

INSPECTION CHECKLIST FOR CONSTRUCTION BUILD OUT



EXTERIOR

- Access drivable for inspections and emergency vehicles
- Addressing of structure, and suite number on front and back
- Fire lanes painted and stenciled and/or signage in place, at approx. 150'
- FDC location unobstructed and marked (signage address and road marker)
- Test header painted marked and accessible with cap
- Lock Box and required keys (doors interior/exterior, electrical, alarms and other systems)
- Bollards where required (gas meters, fire hydrants, and remote FDC's)
- Dumpster enclosure to be verified for clearance and distance
- All fire hydrants have been flowed and all street valves verified and accessible
- Fire hydrant road markers in place

RISER ROOM

- 'RISER ROOM' is clearly marked on door with approved signage
- Room is clear of debris
- Wrench and spare heads are in box, never exposed to sun
- Calculation plate and all other required riser signage is installed/in place
- Valves are marked and accessible
- 'As Built' plans to be stored here or in building as directed
- Riser room shall be accessible from outside/enclose required
- Check for backflow device here or at remote location
- Forward flow test port in place

ELECTRICAL INSPECTION

- All electrical panels are completed
- All electrical panels have schedules
- All breakers are in place or blocked
- Fire Alarm breaker has lock-out in place
- 'ELECTRICAL ROOM' is clearly marked on door with approved signage
- Required clearances to panel, and NO combustibile storage
- All J-boxes completely closed and 'knock outs' in place
- All receptacles properly installed and in place
- High amperage electrical rooms have special requirements

DOOR INSPECTION

- Proper door hardware as per approved plans are in place
- No Dead bolt locks or other prohibited devices in place
- Door signage as required shall read "While Occupied "and not "During Business Hours"
- Suite numbers front and back
- Blocked door sign if permitted
- Self-closing rated doors shall have no gaps between, under, or on the sides
- Test magnetic holders with alarm activation and loss of power
- Door clearance into hallways for proper swing and ADA compliance
- Fire-rated frames and assembly, along with door and any glass to be verified
- Exterior access method is required, either key card or other means provided to fire fighters

FIRE EXTINGUISHER

- Placement per approved plans or NFPA Standard 10
- Usually every 75' in the path of egress near exit
- Heights 36" to 44" at handle meets ADA and fire code for 2A10BC
- Inspections required are annual maintenance, internal at 5 years , and hydrostatic at 12 years
- K Class Extinguisher annual inspection required
- K Class min. 10' and max. 20' away from hood in path of egress, signage required
- Check extinguisher gauge hose nozzle and overall condition
- Special systems Inspection every 6 months... see manufacturers spec.'s

FIRE ALARM

- Alarm system inspection during rough out layout per Approved Plans and NFPA 72
- Device heights bottom of lenses over 80" from finished floor
- Top of lenses under 96" from finished floor
- Wiring completed in loop fashion
- Devices checked for candela rating against approved plans, this is a designed system
- Check for obstruction to throw patterns
- Location of the FACP and alarm pull stations correlates with approved plans
- Devices installed as designed and approved
- All devices functional, horn and strobes are synchronized
- Battery installed as per design, and should include label with install date
- No intermixing of old and new systems unless deemed compatible at review
- Full functionality testing completed with all ancillary systems and devices
- Test horns, strobes, smokes, duct detectors, hood systems, missing device, ground fault, battery missing, tamper and flow. Verification of on/off site reporting, and AHJ/address needed
- Completed NFPA 72 form to be completed and returned to GRFD
- Keys for the alarm panel required
- The alarm panel should address the situation at hand i.e. location and type of alarm

FIRE SPRINKLER

- Underground fire line inspection completed visual to include mechanical restraints burial in ground check bedding materials, depth 2 ½' top of pipe to finished grade for non- road way areas, 3' top of pipe to finished grade for roadways. Blue tracer wire 12ga. required. Thrust blocks if required shall be in place
- Hydrostatic test required for underground 200 psi for a period of 2 hours (commercial)
- No leaks or pressure loss allowed
- Prior to riser connection to the overhead piping a flush is required. In Oro Valley, TOV Water shall be present
- Flush water until water runs clear and is free of debris or sounds. Longer pipe runs will require longer flow time. Always note approximate time as to equate to gallons flowed and record on report. Flush shall have sufficient pressure and duration (800-1000 gpm) to dislodge and move water thru the entire pipeline
- Once flush is completed, a cap or connection to the riser is required or else flush must be conducted again
- Never Hydro test against another valve, a plate or cap to be used
- Connection to riser or a looped hydrostatic test and inspection of the overhead piping is required
- Visual inspection all hangers shall be spaced per NFPA 13, hangars shall not exceed an angle of 15 degrees and no bends allowed
- Check spacing of all heads for proper coverage and verify type of head with approved plan set
- Make sure inspector test port is installed
- No wires or other material shall be supported by the fire sprinkler systems piping, hangars or heads
- Check all areas around and under HVAC ductwork for voids

FIRE SPRINKLER FINAL INSPECTION

- All escutcheons are in place and each head is trimmed properly
- No paint and/or other debris are allowed on the sprinkler head, it must be replaced
- No gaps around trim of head are allowed
- Tamper and flow test required associated with alarm or monitoring, verify off site and bell
- Top of fire sprinkler head to be cleared of insulation or scrim by at least 1"
- See Riser Room details

HOOD INSPECTION

- Rough-in inspection for hood is usually completed by Building Inspector under the IMC. Test includes air tightness, ductwork no intrusions, welds of hood, construction rating behind and on the sides of hood
- The fire inspection deals with the suppression system, and approved plans need to be on site
- Appliance lay out shall be indicated on plans, and all appliances shall be present for inspection
- Rear gas connections should be in place and gas turned on
- All electrical appliances should be connected or a test meter used to verify electrical shut down
- All wheeled appliance shall have a restraint for the appliance as to not pull away from the gas connection

HOOD INSPECTION CON'T.

- Appliances shall correspond to the approved plan set in the order of the cook line
- All nozzles have a rating number and shall be checked against the approved plans, including nozzles in the top of the hood and exhaust duct. A flashlight and magnifying glass will be needed
- The nozzle aim and heights need to be verified from the approved plans
- Any flame producing device, i.e., grill adjacent to deep fryer shall either be separated by 18" or have a 9" high divider between them
- Ensure the alarm company has been notified prior to testing
- Two tests are requiring a cut link test and a pull test, only once does the gas have to be expelled
- If the building has an alarm system, the alarm system should sound upon activation and report as hood system
- The testing should shut down all gas and electric under the hood
- When the gas burner is turned on, the exhaust fan should automatically turn on. (Heat Sensor)
- During testing the caps or balloons should blow off or fill up respectively
- The makeup air should shut down and the exhaust fan stays on during activation
- Most hoods call for a 6" extension past the appliance on either side or some call for a 6" extension at the front or both
- Ensure class K extinguisher is in place, and required signage in place
- Location of the pull station is a least 10' away from the hood, not more than 20' maximum, and in the path of egress (sometimes this is difficult, use best judgment)
- Once test is completed check to see if signal was received if monitored and place system in service
- Check to see if all filters are compliant, and are properly installed along with grease drip cup

This is an outline for common inspections and testing procedures, and may not be all-inclusive for the systems described. This list does not include all inspections and may vary depending on the Occupancy Type and the complexity of the project.