

OFFICE OF THE FIRE CODE OFFICIAL
Collier County Fire Control & Rescue Districts
2700 North Horseshoe Drive
Naples, Florida 34104



COLLIER COUNTY

FIRE ALARM SYSTEM

PLAN CHECKLIST

(For Plan Design Review)

Compiled by
Collier County Fire Marshal's Association
Fire Alarm Sub-Committee
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Collier County

“Fire Alarm System Checklist for Plan and Submittal Review”

The following is intended to **assist** the design professional and or installing contractor in designing and submitting for review a “code compliant” fire alarm system. This document in no way details **ALL** of the requirements that may be necessary for a complete code compliant system.

Note: Systems shall be designed in accordance with the codes and standards adopted in Rule Chapter 69A-60 The Florida Fire Prevention Code, NFPA 1 (2009 edition) the Florida specific version, NFPA 101 (2009 edition) the Florida specific version, NFPA 72 (2007 edition) and the Collier County Fire and Protection Code Policy and Procedures Manual.

- | | |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 1. Is the project name identified on the drawing? |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 2. Is the project address identified on the drawing? |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 3. Has the type of license held by the qualifier, required by the State of Florida, been identified? <input type="checkbox"/> EC <input type="checkbox"/> EF <input type="checkbox"/> EH <input type="checkbox"/> ER <input type="checkbox"/> EY <input type="checkbox"/> EG <input type="checkbox"/> EZ
License #: _____ Expiration Date _____ |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 4. Is the building protected with an automatic fire sprinkler system? If so denote which type:
<input type="checkbox"/> 13 <input type="checkbox"/> 13R <input type="checkbox"/> 13D |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 5. Has the following information been provided?

Occupancy Type: _____ (as defined in NFPA 101, the Florida 2009 edition, Chapter 3 – Definitions)

Occupancy Chapter: _____ (as referenced in NFPA 101, the Florida 2009 edition, Chapter 3 – Definitions)

Occupancy Load: _____ (show occupant load calculation breakdown using NFPA 101, the Florida 2009 edition, Table 7.3.1.2 – Occupant Load Factors)

Number of Stories: _____ Bldg. Height: _____

Square Footage of area scope or building: _____ |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 6. Are floor plans drawn to scale ? (1/8”scale is preferred) |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 7. Have Standardized NFPA 170 Symbols been utilized? |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 8. Have all required EXITS been indicated on the Floor Plans? |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | 9. Are ALL rooms & spaces labeled clearly on floor plans, with occupant loads clearly indicated for any Assembly Occupancies? |

☐YES ☐NO

10. Has a **comprehensive “Scope of Work”** statement been provided, which shall include, but not be limited to: **design parameters** regarding type of fire alarm system (power-limited, nonpower-limited, conventional, addressable analog, etc.), fire alarm system classification (central station service, remote supervising station, etc.), communication method or fire alarm signal transmission means, secondary supply capacity, voltage drop, wire type and size, IDCs...SLCs...and NACs designated by class and/or style, interfacing of sub-panels and other systems, mass notification, etc.?

☐YES ☐NO ☐N/A

11. Will this **fire alarm panel be part of a campus-style arrangement** whereby it serves more than one building or where a “master fire alarm control panel” is used to monitor other satellite fire alarm control units or buildings (two or more) for the purpose of having only one off-premises connection? If yes, have you ensured compliance with the requirements of the Collier County Fire Prevention and Protection Code Policy and Procedure Manual Article FAL02-08?

☐YES ☐NO ☐N/A

12. When the **fire alarm system serves more than one building**, have provisions been made whereby **each building is indicated separately** and that **alarm, supervisory and trouble signals for each building** are transmitted to the supervising station? {NFPA (2007 ed.) 4.4.6.6.2 and 8.6.2.3}

☐YES ☐NO

13. To your knowledge, **is this a “Required System”?**

☐YES ☐NO ☐N/A

14. Will this fire alarm system be a **performance-based design** complying with NFPA 72 (2007 ed.) 5.3 and 5.6.1.3?

☐YES ☐NO ☐N/A

15. Will this fire alarm system be a **prescriptive-based design** complying with the prescriptive provisions outlined in NFPA 72 (2007 ed.)?

☐PL ☐NPL

16. Is the system **Power-Limited or Non-Power Limited?**

☐YES ☐NO ☐N/A

17. Is the Fire Alarm **System Classification** provided {NFPA (2007 ed.) 1.3.1}:

- ☐ Protected premises fire alarm system
- ☐ Supervising station fire alarm system
 - ☐ Central Station Service
 - ☐ Remote Supervising Station
 - ☐ Proprietary Supervising Station

☐YES ☐NO ☐N/A

18. Will the offsite monitoring be the responsibility of **the same contractor** installing the fire alarm system?

☐YES ☐NO ☐N/A

19. If Item #18 is YES, then will the two separate permit applications (one for the fire alarm system installation and one for the monitoring-only) be packaged under one submittal?

- ☐ YES ☐ NO ☐ N/A **20.** If Item #19 is YES and the separate permits are packaged under one submittal, is it understood that the submittal paperwork (i.e. scope of work, bill of materials, specification sheets, plan checklist, etc.) relative to the fire alarm sprinkler **monitoring-only** permit shall be “packaged” and attached to the bottom left corner of the plan sheet documents, **AND SHALL ONLY INCLUDE** paperwork and references to equipment related to the communication methods and transmission technologies utilized to transmit fire alarm system signals to an offsite monitoring company. (i.e. include specification sheets for the phone jacks, connecting cables and telephone surge suppressors, Monitoring Company Information Form and related UL certificate and State License copies, etc.)
- ☐ YES ☐ NO ☐ N/A **21.** If Item #19 is YES and the separate permits are packaged under one submittal, is it understood an **annotation is to be provided on the Riser Diagram** indicating that “the telephone line surge suppression shall be provided under a separate monitoring-only permit?”
- ☐ YES ☐ NO ☐ N/A **22.** Will the offsite monitoring be the responsibility of a **different contractor** than the one installing the fire alarm sprinkler monitoring system?
- ☐ YES ☐ NO ☐ N/A **23.** If Item #22 is YES, then is it understood the submittal paperwork for the Monitoring-Only permit shall be submitted by others under a different set of drawings and ALL paperwork and references to any equipment related to the communication methods and transmission technologies utilized to transmit fire alarm system signals to an offsite monitoring company **shall be EXCLUDED from the fire alarm sprinkler monitoring system submittal paperwork?** (i.e. phone jacks, connecting cables and telephone surge suppressors specification sheets, Monitoring Company Information Form and related UL certificate and State License copies, revised Scope of Work, etc.)
- Is it further understood that a CO HOLD will be placed on the Fire Alarm Installation permit until such time the Monitoring-Only permit is submitted by others?
- ☐ YES ☐ NO ☐ N/A **24.** For **Local Alarms Only**....is an approved permanent sign installed adjacent to each manual fire alarm box that reads: **WHEN ALARM SOUNDS – CALL FIRE DEPARTMENT.** (2010 FBC section 907.4.2.4)
- ☐ YES ☐ NO **25.** Is the system designed for **General Evacuation?**
- ☐ YES ☐ NO **26.** Is the system designed for **Partial/Selective Evacuation or Relocation of Building Occupants?**

- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO ☐N/A
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- ☐YES ☐NO
- 27.** Is this a **Mass Notification System**?
- 28.** If answer to #27 is yes, has compliance with NFPA 72 (2007 edition) 4.7, 6.8.4.11 and 6.8.6 been demonstrated?
- 29.** Is **“Emergency Forces Notification”** provided in accordance with NFPA 101 – the Florida 2009 edition and the 2010 FBC section 907.6.5?
- 30.** Are all Notification Appliance Circuits (**NACs**), Initiating Device Circuits (**IDCs**) & Signaling Line Circuits (**SLCs**)... including appropriate EOLs, clearly delineated and congruent on the both the riser diagram and floor plans?
- 31.** Is the **class AND style** designation shown on the drawings for all initiating, notification, and signaling line circuits? {NFPA 72 (2007 ed.) 6.4.2.1.1 and 6.4.2.2}
- 32.** Is each device, appliance, circuit and component indicated and **enumerated** on the floor plan?
- 33.** Has a **Riser Diagram** been provided delineating each floor, circuit and zone and **ALL devices, appliances and/or components**?
- 34.** In a **non-addressable** system, is the **number of zones** shown in the submittal/drawings and has a **Zone Legend** been provided?
- 35.** Are **ALL** device and component **model #s and quantities** of each, specified on the plan or bill of materials?
- 36.** Are ALL **components “compatible” and “listed”** for the specific fire alarm applications for which they are used and are all detection devices that receive power from the IDC or SLC of a control unit listed for use with that control unit as required by NFPA 72 (2007 ed.) 4.4.2? Provide verification of compatibility between components and the respective panel.
- 37.** Has a detailed **Sequence of Operation** been provided with the submittal package (via Input/Output Matrix or Narrative) and does it detail ALL alarm, supervisory and trouble conditions, as well as ALL emergency functions?
- 38.** Are fire alarm system components **“listed”** for the ambient conditions (i.e., voltage, temperature and humidity) expected at the proposed location of the installed components? {NFPA 72 (2007 ed.) 4.4.4.1, 4.4.4.2.4}
- 39.** Are **ALL wire sizes, types, quantities**, as well as conduit sizes and types, listed on the riser diagram and floor plan?

☐YES ☐NO

- 40.** Is **all wiring** that is located in **wet or damp** locations, **listed** for this use (**Wet & Direct Burial**) and are specification sheets included? {NFPA 70 (2008 ed.) 110.11, 300.5, 310.7, 310.8}

☐YES ☐NO

- 41.** Is there a **wire burial detail** on the drawings provided in accordance with NFPA 70 (2008 ed.) 300.5 and Table 300.5?

NOTE: wire burial detail shall include the location of wiring method or circuit, the type of wiring method or circuit, and the minimum cover requirements.

☐YES ☐NO

- 42.** Is the **wiring installation method** within the building for the fire alarm system indicated on the drawings (i.e. **free wired, wire mold, conduit, etc.**)? {NFPA 70 (2008 ed.) 760.46, 760.130, NFPA 72 (2007 ed.) 4.4.4.4}

☐YES ☐NO ☐N/A

- 43.** Is FACP or a remote annunciator located at the main entrance? {NFPA 72 (2007 ed.) 4.4.6.3}

☐YES ☐NO ☐N/A

- 44.** If the FACP is not located at the main entrance, then is there a **durable sign at the main entrance indicating its location**?

☐YES ☐NO ☐N/A

- 45.** Is the FACP Trouble “**Buzzer**” or **Sonalert** located in an area likely to be heard?

☐YES ☐NO ☐N/A

- 46.** If the **fire alarm control unit** is located in a space that is not continuously occupied, **is it protected with automatic smoke detection** or automatic heat detection when ambient conditions dictate? (This includes all FACP, subpanels, annunciators with control, and power_supplies/extendors that control system functions and supervising station transmitting equipment). {NFPA 72 (2007 ed.) 4.4.5 or exception 1}

NOTE: If no, please identify on PLANS reason why smoke or heat detection is not provided above control panel, subpanel, annunciator, and/or power supplies/extendors.

☐YES ☐NO

- 47.** Has it been indicated on plans that “primary power” connections comply with NFPA 72 (2007 ed.) 4.4.1.4.1 through 4.4.1.4.4. (i.e. **dedicated branch circuit which is mechanically protected, circuit disconnect means marked in red –accessible to authorized personnel only – and identified as FIRE ALARM CIRCUIT, location of circuit disconnecting means identified at FACU, and overcurrent protection provided.**) {NOTE: This shall include air conditioning units (such as “window-shakers” or the self-contained units in the NEMA Type IV enclosures) specifically installed to supply artificial conditioning to the space occupied by the FACU in order for FACU to meet the operating parameters of 4.4.4.1}

- ☐ YES ☐ NO ☐ N/A **48.** Are **interconnected Fire Alarm panels** installed in accordance with NFPA 72 (2007 ed.) 6.8.2.1 through 6.8.2.8?
- ☐ YES ☐ NO ☐ N/A **49.** Is **each interconnected** control unit separately monitored for alarm, supervisory, and trouble conditions in accordance with NFPA 72 (2007 ed.) 6.8.2.5?

NOTE: this means that if the satellite fire alarm control unit interconnected to the master FACP experiences a trouble condition for any reason, that trouble condition reports to the master FACP as a **SUPERVISORY CONDITION**, indicating the interconnected fire alarm control unit is off-normal. Also, the interconnection between the satellite fire alarm control unit and the master FACP is also monitored for integrity and if that circuit experiences a fault condition, a **TROUBLE CONDITION** for that circuit (zone or point) is indicated at the master fire alarm control unit.

- ☐ YES ☐ NO **50.** Are **battery calculations** detailed in a “**chart format**” for EACH battery back-up power supply, in the system? This shall include remotely located control equipment such as satellite control units, circuit interfaces, and other equipment essential to system operation. {NFPA 72 (2007 ed.) 4.4.1.7}
- ☐ YES ☐ NO ☐ N/A **51.** Do all **battery calculations correlate with the alarm and non-alarm current draws** for the respective components in the **Catalog/Specification sheets provided** and are these current draws indicated/highlighted for the plan reviewer?
- ☐ YES ☐ NO ☐ N/A **52.** Does the Protected Premises **utilize an automatic-starting, engine-driven generator for secondary power supply**, arranged in accordance with 4.4.1.9.3.1 and storage batteries dedicated to the fire alarm system with 4-hours of capacity arranged in accordance with 4.4.1.8? {NFPA 72 (2007 ed.) 4.4.1.5.1(2)}
- ☐ YES ☐ NO ☐ N/A **53.** Does the **Emergency Voice Evacuation System** have the required battery size?

NOTE: when general evacuation is used, the battery standby requirements must match the fire alarm system type used in the building and the alarm must sound for **not less than 5 minutes** {NFPA 72 (2007 ed.) 6.9.9}

NOTE: when partial evacuation or relocation of occupants is used, **15 minutes of alarm** is required {NFPA 72 (2007 ed.) 4.4.1.5.3.1(A), 6.9.9}

NOTE: additional panels and/or power supplies remotely located from main control unit and provided for control units, circuit interfaces,

or other equipment essential to system operation, **shall meet the same primary and secondary power supply requirements** as those of 4.4.1.1 through 4.4.1.6 and 4.4.7.3 {NFPA 72 (2007 ed.) 4.4.1.7}

- ☐YES ☐NO ☐N/A **54.** Are **relays** for control devices **located within 3'** of the controlled circuit or appliance and is the installation wiring between the fire alarm control unit and the relay or other appliance monitored for integrity or fail-safe? {NFPA 72 (2007 ed.) 6.16.2.2 through 6.16.2.4 and A6.16.2.2}
- ☐YES ☐NO **55.** Are the **locations of ALL required surge suppressors indicated on both the Riser and Floor Plans** and are ALL specification sheets included in the submittal (i.e. surge for 120 Power supplies; all wiring which enters and/or leaves the building; any wiring which could introduce current from a "Lightning Strike" into the F/A system)? {NFPA 70 (2008 ed.) section 760.32 and Article 800, NFPA 72 (2007 ed.) 4.4.4.3}
- ☐YES ☐NO ☐N/A **56.** Do **doors in stair enclosures** serving more than four stories comply with the **re-entry requirements** of NFPA 101 the Florida 2009 edition, 7.2.1.5.7 and NFPA 72 (2007 ed.) 6.16.7?
- ☐YES ☐NO ☐N/A **57.** Does respective stair enclosure allow **access to the roof** of building? If so, this **door shall also allow re-entry** from the roof. {NFPA 101 the Florida 2009 edition, 7.2.1.5.8 and NFPA 72 (2007 ed.) 6.16.7}
- ☐YES ☐NO ☐N/A **58.** Are **Emergency Control Functions** indicated on floor plans and riser diagram, and have they been detailed in the Sequence of Operations? (i.e. door release, door unlocking, elevator recall and emergency warning light illumination, smoke control, stair pressurization, other extinguishing systems, HVAC shutdown, etc.)
- ☐YES ☐NO ☐N/A **59.** Are there **ceilings that are higher than 10' or that are not smooth or flat?** If so, provide details indicating the ceiling height and depicting the ceiling surface configurations on the appropriate areas of the floor plans. Also provide an elevation detail that delineates the mounting (spacing and location) of new automatic detection device(s) and/or new notification appliance(s) added under this rehabilitation
- ☐YES ☐NO **60.** Are **manual fire alarm pull-stations** provided in the natural exit access path **within 5' of the exit doorway opening** at each exit on each floor? {NFPA 101-the Florida 2009 edition, 9.6.2.3 and NFPA 72 (2007 ed.) 5.13.6}
- ☐YES ☐NO **61.** Is the **horizontal distance** that needs to be traversed on the same floor **to reach a manual pull station ≤ 200 feet?** {NFPA 101-the Florida 2009 edition, 9.6.2.4 and NFPA 72 (2007 ed.) 5.13.8}

☐YES ☐NO

- 62.** Is there **at least one (1) manual pull-station** for each fire alarm system using automatic fire detection or waterflow detection devices and is it in an unobstructed location, accessible to the public and located where required by the local authority having jurisdiction? (NFPA 101 - the Florida 2009 edition, 9.6.2.6)

☐YES ☐NO

- 63.** In campus-style arrangements (involving two or more buildings) whereby each building has its own respective fire sprinkler riser with tamper and flow switches, and one main fire alarm control panel monitoring the multiple automatic fire sprinkler system control valves at multiple buildings within the campus-style arrangement, **have manual pull-stations been installed in the immediate vicinity of EACH building's respective automatic sprinkler system control valves** and are the manual pull-stations in an unobstructed location, accessible to the public and located where required by the local authority having jurisdiction? (Collier County Fire Prevention and Protection Code Policy and Procedure Manual Article FAL02-07)

☐YES ☐NO ☐N/A

- 64.** Does the **smoke detection design documentation state the required performance objective** of the system as required by NFPA 72 (2007 ed.) 5.7.1.1, A.5.7.1.1 and A.5.7.1.3?

☐YES ☐NO ☐N/A

- 65.** Are **Spot Type Smoke Detectors (S/Ds)** located on smooth ceilings and based on 30' spacing and within a distance equal to 0.7 times the selected spacing (i.e. typically 21') from all points on the ceiling? {NFPA 72 (2007 ed.) section 5.7.3.2.3}

☐YES ☐NO ☐N/A

- 66.** Are **S/Ds** that are located **on solid joists or beams** spaced per NFPA 72 (2007 ed.) 5.7.3.2.4?

☐YES ☐NO ☐N/A

- 67.** Are **S/Ds** on peaked or sloped ceilings located per NFPA 72 (2007 ed.) 5.7.3.2.4?

☐YES ☐NO ☐N/A

- 68.** Are **S/Ds** located **> 3' away** from **A/C diffusers, as well as kitchen and bathroom doors**? {NFPA 72 (2007 ed.) 5.7.4.1}

☐YES ☐NO ☐N/A

- 69.** Are **S/Ds** placed in a proper position **under raised floors**? {NFPA 72 (2007 ed.) 5.7.3.7}

☐YES ☐NO ☐N/A

- 70.** Are there any partitions that extend to within 15% of ceiling height and have the spaces separated by the partition(s) been considered as separate rooms? Also, has the **CEILING HEIGHT** been indicated in areas where the detectors are to be installed? {NFPA 72 (2007 ed.) 5.7.3.8}

☐YES ☐NO ☐N/A

- 71.** For both mechanical ventilation and pressurized stair enclosure systems, are **Smoke Detectors** installed **within 10'** of the entrance to the smoke proof enclosure? {NFPA 101 (2009 ed.) 7.2.3.10.1}

- ☐ YES ☐ NO ☐ N/A **72.** Are **Projected Beam Type S/D's** spaced/installed per manufacturer specifications? {NFPA 72 (2007 ed.) 5.7.3.4}
- ☐ YES ☐ NO ☐ N/A **73.** Are **Duct Smoke Detectors** installed in **the supply of** all HVAC Systems **>2000 cfm**? {2010 FBC (Mechanical) 606.2.1 & NFPA 90A (2007 ed.) 6.4.2}
- ☐ YES ☐ NO ☐ N/A **74.** Where **multiple air-handling systems share** common supply or return air ducts, or plenum, make-up or outside air ducts with a combined capacity of greater than 2000cfm have the return air and supply air system provided with **Duct Smoke Detectors** installed {2010 FBC (Mechanical) 606.2.2 & NFPA 90A (2007 ed.) 6.4.2}?
- ☐ YES ☐ NO ☐ N/A **75.** Are **duct smoke detectors installed at each story** where return air and supply air risers serve two or more stories and are part of a return air and supply air system having a design capacity greater than 15,000 cfm? {2010 FBC (Mechanical) 606.2.3 & NFPA 90A (2007 ed.) 6.4.2}?
- ☐ YES ☐ NO ☐ N/A **76.** Are **Duct Smoke Detectors listed** for the air velocities and conditions (temp. / humidity) in which they are installed? {NFPA 72 (2007 ed.) 5.16.5.6}
- ☐ YES ☐ NO ☐ N/A **77.** Do **duct smoke detectors** - that are not part of a smoke-control system and used solely for closing dampers or for heating, ventilating, and air-conditioning system shutdown - **initiate a supervisory signal** only? (Collier County Fire Prevention and Protection Code Policy and Procedure Manual Article FAL02-02)
- ☐ YES ☐ NO ☐ N/A **78.** Is it understood that even when a licensed mechanical contractor is used to install **duct smoke detectors** - in lieu of licensed fire alarm contractors or certified electrical contractors - the **final responsibility for ensuring that the sampling tube(s) and the smoke detector(s) have been installed correctly rests with the alarm system contractor**, and to this end a manometer reading must be posted on the duct at the site of each respective duct smoke detector test (Collier County Fire Prevention and Protection Code Policy and Procedure Manual Articles FAL03-01 and FAL03-02)
- ☐ YES ☐ NO ☐ N/A **79.** Does the **heat detection design documentation state the required performance objective** of the system as required by NFPA 72 (2007 ed.) 5.6.1.1, A.5.6.1.1 and 5.6.1.3?
- ☐ YES ☐ NO ☐ N/A **80.** Is **H/D** spacing on **solid joist construction** (> 4" in depth and spaced

≤3'centers) installed so as not to exceed 50% of the smooth ceiling spacing permitted under 5.6.5.1.1 and 5.6.5.1.2 and mounted at the bottom of the joist? Has a **detailed sketch been submitted** depicting the ceiling height, ceiling surface construction, spacing & depth of projections, and device mounting? {NFPA 72 (2007 ed.) 5.6.3.1.1 and 5.6.5.2}

- ☐ YES ☐ NO ☐ N/A **81.** Is **H/D** spacing on **beam construction** (> 4" in depth and spaced >3'centers) installed so as not to exceed two-thirds of the smooth ceiling spacing permitted under 5.6.5.1.1 and 5.6.5.1.2 Has a **detailed sketch been submitted** depicting the ceiling height, ceiling surface construction, spacing & depth of projections, and device mounting? {NFPA 72 (2007 ed.) 5.6.3. and 5.6.5.3}
- ☐ YES ☐ NO ☐ N/A **82.** Regarding **beam construction** is the **H/D** installed in each **beam pocket** when the ratio of beam depth (D) to ceiling height (H), {D/H}, is **greater than** 0.10 **AND** the ratio of beam spacing (W) to ceiling height (H), {W/H}, is **greater than** 0.40? {NFPA 72 (2007 ed.) 5.6.5.3 and A.5.6.5.3}
- ☐ YES ☐ NO ☐ N/A **83.** Regarding **beam construction** is the **H/D** installed on the **bottom of the beam** when **EITHER** the ratio of beam depth (D) to ceiling height (H), {D/H}, is **less than** 0.10 **OR** the ratio of beam spacing (W) to ceiling height (H), {W/H}, is **less than** 0.40? {NFPA 72 (2007 ed.) 5.6.5.3 and A.5.6.5.3}
- ☐ YES ☐ NO ☐ N/A **84.** Is **H/D** spacing reduced on ceilings 10 feet to 30 feet in height per NFPA 72 (2007 ed.) 5.6.5.5.1 and Table 5.6.5.5.1?
- ☐ YES ☐ NO ☐ N/A **85.** Are there **H/D's** on peaked or sloped ceilings spaced and located in accordance with NFPA 72 (2007 ed.) 5.6.5.4?
- ☐ YES ☐ NO ☐ N/A **86.** Is "**sprinkler supervision**" provided in accordance with NFPA 101 – the Florida 2009 edition and the 2010 FBC sections 903.4 and 903.4.1. *(NOTE: section 13.3.1.7.1.1 and 13.7.1.4.10.2.1 of the respective local amendments to the 2010 edition of the Florida Fire Prevention Code as adopted by the Collier County Fire Districts require all fire sprinkler systems and their associated control valves to be electronically monitored by a UL listed Remote Supervising Station or Central Station Service company.)*
- ☐ YES ☐ NO ☐ N/A **87.** Are **all fire sprinkler systems connected** to the F/A system and are all valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on these sprinkler systems **electrically supervised**? {NFPA 72 (2007 ed.) 6.8.5.6, and 2010 edition FBC, 904.3.5}
- ☐ YES ☐ NO ☐ N/A **88.** Are all **waterflow alarms** non-silenceable while water is flowing?

{NFPA 13 (2007 ed.) 6.9.1, 7.6.1.7.2}

- ☐ YES ☐ NO ☐ N/A **89.** If a double detector check valve (**DDCV**) serves more than one building - where each of these buildings has its own FACP – is it understood that EACH respective FACP shall monitor the DDCV tamper switches? {NFPA 72 (2007 ed.) 6.8.5.6; section 13.3.1.7.1.1 and 13.7.1.4.10.2.1 of the respective local amendments to the 2010 edition of the Florida Fire Prevention Code as adopted by the Collier County Fire Districts, and 2010 FBC section 903.4.1 Exception 2 }
- ☐ YES ☐ NO ☐ N/A **90.** Are the **interior evacuation notification appliances** activated by **operation of** the sprinkler flow switches **and/or** any other suppression system? {NFPA 72 (2007 ed.) 6.8.5.5 and 6.8.5.7, NFPA 101 (2009 ed.) 9.6.2.1, 2010 edition FBC 903.4.2 and 904.3.5}
- ☐ YES ☐ NO ☐ N/A **91.** Do the sprinkler valve tamper switches cause an audible and visual supervisory indication? {NFPA 72 (2007 ed.) 6.8.5.10.4, NFPA 101 (2009 ed.) 9.6.7.6, 2010 edition FBC 903.4.1}
- ☐ YES ☐ NO ☐ N/A **92.** Are **all other type Suppression systems connected to** the fire alarm system? (i.e. clean-agent system, Hood system, Pre-action system etc.) {NFPA 72 (2007 ed.) 6.8.5.7 and 6.12}
- NOTE:** this means that trouble signals from a suppression system control unit must report to the master FACP as a **SUPERVISORY CONDITION** , indicating the interconnected control unit is off-normal. Also, the interconnection between the suppression system control unit and the master FACP is monitored for integrity and if that circuit experiences a fault condition, a **TROUBLE CONDITION** for that circuit (zone or point) is indicated at the master fire alarm control unit {NFPA 72 (2007 ed.) 6.8.5.7.2}
- ☐ YES ☐ NO ☐ N/A **93.** Is the electric **Fire Pump monitored for run, phase reversal & power failure?** {NFPA 72 (2007 ed.) 6.8.5.9}
- ☐ YES ☐ NO ☐ N/A **94.** Is the engine-driven **Fire Pump monitored for run, failure to start, controller off “automatic,” and trouble (e.g., low oil, high temperature, overspeed)?** {NFPA 72 (2007 ed.) 6.8.5.9}
- ☐ YES ☐ NO ☐ N/A **95.** Is the **Generator monitored** according to NFPA 110? (note class or type) {NFPA 72 (2007 ed.) 4.4.1.9.1 through 4.4.1.9.7}
- ☐ YES ☐ NO ☐ N/A **96.** Are the **Elevator Recall** detectors connected to the fire alarm system as required by NFPA 72 (2007 ed.) 6.16.3.1?
- ☐ YES ☐ NO ☐ N/A **97.** Are heat detectors used to shutdown elevator power? If so, they shall be monitored for integrity by the building FACP {NFPA 72 (2007 ed.) 6.16.4.5}

☐ YES ☐ NO

Has consideration been given to a “delay” in the activation of the power shunt trip, whereby the “delay” parallels the time it takes the elevator cab to travel from the top of the hoistway to the lowest recall level?

☐ YES ☐ NO ☐ N/A **98.**

Do the **smoke detectors used for elevator recall** and the **heat detectors used to shutdown elevator power** initiate an **alarm condition and actuate the fire alarm system notification appliances**? (Collier County Fire Prevention and Protection Code Policy and Procedure Manual Articles FAL02-04)

☐ YES ☐ NO ☐ N/A **99.**

Is the **control circuit used to shut down elevator power** monitored for presence of operating voltage? **Loss of this voltage shall indicate a supervisory signal** at the control unit and remote annunciators. {NFPA 72 (2007 ed.) 6.16.4.4}

☐ YES ☐ NO ☐ N/A **100.**

Does each audio/visual appliance have its **candela rating** listed on the floor plan, adjacent to each appliance?

☐ YES ☐ NO ☐ N/A **101.**

Is each visual appliance adequate for the area covered and located per NFPA 72 (2007 ed.) 7.5 requirements? (see also the Appendix section)

☐ YES ☐ NO ☐ N/A **102.**

Has the fire alarm system been **designed to comply with the ADA and the Florida Accessibility Code**? (NFPA 101 – the Florida 2009 edition, section 9.6.3.5; 2010 FBC section 907.9, 2010 FBC (Accessibility) 702.)

☐ YES ☐ NO ☐ N/A **103.**

Are visual signal appliances provided in each of the following areas: restrooms and any other general usage areas, meeting rooms, conference rooms, hallways, lobbies and any other area for common use? NOTE: Common use areas also include classrooms, cafeterias, filing and photocopy rooms, employee break rooms, dressing rooms, examination rooms, treatment rooms, and similar spaces that are not used solely as employee work areas. (2010 FBC 907.9 and 2010 FBC (Accessibility) 702., U.S. Architectural and Transportation Barriers Compliance Board – Bulletin #2)

☐ YES ☐ NO ☐ N/A **104.**

Where required to be “**ACCESSIBLE**” to those with physical disabilities, are rooms and bathrooms within a dwelling unit provided with appropriate notification appliance coverage? (i.e. weatherproof strobes in bathrooms, proper **candela ratings**, and proper **mounting locations** for devices/appliances in the sleeping areas) {NFPA 101 – the Florida 2009 edition, section 9.6.3.5; the 2010 FBC section 907.9; NFPA 72 (2007 ed.) section 7.5.4.6}

- ☐ YES ☐ NO ☐ N/A **105.** In “**ACCESSIBLE**” rooms, have provisions been made **to actuate the visual alarm notification appliance(s)** by **BOTH** the in-room smoke alarm and by the building fire alarm system? {NFPA 101 – the Florida 2009 edition, section 9.6.3.5; the 2010 FBC section 907.9.; NFPA 72 (2007 ed.) section 7.5.4.6}
- ☐ YES ☐ NO ☐ N/A **106.** Will **audible public mode notification appliances** produce a sound level at least 15dB above the average ambient sound level or 5dB above the maximum sound level lasting at least 60 seconds, whichever is greater, measured 5’ above the floor in the occupiable area, using the A-weighted scale (dBA)? {NFPA 72 (2007 ed.) 7.4.2.1}
- ☐ YES ☐ NO ☐ N/A **107.** Do audible appliances provide a **distinctive three-pulse temporal pattern** fire alarm evacuation signal? (NOTE: such a signal is not required, with the approval of the AHJ, if the planned action during a fire emergency is not evacuation, but rather is the relocation of occupants or their protection in place) {NFPA 72 (2007 ed.) 6.8.6.5}
- ☐ YES ☐ NO ☐ N/A **108.** In bathrooms **accessible to the public**, are proper A/V appliance(s) installed? If stalls constitute individual rooms, is a visual appliance inside each stall? If Showers and/ or Saunas are present are “weatherproof” appliances installed?
- ☐ YES ☐ NO ☐ N/A **109.** In **corridors greater than 20 feet in width**, will the installation of visible notification appliances be in accordance with the indirect signaling **requirements for room spacing**? {NFPA 72 (2007 ed.) 7.5.4.3 and 7.5.4.4.4}
- ☐ YES ☐ NO ☐ N/A **110.** In **corridors 20 feet or less in width**, will the installation of visible notification appliances be in accordance with the **spacing requirements for a corridor application**? {NFPA 72 (2007 ed.) 7.5.4.4 and 7.5.4.4.4.1}
- ☐ YES ☐ NO ☐ N/A **111.** Are audio/visual appliances placed **no more than 100’ apart** in corridors **and within 15’ from each end** of the corridor? (NOTE: when the concentrated viewing path is interrupted due to jogs in corridors, changes in elevation, corridor doors which close, or other such obstructions, the area shall be treated as a separate corridor) {NFPA 72 (2007 ed.) 7.5.4.4.5 and 7.5.4.4.6}
- ☐ YES ☐ NO ☐ N/A **112.** When **more than two visible notification appliances are within the same field of view** (approximately 135°) in the same room or adjacent space or within any field of view in corridors, **they shall flash in synchronization**, regardless of their separation distance. {NFPA 72 (2007 ed.) 7.5.4.3.2(3) and 7.5.4.4.7}
- ☐ YES ☐ NO ☐ N/A **113.** With respect to **sleeping areas**, will notification appliances produce a

sound level **at least 15dB above the average ambient sound level or 5dB above the maximum sound level lasting at least 60 seconds** or a **sound level of at least 75dB**, whichever is greater, **measured at the pillow level** in the occupiable area, using the A-weighted scale (dBA)? {NFPA 72 (2007 ed.) 7.4.4.1}

☐ YES ☐ NO

114. Is there any notification appliances **obstructed** by racks, shelves, furnishings, equipment, etc.?

☐ YES ☐ NO ☐ N/A

115. Where appropriate, are the enclosed stairwells equipped with **speaker appliances** connected to a separate notification zone for manual selective paging only? {NFPA 72 (2007 ed.) 6.9.10.3, 2010 FBC – 907.5.2.2}

☐ YES ☐ NO ☐ N/A

116. Is the **fire alarm system arranged to stop or reduce ambient background noise** (via relays, circuits or other such interfaces) in areas such as theaters, dance halls, nightclubs, machine shops and other such high noise areas, and will the notification appliances produce a sound level at least 15dB above the **reduced** average ambient sound level or 5dB above the maximum sound level lasting at least 60 seconds **after reduction of the ambient noise level**, whichever is greater, measured 5' above the floor in the occupiable area, using the A-weighted scale (dBA)? {NFPA 72 (2007 ed.) 7.4.2.5 - 7.4.2.5.3}

☐ YES ☐ NO ☐ N/A

117. Is there **at least 1 listed “weatherproof” audio/ visual appliance**, located **to face the street** by which arriving fire apparatus will arrive? NOTE: In sprinkled buildings this audio/visual appliance shall be located both **facing the street** to which arriving fire apparatus will arrive and **at the end of the building closest to the fire sprinkler riser**. (Collier County Fire Prevention and Protection Code Policy and Procedure Manual Article FAL02-01, as well as section 13.7.1.4.10.2.1 of the respective local amendments to the 2010 edition of the Florida Fire Prevention Code as adopted by the Collier County Fire Districts

☐ YES ☐ NO ☐ N/A

118. When **fire alarm systems are designed for partial, selective evacuation or relocation of building occupants**, have provisions been made such that attack by fire within an evacuation signaling zone **shall not impair control and operation of the notification appliances outside the evacuation signaling zone**? {NFPA 72 (2007 ed.) 6.9.10.4.2}

If yes, which of the following methods will be employed to protect circuits necessary for the operation of the notification appliances until they enter the evacuation signaling zone that they serve:

- ☐ A 2-hour rated cable or cable system

- ☐ A 2-hour rated enclosure
- ☐ Performance alternatives approved by AHJ
- ☐ Buildings fully protected by an automatic sprinkler system installed in accordance with NFPA 13 and with the interconnecting wiring or cables used for the operation of notification appliances is installed in metal raceways or in accordance with Article 760 of NFPA 70.

- ☐ YES ☐ NO ☐ N/A **119.** Are voltage calculations provided **for each notification appliance circuit** and/or for any circuits that draw significant power (such as relays, etc.)?
- ☐ YES ☐ NO ☐ N/A **120.** Is the **wattage tap** indicated for all speakers and circuits?
- ☐ YES ☐ NO ☐ N/A **121.** Are **wattage calculations** provided for each amplifier?
- ☐ YES ☐ NO ☐ N/A **122.** Do all **voltage drop calculations correlate with the alarm and non-alarm current draws** for the respective components **in the Catalog/Specification sheets provided** and are these current draws indicated/highlighted for the plan reviewer?
- ☐ YES ☐ NO **123.** Are **ALL submittal documents consistent with each other** with respect to types and quantities of devices and appliances; are they thorough and comprehensive in nature and in scope; are they neatly and professionally packaged? (i.e. specification sheets, bill of materials list, floor plans, riser diagram, battery and voltage drop calculations, etc.)

I hereby attest that, to the best of my knowledge, the aforementioned checklist information and the battery calculation(s) are accurate and adequate for the fire alarm system being submitted.

Applicant Name (print)

Applicant Company

Applicant Signature

State Registration Number

Address

City

State

Zip Code

Telephone Number

Facsimile Number

Date

E-mail address