

NEW CONSTRUCTION INSPECTION CHECKLIST

WATER-BASED SYSTEMS

UNDERGROUND

- Inspect installation and materials
- Hydrostatic test
- Flush
- If a backflow preventer is installed, backflow test certificate.
- Signed & dated Contractor's Material and Test Certificate for Underground Piping (NFPA 14)

STANDPIPE

- Weld inspection (*no longer required as of 1/1/2021*)
- Rough (installation, restraints, earthquake bracing, etc.) & Hydro (min. 200 psi for 2 hours)
- Standpipe flow test (min. 500 GPM at most remote outlet plus min. 250 GPM at subsequent outlets on subsequent standpipe risers @ 100 psi min.)
- If the flow test results in a pump pressure of over 150 psi, then post a permanent sign on the FDC stating the pressure needed to provide a minimum of 100 psi at the most remote standpipe outlet)
- Final visual and spacing
- Post a permanent hydraulic design plate/information sign at the base of the riser
- Post a permanent sign on FDC (to indicate what it serves: standpipe, sprinklers, or both)
- FDC, if locked, has a break-away lock or provide a key in Knox Box
- Signed & dated Contractor's Material and Test Certificate for Aboveground Piping (NFPA 14)

OVERHEAD PIPING & SPRINKLERS

- Weld inspection (*no longer required as of 1/1/2021*)
- Rough (installation, restraints, earthquake bracing, etc.) & Hydro (min. 200 psi for 2 hours)
- Final visual and spacing
- Remove all tape, covers, etc. from sprinkler heads, control valves, tamper switches, etc.
- All floor valves are open and system is connected to a working water supply
- Post a permanent hydraulic design plate/information sign at the base of the riser
- Post a permanent sign on FDC (to indicate what it serves: standpipe, sprinklers, or both)
- Control valves, if locked, have a break-away lock and provide a key in the Knox Box
- Signed & dated Contractor's Material and Test Certificate for Aboveground Piping (NFPA 14)

FIRE PUMP

- Inspect installation and materials
- Hydrostatic test
- Flush
- Signed & dated Contractor's Material and Test Certificate for Fire Pump Systems (NFPA 20)
- Jockey pump start and stop set properly
- Fire pump start and stop set properly
- Line of sight from pump controller to fire pump is adequate
- Acceptance test (minimum of 6 manual starts and 6 automatic starts, w/emergency power)
- Pump controller signals are relayed to fire alarm control unit

FIRE ALARM SYSTEMS

- All rooms are labeled
- Final visual and spacing
- Test smoke detectors
- Test duct detectors (ensure there is an access panel for maintenance and testing...per mechanical code, have an air pressure gauge reading of the pressure difference between the sampling tube and exhaust tube)
- Test tamper switches
- Test water flow alarms
- Test magnetic door holders
- Test fire and/or smoke curtains, fire rated partitions
- Test duct detectors and fire and/or smoke dampers
- Short, Ground, End of Line NAC supervisory signals
- 24 hour battery test (confirm low-frequency sounders are installed in sleeping areas, notification devices are synchronized)
- Confirm candela setting on strobes, including in-unit strobes
- For visible alarms in-units, ensure visible alarms activate upon FAS and smoke alarm activation
- If stair doors are locked from the stairway side, test fail safe operation
- Remove all tape, covers, etc. from initiation, notification, and other components of F.A.S.; including in-unit smoke alarms/detectors and carbon monoxide alarms/detectors
- If FACP is in a room or closet, provide a sign on the door indicating that the FACP is inside
- System is being monitored
- Signed and dated System Record of Completion (NFPA 72)

ELEVATOR

- Test smoke detectors
- Test duct detectors
- Test heat shunt, if machine room is sprinklered
- Test elevator recall and alternate landing
- Test firefighter phase I and phase II
- Test elevator communications
- Ensure elevator has the proper address for the building
- Provide elevator key in the Knox Box
- Provide State of California Elevator Certification
- If sprinklers are omitted in the elevator hoist way and/or machine room, provide a sign reading "NO COMBUSTIBLE STORAGE PERMITTED IN THIS ROOM By Order of The Fire Marshal" (CBC Section 3005.4.1, Item #6)

TWO-WAY COMMUNICATION SYSTEM & AREAS OF REFUGE

- Test each call station
- Test command station and ensure floor lights are identified on the panel
- If provided, ensure area of refuge is sized properly and has fire & life safety requirements
- Ensure proper signage identifying how to use the call station
- Ensure 2-way communication system recording has the proper location description

DOORS & DOOR FRAMES

- Proper installation of smoke gaskets & astragals on fire rated doors, including elevator fire doors
- Proper door closer operation
- Unlatching force (15 lbs or less) and opening/in-motion force (30 lbs or less) of fire doors
- Remove all protective stickers on fire rating labels
- If needed, provide “Door to Remain Unlocked When Building is Occupied” or similar sign on egress side above front door

EMERGENCY EGRESS LIGHTING

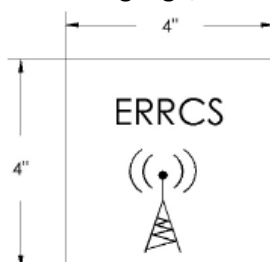
- Provide adequate emergency lighting along egress path including exit discharge (min. 1 foot candle average, 90 minute back-up power)
- Provide adequate egress illumination along egress path (1 foot candle minimum)
- Exit signs properly located
- Pay additional fee for E-light inspection

FIRE & LIFE SAFETY

- Inspect location and quantity of fire extinguishers
- Provide permanent evacuation plan signage
- Test a sampling of in-unit smoke alarms
- Test a sampling of emergency escape windows
- Provide address signage
- Knox Box with a minimum of 1 set of keys (master building including electrical/mechanical rooms, FACP, documents box, elevator reset and recall, ERRCS, fire extinguisher box, car stacker...label all keys)

EMERGENCY RESPONDER RADIO COVERAGE SYSTEM (ERRCS)

- Inspect location & installation of UPS/battery charger
- Inspect location & installation of RF Signal Booster
- Inspect location & installation of antennae
- Inspect location & installation of BDAs
- Inspect NEMA 4 enclosure & security of mounting and latches
- Inspect wiring for proper pathway survivability
- Test AC power failure and test portable radio coverage on back-up power
- Test UPS/battery charger failure
- Test BDA failure
- Test antennae failure
- Test low battery capacity signal
- Test UPS battery failure (make sure this is the last test)
- Provide signage, near Knox Box, indicating ERRCS system



HVAC

- Ensure system is balanced and does not increase door opening pressures

HAZARDOUS MATERIALS

- Hazardous Materials Inventory Sheet and Hazardous Materials Management Plan to City of Berkeley Toxics Division
- Binder with MSDS available to Fire Department in case of an emergency
- NFPA 704 signage
- Site pre-plan located in Knox Box or Documents Box

OPERATIONAL PERMITS

- Assembly
- Compressed Gas (CO2 used in beverage dispensing, CO2 enrichment, flammable gas, oxidizers, etc.)
- Flammable and Combustible Liquids
- Hazardous Materials
- High-Piled Storage
- Spraying/Dipping
- Temporary Membrane Structures and Tents
- Energy Storage Systems
- Other

FEES

- Pay all fines, fees, etc. at the Permit Service Center

Laboratories....should be an additional, separate check list