

Sprinkler System Analysis



Automatic fire sprinkler systems can be the most effective and reliable means of controlling fire in a building, but only if they are correctly designed, installed and maintained. EMC's experts can provide valuable guidance to help maximize your fire protection.

Sprinkler System Design

We can assist with sprinkler system design when you're planning a new building or making changes or additions to your existing facility. EMC can help:



Recommend system design specifications



Assist during contractor bidding process



Review proposed plans

Sprinkler System Updates and Maintenance

EMC can evaluate the adequacy of the fire sprinkler system in your current building. As your organization evolves, your fire protection needs may change and you may need to adjust your sprinkler system accordingly.

Common issues include:

- Purchasing or leasing a new building
- Changing the layout or location of your storage or production areas
- Using new materials with different protection requirements
- Changing occupancy (building new office space within a warehouse, etc.)



Other Fire Prevention Assistance

Fire prevention program development • Water supply assessment • Ignition source control
Flammable liquid and high hazard storage • Fire wall and door placement • Fire pump test witnessing

FLIP FOR MORE

How Sprinkler Systems Work

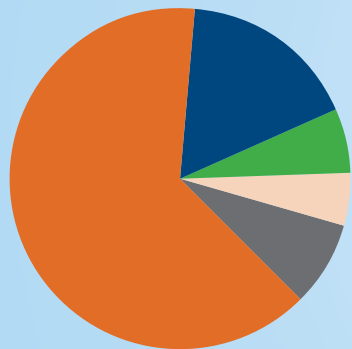
- 1 Heat from flames activates sprinkler
- 2 Activated sprinkler releases pressurized water from overhead piping to control the fire



Fun Facts About Sprinklersⁱ

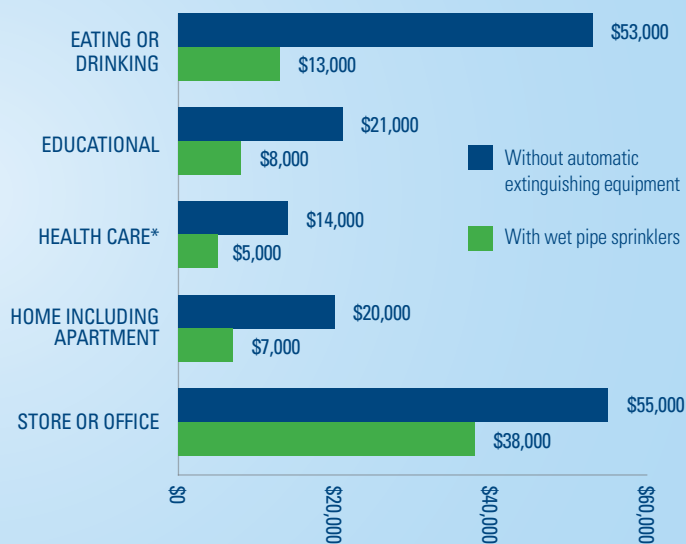
- Many sprinklers discharge around 15 gallons of water per minute, but some warehouse sprinklers can discharge up to 100 gallons per minute.
- Usually only 1 or 2 sprinklers are required to control the fire.
- Sprinkler systems have a median cost of \$1.42 per square foot.
- Unlike the movies, a small fire does not automatically activate all the sprinklers in a facility. Sprinklers activate only near the heat of a fire, preventing unnecessary water damage.

Why Sprinklers Failⁱⁱ



- **64%** system is shut off before fire began (such as during the course of routine inspection or maintenance)
- **17%** manual intervention
- **6%** lack of maintenance
- **5%** inappropriate system for the type of fire
- **Only 7% of sprinkler failures resulted from component damage**

Damage per Fire With Wet Pipe Sprinklers versus Without Automatic Extinguishing Equipment, 2007 - 2011



*Health care includes hospitals, nursing homes, clinics, and doctor's offices.



Hello

Contact Us

EMC loss control representatives are ready to help you maximize your fire protection. Contact your local independent insurance agent, EMC loss control representative or email losscontrol@emcins.com.

ⁱ National Fire Prevention Association, <http://www.nfpa.org>, (Aug. 6, 2015).

ⁱⁱ *US. Experience with Sprinklers*, John R. Hall, Jr., June 2013 NFPA, 1 Batterymarch Park, Quincy, MA 02169, www.nfpa.org Fire Analysis & Research Division, osds@nfpa.org

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