

**DCPS CODE ENFORCEMENT GUIDELINES**  
**FOR**  
**FIRE ALARM SYSTEM CONSTRUCTION DOCUMENTS**

In accordance with the Florida Building Code, construction documents for fire alarm systems shall include, but not be limited to, all of the following:

- A floor plan which indicates the use of all rooms.
- Locations of alarm-initiating and notification appliances.
- Alarm control and trouble signaling equipment.
- Annunciation.
- Power connection.
- Battery calculations.
- Conductor type and sizes.
- Voltage drop calculations.
- Manufacturers, model numbers and listing information for equipment, devices and materials.
- Details of ceiling height and construction.
- The interface of fire safety control functions.
- DCPS also requires a fire alarm device schedule on both the construction documents and the fire alarm shop drawings.

In addition to the above DCPS Code Enforcement requires the following:

1. **Fire Alarm Floor Plans** – Provide room names and numbers, all walls and doors, all partitions extending to within 15 percent of the ceiling height, all fire and smoke rated walls, device/component locations, locations of primary power connections, locations of monitor/control interfaces to other systems, riser locations, routing for Class A compliance, emergency voice systems.
2. **Room and Building Numbers** – The fire alarm panel room/building numbers shall be compatible with the actual room/building numbers in order to ensure proper emergency personnel response. The actual room/building numbers shall be the state approved and designated FISH numbers. Any discrepancies between FISH numbers and actual room/building numbers shall be reported by the Engineer during the design phase of the project.
3. **Room Descriptions and Use** – Room names and descriptions that are different from the current usage shall be reported by the Engineer during the design phase of the project.
4. **Floor Plan Layout** – Room layouts, walls, closets etc. shown on the drawings shall be consistent with the actual field conditions.
5. **Interface of Fire Safety Control Functions** – Interface with mechanical air handling system shutdown, fire suppression and standpipe systems, kitchen hood and suppression systems, gas shut off, elevator control, smoke vents, etc. shall be clearly indicated on the drawings.
6. **Ceiling Profiles and Details** – Ceiling heights and profiles shall be provided and should be project specific, for example, high and unusual ceiling profiles in media centers.
7. **Concealed or Unsupervised Spaces** – All concealed or unsupervised spaces, including but not limited to, crawl spaces, interstitial spaces, attics, etc. which require detection devices shall be identified on the drawings. When heat tape is used it shall be rated for the proper environmental conditions (i.e. unconditioned attic spaces with high temperatures, etc.). A General Note should be provided on the drawings requiring the contractor to notify the Engineer of any concealed or unsupervised spaces requiring heat/smoke detection which are not already indicated on the drawings.

8. **Kitchen Hood/Suppression System Interface** – The sequence of operation for fire alarm system interface with kitchen hoods/suppression systems shall be described on the drawings. Actual existing conditions and gas shut off should be verified prior to construction. Referencing NFPA 96 for compliance without more detailed direction is not sufficient. The following Sequence of Operation shall be provided on the drawings: *Kitchen gas supplies shall be shut off by an automatic fire extinguishing system, not just gas appliances served by the hood. The shutoff valve shall be located exterior to the building. The shutoff valve shall have a manual reset. In addition, NFPA 96 requires the electric power for equipment being served by the hood to also be automatically shutoff upon activation of the fire extinguishing system. Connect kitchen hood to fire alarm panel. Activation of fire alarm panel shall shut down hood supply fans only. Hood exhaust fans shall not be shut down. Hood exhaust fans are required to be started upon activation of the hood fire protection system. Exhaust functions of the hood shall be consistent with manufacturer’s specifications and NFPA 96. Activation of the hood fire suppression system shall initiate the general fire alarm.*
9. **Smoke Doors** – All required smoke doors shall be shown on the documents. Also, provide a General Note as follows: *All smoke detectors at double smoke doors shall be located within 5 feet of the doorway. If it appears that some smoke doors are not required, then DCPS Code Enforcement should be notified and the question can be reviewed and discussed.*
10. **Sprinkler System and Fire Alarm Interface** – For buildings that are fully sprinklered, this requirement is obvious; however, for non-sprinklered buildings there may be special situations to consider such as stage sprinkler systems, standpipes, etc. which should be clearly identified on the drawings.
11. **Fire alarm or Annunciator Panel** – Either the main fire alarm panel or the annunciator panel shall be located in an area accessible to emergency personnel and close to the main entrance. A General Note should be provided on the drawings indicating that the location of this panel (or any other system panel) shall not be changed without prior approval from the Engineer, DCPS Project Manager and DCPS Code Enforcement.
12. **HVAC Interface (Duct Detectors)** – Duct detectors and air handling unit shut down shall be provided as required by code and NFPA 90A. Existing duct detectors are not required, i.e. return air less than 15,000 cfm and as prescribed by NFPA 90A, need not be replaced with new duct detectors especially if they will not operate due to lack of air flow. A schedule of mechanical units with cfm shall be included in the documents. Also, the following General Note is required on the drawings: *Fire alarm duct mounted smoke detectors, shutdown relays, and duct mounted smoke detector remote indicators are shown diagrammatically. Verify exact location and air sampling tube requirements for each air handler unit prior to installation. Locate duct detector on return air duct of each air handling unit or roof top A/C unit. When possible, locate remote indicator in corridor outside the mechanical room. Otherwise, mount in easily visible location within room as close as possible to door. Detectors in duct systems shall be accessible for servicing by providing access doors or panels in the ductwork system. The location of all detectors in duct systems shall be permanently and clearly identified and recorded.*
13. **HVAC interface (Smoke Damper Actuation)** – Smoke damper actuation shall be by one of the methods provided in FBC 716.3.2.1 and FBCM 607.3.2.1, and the selected method shall be clearly indicated on the drawings.
14. **Fire, Smoke, and Fire/Smoke Dampers** – Smoke and fire walls shall be clearly identified on the drawings. Provide the following General Note on the drawings: *Service openings shall be provided in all air ducts adjacent to each fire damper, smoke damper, fire/smoke damper and smoke detector. Access for fire and smoke dampers shall be large enough to permit inspection and maintenance of the damper and its operating parts. Access points shall be permanently identified on the exterior by a label having letters not less than 0.5 inches in height reading: FIRE/SMOKE DAMPER, SMOKE DAMPER, or FIRE DAMPER. Access doors in ducts shall be tight fitting, sealed and suitable for the required duct construction.*
15. **Associated HVAC Work** – Work involving installation of access doors, dampers, etc. shall be performed by a state licensed mechanical contractor. The following General Note shall be provided on the drawings: A state

*licensed mechanical contractor shall be utilized to perform all modifications or installations related to ductwork or mechanical equipment.*

16. **Elevator Recall** – Fire alarm interface for elevator recall shall be provided, and the Sequence of Operation shall be clearly described on the drawings.
17. **Demolition of Existing Fire Alarm System** – Provide a General Note on the drawings indicating the following: *All existing systems shall remain intact and fully operational until all new systems have been tested, inspected, and approved. Once approval has been obtained, the Contractor shall proceed with demolition work. Remove abandoned cables, conduits, equipment, and devices. Repair walls and ceilings. Once demolition is complete a pathway re-inspection by DCPS Code Enforcement is required to verify proper sealing of penetrations and safe completion of demolition.*
18. **Miscellaneous** – Large student restrooms shall have horn/strobes, while strobes should be sufficient in individual toilet rooms where the audible signal can be heard from adjacent areas. Smoke detectors should be provided in Computer Labs. Exterior notification devices do not require a strobe except in assembly areas such as enclosed courtyards. Provide detection in time out rooms.
19. **Document Revisions and Fire Alarm Shop Drawings** – No revisions shall be made to the permit documents without review and approval by the DCPS Code Enforcement Plans Examiner and Fire Safety Inspector I. Shop drawings shall be submitted to DCPS Code Enforcement for review and approval after they have been approved by the EOR and prior to installation. Review by COJ Fire Prevention is no longer required for permit drawings and shop drawing submittals. Only a site plan shall be submitted to COJ Fire Prevention as required by Chapter 633 Florida Statute.
20. **Contractor Qualifications** – Provide a General Note on the drawings indicating the following: *Contractor performing fire alarm work must be qualified as required by Florida Statutes Chapter 489 and Rule Chapter 61G6 of Florida Administrative Code. Designated personnel must have fire alarm system agent identification card in their possession at all times.*
21. **Fire Alarm System Inspection and Testing Requirements** – General references to compliance with NFPA 72 should be used sparingly. Inspection and testing documents from NFPA 72 should be either incorporated into the specifications and/or provided at a pre-construction conference with DCPS Code Enforcement. The following General Note shall be included on the drawings: *All fire alarm testing shall be performed when no students are present. Contractor is required to provide a schedule for testing at least 2 weeks prior. Contractor shall include time in the schedule for DCPS maintenance personnel to test and label all devices.*