



## The Facts About Fire Sprinklers

### Fire Sprinklers

- Reduce the fire death rate by 83%
- Reduce property damage by 34-77%
- Protect people
- Protect firefighters
- Protect property
- Protect the environment

### State Street and the Downtown Business District

*What would the economic impact of a significant fire be? How would it affect the character of State Street?*

*A fire on June 20, 2011 destroyed the Capitol Hills Apartments, displacing 27 residents and shutting down a popular restaurant at the street level. With no sprinklers to slow its progress, it became a 2-alarm incident that took all day to control and extinguish.*

#### *The economic impact?*

*City costs — \$16,359*

*Other agencies and services — \$24,684*

*Loss of revenue for adjacent businesses — \$26,400*

*Direct property loss to contents and structure — \$1.5-2 million*

### Madison is above the national average in its percentage of multi-family housing.

*Glacier Hills Apartments — A fire on July 15, 2007 caused \$.5 million in property damage, destroying the building and displacing more than 50 residents. Six 1/2 years later, the same fire scenario left some vinyl siding with minimal damage. The difference?*

*The replacement building included fire sprinklers.*

The National Institute of Standards & Technology (NIST) reports the time to escape a fire in the home is just **3 minutes!**

### For Assembly Occupancies—Bars & Restaurants

- 2 fatalities annually
- 115 civilian fatalities
- \$246 Million in fire loss
- Damage 75% lower with fire sprinkler protection

### For High-rise Occupancies—Residential & Commercial

- 15,400 fires annually
- 46 fatalities
- 530 civilian injuries
- \$246 Million in fire loss

*The Cost of Installing Fire Sprinklers - \$2.50 - \$3.72 per square foot*



Steven Davis  
Fire Chief  
City of Madison Fire Department  
8th & 9th Floors  
30 W. Mifflin St.  
Madison, WI 53703





## CITY OF MADISON FIRE DEPARTMENT

# Why installing fire sprinklers makes sense

*Including fire sprinklers in your building helps your organization in the following areas:*

- **Continuous business operations.** A fire in an unsprinklered building will shut down major portions, if not the whole building. Fire sprinklers limit the fire and the damage to a small area. Wet items that can be dried out, but critical or historic items that have burned to ash can never be reclaimed.
- **Insurance.** Because fires in buildings with fire sprinklers result in less damage, the insurance industry provides discounts to buildings with complete fire sprinkler systems. (Usually, in order to get the sprinklered rate, the owner needs to send to the insurance company proof that the system has been inspected and tested at least annually.)
- **Federal legislation/ADA compliance.** Complying with some building code requirements can be expensive, but buildings with fire sprinklers are allowed certain “tradeoffs.” For example, designing an “area of refuge” during a fire for people in wheelchairs can be less expensive in a building with fire sprinklers.
- **Liability avoidance.** Recent court decisions involving large loss fires have stated that even though codes did not require fire sprinkler systems when the building was constructed, widespread use of these systems has led to the public expecting sprinklers as a “reasonable level of care.”
- **Income tax deductions.** Although specific rules vary, generally a business can take the depreciation allowance each year for the value of the fire sprinkler system and a tax deduction for the interest on a loan to install a fire sprinkler system; a business might also qualify for the federal Qualified Rehabilitation Tax Credit.
- **Nonstop protection.** Fire sprinklers protect your property around the clock. Arson, electrical problems, and discarded smoking materials are some of the hazards that can occur at any time.
- **Sprinklers are GREEN!** Fires extinguished before they get out of control emit less toxic smoke, need less water, and creates less debris for the landfill.

### ONE MORE THING

**Debunking the Movie Myth:** Only heat activates a sprinkler—not smoke or pulling a fire alarm. Usually only the sprinkler located nearest the fire is needed to extinguish the fire.



Steven Davis  
Fire Chief  
City of Madison Fire Department  
8th & 9th Floors  
30 W. Mifflin St.  
Madison, WI 53703





CITY OF MADISON FIRE DEPARTMENT

## Why Fire Sprinklers Are Green

**A working structure fire pollutes Earth's atmosphere with poisonous chemicals:**

- Hydrogen Cyanide
- Sulfur Dioxide
- Carbon Dioxide
- Carbon Monoxide
- Hydrogen Chloride
- Nitrogen Oxide

### **Fires**

*...fill our landfills with millions of tons of unrecyclable trash annually*

*...injure 16,000 and kill almost 3,500 people a year*

*...waste billions of gallons of potable water annually*

**The use of fire sprinklers to mitigate and contain fires results in**

**REDUCED** water usage

**REDUCED** toxic gases

**REDUCED** carbon foot print

**REDUCED** need for fire apparatus

**REDUCED** fuel and emissions for fire apparatus

**REDUCED** building materials in the landfill

*Burned materials from fire's destruction*

*AND*

*New material to replace and renovate the damaged structure*

**REDUCED** fire deaths and injuries, with the attendant medical care and supplies

*The greenest thing we can do is put the fire out.*

—Michael Klemenz, FPE, Davis-Ulmer/API



Steven Davis  
Fire Chief  
City of Madison Fire Department  
8th & 9th Floors  
30 W. Mifflin St.  
Madison, WI 53703

