

# WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS

## DIVISION 0 – AE AND PROFESSIONAL SERVICES

### SECTION 005006 – WV STATE FIRE MARSHAL

#### PART 1: GENERAL

1.1. Any deviation from the following instructions must be approved during design by WVU Facilities Management Personnel.

1.2. The West Virginia State Fire Marshal (WV SFM) is the authority having jurisdiction and WVU-owned buildings are exempt from city/municipality codes enforcements. The WV State Fire Code (WV SFC) shall be followed including Section 4 which identifies the adopted year of the National Fire Protection Association (NFPA). WV SFC shall take precedence when in conflict with other model codes.

1.3. WVU coordinates with the local Fire Department for the following items:

- a. Location of Fire Department Connections
- b. Location of the Fire Command Center & placement of Fire Alarm Control Panel
- c. Location of Annunciator Panel
- d. Location of Knox box
- e. Proper thread specifications for the Fire Department Connections
- f. Placement of Fire Hydrant(s)
- g. The establishment of fire lanes for the building
- h. A site visit during construction

1.4. AE shall consult with WVU prior to direct contact with WV SFM. All communications to and from WV SFM shall be documented and delivered to the WVU PM and EHS

1.5. For WV SFM Plan Review Fee visit

<http://www.firemarshal.wv.gov/PlansReview/Pages/default.aspx> and select Plan Review Fee Schedule.

1.6. If modifications that impact WV SFC are made during design phases or during construction, revised plans, shop drawings, or RFIs shall be submitted to WV SFM for review and comment.

1.7. The WVU PM and WVU Environmental Health & Safety (EHS) will determine which projects require SFM review based on the following criteria:

- New Construction
- Change in occupancy class of building
- Integration of another occupancy class into an existing occupancy space
- Major modification or elimination of an exit or means of egress
- Alteration/modification of load bearing elements
- Adding additional floors to an existing structure
- Changing the footprint of an existing structure
- Renovation of more than 50% of a structure

- Installation of new Elevator
- Alteration/modification of existing elevator
- Installation of new Fire Alarm System
- Installation of new Sprinkler System
- Installation of new Fire Pump
- Alteration/modification of Sprinkler or fire alarm system involving 20 or more elements of those systems, or installation of a new Fire Alarm Control Panel
- Alteration or modification to an existing Performance Based Design (PBD)
- Installation of a New Emergency Power Supply System (EPSS) to a high rise building more than 75ft. in height
- Installation of a new EPSS, even if not required by code, for providing power to any required fire and / or life safety system or device, (Exit signs, emergency lights, etc.)
- Installation of a new hood suppression system

## **PART 2: DESIGN**

- 2.1. The AE is responsible for design meeting codes. WVU EHS department will review the design for compliance with life safety codes and act as a liaison to WV SFM office.
- 2.2. Walk-in reviews, occupancy inspections, and all correspondence will be coordinated through EHS.
- 2.3. Walk-in reviews are conducted during each design phase. Smaller projects may need one or more walk-in reviews depending on the comments received from SFM.
- 2.4. SFM Comments/Feedback/Questions Time Period
  - a. Comments from informal walk-in reviews are received immediately and shall be documented and published by AE through meeting minutes
  - b. Comments from formal plan reviews such as sealed Construction Documents are typically received in two weeks
  - c. Comments from mailed/faxed plans followed by a phone call are received based on availability of SFM representative
  - d. Comments from local SFM are received in two weeks
- 2.5. Plans shall be submitted to WV SFM on a full scale drawings or 11 x 17 as long as they are legible and includes all information.
- 2.6. Upon completion of 100% Construction Documents, the AE shall submit signed and sealed set of document to the WV SFM for review and comment with the consent of PM. A copy of all documentation submitted to WV SFM shall be provided to EHS.
- 2.7. The transmittal letter shall be submitted with the final drawings and include the project construction budget and the AE name, address, and phone number. The submittal form can be found on the WV SFM website ([www.firemarshal.wv.gov](http://www.firemarshal.wv.gov))

### **PART 3: CONSTRUCTION**

- 3.1. Any direction given by WV SFM during construction visits shall be documented and distributed to WVU PM and EHS.
- 3.2. WV SFM may make unplanned visits to construction site.
- 3.3. Contractor shall notify PM upon WV SFM representative arrival to construction site.
- 3.4. The PM shall notify EHS during planned and unplanned site visits of state and local SFM representative. If PM is not available, the contractor shall notify EHS (304) 293-3792.
- 3.5. The PM shall update EHS regarding construction progress. EHS and PM shall coordinate with the local SFM for periodic field inspections at appropriate stages of construction, such as start of rough-in and when fixture installation starts (fire alarms, sprinkler, etc.).
- 3.6. WV SFM will supply formal report documents to PM, EHS, and AE after all field inspections have been completed.
- 3.7. Occupancy final inspections/testing shall be conducted in the presence of WV SFM representative, WVU PM, WVU EHS, WVU Fire Safety, and a company representative from each system being tested. The inspections/testing include the following:
  - a. sprinkler system (above and below ground) per NFPA 13
  - b. fire alarm system per NFPA 72
  - c. kitchen hood Automatic Extinguishing System per NFPA 96
  - d. smoke management system per NFPA 92
  - e. stairwell pressurization per NFPA 92
  - f. emergency generator per NFPA 110
  - g. fire pump per NFPA 20
  - h. elevators per ANSI A-17.1
- 3.8. Required Documentation for Final Inspection: The following certification and test papers shall be signed, prepared in a binder, and presented at the final inspection to the WV SFM on site as a combined file to assure a Certificate of Occupancy is obtained from SFM:
  - a. Letter of Certification from electrical contractor indicating all electrical installation meets NEC
  - b. Letter of Certification and test report from Fire Alarm contractor (elevator recall if applicable)
  - c. Letter of Certification and test report from Sprinkler contractor
  - d. Letter of Certification from HVAC contractor
  - e. Letter of Certification from Mechanical contractor for Smoke Management System
  - f. Letter of Certification and test report from Generator contractor
  - g. Letter of Certification from contractor for installation and testing Underground Fire Protection piping
  - h. Letter of Certification and test reports from Fire Pump contractor

i. Fume Hood Certification Report/Letter

3.9. When all inspection reports are completed and verified by WV SFM, then WVU will receive an occupancy permit issued by WV SFM office.

END OF SECTION 005007