

## **FIRE PLAN REVIEW AND INSPECTION**

The Building Code Administration Program within Safety Services has been charged with the duty of fire plan review and inspection by the University President, which was previously conducted by the State Fire Marshal (SFM). This assignment became effective October 3, 2019. (Official Announcement) and as of this date it is not necessary to provide signed and sealed sets of documents and specifications for review by the SFM.

Projects that have previously been submitted to the State Fire Marshal (SFM) for review and approval and to which a SFM file number has been assigned need to complete the inspection process through the established policies and procedures for SFM reviewed projects. Any questions concerning which projects should be inspected by the SFM should be directed to John Trecastelli.

These plans review and inspection duties have been assigned to Mr. Danial Bartle, Fire Safety Inspector II. He is deemed the Authority Having Jurisdiction (AHJ) and fully qualified to perform fire plan reviews and on-site inspections by the Division of State Fire Marshal. All fire and life safety plans review and inspections will primarily be by Inspector Bartle. Please address any questions about upcoming projects to him at [safetyservices@floridapoly.edu](mailto:safetyservices@floridapoly.edu).

Projects submitted for permitting, now require 4 signed and sealed sets of documents for review and approval. The new process is identical to the SFM permitting process with the exception of not having to submit the plans for approval to their offices. Fire safety inspections can now be scheduled 24 hours prior rather than 5 days in advance.

Please contact John Trecastelli with any questions or concerns about this initiative. The Building Code Administration is available to assist and can be contacted at (863) 874-8722.

### **PLANS REVIEW:**

The Fire Safety Inspector (AHJ) requires the submission of plans via electronic or paper format for review and approval prior to beginning of work. If the submitter utilizes a paper copy format, two sets of plans and one set of specifications along with an application must be submitted to the Plans Review Section. The submitter may, however, submit plans at an earlier stage, i.e., design review, in which case only one unsigned set needs to be submitted (only one design review will be allowed per project). When the documents are approved for construction, the plans will be stamped "APPROVED" and made available electronically or returned to the submitter. An "APPROVED" stamped set of plans must be kept on the job site for the fire safety inspector's use at the time of inspection. It shall be the responsibility of the submitter to see that the "APPROVED" set of plans is on the construction site before work begins and remains there until final inspection and approval has been issued.

**Design Criteria:** The Life Safety portion of the plans shall be designed in accordance with the currently adopted edition of the Florida Fire Prevention Code. See Florida Administrative Code 69A-3 and 69A-60 for the adopted edition of the Florida Fire Prevention Code and a list of adopted NFPA Standards. (<https://www.flrules.org/>)

### **CONSTRUCTION SITE VISITS:**

The fire plans review process includes a full and complete review of all required construction documents and up to three (3) construction site inspections. During the initial site visit, the inspector may modify the number of

inspections. The purpose of the site inspection is to ensure the project is constructed in accordance with the approved construction documents and in compliance with all applicable laws, codes, and standards. The site inspection may include verification and/or witness of an underground fire main installation, including flush and pressure testing, flow testing of sprinklers, testing of alarm devices, and pull stations, emergency lighting, fire and smoke dampers, assessment of the egress system, and other features of fire protection.

- 1. Underground Fire Main Visit:** If applicable, this site visit is required before backfilling the open trench and covering the supply piping. The inspector will verify the underground installation is in compliance and witness the required pressure test and system flush.
- 2. Intermediate Inspection Visit:** This inspection occurs at approximately 50% of completion (before enclosing walls and ceilings). This inspection may include pressure test for sprinklers, location of pull stations, connections for strobes and horns, alarm wiring, stairs, ramps, etc. The intermediate inspection may be exempted at the Inspector's discretion, depending upon the size and complexity of the construction project. Listed below are some features that may be inspected or witnessed during your intermediate construction inspection:
  - Fire rated partition construction, penetrations and locations, manufacturer's specifications, or listings by recognized testing laboratories required to verify the quality of firestopping material.
  - Fire/smoke damper installations at required locations.
  - Stair details including the run and rise of treads and risers
  - Handrails and guardrails including height and spacing.
  - Integrity of stair enclosures and other vertical openings.
  - Number of exits.
  - Travel distance, common path of travel and dead-end corridors.
  - Placement of exit signs and emergency lighting fixtures.
  - Above ground fire sprinkler system that includes the following:
    - Witness hydrostatic test and obtain copies of Schedule A test certificates that are found in NFPA 13.
    - Ensure that sprinkler head coverage meets code requirements.
    - Installation of risers, mains and lines including hangers.
    - Review hydraulic calculations, manufacturer's specifications, or listings by recognized testing laboratories required to verify the quality of firestopping material.
  - Underground fire main for the fire sprinkler system that includes the following:
    - Witness hydrostatic test and flushing of the supply main and obtain copies of Schedule U test certificates that are found in NFPA 13.
    - Verify location and installation of joints, retainers, and thrust blocks.

- Verify locations and accessibility of fire department connections, post indicator valves, fire hydrants, and backflow prevention valves.
- Manufacturer's specifications or listings by recognized testing laboratories required to verify the quality of firestopping material.
- Installation of emergency generator and witness acceptance (load) test. Obtain copy of test results.
- Installation of fire-jockey pumps and witness acceptance test. Obtain copy of test results.
- Kitchen hood installations including clearance of ducts from combustible material, clean-out doors on ducts, seamless exterior welds, height of discharge vent above roof, and that the top of the vent is hinged for access and cleaning of the fan motor.
- Inspection of fuel storage tank(s) and dispensing piping, and/or performance testing of LPG, flammable and combustible liquids, and other hazardous material systems.

**3. Final Inspections Visit:** Final inspection must be completed by the Inspector to ensure that the construction/renovation is in accordance with the approved construction documents and in compliance with all adopted laws, codes, and standards. Listed below are some features that may be inspected during your final construction inspection:

- Final fire rated partition construction and all visible penetrations through partitions.
- Perform or witness operational test of all smoke or fire dampers and ensure they are accessible for inspection/cleaning.
- Final stair details and enclosures.
- Locations of required fire rated doors/windows and ensure that doors and windows are a listed/labeled assembly or product, and that each function properly (self-closures, latches, etc.).
- Placement of required exit signs.
- Exit door swing.
- Exits and access to exits: Check exit discharge for obstructions and verify that it leads to the public way.
- Fire extinguisher ratings and placements.
- Conduct a final inspection on the fire sprinkler system including exterior items. Make sure valves are supervised, required signage is provided, riser is tagged, hydraulic calculation label is attached, required spare heads and wrench are present, and as-built drawings are provided to the building.
- If emergency generator is installed, a time activation test, emergency lighting, exit signs and other items connected to the generator will be tested while the building is on emergency power and in non-emergency modes.
- Building's electrical system to ensure there is no exposed wiring or live parts, and all circuit breakers are legibly identified as to their purpose.

- Final fire alarm system inspection to include testing EVERY device in the system and provide the following:
  - Certificate of Completion
  - Owner's manual and installation instructions covering all system equipment
  - Record Drawings (as-built)
  - Tag on panel in accordance with F.A.C. 69A-48
- Pre-engineered systems and witness acceptance test in accordance with manufacturers recommendations. Obtain copies of test results, owner's manual, and as-built drawings.
- Fire sprinkler system including flow test and alarm activation.
- Other fire suppression systems protecting special hazards, fuel storage tanks, and dispensing systems.
- Placement of building signage, including street address and other identifying markings.
- Evaluation of the fire alarm system layout.

#### **4. Other Inspections**

- a. Special: This inspection would include any inspection not otherwise specified such as but not limited to, an on-site visit to review and discuss proposed changes to the approved plans before submitting a change order for Plans Review.
- b. Boiler: "First Inspections" are required after the installation of non-exempt boilers. This inspection may be performed by a Special Inspector employed by an insurance company authorized to write boiler and machinery insurance in Florida as part of the State insurance pool.
- c. Fire Protection Systems: This inspection is for an installation of any fire protection system associated with or without new construction or renovations. The inspection will include all aspects of the proper installation and acceptance testing of the system.