

## Annual Sprinkler Inspection- Brief Outline Per NFPA 25

- Wet Pipe Fire Sprinkler Systems: Each system control valve, sectional valve, and system-operating valve is operated through a full range to insure tamper alarm activation and functional ability. Each system is flowed through the appropriate test connection to insure correct alarm activation. All visible components including pipe, pipefittings, hangers, gauges and sprinkler heads are checked to insure proper lay out and integrity. A formal NFPA 25 report is produced from this information and the system is tagged accordingly.
- 2. Dry Pipe Fire Sprinkler Systems: Each. System control valve and system operating valve is operated through a full range to insure tamper alarm activation and functional ability. Low air alarms are tested through loss of air pressure, and water flow pressure alarms are tested through pressurization with water. Systems are then partially trip for two years and a full trip test is conducted every third year. A full trip test will have a recorded time for water to reach the inspectors test connection. A full and partial trip test will have recorded trip times for valve release. The air compressor will be operated through a loss of air pressure to record air pressure activation. The system is then returned to normal operating condition. A formal NFPA 25 report is produced from this information and, the system is tagged accordingly.
- 3. Pre-Action Fire Sprinkler Systems: Each system control valve and system-operating valve operated through a fall range to insure tamper alarm activation and functional ability. Low air alarms are tested through loss of air pressure, and water flow pressure alarms are tested through pressurization with water. The system smoke or heat detectors are then activated to ensure the signal to pre-action panel and activation of the system solenoid valve. PTI recommends that all pre-action valves be tripped every year, as required by NFPA, to insure the operation of the valve. If isolation valve are not present, to avoid flooding the system, PTI recommends that they be installed to accommodate this procedure. The system is then returned to normal operating condition. A formal NFPA 25 report is produced from this information and the system is tagged accordingly,
- 4. Fire Pump Testing: Each system control valve is operated through a full range to insure tamper alarm activation and functional ability, all fire pump and jockey pump data is collected for type, ratings, and performance settings. The jockey pumps are tested for start up and shut off pressures. The fire pumps are then run at a chum rating to determine nominal operating conditions. The fire pumps are then run at 100% capacity to determine RPM, voltage, amps, suction and discharge pressures, pitot tube pressure, and GPM flowed. Pumps are then returned to normal operating condition. A formal NFPA 25 report is produced from this information and the pumps are tagged accordingly.
- 5. Visual Inspection: An inspector walks the entire building. The inspector is to conduct a complete visual inspection of the complex to verify code compliance and any maintenance issues. All observations are noted on the NFPA reports and reported to the customer. A complete visual inspection must be done to tag a sprinkler system as compliant.



- 6. 5 Year Inspections: The following items are required to be tested at 5 year intervals:
- 1) FDC hydrostatic testing
- 2) Pressure Reducing Valve flow testing
- 3) Roof flow test
- 4) Internal Valve Investigation- Check valves, alarm valves, dry valves, and pre-action Valves.

NFPA requires inspections and testing starting at weekly intervals. The intervals are weekly, monthly, quarterly, annually, and at 5-year intervals. NFPA allows the building owner to determine a qualified individual to conduct weekly and monthly testing and inspections. NFPA goes on to state that this individual must be qualified and maintain records of these inspections for a period of 5 years. NFPA requires that quarterly, annual, and 5 year inspections be conducted by a licensed fire sprinkler contractor.

