

WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS

DIVISION 00 – AE AND PROFESSIONAL SERVICES

SECTION 005006 – WV STATE FIRE MARSHALL

PART 1 - GENERAL

- 1.1 Any deviances from the following instructions must be approved during design by WVU Facilities Management Personnel.
- 1.2 Definitions
 - A. (AE) Architect and Engineer
 - B. (EHS) Environmental Health & Safety
 - C. (EPSS) Emergency Power Supply System
 - D. (NFPA) National Fire Protection Association
 - E. (PBD) Performance Based Design
 - F. (WV SFC) West Virginia State Fire Code
 - G. (WV SFM) West Virginia State Fire Marshal
- 1.3 The WV SFM is the authority having jurisdiction and WVU-owned buildings are exempt from city/municipal codes. The WV SFC shall be followed including Section 4 which identifies the adopted year of the NFPA code. The WV SFC shall take precedence when in conflict with other model codes
- 1.4 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

WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS

DIVISION 00 – AE AND PROFESSIONAL SERVICES

1.5 Quality Control

- A. 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
- B. For WV SFM Plan Review Fee, see: the website below
 - 1. http://www.firemarshal.wv.gov/Divisions/Fire_Inspections/Pages/Plans-and-Review-Division.aspx and select Plan Review Fee Schedule.
- C. The WVU PM and WVU EHS will determine which projects require SFM review based on the following criteria:
 - 1. New Construction
 - 2. Change in occupancy class of building
 - 3. Integration of another occupancy class into an existing occupancy space
 - 4. Major modification or elimination of an exit or means of egress
 - 5. Alteration/modification of load bearing elements
 - 6. Adding additional floors to an existing structure
 - 7. Changing the footprint of an existing structure
 - 8. Renovation of more than 50% of a structure
 - 9. Installation of new Elevator
 - 10. Alteration/modification of existing elevator
 - 11. Installation of new Fire Alarm System
 - 12. Installation of new Sprinkler System
 - 13. Installation of new Fire Pump
 - 14. Alteration/modification of sprinkler or fire alarm system involving 20 or more elements of those systems, or installations of a new Fire Alarm Control Panel
 - 15. Alteration or modification to an existing PBD
 - 16. Installation of a new EPSS to a high rise building more than 75ft. in height
 - 17. 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.)
 - 18. Installation of a new hood suppression system
- D. After plans are approved by SFM, any modifications that impact compliance with the WV SFC such as, revised plans, shop drawings, or RFIs shall be submitted to WV SFM for review and comment

WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS

DIVISION 00 – AE AND PROFESSIONAL SERVICES

PART 2 - PRODUCTS

- 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).

WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS

DIVISION 00 – AE AND PROFESSIONAL SERVICES

PART 3 - EXECUTION

- 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 elevator inspector will submit the completed inspection report documents to WVU.
- 3.6 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.).
- 3.7 WV SFM will supply formal report documents to PM, EHS, and AE after all field inspections have been completed.
- 3.8 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

WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS

DIVISION 00 – AE AND PROFESSIONAL SERVICES

- 3.9 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 that the system is balanced and operating correctly
 - 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
 - J. Elevator inspection report
- 3.10 SFM shall sign the following documents indicating approval
- A. NFPA 72 record of completion
 - B. Sprinkler system test certificate
 - C. Fire pump test certificate
 - D. Certificate of Occupancy (to be issued after inspection)
- 3.11 When all inspection reports are completed and verified by WV SFM, then WVU will receive an occupancy permit issued by WV SFM office
- 3.12 Closeout
- A. Building Turnover Documents:
 - 1. Written notification from the PM indicating the exact time and date that WVU is assuming responsibility
 - 2. Certificate of Occupancy, Signed by SFM
 - 3. NFPA 72 record of completion, signed by SFM
 - 4. Sprinkler system test certificate, signed by SFM
 - 5. Fire pump test certificate, signed by SFM

WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS
DIVISION 00 – AE AND PROFESSIONAL SERVICES

6. 4 extra sets of keys, for locked and tamper proof components from contractor
7. 1 hard copy of shop drawings to be placed in the fire control center of each building (See attachments for examples). These shall include
 - a. Sprinkler
 - b. Fire Alarm
 - c. Smoke management
 - d. HVAC
 - e. Access information including passwords and software

END OF SECTION 005006