



Tuesday e-Tech Alert
August 15, 2006
No.63

Beware Bathroom Heat Fans

The Sister Bay & Liberty Grove Fire Department in Wisconsin recently worked with one of the fire sprinkler manufacturers and discovered a trend of concern relating to bathroom ventilation fans: some contain heating units. This has important implications for minimum sprinkler distance from such units in bathrooms that are protected with sprinklers.

Neither the fire department nor the sprinkler manufacturer could understand why there were multiple reports of inadvertent sprinkler discharge among bathroom sprinklers on a certain project, especially when a replacement sprinkler suffered the same fate. The fire department instrumented some of the bathrooms to record temperatures near the sprinklers while showers and bathroom exhaust fan were operating. They were surprised to find that temperatures were reaching the range of the 155°F sprinkler operating temperatures for some sprinklers approximately 6 inches from the exhaust fans. Closer investigation revealed that the fan assemblies contained heating units on one side and, depending on the orientation in which they were installed, had the potential to activate nearby sprinklers. Sprinklers located on the side opposite the heating unit or farther away had not actuated but in some cases had show leakage of the bulb contents.

The heat fan units are not rare. A recent visit to a Home Depot showed that a NuTone 665RP “ventilation fan with light and heater” sells for about \$75 and looks identical to the NuTone 668RP “ventilation fan with light” selling for \$60. In addition to the maximum 100 W light for each unit, the slightly pricier fan contains a 1500 W heating unit intended to add coziness to the bathroom experience.

In accordance with the minimum separation distances for residential sprinklers given in Table 7.5.5.3 of NFPA 13D, Table 6.6.7.1.5.3 of NFPA 13R and (in the 2002 edition) Table 8.3.2.5(c) of NFPA 13, ordinary temperature rated sprinklers are required to be a minimum of 6 inches (150 mm) away from a 100 W light fixture, but a minimum 24 inches (600 mm) away from the side of a ceiling heat diffuser. For intermediate temperature rated sprinklers the minimum distances are 3 inches (75 mm) for the light fixture and 12 inches (300 mm) for the heat diffuser.

Because bathroom fan units are often replaced during their lifetime and could be replaced with a heating unit, it would be advisable to maintain the larger separations from bathroom fans for all new installations and consider the use of intermediate rated sprinklers.

Upcoming NFSA “Technical Tuesday” Online Seminar

Topic: Sprinkler Obstructions

Instructor: Victoria B. Valentine, P.E, NFSA Manager of Product Standards

Date: August 22, 2006

Many guidelines detail the proper location for fire sprinkler installation with relation to common obstructions. This program will review those common obstructions including frequent problem areas, as the ceiling is shared space with other common features such as lights. In addition, different types of sprinklers will be covered with their specific rules. Recent research will also be discussed.

Information and registration for this seminar is available at www.nfsa.org or by calling Dawn Fitzmaurice at 845-878-4200 ext. 133 or email: dawn@nfsa.org.

Upcoming NFSA “Business Thursday” Online Seminar

Topic: Insurance “Wrap-Up” Programs; OCIPs & CCIPs

Instructor: Buddy Dewar, NFSA Director of Regional Operations

Date: August 24, 2006

Owner Controlled Insurance Programs (OCIPs) and Contractor Controlled Insurance Programs (CCIPs), also known as “wrap-ups”, are increasing in popularity with owners and general contractors to counter increasing insurance costs. This presentation explains the root causes leading to wrap-ups; the gamble assumed by the owner when wrap-ups are provided; the many gaps in coverage that are problematic for the subcontractor and its current insurer; potential umbrella coverage problems depending on the contractor; workers’ compensation woes, and long-term completed operations coverage by a third party insurer. The course will present the key factors in identifying problems with wrap-up coverage and actions needed to protect your company from financial distress when signing unto a wrap-up program.

Information and registration for this seminar is available at www.nfsa.org or by calling Dawn Fitzmaurice at 845-878-4200 ext. 133 or email: dawn@nfsa.org.

2006 Basic and Advanced Technician Training, NICET Inspection Seminars

The NFSA is the only organization that offers two-week basic technician training seminars, 3-day advanced technician training seminars, and NICET-oriented inspection and testing review seminars at various locations across the United States. The 2006 schedule still includes the following dates and locations:

2-week Basic Technician Training

October 16-27, 2006 – Philadelphia, PA

3-day Advanced Technician Training

October 3-5, 2006 – Minneapolis, MN

3-day NICET Inspection and Testing Certification Review

September 6-8, 2006 – Dallas, TX
November 14-16, 2006 – Anchorage, AK

For more information, contact Nicole Sprague at 845-878-4200 ext. 149 or email:
sprague@nfsa.org.

NFSA In-Class Training Opportunities

NFSA also offers in-class training on a variety of subjects at locations across the country. Here are some upcoming seminars:

Two-day NFPA 13 Overview & Intro to Plan Review 30-31	Carol Stream, IL	Aug
Hydraulics for Fire Protection 1	Carol Stream, IL	Sept
Two-day NFPA 13 Overview & Intro to Plan Review 11-12	Eugene, OR	Sept
Hydraulics for Fire Protection 13	Eugene, OR	Sept
Basic Seismic Protection (1/2 day)(AM) 14	Eugene, OR	Sept
Underground Piping (1/2 day) (PM) 14	Eugene, OR	Sept
Introduction to Sprinkler Systems (1/2 day) (AM) 19	Dublin, OH	Sept
Basic Seismic Protection (1/2 day) (PM) 19	Dublin, OH	Sept
Two-day NFPA 13 Overview & Intro to Plan Review 20-21	Dublin, OH	Sept
Introduction to Sprinkler Systems (1/2 day) (AM) 26	Appleton, WI	Sept
Standpipe Systems (1/2 day) AM 26	Kansas City, MO	Sept
Underground Piping (1/2 day) PM 26	Kansas City, MO	Sept
Two-day NFPA 13 Overview & Intro to Plan Review 26-27	Seattle, WA	Sept
Underground Piping (1/2 day) (PM) 26	Appleton, WI	Sept
Pumps for Fire Protection 27	Kansas City, MO	Sept
Inspection, Testing & Maintenance 28	Kansas City, MO	Sept
Inspection, Testing & Maintenance 27	Appleton, WI	Sept
Hydraulics for Fire Protection 28	Seattle, WA	Sept

Pumps for Fire Protection 28	Appleton, WI	Sept
Inspection, Testing & Maintenance Two-day NFPA 13 Overview & Intro to Plan Review 3-4	North Las Vegas, NV Meridian, ID	Oct 3 Oct
Residential: Homes to High-Rise Hydraulics for Fire Protection	North Las Vegas, NV Meridian, ID	Oct 4 Oct 5
Standpipe Systems (1/2 day) (AM)	North Las Vegas, NV	Oct 5
Underground Piping (1/2 day) (PM) 5	North Las Vegas, NV	Oct

For more information or to register, visit www.nfsa.org or call Michael Repko at 845-878-4207 or email: seminars@nfsa.org.

NFSA Tuesday e-Tech Alert is c. 2006 National Fire Sprinkler Association, and is distributed to NFSA members on Tuesdays for which no NFSA Technical Tuesday Online Seminar is scheduled. Statements and conclusions are based on the best judgment of the NFSA Engineering staff, and are not the official position of the NFPA or its technical committees or those of other organizations except as noted. Opinions expressed herein are not intended, and should not be relied upon, to provide professional consultation or services. Please send comments to Russell P. Fleming, P.E. fleming@nfsa.org.

In the promotion of the fire sprinkler concept, the National Fire Sprinkler Association represents all fire sprinkler industry interests including fire sprinkler contractors, manufacturers and suppliers of fire sprinklers and related equipment and fire protection professionals. Established in 1905, the National Fire Sprinkler Association provides publications, nationally accredited seminars, representation in codes and standards-making, market development, labor relations and other services to its membership. Headquartered in Patterson, New York, the National Fire Sprinkler Association has regional operations offices throughout the country.