

# Fire Sprinkler E-News

Keeping You Up-To-Date and Informed

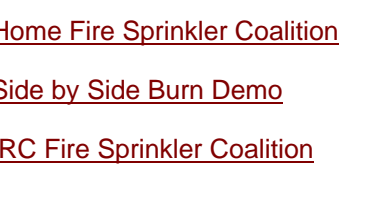
Washington State Fire Marshal's Office  
Michael G. Matlick, State Fire Marshal



## In This Issue:

- 2008 Sprinkler Activations
- Communities with Res. Fire Sprinkler Ordinances
- Renewals
- Licensed Plumbers
- Sub-Contracting
- Supervision
- Underground
- Investigations
- CPVC Chemical Compatibility
- Anti Sprinkler Bills
- Sprinkler Smarts Program

## Residential Fire Sprinkler Education Programs



[Home Fire Sprinkler Coalition](#)

[Side by Side Burn Demo](#)

[IRC Fire Sprinkler Coalition](#)



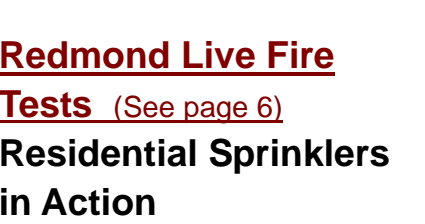
[NFPA Fire Sprinkler Initiative](#)

[Sprinkler Video Page](#)



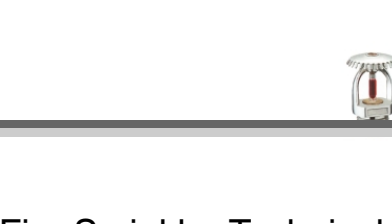
[Residential Fire Safety Institute](#)

[Answers to Home Builders Objections](#)



[Fire Safety & Prevention Resources](#)

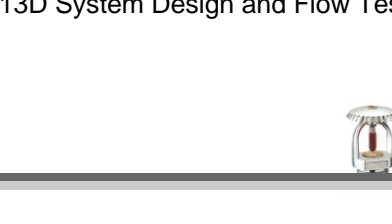
[Residential Fire Sprinkler Systems](#)



## Redmond Live Fire Tests (See page 6)

## Residential Sprinklers in Action

This DVD is available at no charge to Authorities Having Jurisdiction. To request a copy, please contact Regulatory Services at, 800.595.9844 or by email at [ulregulatoryservices@us.us.com](mailto:ulregulatoryservices@us.us.com).



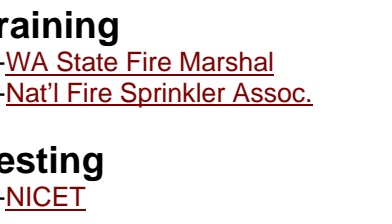
## Fire Sprinkler Technical Advisory Group Meeting Dates

General Administration Bldg.  
210 11th Ave SW, Olympia  
WSP Conference Room

Thursday, June 25 1:00-3:00

Thursday, Sept. 24, 1:00-3:00

Thursday Dec. 17, 1:00-3:00



## 2009 Training and Events

Sept 9-11—NICET I&T—NFPA 25

Oct. 19-20—Residential

Workshop—Promoting Residential Fire Sprinklers—TBA

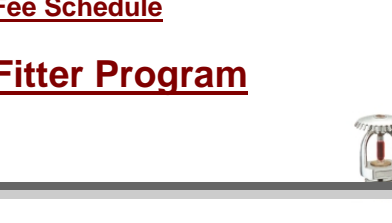
13D System Design and Flow Test



## Presentations Offered by OSFM Staff

- Identification of Recalled Sprinkler Heads
- Underground Portion of Fire Sprinkler Systems
- Building Owner Responsibilities
- Sprinkler Law RCW 18-160 and WAC 212-80 for AHJ's

To have one of these presentations given at your business or organization, contact [Ed Borgatti](#) or [Karen Jones](#).



## Training

-WA State Fire Marshal

-Nat'l Fire Sprinkler Assoc.

## Testing

-NICET

## Public Education

-Home Fire Sprinkler Coal.

-WA State Fire Marshal

## Saves

-Spokane

## Links

-WA State Fire Marshal

-American Fire Sprinkler Assoc.

-Nat'l Fire Sprinkler Assoc.

-Fire Sprinkler Advisory Board of Puget Sound

-Nat'l Fire Protection Assoc. (NFPA)

-WAC 212-80

-RCW 18.160

-RCW 18.270

-Society of Fire Protection Engineers

-Empty Shoes WA (after following this link, the empty shoes link is on the right side)



## Applications

### Contractors: Level 1,2,3,U & ITT

- Application
- Affidavit
- Terms of License
- Licensing Bond (Levels 1,2 and I&T)
- Licensing Bond (Levels 3 and U)
- Assignment of Time Deposit

### C of C (Designer): Level 1,2,3 & U

- Application
- Affidavit
- Verification of Employment

## Inspection and Testing Technician:

- Application
- Affidavit

## Fee Schedule

## Fitter Program



## Contact Us:

Office of the State Fire Marshal  
Licensing Section  
210 11th Ave SW  
Post Office Box 42600  
Olympia, WA 98504-2600



[Chuck Duffy](#)  
Chief Deputy State Fire Marshal  
Licensing Section



[Ed Borgatti](#)  
Deputy State Fire Marshal  
Investigations



[Karen Jones](#)  
Deputy State Fire Marshal  
Training/Licensing/Inv.



[Ken Dellsite](#)  
Deputy State Fire Marshal  
Investigations/Fire Safe Cigarettes



[Humberto Rodriguez](#)  
Comm. Trade and Economic Devel. Spec. 1  
Licensing



[Angie Benson](#)  
Office Assistant 3  
Sprinkler Fitter Program

## Sprinkler Fitter Program FAQ



## 2008 Data on Fire Sprinklers in Washington

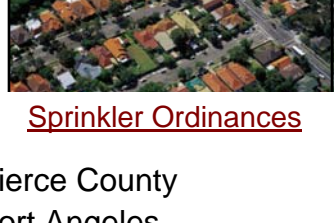
There were 127 successful fire suppression system activations reported in 2008. These activations protected \$313 million in property and saved 99% of the property and contents with a loss of only \$2.5 million.



Fires in homes pose one of the biggest threats to people. In 2008, there were more than 5,500 structure fires in single and multi-family properties, resulting in 33 fire fatalities and dollar loss in excess of more than \$132 million. Home fire sprinklers are a proven way to protect lives and property against fires at home. When sprinklers are present, they save lives. See page 14 of the [Fire in Washington Annual Report](#)

## Washington Communities with Residential Fire Sprinkler Ordinances/Amendments/Incentives

The following communities have adopted fire sprinkler ordinances, amended code requirements or use incentives to promote the installation of residential sprinkler systems.



[Sprinkler Ordinances](#)

Bremerton	Federal Way	Pierce County
Camas	King County	Port Angeles
Clark County	Kitsap County	Redmond
Cowlitz County	Maple Valley	Woodinville
DuPont	Olympia	

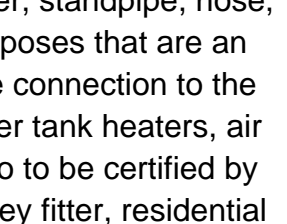
If you know of additional communities with ordinances, code amendments or incentives for the installation of residential fire sprinkler systems or for more information, please contact Deputy State Fire Marshal [Karen Jones](#). She will contact them and add their information. If you would like detailed information about the requirements or incentives used by the communities listed above, you can also contact [Karen Jones](#).

## Renewals Complete

Over 1,000 renewals were issued to the fire sprinkler industry for 2009. Our thanks to contractors and certificate of competency holders for helping us to reduce the error rate on renewals by 50%. Renewal notices are mailed in November and are due by December 31, 2009. Certifications or licenses that are not renewed within 60 days, are revoked. Please remember to keep your contact information up-to-date with our office.

## Licensed Plumbers and the New Sprinkler Fitter Law

[Sprinkler Fitter FAQ](#)



The new Fire Protection Sprinkler Fitter law, RCW 18.270, became effective on January 1, 2009. This law requires certification as a Sprinkler Fitter of anyone who "installs, alters, or repairs sprinkler, standpipe, hose, or other hazard systems for fire protection purposes that are an assembly of piping or conduit beginning at the connection to the primary water supply within a building, sprinkler tank heaters, air lines and all tanks and pumps attached thereto to be certified by the Office of the State Fire Marshal as a journey fitter, residential fitter, or a trainee.

There is one exception to RCW 18.270 for [licensed plumbers](#). The exception for plumbers is limited to the installation of residential fire protection systems connected to a potable water source, which requires a plumbing certificate (Washington Administrative Code 212-780-095(J)). The system must be a multipurpose network system in which each sprinkler is supplied from three separate paths. Plumbers cannot install any other type of fire protection sprinkler system such as a residential NFPA 13D "stand-alone" system (a system that does not connect to the potable water source).

Plumbers are strictly limited to the installation of these specific systems; they cannot perform the required design work. All sprinkler system design work must be done by individuals with the appropriate Certificate of Competency for Design issued by this office.

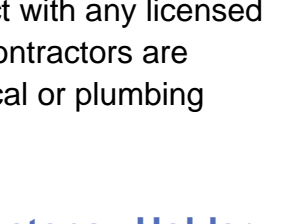
Plumbers using this exception [must work for a Licensed Fire Sprinkler Contractor](#) per RCW 18.160. Plumbers cannot perform installation work using only a plumbing license.

The plumber exception does not permit the installation of any other type of fire protection system other than one described above. A plumber seeking to install other types of fire protection sprinkler systems must first obtain a Sprinkler Fitter's Certificate of Competency.

Penalties for violating the law range from \$200 to \$5,000 a day for both the individual and their employer (WAC 212-80-255 to 265). To report violators, see the Contractor Complaint Form on line at: <http://www.wsp.wa.gov/fire/docs/sprinkler/complain.pdf>.

## Sub-Contracting—A clarification

A frequently asked question is the relationship between a general contractor and a licensed fire sprinkler system contractor. Can a general contractor legally contract with a licensed sprinkler contractor? The answer: Yes.



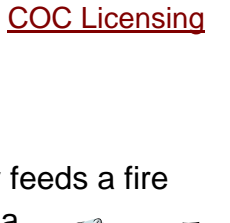
[WAC 212-80-048](#)

A licensed general contractor may subcontract with any licensed specialty contractors. Fire sprinkler system contractors are classified as specialty contractors, like electrical or plumbing contractors.

## Supervision by a Certificate of Competency Holder

Certificate of Competency Holders (CofC) for Level I, II, III and U are responsible to:

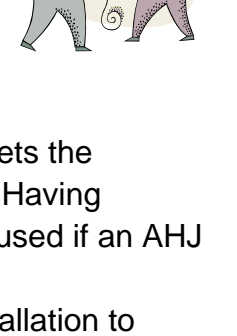
- Be on site during the installation, **OR**
- Supervise the installation by overseeing the work being performed through periodic visits to the job site. Supervision cannot be performed by a person that is located out-of state or has never been to the job site. WAC 212-80-043(6)
- The CofC **shall** be present for the final inspection, and the flushing, hydrostatic, and leakage testing, **AND**
- The CofC **shall** be the person that signs and affixes the CofC stamp to the Contractor's Material and Test Certificate because the CofC is responsible for the job. WAC 212-80-088(1) and WAC 212-80-043(6)



[COC Licensing](#)

## Unlicensed Underground Installations

All underground water supply piping that directly feeds a fire protection sprinkler system must be installed by a licensed Level U contractor. Any unlicensed contractor installing the underground portion of a system is violating RCW 18.160 and WAC 212.80. A licensed contractor who connects the above ground portion of the system is also violating both the RCW and the WAC.

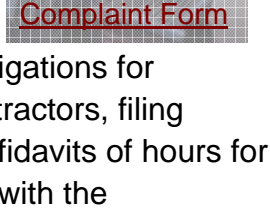


The responsibility for ensuring the installation meets the International Fire Code falls to the local Authority Having Jurisdiction (AHJ). The following options can be used if an AHJ finds an illegal underground installation.

- Issue a stop work order on the residential installation to prevent the above portions of the system from connecting to the underground portion. Take one of the following steps to ensure the underground work meets all testing and inspection requirements.
  - Require the general contractor to uncover all of the underground systems and have it replaced using a Level U licensed contractor.
  - Accept the system after requiring all NFPA 25 tests and inspections to be performed. These include flushing the system, hydrostatic test, leakage test, plus checking all pipes, joints and thrusts blocks. **Note: the AHJ who uses this approach is accepting liability for the AHJ who uses this approach is accepting failures of the system.**
  - File a State Fire Marshal's complaint form against both contractors for work performed in violation of the RCW and the WAC.
- If the above ground portion has already been connected, the AHJ can use either of the two methods mentioned in #1 above. However, the above ground portion may have become contaminated with debris from the underground system. The AHJ will have to require sufficient testing of the above ground system to ensure there is no debris and the system can operate.

## Investigations

Recent investigations by Deputy State Fire Marshals have resulted in over \$16,000 in fines. The fines were levied against contractors for using uncertified ITT personnel.



[Complaint Form](#)

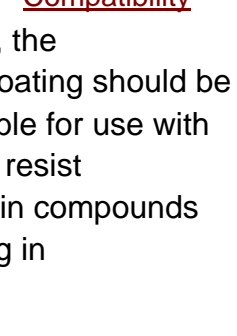
DSFM Borgatti currently has 17 pending investigations for additional uncertified ITT work, unlicensed contractors, filing fraudulent inspection reports, and fraudulent affidavits of hours for sprinkler fitter certification. Ed will be assisted with the investigations in the near future by DSFM Ken Dellsite, who recently joined the Licensing section.

There are steep penalties for companies and individuals who violate the law. For example, a company using uncertified ITT personnel risks having a penalty assessed as a Type II violation, with fines ranging from \$200 to \$500 per day. Repeating the offence three times makes it a Type III violation with fines of \$500 to \$5,000 per day. Unlicensed contractors who work on sprinkler systems can be charged with a gross misdemeanor, which can result in fines of up to \$5,000 and one year in jail.

Our goal is to create a positive working relationship with all members of the sprinkler industry. We prefer to answer questions about licensing and certification requirements before there is a problem.

## CPVC Chemical Compatibility

There have been instances when CPVC piping has been damaged after contact with incompatible ancillary products such as thread sealants, leak detectors, firestops, anti freeze sealants, etc. Check with the manufacturer of both the pipe and the ancillary products to confirm chemical compatibility with CPVC piping.



[Chemical Compatibility](#)

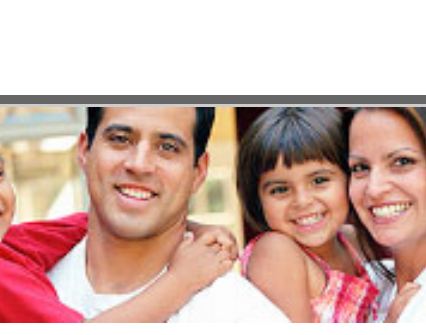
When installing a mixed steel/CPVC pipe system, the manufacturer of steel pipe with an antimicrobial coating should be contacted to ensure that its products are compatible for use with CPVC. Some antimicrobial coatings (provided to resist microbially influenced corrosion) may contain compounds that can affect nonmetallic sprinkler pipe, resulting in environmental stress cracks. [Read more . . .](#)

## National Fire Protection Association

National fire service speaks out against anti-sprinkler bills Stand together to better protect firefighters and public May 4, 2009 – Citing the fact that more than 90 percent of fireground firefighter deaths occur in one- and two-family homes, leading fire service organizations warned against state-by-state legislative efforts, orchestrated by homebuilders, which are designed to prohibit communities from requiring residential fire sprinklers in new home construction. Fire service groups are reiterating their strong support for sprinklers in the wake of several legislative attempts across the country. [Read more . . .](#)

## Interactive Program for Junior High Students

Last Fall, the Home Fire Sprinkler Coalition introduced an interactive educational program for students in sixth through eighth grades. It includes the "Sprinkler Shuffle" game where students learn how fire sprinklers work, the "Sprinkler Circuits" activity helps students learn to engineer water flow, and the "Fact or Fiction" movie theater.



# PREVENT FIRES IT'S YOUR JOB!

Home Fire Sprinklers  
Ask your builder to install fire sprinklers and protect what you value most! [More Information >](#)

