candela rating [7.2.1(11)]	
33) Show the height of strobes mounted on the wall [7.2.1(9)]	
34) Indicate the ceiling height for ceiling mounted strobes [7.4.5(13)]	
35) Provide strobe spacing in rooms per Table 18.5.5.5.1(a) and Figure 18.5.5.5.1 or Table 18.5.5.5.1 (b)	
36) Provide a note on the drawing regarding strobe synchronization where two or more strobes are in the same field of vision [18.5.5.5.2 & 18.5.5.6.7]	
37) Locate strobes in corridors not more than 15ft from the end of the corridors and not more than 100ft between strobes [18.5.5.6.5] Note: Corridors exceeding 20ft in width must use the spacing requirements of [18.5.5.5]	
38) Provide strobes in sleeping areas where required per [Table 18.5.5.8.3 (18.5.5.8.1)]	
39) Provide visual notification in offices great than 300ft ² or with 2+ workstations (2010 ADA)	
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 21ft of the centerline of the elevator bank for elevator recall [21.3.5.1, 21.3.5.2]	
42) Provide smoke detectors in sprinkled hoist ways [21.3.6] Note: Smoke detectors shall not be installed in unsprinklered elevator hoist ways 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 [17.7.5.6 (21.9)] Note: Smoke detectors for door release to report as a supervisory signal	
44) Show the location of electrically locked doors [21.10]³	
45) Provide a note detailing HVLS fan shutdown on actuation of a sprinkler waterflow switch that indicates waterflow in the area served by the fans [21.8]	
SUPERVISING STATION ALARM SYSTEMS	
46) Provide a note on the drawing stating how the fire alarm system will be monitored by a supervising station [Chapter 26]	

¹ The above is not an all-inclusive list, all applicable codes for fire alarm systems must be met

² An audible sound level test report is required to be provided to the Life Safety Inspector

³ Special locking arrangements include access control doors, delayed egress locks, and elevator lobby exit access door assemblies – **SEPARATE SUBMITTAL REQUIRED FOR SPECIAL LOCKING ARRANGEMENTS**

Reviewer: _____

Date: _____

DOC: Fire Alarm Checklist - 10/21/2021