

**WAC 296-24-60705 General requirements. (1) Design.**

(a) All automatic sprinkler designs used to comply with this standard must provide the necessary discharge patterns, densities, and water flow characteristics for complete coverage in a particular workplace or zoned subdivision of the workplace.

(b) You must ensure that only approved equipment and devices are used in the design and installation of automatic sprinkler systems used to comply with this standard.

(2) **Maintenance.** You must properly maintain an automatic sprinkler system installed to comply with this section. You must ensure that a main drain flow test is performed on each system annually. You must open the inspector's test valve at least every two years to assure that the sprinkler system operates properly.

(3) **Acceptance tests.** You must conduct proper acceptance tests on sprinkler systems installed for employee protection after July 1, 1982, and record the dates of such tests. Proper acceptance tests include the following:

- (a) Flushing of underground connections;
- (b) Hydrostatic tests of piping in system;
- (c) Air tests in dry-pipe systems;
- (d) Dry-pipe valve operation; and
- (e) Test of drainage facilities.

(4) **Water supplies.** You must ensure that every automatic sprinkler system is provided with at least one automatic water supply capable of providing design water flow for at least 30 minutes. You must provide an auxiliary water supply or equivalent protection when the automatic water supply is out of service, except for systems of twenty or fewer sprinklers.

(5) **Hose connections for firefighting use.** The employer may attach hose connections for firefighting use to wet pipe sprinkler systems provided that the water supply satisfies the combined design demand for sprinklers and standpipes.

(6) **Protection of piping.** You must ensure that automatic sprinkler system piping is protected against freezing and exterior surface corrosions.

(7) **Drainage.** You must ensure that all dry sprinkler pipes and fittings are installed so that the systems may be totally drained.

(8) **Sprinklers.**

(a) You must ensure that only approved sprinklers are used on systems.

(b) The employer may not use older style sprinklers to replace standard sprinklers without a complete engineering review of the altered part of the system.

(c) You must ensure that sprinklers are protected from mechanical damage.

(9) **Sprinkler alarms.** On all sprinkler systems having more than 20 sprinklers, you must ensure that a local water-flow alarm is provided which sounds an audible signal on the premises upon water flow through the system equal to the flow from a single sprinkler.

(10) **Sprinkler spacing.** You must ensure that sprinklers are spaced to provide a maximum protection area per sprinkler, a minimum of interference to the discharge pattern by building or structural members or building contents and suitable sensitivity to possible fire hazards. The minimum vertical clearance between sprinklers and material below must be 18 inches.

(11) **Hydraulically designed systems.** You must ensure that hydraulically designed automatic sprinkler systems or portions thereof

are identified and that the location, number of sprinklers in the hydraulically designed section, and the basis of the design is indicated. Central records may be used in lieu of signs at sprinkler valves provided the records are available for inspection and copying by the director.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 15-24-100, § 296-24-60705, filed 12/1/15, effective 1/5/16. Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 82-02-003 (Order 81-32), § 296-24-60705, filed 12/24/81.]