Buckeye Fire Department
Fire Prevention Division

ROUGH FIRE SPRINKLER SYSTEM INSPECTION

1. Inspection shall be scheduled by the fire sprinkler contractor.
2. Verify the installing contractor has a valid City of Buckeye Fire Department "Fire Equipment Contractor Permit" and "On Site Competent Person" with documentation. No fire inspections will be conducted until permit is obtained and competent person document is provided.
3. Consult the Approved Plans and verify the following;
    a. Proper type of piping.
    b. Double Backflow assembly for size, type, and direction.
    c. Confirm the installation of the piping does not have excessive change of directions that are not indicated on approved plans. (Excessive use of extra fitting, such as elbows may effect hydraulic calculations).
    d. Proper size of piping.
    e. Proper piping hangers and supports with correct spacing.
    f. Sway bracing is installed per City of Buckeye code requirements. Sway bracing is required at top of risers and major changes of direction.
    g. Proper type, orifice, and temperature of fire sprinklers.
    h. Proper clearance of fire sprinklers from ALL obstructions.
    i. Check for correct distances between the fire sprinklers, off of walls, maximum coverage per fire sprinkler, and distance below roof deck. Also deflector orientation to roof deck.
    j. Check for installation of orifice in inspector's test. (Orifice shall be the same size as the smallest orifice installed in the system).
    k. Check to ensure fire sprinklers are not painted. Painted fire sprinklers shall be replaced, they shall not be cleaned.
    l. All control, auxiliary, drain, and inspector's test valves located more than seven (7) feet above finish floor or grade.
    m. Access panels shall be provided for all valves located inside a wall or concealed space. Signage shall be provided on the outside of access panel indicating type of valve that is concealed within. (This includes fire department connection check valves).
4. Observe hydrostatic testing of all piping at 200 psi for 2 hours or 50 psi in excess of system working pressure whichever is greater.

Buckeye Fire Department
Fire Prevention Division

ROUGH FIRE SPRINKLER SYSTEM INSPECTION

5. Where a tenant improvement addition or modification is made to an existing fire sprinkler system affecting more than 20 fire sprinklers, the new portion shall be isolated and hydrostatically tested at 200 psi for 2 hours or 50 psi in excess of system working pressure whichever is greater. Modifications that cannot be isolated shall not require hydrostatic testing in excess of system working pressure.
6. Tenant improvement modifications affecting 20 or fewer fire sprinklers shall not require hydrostatic testing in excess of system working pressure.
7. Relieve pressure after hydrostatic test and confirm the test gauge returns to zero. (A gauge that does not turn to zero could be an indication that the gauge is broken or pegged).
8. Verify all signage is in place. (Examples; control valve, inspectors test, main drain).
9. Verify that spare fire sprinkler cabinet is installed in an area that will not exceed 100 degrees Fahrenheit and has the following contents; the correct number of spare fire sprinklers, correct size fire sprinkler wrench, and NEW current issue NFPA 25. (An ILLEGALLY copied NFPA 25 is NOT acceptable).
10. Verify a listed and approved pressure relief valve is installed on all grid type fire sprinkler systems.
11. Verify the following when the Fire Department Connection is located on the building:
    a. Fire Department Connection shall be within fifty (50) feet of a fire hydrant.
    b. Fire Department Connection shall be located on address side of building or located on the building in the fire department access approach.
    c. Signage for fire department connection shall be per NFPA 13 and City of Buckeye code requirements.
    d. Fire Department Connection shall be installed between 18 and 48 inches above finish grade.
    e. Verify that swing check valve is installed as close to Fire Department Connection as possible and is installed in correction direction.
    f. Verify that the 2.5 inch approved caps or plugs installed.
    g. Verify department connection is not obstructed by any obstructions. (Examples; electrical transformers and landscaping).
    h. Verify fire department connection has proper signage. Additional signage may be required if fire department connection is visually obstructed. (Example; when a parking space is directly in front of the fire department connection).