

WEST COUNTY EMS & FIRE Serving West St. Louis County since 1908

Sprinkler System Permits

Modifications to Existing Systems

If the work is in an existing multi-tenant Type I or Type II building, the building may have an optional Master Building Permit. Please read the Master Building Permit guide for more details as it can affect the need to obtain a Sprinkler Permit.

With the exception of the criteria established for Master Building Permits, the installation, relocation or modification of an existing system falls under 3 categories based on scope. They are:

<u>4 heads or less:</u> No permit or inspection is required

<u>5 heads to 19 heads</u>: A permit is required and the system will be inspected for proper head installation, piping securement and visible leaks. Inspection must occur prior to ceiling cover approval.

20 heads or more: A permit is required and the system will be inspected for proper head installation, piping securement, visible leaks and a witnessed Hydro-test per NFPA 13 2019 Edition. Inspection must occur prior to ceiling cover approval. Witnessed hydro-testing requires an inspection to be called in **2 business days** or more in advance. The initial pressure will be witnessed by the District inspector. The inspector will return after more than 2 hours has elapsed to verify that there is no loss of pressure in the system.

New Systems

A permit is required and the system will be inspected for proper head installation, piping securement, visible leaks and a witnessed Hydro-test per NFPA 13 2019 Edition. Inspection must occur prior to ceiling cover approval.

Witnessed hydro-testing requires an inspection to be called in <u>2 business days</u> or more in advance. The initial pressure will be witnessed by the District inspector. The inspector will return after more than 2 hours has elapsed to verify that there is no loss of pressure in the system.

Requirements for all systems

The annual required testing and inspection documentation for the entire sprinkler system will be reviewed during the permit inspection process. Final approval will not be provided on a Sprinkler System Permit without current (less than 12 months) testing certification per NFPA 13 2019



Edition. For systems served by Private Hydrants, a current flow and inspection test (less than 12 months old) must also be available onsite for review.

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Flexible Hose Installations

Flexible hose installations are currently limited to a maximum of 3' as measured from the end of the rigid pipe to the base of the sprinkler head. Under no circumstances are flexible hose and head assemblies allowed to be used when the pendant can drop to a vertical position (when unsecured) lower than 84" as measured from the floor walking surface to the pendant.

For flexible head installations using a ceiling grid system as its securement, a full set of ceiling plans must be submitted with the Sprinkler permit showing ceiling construction, typical installation detail and product specifications demonstrating that the product and installation meets or exceeds ASTM C635 and C636 standards.

A **Ceiling Grid Inspection** *will be required* for Sprinkler System Permits using flexible hose systems.

Visible Leaks

Any sprinkler system shall be free of all visible leaks. Visible leak is defined as any presence of water, including a single droplet, on or from any portion of the sprinkler system. Any leak showing flowing water is an instant fail. If, during the course of any sprinkler system inspection there are indications of moisture or droplets, the inspection will fail upon finding a third area on the sprinkler system with moisture or droplets. Moisture on the floor or any surface below the plane of the sprinkler system will be deemed as a leaking location in the sprinkler system.

Removal of Hydrostatic Testing Pumps and Equipment

All hoses and pumps used to pump up a sprinkler system for a hydrostatic test shall be completely disconnected from the sprinkler system and removed from the building. The presence of any materials used to increase the pressure on a sprinkler system during a hydrostatic test will immediately void and/or terminate the test.