



MAY/JUN 2009 / No. 154

Journal of the
National Fire Sprinkler
Association

SQ

2009 Buyer's Guide Issue

INSIDE THIS ISSUE:

- Fire Pump and Riser Rooms
- Evaluating Protection Bags for Sprinklers
- Top Tech Exam: How Would You Have Done?
- Introducing "Catch a BIG WAVE" Membership Campaign

ATTENTION

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100 sq. ft.	100 sq. ft.	100 sq. ft.	100 sq. ft.	100 sq. ft.	196 sq. ft.
50 psi	35 psi	15 psi-UL 20 psi-FM	22.7 psi (.80)	22 psi	30 psi
12 sprs	12 sprs	12 sprs	2000 sq. ft.	15 sprs (1500 sq. ft)	7 sprs (min. of 1200 sq. ft.)
1200+ gpm	1200+ gpm	1200+ gpm-UL 1352+ gpm-FM	1600+ gpm	1200+ gpm	Sys. demand 966+ gpm
250 gpm HS	250 gpm HS	250 gpm HS	500 gpm HS	500 gpm HS	250 gpm HS

Building Height: 35' Storage Height: 30' Coverage: up to 144 sq ft (12'x12')

K-14.0 ESFR	K-16.8 ESFR	K-25.2 ESFR	N252 EC
100 sq. ft.	100 sq. ft.	100 sq. ft.	144 sq. ft.
75 psi	52 psi	20 psi-UL 30 psi-FM	40 psi
12 sprs	12 sprs	12 sprs	9 sprs (min. of 1200 sq. ft.)
1455+ gpm	1452+ gpm	1352+ gpm-UL 1656+ gpm-FM	Sys. demand 1435+ gpm
250 gpm HS	250 gpm HS	250 gpm HS	250 gpm HS

- Wet Pipe or Pre-action Systems (when they meet the equivalency of a wet system).
- Approved for Non-combustible Obstructed Construction.
- Refer to Reliable Bulletins 008 & 908 for more information.
- Refer to FM Global's Data Sheets 2-8N, 2-2 & 8-9 for installation and design of CMSA and extended coverage sprinklers.

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May - June 2009 • no. 154

ON THE COVER:

To acknowledge the commitment and dedication of its Supplier and Manufacturer (SAM) members, each year NFSA publishes a Buyer's Guide issue of SQ. This year, listings of NFSA's Professional members have been added to the Buyer's Guide, making this one of the largest issues ever.



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Sprinkler Watch Attack Team

John Viniello



By way of background ...whenever a project, program or initiative is designated by me, the NFSA President, or Russell P. Fleming, Executive Vice President, as a SWAT initiative, all of the internal, as well external resources available to your Association are utilized. A SWAT designation elevates the project to a red alert priority status and immediately defaults to the Director of Public Fire Protection Jim Dalton and any and all staff within the Association. A SWAT is assembled, organized and launched to either support fire sprinkler initiatives or oppose those adversaries who are attempting to diminish code or legislation requiring fire sprinkler installation.

As a result of an all out effort and support of the fire services from coast-to-coast and border-to-border, an historic event took place in Minneapolis on September 21, 2008. In the 2011 edition of the IRC, all new one- and two-family dwellings will be required to have fire sprinklers installed in accordance with NFPA 13D. This requirement at the model code level now needs to be adopted at the state and local level before it becomes law. The National Association of Home Builders has started a massive effort to prevent this from happening. Several states have had legislation introduced in various forms, that if enacted into law, the state and local jurisdictions will be prevented from adopting a model code or passing an ordinance which contains this life-saving requirement.

Early in 2009, I designated this attack against our industry as a SWAT initiative and launched an all out effort to oppose it whenever it surfaced.

In the last issue of SQ you read about our plans for hiring additional staff in 2009. In an effort to divert resources to oppose this

anti-sprinkler initiative that is springing up in numerous states, we have decided to delay any hiring of additional staff and use all resources available to us to fight the battle at the state and local level.

Let me assure you that the NFSA is monitoring revenues and expenses very, very carefully during this economic downturn. Only essential staff travel will be approved. Efficient methods of communication will be utilized and all department heads have been advised to be extremely conscious of their travel budgets until further notice.

Let me assure you, our members, that we will not diminish services at the grassroots level. We have fourteen regional managers who will continue to work for you as they have in the past. The time that the industry needs this great Association the most is when we are in an economic downturn.

We will continue to provide the highest level of service from every department within the Association.

This is a formidable battle, as the National Association of Home Builders is very well organized and very well financed. We are marshaling our resources and forming coalitions with some very powerful groups within the fire services at the national and local level. I ask you to refer to the regional reports from your respective regional managers, as well as any late-breaking information available on our website, www.nfsa.org, to be kept abreast of the latest developments in this attack against our industry.

In closing, let me thank you for your support. Your membership is vitally important to us and I am confident that when the "dust finally settles," fire sprinklers will indeed become a way of life. ☺

John A. Viniello, President

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calendar

Dwellings	McFarland, WI	May 6
CPVC Update ½ day	McFarland, WI	May 7
Dry Foam Water ½ day	McFarland, WI	May 7
Inspection, Testing & Maintenance	McFarland, WI	May 8
<i>Frequently Asked Questions Park IV</i>	Online	May 12
<i>CPVC Update</i>	Online	May 21
<i>Hydraulics for Non-Uniform Layouts</i>	Online	June 2
<i>Best Practices Update</i>	Online	June 16
<i>Sprinklers and the National Electrical Code</i>	Online	June 16
<i>Strategic Planning for Contractors</i>	Online	June 18
Two-week Technician Training	Omaha, NE	August 10-21
Two-week Technician Training	Baltimore, MD	September 14-25
Two-week Technician Training	Phoenix, AZ	October 12-23

For more information on the above classes, contact Nicole Sprague using sprague@nfsa.org or by calling 845-878-4200 ext. 149.

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Model "J" Dry Style Fire Sprinklers
 Manufactured by Globe Fire Sprinkler Corporation

The sprinklers may not operate in a fire, creating a risk of death or serious injury.

AFFECTED SPRINKLERS

- Globe Model "J" dry style fire sprinklers
- Manufactured between 1990 & 1999
- Pendent, upright, and sidewall sprinklers

WHAT TO LOOK FOR:

- "GLOBE," "J," and year (1990 - 1999) embossed on flat surfaces of the frame

- Installed in nursing homes, hospitals, long-term care facilities, offices, supermarkets, apartment buildings, and other buildings

WHAT TO DO:

- Check areas where dry sprinklers might be installed (unheated attics, porches, freezers and coolers, parking garages, warehouses)
- Until you obtain replacement sprinklers, have working smoke detectors and adequate escape plans

To learn how to receive replacement sprinkler heads at a substantially reduced cost:

- (1) Call 1-800-248-0278 between 8:00 a.m. and 5:00 p.m. EST,
- (2) Visit Globe's web site at www.globesprinkler.com and click on the "Recall" link,
- or (3) Contact Globe by mail at 4077 Airpark Drive, Standish, MI 48658.

When The Going Gets Tough ...

Gregg Huennekens



When the going gets tough..." We have all heard this saying before, certainly more than once. And we all know how it ends. Although I am not certain anyone has ever been attributed with coining the phrase, what I do know is when it was said "...the tough get going," while perhaps leaving room for misinterpretation, in the context the phrase was usually delivered, I don't think anyone could confuse the meaning. No, the message isn't one of submission, turning tail for cover as it were, but quite the opposite. It's a call to character, about digging in one's heels and committing to meeting a challenge head on, weathering whatever storm has arisen as an equally unyielding force.

Nowhere has the phrase be taken more to heart than at your Association. If you have been following articles published in SQ, you know that NFSA has initiated a number of projects that will help improve business conditions in the fire sprinkler industry for generations to come. The Fire Sprinkler Incentive Act of 2009, for example, has been reintroduced to Congress and progress continues to be made ushering it through the legislative process. Most recently, great strides forward were made by the adoption

of fire sprinklers into the International Residential Code. That success did not come without a fight. It is one that continues as homebuilders' organizations around the country are now taking the battle to the state level as they introduce legislation to prohibit local adoption of sprinkler requirements.

Let me assure you; NFSA will not yield under the pressure and we ask that you, our loyal members not either. Your unwavering support, especially through these most challenging times, is vital to the continued success of the Association and the greater fire sprinkler industry. It is through time like these that NFSA does its most important work. It's a time when the membership needs the Association most.

As you read through this Buyer's Guide issue, you'll see the listings of our SAM and Professional members from around the country who have made a commitment to the Association. Let's support them with our business whenever possible. Let's stand strong, dig in our heels and support each other through this economic downturn. Let that be our response to the call "...the tough get going." ①

A handwritten signature in black ink, appearing to read "G. Huennekens". The signature is fluid and cursive.

Gregg Huennekens, Chairman

Area	States	Regional Manager	Area Director
New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	Tim Travers, NFSA 751 Washington St. Whitman, MA 02382 (845) 661-5876 FAX (781) 524-1026	Donald A. DeLuca SRI Fire Sprinkler Corporation 1060 Central Avenue Albany, New York 12205 (518) 459-2776 FAX (518) 459-0068
New York	New York	Dominick G. Kasmauskas, NFSA 1436 Altamont Ave. Suite 147 Rotterdam, NY 12303 (914) 414-3337 FAX (518) 836-0210	
Mid Atlantic	Delaware, Maryland, New Jersey, Pennsylvania, Virginia, Washington, D.C.	Raymond W. Lonabaugh, NFSA P.O. Box 126 Ridley Park, Pennsylvania 19078 (610) 521-4768 FAX (610) 521-2030	Kent Mezaros Quick Response Fire Protection 77 Pension Road, Suite 5 Manalapan, New Jersey 07726 (732) 786-9440 FAX (732) 786-9443
Southeast	Alabama, Georgia, Mississippi, North Carolina, South Carolina	Wayne Waggoner, NFSA PO Box 9 Andersonville, Tennessee 27705 (865) 755-2956 FAX (865) 381-0597	Ed Davis Morristown Automatic Sprinkler Company, Inc. 1310 Karnes Avenue Knoxville, Tennessee 37917 (865) 689-4480 FAX (865) 687-8622
Tennessee	Tennessee		
Florida	Florida, Puerto Rico	Dave Bowman, NFSA Florida Fire Sprinkler Association 6572 SE 173rd. Court Ocklawaha, Florida 32179 (845) 519-7648 FAX (661) 455-3968	Wayne H. Gey Wayne Automatic Fire Sprinklers, Inc. 222 Capital Court Ocoee, Florida 34761 (407) 656-3030 FAX (407) 656-8026
Great Lakes	Indiana, Michigan, Ohio, West Virginia, Kentucky	Ron Brown, NFSA 1615 Cypress Spring Drive Fort Wayne, Indiana 46814 (845) 661-6534 FAX (260) 625-4478	Richard A. Ackley Dalmatian Fire, Inc. P.O. Box 78068 Indianapolis, Indiana 46278 (317) 299-3889 FAX (317) 299-4078
Illinois	Illinois	Bob Kleinheinz, NFSA 509 Dawes Street Libertyville, Illinois 60048 (914) 671-1945	Gregg Huenekens United States Fire Protection, Illinois, Inc. 28427 North Ballard – Unit H Lake Forest, Illinois 60045 (847) 247-4755 FAX (847) 816-0098
North Central	Minnesota, Wisconsin	Daniel J. Gengler, NFSA P.O. Box 280 Williams Bay, Wisconsin 53191 (262) 245-5255 FAX (262) 245-5258	Richard Ray – Alternate Cybor Fire Protection Company 5123 Thatcher Road Downers Grove, Illinois 60515 (630) 810-1161 FAX (630) 810-0685
South Central	Arkansas, Louisiana, Oklahoma, Texas	Steven E. Randall, NFSA 7165 Lazy Meadow Lane Frisco, Texas 75034 (214) 206-6163 FAX (972) 668-4077	John Kauffman III Kauffman Company 13225 FM529 –Ste A Houston, Texas 77041 (713) 937-4144 FAX (713) 937-4149
Central	Iowa, Kansas, Missouri	Chris Gaut, NFSA 189 Eureka Town Center Dr. Suite 135 Eureka, Missouri 60325 (845) 803-6426 FAX (636) 410-7700	Dennis C. Coleman Engineered Fire Protection, Inc. 1615 South Kings Highway St. Louis, Missouri 63110 (314) 771-0033 FAX (314) 664-1619
Great Plains	Colorado, Montana, Nebraska, North Dakota, South Dakota, Wyoming	Terry Phillips, NFSA 1829 Meadow Drive Cheyenne, Wyoming 82001 (914) 525-4396 FAX (307) 514-0406	Gene Postma Western States Fire Protection Company 7020 South Tucson Way, Unit A Centennial, Colorado 80112 (303) 792-0022 FAX (303) 790-3875
Southwest	Arizona, Nevada, New Mexico, Utah	Doyle Sutton, NFSA P.O. Box 50845 Sparks, NV 89434 (845) 803-3785	Todd Little RCI Systems, Inc. 252 South El Dorado Circle Mesa, Arizona 85202 (602) 894-8711 FAX (602) 894-8740
West	California, Hawaii	Bruce Lecair, NFSA 25417 West Hyacinth Street Corona, CA 92883 (951) 277-3517 FAX (951) 277-3199	Jack Thacker Allan Automatic Sprinkler Corporation 3233 Enterprise St. Brea, California 92821 (714) 993-9500 FAX (714) 993-5708
Pacific Northwest	Alaska, Idaho, Oregon, Washington	Don Pamplin, NFSA 1436 Harrison Avenue Blaine, Washington 98230 (360) 332-1948 FAX (360) 332-1962	James Boulanger Patriot Fire Protection, Inc. 2707 70th Avenue East Tacoma, Washington 98424 (253) 926-2290 FAX (253) 922-6150
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Time Frames for Liens and Claims

There has been some confusion about the time frames associated with filing a mechanic's lien and commencing a payment bond claim. Some members believed that they had plenty of time to file a mechanic's lien on a particular project when, in fact, their time expired.

As a result, I was requested by a few members to once again publish the time frames associated with filing a mechanic's lien or bringing a claim under the payment bond.

Below are the various time frames associated with each procedure. Do not, however, wait for the last day to file your lien. Once the general contractor has been paid by the owner, your lien is worthless.

Furthermore, many payment bonds contain strict requirements that notices be served on various parties within a specific time frame. Once that time frame expires, your right to recover may be jeopardized.

Private Improvement:

One-family (also two-family suggested)—four months from date of last item of labor or material

Commercial and more than one-family—eight months from last item of labor and materials

Duration of Lien—one year

Renewal:

One-family dwelling—Court Order

More than one-family and commercial, first-year renewal—Notice of Renewal

After one year of more than one dwelling and commercial—Notice of Renewal

Public Improvements:

Lien—30 days after completion and acceptance of job

Duration—12 months

Renewal—Notice of Renewal

Payment Bond Notice:

Notice Directed to any two of Owner, Bonding Company or Contractor—Usually 90 days

Time for Commencement of Action—Usually one year

Direct Contract with Principal—Usually no

notice required

Time for Commencement of Action—Usually one, sometimes two years

Remember, never let your lien time run out!

For a free copy of a pamphlet pertaining to payment bond claims and mechanic's liens, please contact Stuart Zisholtz at Zisholtz & Zisholtz, LLP, 170 Old Country Rd. Suite 300, Mineola, NY 11501 tel: 516. 741. 2200 fax: 516. 746. 1024

Best of EOD

We have selected the following questions as the "Best Questions" answered by the engineering staff as part of the NFSA's "Expert of the Day" member assistance program:

Question 1

Update on CPVC-Compatible Antimicrobial Coatings for Steel Pipe

The January 13, 2009 edition of eTechAlert (No. 137) indicated that Lubrizol had recommended against the use of coated steel pipe with CPVC until some products could be evaluated and declared compatible. Have any products been successfully evaluated yet?

Answer: Yes. The company released the following February 26th announcement:

Please be advised, the following has been added to the "Steel Piping with Antimicrobial Coating" section on Lubrizol's "Other Chemical Compatibility Concerns" web page at the following link: <http://www.systemcompatible.com/other-com-program>

>> CONTINUED ON PAGE 10



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>> CONTINUED FROM PAGE 9

patibility-concerns.asp#SteelPiping.

February 26, 2009 Update - Lubrizol is providing this update regarding the use of antimicrobial coated steel pipe with BlazeMaster® CPVC fire sprinkler piping systems. Contractors should not use steel pipe with antimicrobial coatings, such as Allied's ABF II, in conjunction with BlazeMaster CPVC pipes and fittings, unless the factory applied coated steel pipe has been approved for inclusion in our FGG/BM/CZ™ System Compatible program (www.systemcompatible.com). This recommendation covers antimicrobial coatings that are applied by the pipe manufacturer or sold separately in the aftermarket. At this time, Wheatland Tube Company's MIC SHIELD™ Coating (for steel pipe manufactured after 2/22/2009—the date when the product's validation was completed) is part of the FGG/BM/CZ System Compatible Program. For Wheatland Tube MIC SHIELD™ coated pipe manufactured before 2/22/2009 please contact Wheatland Tube for clarification. In the aftermarket, Potter Pipe-Shield™ corrosion inhibiting antimicrobial liquid is approved as part of the FGG/BM/CZ System Compatible Program. The coating must be applied and used in accordance with the manufacturer's installation instructions.

Lubrizol is continuing to thoroughly investigate the use of BlazeMaster CPVC with ABF II and other antimicrobial coatings and will issue its findings as soon as possible. In the meantime, we ask that contractors carefully follow the recommendations set forth by our compatibility program.

Question 2 **Number of Design Area Sprinklers for ESFR Systems**

I have an existing ESFR system that has been calculated with 13 sprinklers to meet the minimum area of application. Now there is to be a tenant improvement to this building and they require sprinklers below obstructions. Would I now need to calculate a total of 15 sprinklers (13 at the deck and 2 below obstructions)?

Answer: In this case, you need to design for 15 sprinklers because the 960 sq ft de-

sign area needs to be satisfied separately from the sprinklers below the obstruction. Then, the 2 sprinklers under the obstruction need to be added in. Remember that if the obstruction is not in the most remote area, you are not required to add the demand for the sprinklers under the obstruction to the most remote ceiling sprinklers. If the sprinklers under obstructions are closer to the water supply, you can add the 13 most demanding ceiling sprinklers over the obstruction to the sprinklers under the obstruction instead.

It might also help you to know that for the 2010 edition of the standard, the committee agreed to get rid of the minimum 960 sq ft design area based on an analysis by FM Global indicating that even when sprinklers are spaced at 64 sq ft per sprinkler the design area of 12 ESFR sprinklers is adequate.

Question 3 **Application of 3000 Sq Ft Rule to NFPA 13 Residential Systems**

We have a residential retirement condominium project being protected in accordance with NFPA 13. We've calculated the units using a "dwelling unit" calculation proving the four most hydraulically demanding residential sprinklers in the units. Due to the fact that the floor/ceiling construction includes composite wood joists, there are non sprinklered combustible concealed spaces. We are unsure how to address the 3000 sq ft rule requirements of 11.2.3.1.4 (3), or if this even applies to dwelling unit type calculated portions of the system.

Answer: Since you are using residential sprinklers, the 3000 sq ft rule does not apply for the 2007 and previous editions of NFPA 13. The 3000 sq ft rule only applies to the use of standard spray sprinklers with the density/area or room design methods of hydraulic calculations. But you should be aware that the Sprinkler System Discharge Criteria Committee considers this to be a loophole and has taken measures to require the 3000 sq ft design area with the use of residential sprinkler in the 2010 and future editions of NFPA 13.

Question 4 **Water Supply for Upper Standpipe Zones**

Section 7.9.3.1.1 from NFPA 14, 2003 edition, states:

7.9.3 Where the supply for each zone is pumped from the next lower zone, and the standpipe or standpipes in the lower zone are used to supply the higher zone, such standpipe shall comply with the provisions for supply in 7.9.2.

7.9.3.1 At least two lines shall be provided between zones.

7.9.3.1.1 One of these lines shall be arranged so that the supply can be automatically delivered from the lower to the higher zone.

If one supply line is required to be automatic, what would be the arrangement or arrangements of the other line, if it is not also automatic? Does this section of the standard permit the other line to be provided with a closed gate valve? What is the rationale for not requiring both lines to be automatic?

Answer: Section 7.9.3.1.1 only applies when standpipes in the lower zone are used to also provide water to the upper zone. In this case, the situation is only required to have one path for the water to travel automatically. A second (manual) path is required as a back-up. The second path is generally only used when the first path is out of service (planned impairment). It is theoretically possible that it could be used during a fire, but that is not its primary purpose. Yes, this secondary path is permitted to have a closed control valve, which would be opened if the primary (automatic) path needed to be closed for maintenance.

Question 5 **Supply Pipes under Building for NFPA 13R Application**

Our question is based on the 1999 edition of NFPA 13R and deals with the under-

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ground fire main supply. As with many slab on grade residential structures, the riser room is located approximately 15 ft from the building footing. There is no way to rise the supply main at the exterior wall as the footing sits in (typical construction) so if you rise you are 6 inches into the room (away from the wall) in the living space. We consulted the city's plumbing commissioner and he stated that we were fine to come up in the mechanical room. The plumbing inspector reviewed the installation in the field and approved it. The fire marshal just now issued his letter, 5 months after submittal, and stated we are to rise at the exterior wall. Per NFPA 13R Section 1-5.1 and A 1-5.1 it seems that any listed piping is acceptable (ours is brazed Type K copper) and as NFPA 24 is not referenced in the NFPA 13R standard, does Exception 3 of NFPA 13 (1999 edition) Section 5-14.4.3.1 allow us to set the riser in the mechanical room? "Where...physical conditions make it impractical..."

Answer: You are correct that both NFPA 13 and NFPA 24 allow supply pipes to be run under the building slab when it is necessary due to the site/building conditions. As you pointed out, this allowance is specifically in Exception 1 to section 5-14.4.3.1 in the 1999 edition of NFPA 13 and the exception to section 8-3.1 in the 1995 edition of NFPA 24. Note that there is no 1999 edition of NFPA 24 because it was the NFPA's plan back then to merge NFPA 24 with NFPA 13 (which is why the section is in NFPA 13 in the 1999 edition). In 2002, the NFPA brought NFPA 24 back and both standards continue to allow pipe to be run under the building.

The situation is a little different with NFPA 13R. As you stated in your note, NFPA 13R does not reference NFPA 24. Instead, there is a blanket statement in NFPA 13R (section A-1-5.1) that states that the water supply pipe only needs to comply with the local plumbing code. As long as the water supply complies with the plumbing code, as interpreted by your plumbing commissioner, it is acceptable to use for fire protection as well.

Question 5 Dishwasher Heat Zones

I have a question about a dishwashing room in the cafeteria of a new hospital. The room is about 50 ft x 20 ft and has a dishwasher in the middle of the room. There are dedicated dishwasher exhaust diffusers and ductwork in the ceiling. The sprinklers installed are rated 1550 F and are spaced for ordinary hazard. The AHJ has asked my opinion whether we need to provide higher temperature sprinklers in the ceiling near the dishwashing machine.

Answer: Although the heat from a dishwasher would not be expected to be worse than that from a stove or an oven, those appliances often have exhaust collection hoods as mitigating factors. Table 8.3.2.5(c) in NFPA 13 advises that fast response, ordinary temperature, sprinklers are fine as long as they are at least 18 inches away from the unit horizontally. The sprinklers can be closer if you go with intermediate temperature sprinklers.

If you wanted to be really conservative, you could use the rules for fireplaces (same table), which allow fast response, ordinary temperature, sprinklers as long as they are at least 60 inches away from the front of a fireplace. Intermediate temperature sprinklers can be used between 36 and 60 inches of the fireplace face. Certainly the dishwasher would not generate more heat than a fireplace.

The ultimate guidance is to make sure that the ambient temperature around the ordinary temperature sprinkler does not exceed 100°F (see 8.3.2.2).

Question 6 Sprinklers under Deep Concrete Beams

I am designing a wet pipe system to protect the basement of a municipal water pump facility. The roof structure above technically meets the definition of "unobstructed construction" in NFPA 13 Section 3.7.1 because the beams are greater than 7-1/2 feet on center. This would require that the sprinkler deflectors be located within 12 inches of the deck.

However, these beams are 36 inches wide, and 42 inches deep, and typically

on 9 ft. centers. Placing sprinklers only at the roof deck with deflectors 12 inches below the deck as required for unobstructed construction would create a lot of spray pattern blockage by the large beams. Because the beams are so large, it would not be possible to position the sprinklers in compliance with Table 8.6.5.1.2, but Section 8.6.5.1.2(2) allows sprinklers to be spaced on opposite sides of obstructions not exceeding 4 ft in width where the sprinkler spacing does not exceed half the allowable distance between sprinklers.

In particular, for the beams spaced 9 ft apart on center, would it be permissible to install sprinklers centered in the bay and with their deflectors located at or above 1-inch below the bottom of the concrete beams similar to the method described in 8.6.4.1.2(5) for concrete tee construction with tees greater than 36 inches and less than 7-1/2 ft on center? The pockets between these beams would be 6 ft wide, which would create a similar situation. The only alternative I know would be to install sprinklers both at the roof deck and below every beam, which seems excessive and inefficient.

Answer: No, you are not allowed to space the sprinklers using the concrete tee rules, the structural members are too far apart. Just put the sprinklers in the middle of the channels formed by the structural members so that the deflectors are 1 to 12 inches below the upper portion of the ceiling. You don't have to worry about spraying under the structural members because you have sprinklers on the other side. You meet section 8.6.5.1.2(2), so you can ignore 8.6.5.1.2(1). The only place that you may have a problem is the end section where the structural member forms a soffit against the wall. There, you may need to put a sprinkler under the last structural member since it is more than 30 inches wide and cannot meet 8.6.5.1.2(3).

Question 7 Storage of Class IIIB Combustible Liquids in Tanks

I need help determining a density and remote area size. The building is a shop/

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warehouse storage facility with Class IIIB combustible liquids (flash point > 200oF). I have been searching NFPA 30 for the design criteria, but have not been successful.

Answer: You did not say which edition of NFPA 30 you are using, but we will assume you are using the current 2008 edition. The concepts are all the same in previous editions, but the chapter numbers were reorganized in the 2008 edition.

Chapter 16 contains specific information on the sprinkler densities and design criteria for certain size tanks containing flammable and combustible liquids. This is generally supposed to be used for storage of small containers, although there are some criteria given for 55 gal drums and IBC's (intermediate bulk containers) meeting certain specifications. If the storage or use of flammable or combustible liquids is not listed in Chapter 16, then the

user has to go to Section 6.4. Specifically, Section 6.4.1.1 requires an engineering evaluation of the hazard and an extent of fire protection unique to each facility. This would involve an engineer working with the building owner, insurance agent and local fire and building officials to determine goals and objectives of the fire protection system and then developing a comprehensive plan on how those goals and objectives are going to be met.

Question 8

Use of 3/4-Inch Nipples for Copper and CPVC in Earthquake Areas

Referencing the 2002 edition of NFPA-13, we note that 3/4-inch copper and CPVC are allowed for design, yet Section 8.14.19.4.4 says that 3/4-inch nipples are not allowed in areas subject to earthquakes. It would seem reasonable that if 3/4-inch pipe is allowed, then 3/4-inch nipples should be acceptable. Any thoughts or guidance?

Answer: First of all, the section you are referring to is only applicable to Section 8.14.19 criteria for "revamping" of systems, i.e. dropping pendent sprinklers below a ceiling from an existing system with upright sprinklers. It is not intended as a general rule, so 3/4-inch nipples are generally permitted for copper tube and CPVC, even in earthquake areas. The reason 3/4-inch steel pipe is not allowed is out of concern for long-term corrosion. Secondly, this is one of those unfortunate instances where the committee developed criteria while thinking of the common circumstance of threaded steel pipe, without specifically addressing other types of pipe such as copper or CPVC. While steel pipe nipples of less than 1-inch are not normally allowed, it must be recognized that the "revamping" rules were intended to allow the use of the upright sprinkler outlets to serve the piping to the new pendent sprinklers below the ceiling. The concern with threaded steel pipe nipples is that the remaining wall at the first exposed thread root is very thin for 1/2-inch and even 3/4-inch pipe nipples. Since this joint would be exposed to shaking in areas subject to earthquakes, the committee didn't want to allow a weak point in the system and added the restriction.

Question 9

Flow Alarm Requirements for Parts of 13R Occupancies

We have a question on the water flow alarm device required by NFPA 13R, 1999 edition. When viewed from the street this is a typical apartment structure with a left wing, then a breezeway, a center wing, then a breezeway, then a right wing, with all three wings under one roof, side to side and front to back. The entire building is about 8,000 sq ft per floor. The fire marshal is now requiring a vane type water flow switch per vertical section. I have been through all of NFPA 13 (1999), NFPA 13R (1999), the IBC (2003) and the IFC (2003) but cannot find any such requirement for an R-2 occupancy. Does it exist?

Answer: The answer to this question depends on whether or not the structure is considered a single building, or three

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separate (connected) buildings under the code. You need to find out from the architect or engineer that designed the building whether or not the structure is considered a single building. If the structure is considered a single building, water flow switches are required on each floor under the IBC, but a single switch can service the whole building, which would include all three parts. If the structure is considered three separate (connected) buildings, then there will need to be a flow switch on each floor for each separate building.

Question 10

Dry System 30-minute Air Refill Rule

A property has passed its testing for last 20 years, but at the request of the inspection company they had a new air compressor installed last month. Now the company is saying they need to subdivide the dry system into three systems because they cannot charge the system in less than 30 minutes, work that carries a very large price tag. As the AHJ, I question whether this is necessary for an open parking garage, knowing the codes do not require open parking garages to be sprinklered throughout, but only below ground and the first floor. Any thoughts?

Answer: This falls into the category of "previously approved" systems, which is always difficult for AHJ's. You don't know if the previous AHJ consciously made the decision to waive the 30-minute refill requirement at the time the system was built, or if they just missed the fact that the 30-minute refill was required. Another possibility is that the system can be filled in 30 minutes during warm weather, but during the cold weather it takes longer to compress enough air to build up the pressure. For this reason, NFPA 13 gives freezer systems 60 minutes to fill.

The 30-minute refill rule is in NFPA 13 for a number of reasons, but none of them have to do with the operation of the system during a fire. We have previously tried to provide guidance to contractors on how large the compressors should be to make sure that systems could be returned to service in reasonable times so

that people did their testing and maintenance without being concerned that they were paying a contractor to stand around and wait for the system to fill. These rules are consumer protection rules, and long-term maintenance concerns, but they are not fire safety issues. As such, as the AHJ, you can grant a variance to this property for this situation, as long as the owner realizes that it will take longer to refill the system when it is tested, and they are going to pay for a contractor to do that.

Question 11

Sizing Pump Suction Piping from a Suction Tank

I am trying to size the suction pipe for the pump, i.e. the pipe between the tank and pump. The system requires 300 gpm at 55 psi, and will be supplied by a 40,000 gallon tank and a pump rated at 100 psi at 200 gpm. I do not know what the elevation of the tank will be. Can you tell me what size to make the suction on the tank and do you have anything we can use to size this?

Answer: Table 5.25(a) of NFPA 20 requires the suction pipe for pumps rated at 200 gpm to be at least 3-inch. Also, Section 5.14.3.2 states that the maximum allowable friction loss in the suction piping is 3 psi (at maximum flow of 300 gpm) when the elevation of the bottom of the tank is the same as the pump. If you exceed 3 psi with 3-inch pipe, you either need to increase the pipe size or elevate the tank to overcome any excess friction loss.

Question 12

Single-Interlock Preaction System Design Area

Can you tell me if a single-interlock preaction system is required to have the 30% increase added to the remote design area as with the double-interlock preaction system? NFPA 13 Section 12.5 (2007 edition) does not break down the two types of preaction systems and therefore it seems this section applies to both. However, there are several sections of the standard that seem to treat a single-interlock preaction system like a wet pipe system.

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Answer: The answer depends on the hazard you are trying to protect. The rules for light, ordinary and extra hazard occupancies are found in Chapter 11. Section 11.2.3.2.5 requires the 30% increase for double-interlock systems. Since there is no requirement in Chapter 11 for single-interlock systems, no such increase is required.

The rules for protecting storage start in Chapter 12. As you have noted, section 12.5.1 requires the 30% increase for all preaction systems, including single interlock. There used to be an exception for situations where you could prove that you

could get water to the most remote sprinkler before it opened using the difference between the sensitivities of the detectors and the sprinklers. This exception was eliminated in the 2007 edition of NFPA 13 because so few people know how to do such a calculation correctly. You could still do the calculation if you wanted to avoid the 30% increase and get the AHJ to accept it under the "alternate arrangement" provisions of Sections 1.5 and 1.6.

So, in summary, yes the 30% increase is required for single-interlock preaction systems protecting storage. ①



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By Don Pamplin

I saw a sign that said

"All that glitters is not gold, if you sleep in this home, you may not grow old."

The sign had been made by a Fire Chief back in 1993 who was frustrated with what the homebuilders in his area were saying about how "new homes don't burn!" He believed that any residence in his jurisdiction, whether it was an apartment, condominium, townhouse or single-family residence, was unsafe without adequate smoke alarm and fire sprinkler protection. He based that warning position on the fact that his fire department did not have enough "Muscle & Hose" (firefighters and fire fighting resources) to adequately protect the citizens his department served and also by the dangers that lurked within those residences. He was being truthful and practicing good "risk management."

He was also taking a similar approach as what Ralph Nader did in 1965. Nader published a book entitled *"Unsafe at Any Speed: The Designed-In Dangers of the American Automobile."* He and many other fire chiefs and fire marshals felt that what the homebuilders were building had designed-in dangers to the safety of any inhabitant, especially the very young, seniors, those who had physical impairments and firefighters who would have to enter the residential structure and fight a fire that had passed the point of "flash-over." These fire chiefs recognized how dangerous "roof and flooring truss construction" could be when exposed to a fire that was out of control and what extreme dangers of roof and floor collapse firefighters would face if they entered those structures, trying to extinguish a fire that 70% of the time had reached

flashover before fire crews had even left their fire station. Those fire chiefs also recognized the fact that the majority of structure fires start as "content fires," which in the modern world of highly flammable upholstery, draperies, carpeting, wall coverings and plastics usually produces flashover within three to five minutes of ignition. That doesn't give much time to escape, especially between 11:00 p.m. and 7:00 a.m. when family members are asleep and most vulnerable. When there is an effort by the trapped occupants to get out of the residence, they are substantially hindered by toxic gases and super-heated smoke (1,000 to 1,500 degrees Fahrenheit). Most never make it to the door or window.

This hostile environment kills people very effectively, especially those that are highly at risk. The National Fire Protection Association (NFPA) has just released a report dated January, 2009 entitled *"Home Structure Fires"* that identifies a number of facts that should make every citizen concerned about the home environment they live in. They should also realize the fact that their fire department may not be able to get there in time to rescue them and/or save their home and possessions. The NFPA Report was based on information collected through the National Fire Incident Reporting System (NFIRS) and also the Annual NFPA Fire Experience Survey. Quick-Stats for the overall fire picture for 2007 (latest year available) are:

- There were 3,430 civilians who lost their lives as the result of fire;
- In America, there was a civilian fire

death every 153 minutes;

- On average, eight people die in home fires every day somewhere in America;
- 50% of those deaths are children under five years-of-age and seniors over 60;
- There were 17,675 civilian injuries that occurred as the result of fire;
- Nationwide, there was a civilian fire injury every 30 minutes;
- There were 103 firefighters killed while on duty;
- Fire killed more Americans than all natural disasters combined;
- 84 percent of all civilian fire deaths occurred in homes;
- 1.6 million fires were reported. Many others went unreported, causing additional injuries and property loss;
- Every 20 seconds, a fire department responded to a fire somewhere in America;
- Direct property loss due to fires was estimated at \$14.6 billion;

These statistics are devastating and should be a loud, wake-up call to all people about the danger of fire, especially in the place where they feel safest—their own

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NFSA's Regional
Manager for the
Pacific Northwest

Don Pamplin

home! What is concerning is the attitudes and actions of homebuilder associations across America that are specifically intended to prevent people from having the needed safety protection in their homes, a level of protection that was recognized by a U.S. national building code organization (International Residential Code) that voted to mandate fire sprinklers in all new one- and two- family homes and town-homes starting on January 1, 2011.

What the homebuilders are doing today is introducing legislation at the state level that would prohibit local governments in that state from passing ordinances that would require residential fire sprinkler protection. As of March 1, 2009, eleven states have had this prohibitive type of legislation introduced and it appears the number will continue to increase as homebuilder associations are determined to stop the mandating of residential fire sprinkler protection.

Why are the homebuilder associations doing this? The answer to that perplexing question is superbly detailed in a report entitled *"Residential Fire Sprinklers and Housing Economics - A Legislative Guide to Life Safety"* written by Buddy Dewar and released in February, 2009. Buddy Dewar is a graduate from Florida Atlantic University with a Bachelors of Science Degree, majoring in Econometrics, which is quantitative economic analysis. He is also a graduate from Nova Southeastern University with a Masters Degree in Business Administration and is a member of the International Honor Society Sigma Beta Delta. He has a distinguished fire service career, which includes work as a firefighter, fire officer, fire chief, Superintendent of the Florida State Fire College and Director of Florida's State Fire Marshal's Office. He is currently serving as Director of Regional Operations for the National Fire Sprinkler Association (NFSA).

Why do I itemize all of Buddy's qualifications, both academic and in the real world of fire protection? Simply to underscore the fact that he is highly qualified. What he states in this report is absolutely true. If you really want to understand what the national and local homebuilders associations are trying to achieve through their legislative chicanery, then you should read this 62 page report, especially if you

are trying to prevent the homebuilders from railroading their prohibitive agenda through your state legislature process. You can get a copy of this report at NFSA's webpage www.nfsa.org or emailing me your request at pamplin@nfsa.org.

If you haven't time to read the whole 62 page report right away, then please read the two-page *"Executive Summary"* and the seven-page *"A Legislator's Guide to Life Safety - A Must Read Overview"*. In addition, you should electronically copy this entire report and get it to your state Fire Chief's Association and your state legislators, along with a copy of this article as an overview of what is happening.

The Dewar Report *"Executive Summary and A Legislator Guide to Life Safety"* contains the following important points:

- Some homebuilders have embraced residential fire sprinkler protection as a good thing for their homes;
- Blocking the adoption of the IRC national code requirement for fire sprinklers:
 - a) will not hurt or improve the current housing market;
 - b) will continue to give the new homebuilder an advantage over the existing private home seller;
 - c) will retain the lucrative multi-billion dollar fire-damaged rebuild market for the builders while the pain & losses of the owners and their families continue;
 - d) will cost local government significantly more money for fire protection infrastructure;
 - e) will restrict local government from properly managing growth;
 - f) will shift the cost of growth from the builder to government;
 - g) will continue to expose the homebuilder to greater liability;
- The real reason for our nation's economic housing crisis;
- Why homebuilders put more importance on "in-home glitter-stuff" than the health, safety and welfare of the purchasing public;
- How fire sprinklers reduces home fire-property losses by as much as 95.189%;
- Why local government will have an "unfunded mandate" forced upon them;
- Why the homebuilders will face increased litigation for building homes

without fire sprinkler protection;

- The scary truth about smoke detector protection;
- Reductions in the cost of home insurance;
- Why residential fire sprinkler systems require little maintenance;
- Why new homes are not safer than old homes;
- Why "Let the Owner Decide" is a false assumption for life safety;

These are important points to read and consider. The one point that every state governor should pay attention to is the issue of local governments having an unfunded mandate forced upon them! The following true story identifies what that really means.

After the City of Vancouver (in British Columbia, Canada) passed their ordinance in 1990 that required fire sprinklers in all new occupancies where people slept (including single family homes,) many cities and municipalities in the Greater Vancouver area wanted to do the same. They wanted to achieve the ability to dramatically improve the level of residential fire safety and at the same time save over 100 million dollars in fire protection costs over a twenty-year period. What politician and appointed civic bureaucrat wouldn't want to achieve that?

Vancouver was able to pass their ordinance because it was a "charter city," that gave them the right to set their own building, fire, plumbing and electrical codes, etc. Everywhere else in British Columbia, cities and municipalities had to conform to the established Provincial Codes. If a local government wanted to go beyond the minimal requirements of the provincial building code, it had to get past the provincial "gate-keeping building codes council" that could allow the local government to pass ordinances to mandate residential fire sprinklers. But the BC Building Codes Council, heavily influenced by local and provincial homebuilders associations, would never allow those local governments to establish life-saving and dollar saving fire sprinkler ordinances. The gate was always shut!

The Greater Vancouver Fire Chiefs Association wasn't satisfied with that situation. They had a meeting with the Provincial Minister of Municipal Affairs and made

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their case for residential fire sprinklers. The Minister displayed an arrogant attitude that clearly showed she wasn't interested in what the Fire Chiefs were saying. The Fire Chiefs pressed their position which was: since the Provincial Government was not allowing local government to use a proven technology that would not only save lives, reduce fire-related injuries, save property and possessions and would allow local government to properly control the cost of their fire protection expenses, then the provincial government is actually saying that the only way local government can solve their problem is to buy more "muscle and hose." The Fire Chiefs Association clearly stated that that was an "unfunded mandate" and if the Provincial Government continued with that prohibitive and costly policy, then the Fire Chiefs were prepared to mount a massive public-relations campaign to clearly show that what the provincial government was doing to local government was unfair and that the provincial government should pay for the total increase of fire infrastructure costs needed to provide effective fire protection throughout the rest of the Province. The Minister was not pleased with the Fire Chiefs' position and quickly shut-down the meeting.

But guess what? Within a few months of that meeting and the Fire Chiefs starting the initial steps of their media campaign, the Provincial Government had second thoughts. The Provincial Building Codes Council was "unofficially" told to stop saying no to any local government request to establish any local fire sprinkler ordinance, especially residential ordinances. The Provincial Government had realized that this was a situation that could eventually be very embarrassing for them and very costly in terms of funding local fire fighting infrastructure requirements. It was an "unfunded mandate" that would be politically damaging with potentially huge litigation consequences. The correct and aggressive position taken by the Fire Chiefs Association made it possible for local government

to properly manage their fire protection affairs in a cost-effective way that was a total win-win for those local taxpayers. It has been interesting that 19 years after Vancouver's Council unanimously passed their residential fire sprinkler ordinance, not only has it saved lives and property big-time, it has saved the city of Vancouver millions and millions of dollars in fire protection costs without laying-off one single firefighter. In 1990, Vancouver had

800 plus firefighters and today, 19 years later, they still have 800 plus firefighters.

If State Governors and State Politicians vote to implement an "unfunded mandate" on local governments as being pushed by home builder associations across this country, then those States should pay for the increased fire protection costs that local government will be required to spend to properly protect the citizens in their communities! ☺



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5/6/09

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This one-day seminar analyzes the basic requirements used in designing, installing and accepting sprinkler systems in one & two-family dwellings and manufactured housing. The program addresses the basic responsibilities of the designer, installer, authority having jurisdiction (AHJ) and owner for the proper installation of these systems. The program discusses the issues behind developing a life safety type sprinkler system to specifically address the problems associated with fire deaths in the U.S.

5/7/09

CPVC

This half-day seminar will cover NFPA 13 requirements and Industry recommendations. The student will learn about hanging requirements, expansion loops, gluing methods, fire stopping assembly requirements, anti-freeze systems and other installation requirements specified in NFPA 13 and by the manufactures of CPVC fire protection piping. This seminar is intended for entry level and intermediate level students and any person involved with the installation, approval or inspection of a CPVC fire piping systems.

5/7/09

FOAM

This half-day seminar covers the requirements for water-based fire protection utilizing the low expansion form. The seminar will provide an overview of the requirements of NFPA 16. The student will learn about the various types of foam concentrates, foam proportioning criteria, foam supply time requirements, an installation requirements of NFPA 16.

5/8/09

INSPECTION, TESTING & MAINTENANCE

This one-day seminar provides the attendees with vital information related to the procedures and responsibilities for properly inspecting, testing & maintaining water-based fire protection systems. The seminar also discusses the various responsibilities of the building owner, contractor and authority having jurisdiction (AHJ) as they relate to the requirements contained in NFPA 25.

Location:

Nebraska State Office Building
310 Centennial Mall South
Lincoln, NE 68508

5/12/09

CPVC PIPING

This half-day seminar will cover NFPA 13 requirements and Industry recommendations. The student will learn about hanging requirements, expansion loops,

gluing methods, fire stopping assembly requirements, anti-freeze systems and other installation requirements specified in NFPA 13 and by the manufactures of CPVC fire protection piping. This seminar is intended for entry level and intermediate level students and any person involved with the installation, approval or inspection of a CPVC fire piping systems.

5/12/09

COMMISSIONING & ACCEPTANCE TESTING

This half-day seminar will cover acceptance testing requirements of NFPA 13, 13R and 13D. The student will learn the requirements for completion of the A certificates and U certificates, flushing requirements and procedures, hydro-static pressure testing criteria, and the basic requirements for conducting an inspection of a new fire sprinkler to insure compliance with the NFPA Standards. The basic methodology for conducting and a system acceptance test and documentation will also be covered. Example acceptance testing

>> CONTINUED ON PAGE 20



Bob Treiber

Based in
 Centerville, Ohio,
 Bob is NFSA's
 Director of Training
 & Education

forms will be provided. This seminar is intended for entry level and intermediate level students. The seminar is intended for any persons responsible for acceptance testing of a fire sprinkler system. One of most important aspects of a new sprinkler system is to insure a correct and quality installation.

5/13/09
INSPECTION, TESTING & MAINTENANCE

This one-day seminar provides the attendees with vital information related to the procedures and responsibilities for properly inspecting, testing & maintaining water-based fire protection systems. The seminar also discusses the various responsibilities of the building owner, contractor and authority having jurisdiction (AHJ) as they relate to the requirements contained in NFPA 25.

5/14/09
NFPA 13 UPDATE

This one-day seminar describes the major changes that have occurred in the 2007 editions of NFPA 13, 13R and 13D to enhance and further develop the rules/requirements for the proper installation of fire sprinkler systems.

Location:
Colorado Springs Fire Department
3737 Airport Road
Colorado Springs, CO 80910

5/19/09
HYDRAULICS

This one-day program is designed to concentrate on one portion of the design phase of water-based fire protection systems, the hydraulics. This seminar discusses theory and application of hydraulic calculations, the various decisions that can affect them, and how to prove the design of the system will meet the water supply available as described in NFPA 13 by using actual problems. The program also offers various alternatives to solving a problem and shows the comparison among them and offers some basic methods to check the accuracy of hydraulic calculations.

5/20/09
INSPECTION, TESTING & MAINTENANCE

This one-day seminar provides the attendees with vital information related to the procedures and responsibilities for properly inspecting, testing & maintaining water-based fire protection systems. The seminar also discusses the various responsibilities of the building owner, contractor and authority having jurisdiction (AHJ) as they relate to the requirements contained in NFPA 25.

5/21/09
SPRINKLERS FOR DWELLINGS

This one-day seminar analyzes the basic requirements used in designing, installing and accepting sprinkler systems in one & two-family dwellings and manufactured housing. The program addresses the basic responsibilities of the designer, installer, authority having jurisdiction (AHJ) and owner for the proper installation of these systems. The program discusses the issues behind developing a life safety type sprinkler system to specifically address the problems associated with fire deaths in the U.S.

Location:
City Hall West - Gordon Hoyt
Training Room
201 South Anaheim Blvd.
Anaheim, CA 92805

5/26-27/09
NFPA 13 OVERVIEW

This two-day seminar provides attendees with vital information on determining compliance with fire sprinkler system design and installation rules in NFPA 13. The seminar uses a basic sprinkler plan as a visual aid to help illustrate many of the rules/regulations of NFPA 13 and introduce the student to sprinkler plan review.

5/28/09
PLAN REVIEW POLICIES & PROCEDURES

This one-day seminar is intended to educate the attendee on how to conduct a plan review of a sprinklers system. The seminar covers the methodology and systematic approach to plan review

procedures. The attendee will learn how to evaluate and analyze a fire sprinkler plan for compliance with NFPA 13. Each attendee will receive copies of various sprinkler plan review check sheet that are used for compliance with NFPA 13 (1999 & 2002). This seminar is intended for those students who have attended the NFPA 13 overview seminar or those students having a good comprehension of NFPA 13.

Location:
Branson Fire & Rescue Station #1
110 Crosby Street
Branson, MO 65616

6/2-3/09
NFPA 13 OVERVIEW

This two-day seminar provides attendees with vital information on determining compliance with fire sprinkler system design and installation rules in NFPA 13. The seminar uses a basic sprinkler plan as a visual aid to help illustrate many of the rules/regulations of NFPA 13 and introduce the student to sprinkler plan review.

6/4/09
INSPECTION, TESTING & MAINTENANCE

This one-day seminar provides the attendees with vital information related to the procedures and responsibilities for properly inspecting, testing & maintaining water-based fire protection systems. The seminar also discusses the various responsibilities of the building owner, contractor and authority having jurisdiction (AHJ) as they relate to the requirements contained in NFPA 25.

Location:
Hillsboro Building Department
150 E. Main Street
Hillsboro, OR 97123

6/15/09
INTRODUCTION TO SPRINKLER SYSTEMS

This half-day program provides the participant with basic knowledge of sprinkler systems. The program covers the type of systems, types of sprinklers, components,

terms and basic definitions used in NFPA 13. The course also provides the student with a brief overview of the historical development of sprinkler systems. This program will be very beneficial to the individual with limited knowledge of sprinkler systems.

6/16/09

GENERAL STORAGE

This one-day program teaches attendees to use the standard to determine the basic requirements for sprinkler systems in protection General Storage warehouse occupancies. The course is specifically designed to address the protection requirements for Class I-IV commodities and plastics that are Solid Piled, Palletized, in Bin Boxes or on Shelves. The courses emphasizes gaining familiarity with the standard by solving practical application problems. A guide is provided to the participants to assist them in improving their ability to find appropriate tables in the standards.

6/17/09

HYDRAULICS

This one-day program is designed to concentrate on one portion of the design phase of water-based fire protection systems, the hydraulics. This seminar discusses theory and application of hydraulic calculations, the various decisions that can affect them, and how to prove the design of the system will meet the water supply available as described in NFPA 13 by using actual problems. The program also offers various alternatives to solving a problem and shows the comparison among them and offers some basic methods to check the accuracy of hydraulic calculations.

6/18/09

BASIC SEISMIC

This half-day seminar describes the responsibility of the contractor and authority having jurisdiction for the proper installation of earthquake protection of fire sprinkler systems.

6/18/09

ADVANCED SEISMIC

This half-day seminar provides the attendee with the skills to conduct layout procedures and plan review for the proper

installation of earthquake protection for fire sprinkler systems.

Location:

**University at Albany,
State University of NY
Empire Commons Community
Bldg., University Drive West
Albany, NY 1222**

6/23/09

**RESIDENTIAL SPRINKLERS:
HOMES TO HIGH RISE**

This one-day seminar provides the participants with an overview of the residential fire problem in America. The seminar addresses the causes and effects of that problem in the past, the present & the future. The seminar explains the history of the residential sprinkler and how it was designed to specifically address the life safety considerations in residential fires. The attendee is given an overview of the basic differences among residential designs and installations applied in accordance with NFPA 13, 13R & 13D.

6/24/09

**INTRODUCTION TO SPRINKLER
SYSTEMS**

This half-day program provides the participant with basic knowledge of sprinkler systems. The program covers the type of systems, types of sprinklers, components, terms and basic definitions used in NFPA 13. The course also provides the student with a brief overview of the historical development of sprinkler systems. This program will be very beneficial to the individual with limited knowledge of sprinkler systems.

6/24/09

**COMMISSIONING
& ACCEPTANCE TESTING**

This half-day seminar will cover acceptance testing requirements of NFPA 13, 13R and 13D. The student will learn the requirements for completion of the A certificates and U certificates, flushing requirements and procedures, hydrostatic pressure testing criteria, and the basic requirements for conducting an inspection of a new fire sprinkler to insure compliance with the NFPA Standards. The

basic methodology for conducting and a system acceptance test and documentation will also be covered. Example acceptance testing forms will be provided. This seminar is intended for entry level and intermediate level students. The seminar is intended for any persons responsible for acceptance testing of a fire sprinkler system. One of most important aspects of a new sprinkler system is to insure a correct and quality installation.

6/25/09

**SPRINKLER PROTECTION
FOR SPECIAL STORAGE**

This one-day seminar provides the attendees with the requirements of NFPA 13 for the storage of flammable and combustible liquids (NFPA - 30), storage of aerosols (NFPA - 30B), tire storage, rolled papers, & cotton storage. It is recommended that entry level students complete the General Storage seminar prior to enrolling in this seminar.

Location:

**New Lenox Fire Department
261 E. Maple
New Lenox, IL 60451**

7/7/09

HYDRAULICS

This one-day program is designed to concentrate on one portion of the design phase of water-based fire protection systems, the hydraulics. This seminar discusses theory and application of hydraulic calculations, the various decisions that can affect them, and how to prove the design of the system will meet the water supply available as described in NFPA 13 by using actual problems. The program also offers various alternatives to solving a problem and shows the comparison among them and offers some basic methods to check the accuracy of hydraulic calculations.

7/8-9/09

NFPA 13 OVERVIEW

This two-day seminar provides attendees with vital information on determining compliance with fire sprinkler system design and installation rules in NFPA 13. The seminar uses a basic sprinkler plan as

a visual aid to help illustrate many of the rules/regulations of NFPA 13 and introduce the student to sprinkler plan review.

Location:

**Apple Valley Fire Protection
19235 Yucca Loma Road
Apple Valley, CA 92307**

7/28/09

COMMISSIONING AND ACCEPTANCE

This half-day seminar will cover acceptance testing requirements of NFPA 13, 13R and 13D. The student will learn the requirements for completion of the A certificates and U certificates, flushing requirements and procedures, hydrostatic pressure testing criteria, and the basic requirements for conducting an inspection of a new fire sprinkler to insure compliance with the NFPA Standards. The basic methodology for conducting and a system acceptance test and documentation will also be covered. Example accep-

tance testing forms will be provided. This seminar is intended for entry level and intermediate level students. The seminar is intended for any persons responsible for acceptance testing of a fire sprinkler system. One of most important aspects of a new sprinkler system is to insure a correct and quality installation.

7/28/09

CPVC

This half-day seminar will cover NFPA 13 requirements and Industry recommendations. The student will learn about hanging requirements, expansion loops, gluing methods, fire stopping assembly requirements, anti-freeze systems and other installation requirements specified in NFPA 13 and by the manufactures of CPVC fire protection piping. This seminar is intended for entry level and intermediate level students and any person involved with the installation, approval or inspection of a CPVC fire piping systems.

7/29/09

INSPECTION, TESTING & MAINTENANCE

This one-day seminar provides the attendees with vital information related to the procedures and responsibilities for properly inspecting, testing & maintaining water-based fire protection systems. The seminar also discusses the various responsibilities of the building owner, contractor and authority having jurisdiction (AHJ) as they relate to the requirements contained in NFPA 25.

7/30/09

STORAGE PROTECTION FOR RACK STORAGE

This one-day program familiarizes attendees with using the standard to determine the basic requirements for sprinkler systems in protection Rack Storage warehouse occupancies. The course is specifically designed to address the protection requirements for Class I-IV commodities and plastics that are in Single, Double & Multi-Row Racks. The course emphasizes gaining familiarity with the standard by solving practical application problems. A guide is provided to the participates to assist them in improving their ability to find appropriate tables in the standards

Location:

**Brighton Area Fire Department
1580 South Old US 23
Brighton, MI 48114**

8/19-20/09

NFPA 13 OVERVIEW

This two-day seminar provides attendees with vital information on determining compliance with fire sprinkler system design and installation rules in NFPA 13. The seminar uses a basic sprinkler plan as a visual aid to help illustrate many of the rules/regulations of NFPA 13 and introduce the student to sprinkler plan review.

8/21/09

DWELLINGS

This one-day seminar analyzes the basic requirements used in designing, installing and accepting sprinkler systems in one& two-family dwellings and manufactured housing. The program addresses the basic responsibilities of the designer, installer, authority having jurisdiction (AHJ) and owner for the proper installation of these systems. The program discusses the issues behind developing a life safety type sprinkler system to specifically address the problems associated with fore deaths in the U.S. ①

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Top Tech Exam Hydraulics Question - How Well Would You Have Done?

By Kenneth E. Isman, P.E.

Throughout January and February, the NFSA conducted the regional portions of the Top Tech 2009 competition to find the best sprinkler technicians in the United States and Canada. Hundreds of people took the exam in the hopes of making their regional team. The Regional Teams will compete in an elimination tournament at the NFSA Annual Seminar and Exhibit in Orlando, FL on April 30th and May 1st for the honor (and prizes) of being "Top Tech's"

The exam consisted of 30 multiple choice questions, a hydraulics question and a building where an ESFR sprinkler system needed to be laid out. In this article, we'll discuss the hydraulics question, the correct answer, and the common mistakes made by people that came up with the wrong answer. The rest of the exam, along with the answers, will be posted on the NFSA website (<http://nfsa.org/toptechexam.html>) so that people can see the correct answers to all of the questions. Check out the questions. Would you have come up with the correct answers? Remember before you answer that they only had an average of 2 minutes per multiple choice question and 20 minutes for each of the hydraulics and layout portions of the exam if they wanted to be able to finish and answer all of the questions.

Hydraulics Question

Given the sprinkler system protecting a retail store (Ordinary Hazard Group 2) shown in the plan view in Figure 1 and the

isometric and section view shown in Figure 2, calculate the demand flow going up into the second branch line (feeding sprinklers 5, 6, 7 and 8). The system has been designed for a density of 0.2 gpm per sq ft over 1500 sq ft. The system is a wet pipe system with upright k-8.0 standard response spray sprinklers (14 ft between sprinklers and 8.5 ft between branch lines) directly attached to the branch lines and the branch lines are connected to the main through an 18 inch long riser nipple. All branch lines and riser nipples are 1-1/2 inch schedule 40 steel and the main is 3 inch schedule 40 steel pipe. There is no need to calculate the whole system. Just calculate the flow for the first branch line and use it to determine the flow from the second branch line.

[see figures 1-2 on next page, 24]

First Sprinkler - Flow

The key to answering the question correctly is starting with the proper flow and pressure demand at the first sprinkler. In order to get this correct, the user needed to correctly determine the area of coverage of the first sprinkler (labeled "1" on Figure 1). Since the sprinklers were on a 14 ft x 8.5 ft spacing, it might be tempting to answer that the sprinkler covers 119 sq ft. But Sprinkler 1 is different from most of the other sprinklers. Sprinkler 1 is 7.5 ft from the (south) wall, so using the S x L rules of section 8.5.2 of NFPA 13, this sprinkler really covers 15 ft x 8.5 ft, or 127.5 sq ft of floor space, which is permitted for

Ordinary Hazard Group 2 occupancies.

With a floor area of coverage of 127.5 sq ft and a density requirement of 0.2 gpm per sq ft, the sprinkler needs to discharge a minimum of 25.5 gpm (127.5 x 0.2 = 25.5). If you had used the incorrect area of coverage of 119 sq ft, you would have come up with a flow of 23.8 gpm, which would have been too low.

First Sprinkler - Pressure

The next step would be calculating the starting pressure at Sprinkler 1. With a flow demand of 25.5 gpm and a sprinkler having a k-factor of 8.0, the starting pressure would need to be 10.2 psi. This can be calculated using the formula:

$$P = (Q/k)^2 = (25.5/8)^2 = 10.2$$

If a person started with the incorrect flow of 23.8 gpm (as described above), they would have come out with the incorrect pressure of 8.9 psi, which many people did in trying to solve this problem. Recognizing that they started with a flow that was too low, we didn't take off too many points for having the wrong pres-

>>CONTINUED ON PAGE 24



Vice President, Engineering for NFSA. Ken represents NFSA on the NFPA Technical Committee on Sprinkler Installation Criteria

Kenneth E. Isman, P.E.

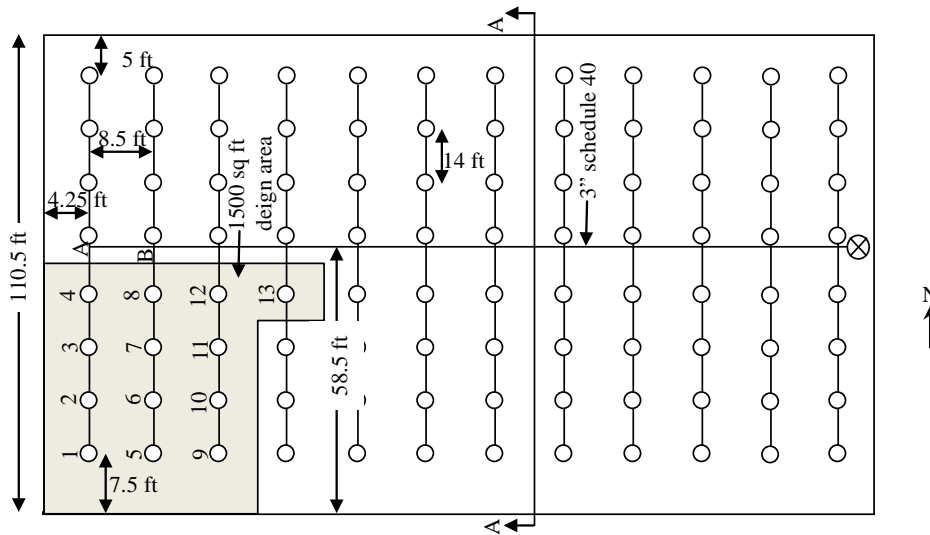


Figure 1 – Plan View for Hydraulic Calculation Portion of Exam

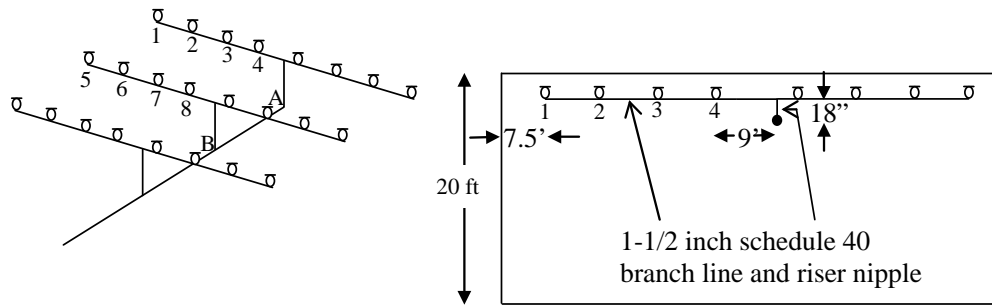


Figure 2 – Isometric and Section View AA for Hydraulic Portion of Exam

sure because they demonstrated knowledge of how to get the pressure demand from the flow demand.

Several of the people that took the exam worked the situation backwards. They tried to start with the minimum pressure of 7 psi at the sprinkler and used the formula “Q equals k times the square root of P” to get the flow. This approach was incorrect. It is true that NFPA 13 states that the minimum pressure at any sprinkler is 7 psi (see section 22.4.4.10.1). However, for this situation, a pressure of 7 psi at a sprinkler with a k-factor of 8 will only yield a flow of 21.2 gpm as follows:

$$Q = k\sqrt{P} = 8\sqrt{7} = 21.2$$

With a flow of only 21.2 gpm, spread over the 127.5 sq ft coverage area of the sprinkler, this would only equate to a density of 0.166 gpm per sq ft (21.1/127.5 = 0.166), which is below the specified minimum density requirement of 0.2 gpm per

sq ft. Therefore, a pressure greater than 7 psi needs to be in place at Sprinkler 1 in order to create the flow out of Sprinkler 1 that will provide the minimum density that we need to control or suppress a fire in this occupancy.

Friction Loss

Most people understood how to perform the Hazen-Williams formula to predict the friction loss for the flows between sprinklers. Most people also recognized that the actual inside diameter of the pipe needed to be used in the formula (1.61 for 1-1/2 inch pipe and 3.068 for 3-inch pipe). These actual inside diameters can be found in Table A.6.3.2 of NFPA 13. A few people used the nominal diameters in the formula (1.5 and 3) rather than the actual diameters, which cost them a point.

In order to calculate the friction loss correctly between nodes, the user needed to get the number and type of fittings correct as well as the correct equivalent lengths for the fittings. Everyone that

answered this question recognized that NFPA 13 instructs you to ignore the fitting (tee or elbow) directly attached to the sprinkler (see section 22.4.4.7(9)). That left two fittings to be concerned with, the tee at the top of the riser nipple and the tee and the bottom of the riser nipple. The fitting at the bottom of the riser nipple on the most remote branch line (with sprinklers 1, 2, 3 and 4) needed to be a tee and not an elbow. While it is true that this was the last branch line and that the main did not need to continue to pick up any more sprinklers, this section of main needs a flushing connection and so a tee needs to be installed in this section of pipe to meet that rule of NFPA 13 (see section 8.16.3.2).

Not only was it important to recognize that the fitting at the bottom of the riser nipple was a tee, but the user also needed to recognize that the fitting needed to be included with the riser nipple in the calculations. Section 22.4.4.7(4) of NFPA 13 specifically states that the fitting at the

bottom of a riser nipple needs to be calculated with the riser nipple, not the main that it is attached to. So, in order to get full credit for the calculation, the calculation step that included the pipe from Sprinkler 4 on the branch line to the fitting (9 ft long) and the riser nipple (1.5 ft long) needed to include an equivalent length of 2 tees (8 ft each according to Table 22.4.3.1) or 16 ft of equivalent length of pipe. This made the total pipe length in this step 26.5 ft (9+1.5+16=26.5).

Elevation Loss

In order to get the correct answer, you needed to take into account the elevation loss between the branch line and the cross main. The branch line was 1.5 ft above the cross main, which made for additional elevation loss of 0.6 psi, which can be calculated from the following formula (where H is the change of elevation in feet):

$$P_e = H \times 0.433 = 1.5 \times 0.433 = 0.6$$

K-Factor for Branch Line

Towards the end of the calculation, the user needed to recognize that they needed to calculate an equivalent k-factor for the first branch line that they could apply to the pressure at the second branch line to predict the flow into the second branch line. The use of this equivalent k-factor is permitted because the second branch line was arranged identically to the first and had the same number of sprinklers in the design area along the branch line. The k-factor is calculated from the pressure and flow demands at the base of the branch line using the following formula:

$$k = \frac{Q}{\sqrt{P}}$$

At the base of the first branch line, the flow and pressure demands were 109.9 gpm at 25.4 psi. This means that the branch line had a k-factor of 21.81 as shown below:

$$k = \frac{Q}{\sqrt{P}} = \frac{109.9}{\sqrt{25.4}} = 21.81$$

After finding this k-factor, the user needed to conduct two more steps. Next, they needed to calculate the friction loss

in the main from node A to node B. Since the main was 3-inch pipe, this friction loss was very small (0.1 psi) and the pressure demand at node B was 25.5 psi (25.4+0.1 = 25.5). Then the user needed to apply the k-factor for the branch lines to the pressure at node B to predict the flow as follows:

$$Q = k\sqrt{P} = 21.81\sqrt{25.5} = 110$$

Final Answer

The correct final answer was 110 gpm as shown above. Many people failed to take the last few steps of calculating the k-factor for the first branch line and applying it to the pressure at the second branch line. They just used the flow from the first branch line of 109.9 gpm and assumed that the second branch line would be the same. While this result is very close as an answer, it is not the correct procedure to use and a few points were taken away if the user made this assumption. The answer of 109.9 gpm is only close because of the very low friction loss between nodes A and B. If the friction loss had been greater between these points, then the flow demand would have been significantly different and a Top Tech would need to demonstrate knowledge of this difference.

Another common mistake that was made was the adding together of the flows

from the first and second branch lines to answer the question. While it is true that this total flow would be in the system, this was not the question that was asked. The question specifically asked what the flow would be in the second branch line, not what the total flow would be in the main feeding the two branch lines. In a detail-oriented business like the sprinkler industry, we need to answer the questions that were asked of us, not other questions. Good communication skills are also necessary in order to be a "Top Tech".

See Figure 3 for a complete hydraulic calculation form showing how the final answer of 110 gpm was achieved. We hope that you enjoyed working towards this answer and that you learned something along the way. Stay tuned to the next edition of SQ magazine where we will announce the winners of the Top Tech competition from Orlando, FL.



Contract Name: Top Tech 2009 Hydraulic Calculation Question								Sheet 1 of 1		
Step No.	Nozzle Ident and Location	Flow In gpm	Pipe Size (in)	Pipe Fittings and Devices	Equiv. Pipe Length (ft)	Friction Loss (psi/ft)	Pressure Summary	Normal Pressure	Notes	Ref. Step
1	2	q 25.5 Q 25.3	1.61	F - T 14	L 14	0.025	P ₁ 10.2 P ₂ 0.4	P ₁ P ₂	0.2x127.3=25.5 (25.3/8) ² =10.2	
2	3	q 26.0 Q 31.5	1.61	F - T 14	L 14	0.093	P ₁ 10.6 P ₂ 1.3	P ₁ P ₂	q=8(10.6) ^{0.54} =26 q=8(1.3) ^{0.54} =07.6	
3	4	q 27.6 Q 79.1	1.61	F - T 14	L 14	0.206	P ₁ 11.9 P ₂ 2.9	P ₁ P ₂	q=8(11.9) ^{0.54} =07.6	
4	A	q 30.8 Q 109.9	1.61	2T F 16.0 T 26.5	L 10.5 F 16.0 T 26.5	0.378	P ₁ 14.8 P ₂ 0.6	P ₁ P ₂	q=8(14.8) ^{0.54} =30.8	
A	B	q - Q 109.9	3.068	F - T 8.5	L 8.5 T 8.5	0.016	P ₁ 25.4 P ₂ 0.1	P ₁ P ₂	k=109(25.4) ^{0.54} k=21.81	
B		q 110 Q		F - T	L T		P ₁ 25.3 P ₂	P ₁ P ₂	q=21.81(25.5) ^{0.54} =110	

Figure 3 Hydraulic Calculation Worksheet

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Roche, Scholz, Roche & Walsth Ltd.
Orland Park, IL

Scott Ramsbottom

RPI Printing, Inc.
Fall River, MA

Steven J. Schwartz

Shatz, Schwartz and Fentin P.C.
Springfield, MA

Greg Carscallen

Si Systems (BravePoint)
Norcross, GA

Don DeLuca

SRI Fire Sprinkler, LLC.
Albany, NY

Michael J. Asher

Sullivan, Ward, Asher & Patton, P.C.
Southfield, MI

Chuck Kitts

System Sensor
Lansdale, PA

Clifford H. Routh
The Segal Company
Washington, DC

Michael Pistner
Ullico, Inc.
Washington, DC

PROFESSIONAL

James Benton
San Diego, CA

Steven J. Hanis
Gaylord, MI

Ralph L. Gross
Associated Technical Services, Ltd.

Villa Park, IL
David Hill

BCER Engineering, Inc.
Arvada, CO

Andrew Blum
Exponent, Inc.
Bowie, MD

Peter J. Neilio
Fire Control Design, LLC.
Rhineland, WI

David Gessert PE
Fire Protection Consulting
Portland, OR

Mark A. Davis
Hawk Fire Protection & Design, LLC.
Weatherford, TX

Dwayne Powell
National Sprinkler Design
Cincinnati, OH

David R. Thomas
Rockwell Fire Systems, Inc.
West Palm Beach, FL

Jerry Rennard Hunter
Schirmer Engineering Corporation
Austin, TX

Robert Trotter
Smith Seckman Reid, Inc.
Franklin, TN

John S. Leadbetter
Superior Fire Protection Engineering
Negaunee, MI

Michael J. Smolen
Watts Architecture & Engineering P.C.
North Tonawanda, NY

SAM

Wolfgang Neumann
AMTROL, INC.
West Warwick, RI

Ed Lynch
ERICO
Solon, OH

Fred Grenning
HYDRO FLOW PRODUCTS, INC.
Arlington Heights, IL

SUBSCRIBER

David Greenwald
Aracadia, CA

Stephen Cochran
Anchorage School District
Anchorage, AK

Ronald Kunda
Bismarck Fire Department
Bismarck, ND

Tim R. Frost
Boise City Planning & Development Services
Boise, ID

Art Black
Carmel Fire Protection Association
Carmel, CA

Adam C. Hungerford
Chemung ARC
Elmira, NY

Allen Geeser
Cherry Valley Fire District
Cherry Valley, IL

Jeff Dean
City of Indianapolis
Indianapolis, IN

Charles Dearden
City of Ketchikan
Ketchikan, AK

Tony Padula
City of Park Ridge
Park Ridge, IL

Marvin Rose
City of Surprise Building Safety Dept
Surprise, AZ

Richard Kelley
Deschutes County Building Department
Sunriver, OR

Marnie Grondahl
Duluth Fire Department
Duluth, MN

Jeffrey W. Uthe
Georgia Pacific
Camas, WA

Jeff Butterfield
Georgia Pacific
Camas, WA

Mark Jester
Georgia Pacific
Camas, WA

Patrick T. Crawford
Hi-Tech Fire
Poplar Bluff, MO

Gray Fowler
Liberty Mutual Property
Jackson, MS

Roger Herin
Monarch Fire Protection District
Chesterfield, MO

Dennis Grubb
Orange County Fire Authority
Irvine, CA

Amy Acton
Phoenix Society for Burn Survivors
Grand Rapids, MI

Richard Johnson
Raytheon Missile Services
Tucson, AZ

Jeffrey D. George
Raytheon Missile Systems Fire Prevention
Tucson, AZ

Richard Hamner
Saint Lucie County Fire District
Port Saint Lucie, FL

Ryan Ankrom
SBC Advertising
Columbus, OH

James L. Tucker CET
The Raytheon Company
Tucson, AZ

David Tiller
The University of Akron/EOHS
Akron, OH

Jennifer Galloway
The University of Akron/EOHS
Akron, OH

Andrea Testa
Township of West Goshen
West Chester, PA

**NFSA
BUCKS**

For every NFSA chapter meeting attended by a MEMBER they will receive a \$10.00 Certificate redeemable for NFSA Resource Center Materials. Certificates can be accrued for up to one (1) year. Just another service that NFSA has added to it's cast of membership benefits!

NFSA is pleased to announce our newest recruitment contest...

CATCH A BIG WAVE

**to NFSA's 2010 Annual Seminar on the
Big Island of Hawaii!**

HOW CAN YOU WIN?

If you are a NFSA member, you are eligible to win! Just 'Catch' (recruit) a new Fire Sprinkler Contractor or SAM (supplier/manufacturer) member into NFSA. For every 'Catch' you will receive ONE (1) entry to win the Grand Prize or one of two Runners-up prizes. Your 'Catch' (the new member) will also be eligible for a chance to win the same. Only Contractor or SAM recruits can give you an entry into the drawing. The more Contractor or SAM members you recruit, the more chances you have to win!

GRAND PRIZE WINNER

May 12-16, 2010, you and a guest will enjoy four fabulous trade-wind nights at the Fairmont Orchid Hotel. This 32-acre resort with a sugar-white sandy lagoon and aquamarine waters is located on the Kohala Coast of the BIG Island of Hawaii.

Along with your airfare and accommodations, your winning package will include full registration for two to our Annual Seminar. Your registration will include our engaging welcome reception, informative General and Workshop Sessions, a Spouse's Program and a fun-filled traditional Luau.

The Fairmont Orchid Hotel provides a beautiful and challenging golf course for pros and amateurs alike. The course has spectacular scenery with ocean views and green fairways patterned with black lava.

Enjoy the many attractions the Island has to offer, from Mauna Kea's winter snow-capped mountaintop to the sizzling Kilauea Volcano of Madame Pele's flowing lava, along with tropical rainforests and a teeming undersea world, the island is full of wondrous places to explore.

This entire Paradise Prize Package is worth over \$3,500!



SECOND PRIZE WINNERS

Two (2) runners-up will each receive a gift certificate for \$250 to be used at the Fairmont Orchid's Spa, Hawaii's award-winning Spa, which boasts 9 private outdoor waterfall haies (huts), 6 more ocean side and 3 indoor treatment rooms. With the soothing sounds of water, the pleasant ocean breezes and the floral scent that fills the air, treatments integrate Hawaii's natural therapeutic environment and ancient healing arts into every experience.

WHO CAN WIN?

This contest is open from May 3, 2009 through January 15, 2010 to any NFSA member in good standing.

Winners will be announced on or about January 31, 2010.

Any Questions? Please contact Karyn Hudgens, Director of Membership, at 845.878.4200 x156.



The Voice of the Fire Sprinkler Industry

'Catch a BIG WAVE' and enjoy Hawaii on us in 2010!

By Karyn Hudgens

As Membership Director for NFSA, I am so excited to introduce to you our newest recruitment campaign that can carry you away to PARADISE!!!

Winning couldn't be easier! All you have to do is brag about the National Fire Sprinkler Association, and introduce us to your peers. Who better to sell an Association but its members? The more you

brag, the better your chances to bring new memberships to NFSA. For every new member you persuade to join, you gain an entry to win! There is no limit on your chances to win.

In this time of economic uncertainty, we know it's not going to be an easy task, therefore we've decided to reward you with a chance to join us in paradise, on the Big Island of Hawaii, at our 2010 Annual

Seminar – at our expense!

That's right, you and a guest will fly to Hawaii and enjoy complimentary 4 nights, 5 days, at the Fairmont Orchid and full registration to the seminar. This prize package is worth over \$3,500!

Kicking off at our 2009 Annual Seminar at the Omni ChampionsGate Resort in Orlando, and running through January 2010, you can have as many chances as you want to win! Just recruit new Contractor or SAM Members and you and your new member will be put into the drawing to win! It's as easy as that! No gimmicks no tricks, just recruit to win!

See the full color ad on the previous page and as always, feel free to call or email me with any questions.

Thank you in advance for making this campaign a successful one!



NFSA Florida Regional Manager Dave Bowman (r.) awards Mike Brown of Advanced Fire a 15 year membership plaque.



NFSA Florida Regional Manager Dave Bowman (r.) awards Lenny Hollis of Southern Fire Protection a 15-year membership plaque.



NFSA Florida Regional Manager Dave Bowman (r.) awards a 15-year anniversary plaque to Jay Larson, of L. Pugh and Associates of Pensacola, Florida.

Karyn Hudgens

hudgens@nfsa.org

845-878-4200 ext. 156

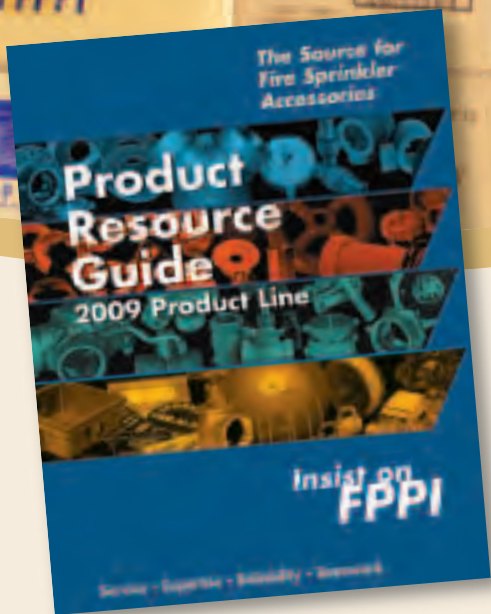


NFSA's Director
of Membership

Karyn Hudgens



FPPI. The Strength of Our Network.



At FPPI our dedication to getting it right means your business can depend on us...on every order, every time with efficient and responsive distribution centers on both coasts and over 200 distributors in the U.S. and Canada. They are all supported by a state-of-the-art supply chain management system ensuring the right part is available when and where you need it.

FPPI—Exceptional service everyday.sm

Visit us online at FPPI.com and download the new 2009 Product Resource Guide.

Insist on FPPI®

For a distributor near you call 1 800 344-1822 or visit FPPI.com

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SAM Council Members:

Chuck Kitts, *Chairman*
System Sensor
Lansdale, Pennsylvania

Michael Berkelhammer
United Brass Works, Inc.
Randleman, North Carolina

Buck Buchanan
H-D Supply, Inc.
Devon, Pennsylvania

Jim Henry
Potter Roemer
Elm Grove, Wisconsin

Gary Johnson
Lubrizol Advanced Materials
Cape Charles, Virginia

Bruce LaRue
Potter Electric Signal Company
St. Louis, Missouri

Cary Nicol
Viking SupplyNet
Carol Stream, Illinois

Don Smith
Chicago Backflow Protection
Systems
Alsip, Illinois

Dean Taylor
Anvil International
Portsmouth, New Hampshire

Al Gettler, *Secretary*
NFSA
Patterson, NY

2009 Buyer's Guide

The Association would like to acknowledge the commitment and support it has received from its SAM (Supplier and Manufacturer) members. Each company listed in the Buyer's Guide has demonstrated their dedication to the fire sprinkler industry by joining in the Association's goal to provide fire sprinkler protection where people live, work and play. Special recognition is also given to the member companies and their representatives who make up the SAM Council.

National Fire Sprinkler Association

A-C Fire Pump Systems

10661 New Kirk Street
Dallas, Texas 75220
Telephone: 469.221.1288
Fax: 214.357.5861
Internet: www.acfirepump.com

Founded:
1878

Primary Products/Services:
Fire Pumps & Packages

Market Area:
Global

Hours of Operation:
8:00 a.m.-4:30 p.m. Mon.-Fri.

Management:
Hansford Stewart, Manager, Global Fire Pump Marketing

Sales Contact:
Hansford Stewart

Telephone:
469.221.1288

FAX:
214.357.5861

Company Profile:
A-C Fire Pump Systems offers an extensive line of stationary fire pumps including in lines, end section, horizontal, split case and vertical turbines. All pumps are UL listed, FM approved and meet the requirements of NFPA #20. We also offer custom engineered fire pump package systems with or without house enclosures.



AGF Manufacturing, Inc.

100 Quaker Lane
Malvern, Pennsylvania 19355
Telephone: 610 240-4900
FAX: 610 240-4906
Internet: www.testandrain.com

Founded:
1986

Primary Products/Services:
TestanDrain Valves & Accessories

Market Area:
International

Hours of Operation:
8:30 a.m. - 5:00 p.m. Mon.-Fri.

Management:
James McHugh
George McHugh IV

Sales Contact:
James McHugh

Company Profile:
AGF Manufacturing, Inc. revolutionized the fire sprinkler industry with the Model 1000 TESTanDrain single valve inspector's test which eliminated the time and space

consuming traditional loop assembly. Since then, TESTanDrain valves have been installed in countless systems throughout the world and AGF continues to introduce innovative new products such as INSPECTOR'S TEST, REMOTE TEST and Commercial and Residential RESERPACK. TESTanDRAIN valves are now made in more styles, in more sizes and with more orifice options than any other valved on the market. All AGF products are manufactured to the highest quality and meet or exceed ISO 9002 standards. AGF valves are UL Listed and FM Approved.



Accu-Fire Fabrication, Inc.

8 Progress Drive
Morrisville, Pennsylvania 19067
Telephone: 215.428.2400
Toll-Free: 800.641.0005
FAX: 215.428.0355
Internet: www.accufire.com

Founded:
1991

Primary Products/Services:
Fire Sprinkler Fabrication & Supply

Market Area:
Northeastern United States

Hours of Operation:
7:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:
Deandra Murphy, President
Vince Murphy, Vice President of Operations
Mike Stango, Vice President of Sales

Sales Contact:
Mike Stango, Vice President of Sales
Tel: 215.260.4400

Company Profile:
Our entire organization is dedicated to supplying fast, accurate, leak-free fabrication. Since its inception in 1991, Accu-Fire maintains a solid reputation for quality and service. We have a 60,000 sq. ft. facility with six acres of pipe inventory. All products are delivered on our trucks equipped with 50 foot booms or rear mounted fork lift. In addition to fabrication, Accu-Fire is a full service supplier of fire sprinkler devices. Visit www.accufire.com for product affiliation. Accu-Fire is an approved Women's Business Enterprise.



ACT Pipe & Supply

6950 W. Sam Houston Pkwy
Houston, Texas 77041
Telephone: 713.937.0600
Fax: 713.937.8068

Sales Contact:
Don Schmitt, Sales Manager



Action Fire Fabrication & Supply, Inc.

1600 West Linne Road
Tracy, California 95377
Telephone: 209 836-6460
FAX: 209 836-6475
Internet: www.actionfirefab.com

Founded:
1986

Primary Products/Services:
Fire protection fabrication & Supply

Market Area:
West Coast, Northwest, Alaska, Pacific Rim

Hours of Operation:
7:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:
Ted M. Bolls, Sr., President
Amy M. Donahoo, Executive Vice President

Sales Contact:
Bob, Margaret, Sisko, Sales Associates

Telephone:
209.836.6460

FAX:
209.836.6475

Company Profile:
Complete fire protection systems, from residential to commercial. Custom risers, manifolds and pipe stands. Featuring our own line of UL/FM approved segmentally welded grooved-end fittings. Most all major manufacturers' products available. Family owned and operated for 23 years.



Advanced Fire Technology, Inc.

7532 Watson Road
St. Louis, Missouri 63119
Telephone: 314.752.5200
FAX: 314.481.0029
Internet:
www.advancedfiretechnology.com

Primary Products/Services:
Self Contained Residential Sprinkler Systems

Management:
Joe Weber, President
Brett Dickerson, Vice President

AFCON

P.O. Box 3365
 South El Monte, California 91733
 Telephone: 626.444.0541
 FAX: 626.444.3887
 Internet: www.afcon.org

Founded:
 1952

Primary Products/Services:
 Pipe Hanger Products, Sway Braces

Market Area:
 Worldwide

Hours of Operation:
 7:00 a.m. - 3:30 p.m. Mon.-Fri.

Management:
 Kraig Kirschner, President

Company Profile:
 We specialize in the design and manufacture of fire sprinkler hanging and bracing products, from the contractor's point of view. Our 40 years of UL sway brace experience exceeds that of all the other manufacturers and brands combined. AFCON has more products in the sway brace and restraint categories than any other brand. Our sway brace designs are available for more pipe sizes and load ratings in both steel pipe and CPVC pipe. AFCON has a broad array of pipe hanger products for steel and CPVC pipe. Please note that we have many special UL fastener listings for use with our hangers. Attention to these features may be beneficial to your engineering and installation. AFCON knows that smart hanger design requires constant effort in Research and Development. We appreciate your comments, regarding hanger situations, where our designs may assist you. For further information, please e-mail info@afcon.org.

Allied Tube & Conduit

11350 Norcom Road
 Philadelphia, Pennsylvania 19154
 Telephone: 215.676.6464
 FAX: 215.673.4152
 Internet: alliedtube.com

Primary Products/Services:
 Steel Sprinkler Pipe

Market Area:
 Worldwide

Management:
 Steve Norvalis

Ames Fire & Waterworks

1427 North Market Blvd., Suite 9
 Sacramento, California 95834
 Telephone: 916.928.0123
 FAX: 916.928.9333
 Internet: www.amesfirewater.com

Founded:
 1910

Primary Products/Services:
 Backflow Prevention

Market Area:
 North America

Management:
 Dave Johnson, Sr. Vice President Sales,
 Wholesale
 Bruce Parrott, Vice President of Sales
 Administration

Sales Contact:
 Rick Ferguson, National Sales Manager-
 Backflow Products

Telephone:
 916.928.0123

FAX:
 916.928.9333

Company Profile:
 Ames Fire & Waterworks designs, manufactures and sells an extensive line of backflow preventers, automatic control valves, pressure reducing valves, backflow test kits and related flow control products. Ames features lightweight stainless steel construction, low pressure loss and optional grooved-end butterfly shutoff valves with integral tamper switch. Optional body configurations include horizontal, vertical flow up, vertical flow up and down N-shape and Z shape.

Amtrol, Inc.

1400 Division Road
 West Warwick, Rhode Island 02893
 Telephone: 401.884.6300
 Fax: 401.884.5276

Management:
 Wolfgang Neumann, Product Manager

Anvil International, Inc.

110 Corporate Drive, Suite 10
 Portsmouth, New Hampshire 03862
 Telephone: 603.422.8000
 Toll Free: 800.301.2701
 FAX: 603.422.8033
 Internet: www.anvilstar.com

Founded:
 1800's

Primary Products/Services:
 Largest supplier of domestic and globally sourced products for piping systems offered through AnvilStar, Fire Products Division of Anvil International.

Market Area:
 U.S., Canada, Europe, Latin America

Hours of Operation:
 8:00 a.m. - 5:00 p.m., Mon. - Fri.

Management:
 Mitch Bevill, Director of Sales, Eastern U.S.,
 Brian Reef, Director of Sales, Western U.S.
 Dean Taylor, V.P. Sales
 John Smayda, V.P. Marketing

Sales Contact:
 Debbie Smith, Executive Fire Protection
 Administrator

Tel:
 708.885.3000

Fax:
 708.534.5441

Company Profile:
 AnvilStar combines the latest technology and the most current fire protection ratings to create products in a full range of styles and applications. Products include: Gruvlok Grooved Couplings, Fittings and Flanges. SPF Cast Iron & Ductile Iron Threaded Fittings, SPF Steel Pipe Nipples and O'Lets. Anvil Cast and Malleable Iron Threaded & Flanged Fittings, Beck Steel Pipe Nipples, Steel Pipe Couplings and Anvil Hangers & Supports and All Thread Rod. AnvilStrut Channel and Fittings. Merit Tee-Lets and Drop Nipples. Mueller Valves and Indicator Posts. AnvilStar is the exclusive Fire Products Division of Anvil International, the world's largest and most complete manufacturer of piping connections and support systems for over 150 years.

APEX Pumping Equipment, Inc.

720 Heartland Drive, Unit P
 Sugar Grove, Illinois 60554
 Tel: 630.466.4488
 Toll Free: 866.563.2739
 FAX: 630.466.4499

Founded:
 1996

Primary Products/Services:
 Fire Pumps, Tanks, Controller, Service

Market Area:
 Illinois, Indiana, Iowa, Nebraska

National Fire Sprinkler Association

Hours of Operation:

Mon.-Fri
8:00 a.m.-5:00 p.m. w/ 24 hr. service

Management:

Brad Clemmons, President,
Vince Rodriquez, Service Manager
Bruce Jacobson, Sales Manager
Steve Holzkopf, Office Manager

Sales Contact:

Steve Holzkopf, Office Mgr or Bruce Jacobson, Sales Mgr.

Company Profile:

Since 1996, APEX has added numerous products and we presently have five full-time service trucks on the road and offer 24-hour emergency service for fire pumps, motors, engines and controllers. We also stock many products and represent many manufacturers. From water storage, disinfecting, pumping, driving, controlling and repairing, APEX provides solutions.

Apollo Valves/Conbraco Industries

PO Box 247
Matthews, North Carolina 28106
Telephone: 704.841.6000
FAX: 704.841.6021

Primary Products/Services:

Flow Controls-Ball Valves, Backflow Preventers

Market Area:

Worldwide

Hours of Operation:

7:30 a.m.-5:30 p.m. EST, Mon.-Fri.

Management:

Pete Chapman, General Manager,
Backflow Prevention
Cal Mosack, Executive Vice President,
Sales & Marketing
John Wells, Inside Sales Manager
Sean Perry, Western Regional Sales Manager

Sales Contact:

Pete Chapman, Gen. Mgr., Backflow Prevention

Telephone:

704.841.6066

Company Profile:

Apollo Valves/Conbraco Industries is a third generation, family-owned company. Employing 1,200 people to manufacture and market MADE IN AMERICA valve products. Featuring UL/FM Backflow Preventers, UL Ball Valves, pressure regulations and relief controls. Introducing the new DC 4SG Double Check assembly and DCDA 4SG Double Check Detector

assembly in 2 1/2"-8" sizes, featuring short lay length, low flat pressure loss performance with mix/match grooved butterfly, or OS&Y, or Post Indicator shutoffs for ease of installation in any fire protection application.



ARGCO

2610 Commerce Way
Vista, California 92081
Telephone: 760.727.1644
Toll-Free: 800.854.1015
FAX: 760.727.3270
Internet: www.argco.com

Founded:

1981

Primary Products/Services:

Fire Sprinklers, Piping Tools, Hangers & Fasteners, Grooved Piping Products

Market Area:

United States

Hours of Operation:

6:00 a.m.-4:00 p.m. PST, Mon.-Fri.

Management:

Tom Tallman, General Manager
Lawrence Kent, Sales
Buck Eilers, Sales
Woody Witwer, Sales

Sales Contact:

Tom Tallman, Gen. Mgr.

Telephone:

800.854.1015

FAX:

760.727.3270

Company Profile:

Since 1981, ARGCO has been supplying the fire sprinkler industry. Starting with hard-to-find escutcheons and wall plates, ARGCO has expanded its line extensively. Top selling pipe thread sealants, a full line of hangers and fasteners and ARGCO's own brand of "PT" piping tools. New in 2009, Pipe Fittings which include Grooved Couplings, Tees, Elbows, Flange Adapters and Welded Fittings.

ASCO Power Technologies- Firetrol Products

5625 Dillard Drive
Cary, North Carolina 27518
Telephone: 919.460.5200
FAX: 919.460.5250

Management:

Matthew Rodgers, Vice President –
Firetrol Products
Kevin Shaw, Eastern Sales Manager
William King, Western Sales Manager
Carol Brady, Customer Service Manager

Sales Contact:

Carol Brady

Telephone:

919.460.5208

FAX:

919.460.5250

Company Profile:

For over 35 years, the Firetrol name has been recognized as a leader in fire pump controller innovation, design, quality and manufacturing.

Atlantic American

Fire Equipment Company
121 Titus Avenue
Warrington, Pennsylvania 18976
Telephone: 215.491.9800
Toll-Free: 800.247.1128
FAX: 215.491.7395
Internet: www.atlanticamerican.com

Founded:

1985

Primary Products/Services:

Fire Protection Products

Market Area:

Maine to North Carolina

Hours of Operation:

7:00 a.m. - 5:00 p.m., Mon.-Fri.

Management:

Paul DeCamara, Sr. President
Patrick Roche, Vice President
Robert MacGeorge, V.P., Operations
John Beck, Steel Pipe Division Manager

Sales Contact:

Bill Devlin, Sales Manager

Company Profile:

Atlantic American Fire Equipment Company is a leading wholesale material supplier to the fire protection industry. We provide top quality products at very competitive prices to commercial and residential fire sprinkler contractors throughout the Mid-Atlantic and Northeast regions of the U.S. The company was founded by Paul DeCamera and Patrick Roche in 1985, based on a vision of providing quality products and service to our customers. Since then, we have grown by adding five warehouses strategically located throughout a 13-state region, allowing us to take our service to an even higher level. Our plans include adding more warehouses to support

the demand for our products and services. We insist upon well-stocked inventories resulting in excellent fill rates, making us your one stop shop for the best sprinkler system components available on the market today.

Aurora Pump/Pentair Water

800 Airport Road
North Aurora, Illinois 60542
Telephone: 630 859-7000
FAX: 630 859-7060
Internet: www.aurorapump.com

Founded:
1919

Primary Products/Services:
Fire Pumps/Systems

Hours of Operation:
Monday-Friday

Management:
David Goddard, V.P. Sales & Marketing
Dina Brown, Marketing Services Manager

Company Profile:
Pentair Water North Aurora Operations offers a complete line of fire pumps to meet your fire protection needs; Vertical Inline, Horizontal Split-Case, Vertical Turbine, Foam and Mist Pumps. Aurora Pump™, Fairbanks Morse™ and Edwards™ are the product lines that are manufactured and sold at the Pentair Water North Aurora Operations plant. Offering both electric and diesel drives, we can also supply complete packaged systems to custom fit your requirements.

BAVCO

20435 South Susana Road
Long Beach, California 90810
Telephone: 310.639.5231
Toll Free: 800.458.3492
Internet: www.bavco.com

Founded:
1977

Primary Products/Services:
Distributor of Backflow Preventer Repair Parts

Market Area:
North America

Hours of Operation:
7:30 a.m.-4:00 p.m. PST, Mon.-Fri.

Sales Contact:
Sales Department

Company Profile:
BAVCO is the largest Master Part Distributor of original factory parts for backflow preventers. Every part for every model &

size of assembly is in stock & ready for our same day shipping guarantee. To help you easily access assembly information, we have compiled the BAVCO Reference Manual. The manual is the first comprehensive collection of breakdowns, repair information, specifications and dimensions for all 22 of the backflow assembly information; we have compiled the BAVCO Reference Manual. We can help with your repair parts needs. We are repair parts specialists. 800.458.3492

BlazeMaster®

Fire Sprinkler Systems
9911 Brecksville Road
Cleveland, Ohio 44141
Telephone: 216.447.5000
Toll-Free: 888.234.2436
FAX: 216.447.5750
Internet: www.blazemaster.com

Founded:
1984/Lubrizol founded 1928

Primary Products/Services:
BlazeMaster® pipe and fittings

Management:
Rocco Mango, Business Director
Gary L. Johnson, Global Business Development Manager
Matthew Kuwatch, Global Marketing Manager
Jeff Gibson, Technical Manager
Barry Just, Market Development Manager

Sales Contact:
Sales Department

Telephone:
888.234.2436

FAX:
216.447.5750

Company Profile:
BlazeMaster® CPVC Fire Sprinkler Systems have a proven history of performance as a cost effective alternative to metal piping systems featuring fast, easy installations, superior corrosion resistance and low flame and smoke characteristics. Since the product was introduced in 1984, more than one billion feet of BlazeMaster® pipe have been installed in more than 40 countries, making it the most specified non-metallic fire sprinkler system in the world. BlazeMaster® pipe and fittings are accepted for use in all three major model codes and meet National Fire Protection Association NFPA 13, 13D and 13R sprinkler standards.

Brooks Equipment Company, Inc.

P.O. Box 481888
Charlotte, North Carolina 28269
Telephone: 800.826.3473
FAX: 800.433.9265
Internet: www.brooksequipment.com

Founded:
1941

Primary Products/Services:
Fire and Life Safety Equipment

Market Area: National
Hours of Operation:

7:00 a.m. - 8:00 p.m. EST Mon.-Fri.

Management:
Tim Foughty, President
Sarah McManus, Sales Mgr.
Steve Mauro, Sales Mgr.

Sales Contact:
Sarah McManus/Steve Mauro, Sales Mgr.

Tel:
800.826.3473

FAX:
800.433.9265

Company Profile:
For 68 years, Brooks Equipment has been a leader in the industrial fire safety market, offering over 6,200 top quality products including fire extinguishers and cabinets, fire hoses, fire alarms, safety products and more. With our nationwide network of distribution centers, knowledgeable sales staff and training programs, we are committed to providing you with the tools you need to grow your business. At Brooks, you'll not only come to rely on great customer service, but will also receive technical and procurement support, fast delivery and information at your fingertips. Plus, you'll experience true loyalty, real quality control and life-saving technology. We work hard for you and will continue to earn our place as Your First Choice for Fire Equipment.

Buckeye Fire Equipment Company

1170 West Corporate Drive
Suite 201
Arlington, Texas 76006
Telephone: 817.633.3626
Toll-Free: 877.391.3626
FAX: 817.633.5884
Internet: www.buckeyefire.com/fire

Founded:
1967

National Fire Sprinkler Association

Primary Products/Services:

Fire Protection Equipment

Market Area:

Worldwide

Hours of Operation:

8:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:

Robert Taylor, System Sales Engineer
Jim Devonshire, Manager, Foam Business Development

Company Profile:

Buckeye Fire Equipment Company has a full range of fire fighting foam concentrates, hardware, proportioning and delivery systems to the sprinkler industry. We have a full line of AFFF aqueous film forming foam concentrates, along with high expansion and protein based concentrates for specific applications. Each of these products are considered "Earth-Friendly" and do not require reporting to the EPA in the event of a discharge. Our hardware line includes bladder tanks, ratio controllers, monitors, balanced pressure proportioning systems with foam concentrate pumps, I.L.B.P. modules, foam chambers and foam makers. We offer design assistance in accordance with the appropriate NFPA codes and standards and a Foam Agent and Systems Application Guide is available in Hard Cover and CD-ROM versions, free of charge. Please contact us for additional information.

Chemguard, Inc.

204 South 6th Avenue
Mansfield, Texas 76063
Telephone: 817.473.9964
Toll Free: 800.222.3710
FAX: 817.473.6590

Founded:

1987

Primary Products/Services:

Manufacturer of fire suppression foam concentrates and fire suppression systems.

Hours of Operation:

8:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:

Roger Bower, President

Twana Connors, Senior Vice President

John Vieweger, VP, Sales and Marketing

Sales Contact:

John Vieweger, VP Sales & Marketing

Telephone:

817.473.9964

FAX:

817.473.6590

Company Profile:

ISO 9001:2000 certified, Chemguard manufactures UL and FM approved fire - suppression foam concentrates, fire-fighting hardware and engineered foam systems for industrial, military, municipal, offshore, petrochemical/energy, transportation/freight and aircraft hangar applications around the world. Our extensive line of high-quality, durable and field-proven fire-fighting hardware includes fixed systems, self-contained foam units and large dry chemical skid units. We custom engineered trailer- and skid-mounted foam systems, self-contained foam units and large dry chemical skid units. We utilize global blending facilities to ship orders quickly-including emergency foam concentrate requests. Customer support includes laboratory analysis, live fire testing, technical application and design assistance and custom training on or off site



Chicago Backflow, Inc. aka CB Marketing

12607 S. Laramie Avenue
Alsip, Illinois 60803
Telephone: 708.389.5600
Toll Free: 866.BACKFLOW
FAX: 708.389.5632
Internet: www.backflow.com

Founded:

1993

Primary Products/Services:

Backflow Assembly Testing

Market Area:

Illinois, Northwest Indiana, Mississippi, Arkansas, Louisiana

Hours of Operation:

8:00 a.m. - 4:30 p.m. Mon.-Fri. -24 hour emergency service

Management:

Donald J. Smith, President
Michael D. Eisenhauer, Secretary
Brett Scharpenter, Vice President

Katie Rager, Operation Manager

Sales Contact:

Katie Rager, Operations Manager

Company Profile:

USA's largest backflow testing and maintenance company that is exclusively dedicated to the installation, testing and maintenance of backflow assemblies. With

a unique understanding of fire sprinkler systems, Chicago Backflow, Inc. also has a products group within CBI that operates under the CBI banner aka CB Marketing, which is a manufacturers rep and service organization for Ames, Patterson Fire Pumps, Fire Pump Controls (Masters and Others), Aqua Store Tanks, Legend 13D Pump systems, pressure vessels and polypropylene 13D tanks. The CB Marketing group also handles fire pump control industrial organizations for backflow related issues.



CB Marketing, Inc. (A CBI Company)

12559 South Laramie Avenue
Alsip, Illinois 60803
Telephone: 708.202.0033
FAX: 708.385.5415
Internet: www.backflow.com

Primary Products/Services:

Manufacturers Representatives of specialty products for fire protection

Market Area:

Illinois, Northwest Indiana, Wisconsin /
Nationally for 13D Pump Systems

Hours of Operation:

8:00 a.m. - 4:30 p.m. Mon.-Fri., 24/7
emergency service

Management:

Donald J. Smith, President
Brett Scharpenter, Vice President
Sal Doug Eisenhauer, Director of Product
Management

Sales Contact:

Sales/Quote Contact:

Doug Eisenhower

New Product Opportunities:

Brett Scharpenter

Telephone:

708.202.0033

FAX:

708.385.5415

Company Profile:

With a unique understanding of fire sprinkler systems and markets, CB Marketing is a manufacturers' rep and service organization for Ames, Patterson Fire Pumps, Fire Pump Controls (Master and Others), Aqua Store Tanks, Legend 13D Pump systems, pressure vessels and polypropylene 13D tanks, The CB Marketing group also handles fire pump control replacements

and repairs. CBI specializes in new product launches and market recaptures for principals CBM represents.

Clarke Fire Protection Products, Inc.

3133 East Kemper Road
Cincinnati, Ohio 45241
Telephone: 513.771.2200
FAX: 513.771.0726
Internet: www.clarkefire.com

Founded:
1964

Primary Products/Services:

Diesel engines for stationary sprinkler fire pumps.

Market Area:

North America, South America, Europe, Asia, Middle East

Hours of Operation:

8:00 a.m. - 5:30 p.m. Mon.-Fri.

Management:

Dane Petrie, President
Mark Evans, Global Marketing Manager
Justin Strousse, Sales Manager, Americas
Dave Scholten, Customer Service Manager

Sales Contact:

Justin Strousse, Marketing Manager, Americas

Telephone:

513.719.2307

Company Profile:

Clarke manufactures diesel engines to NFPA-20 specifications that are certified under UL and FM, ranging in power from 41hp to 575hp. Clarke's Pressure Limiting Driver limits system pressure to prevent over-pressurization of building sprinkler systems during the weekly test. Introduced in 2007, Clarke provides UL listed couplings for electric motor driven fire pumps and in 2008 will introduce UL listed drive shafts for diesel driven fire pumps.

Columbian TecTank

5400 Kansas Avenue
Kansas City, Kansas
Telephone: 913.621.3700
FAX: 913-621-2145
Internet: www.columbiantectank.com

Primary Products/Services:

Manufacturer of bolted tanks and shop-welded tanks in coated carbon steel, aluminum and stainless steel.

Complete Pump Service Co., Inc.

461 South Immen Drive
Addison, Illinois 60101
Telephone: 630.628.1600
FAX: 630.628.1709
Internet: www.completepump.com

Founded:
1964

Primary Products/Services:

Fire Pump Testing/Service on all Water Application Pumps

Hours of Operation:

7:00 a.m.-4:30 p.m. w/ 24 hr. emergency service

Management:

Richard D. Ficarra, Jr., President
Laura Ficarra Allen, Treasurer

Sales Contact:

Rich Ficarra, President

Telephone:

630.628.1600 ext. 107

FAX:

630.628.1709

Company Profile:

Complete Pump Service Company offers 24

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National Fire Sprinkler Association

hour emergency service and experienced repair of all makes of water application pumps. Complete Pump performs annual fire pump testing. They are authorized representatives for Talco Residential Fire Pumps and also sell fire pump accessories. Complete Pump Service Company's success is based on good, honest service.



Croker Division

Fire-End and Croker Corporation
7 Westchester Plaza
Elmsford, New York 10523
Telephone: 914.592.3640
Toll Free: 800.729.3473
FAX: 914.592.3892
Internet: www.croker.com

Founded:
1911

Primary Products/Services:
Fire protection equipment

Market Area:
Nationwide/Worldwide

Hours of Operation:
8:30 a.m.-4:30 p.m.

Management:
Paul A. Sposato, President
Larry J. Kaplan, VP Sales

Sales Contact:
Larry J. Kaplan, VP Sales

Company Profile:
Since 1911, Croker has manufactured and supplied the highest quality Fire Hose Standpipe Equipment available in the industry. Croker continues to be an industry leader in quality products as well as dependable service. Our Croker catalog provides building owners, architects, engineers, distributors and contractors with a clear, comprehensive specification and purchasing reference guide second to none. Our main warehouse is located in Elmsford, New York. We maintain inventory in Dallas, Texas, Detroit, Michigan, Plantation, Florida, Cleveland, Ohio, Louisville, Kentucky, Ashland, Virginia and Wilmington, Delaware. Because our equipment is critical for the protection of lives and property, we are continually striving to maintain and improve our product quality year after year. This has been our mission since 1911.

Branch Office and Regional Warehouse:
Croker Division-Fire-End & Croker Corp.
1110 South Airport Circle-Suite 110
Eules, Texas 76040

Telephone:
817.354.9900

Toll Free:
877.354.9905

FAX:
817.545.0055
Max Lombard, Regional Sales Manager
Jake Lombard, Warehouse Manager



DecoShield Systems, Inc.

272 Southwest 12th Avenue
Deerfield Beach, Florida 33442
Telephone: 954.725.7665
Toll-Free: 800.873.0894
FAX: 800.585.3894
Internet: www.decoshield.com

Founded:
1989

Primary Products/Services:
Pipe hangers & decorative pipe covers

Market Area:
worldwide
Hours of Operation: Mon.-Fri. 8:00 a.m.-
6:00 p.m.

Sales Contact:
Linda Camm, President

Telephone:
800.873.0894

FAX:
800.585.3894

Company Profile:
UL/ULC listed DecoShield Systems provide you with lightweight, attractive, affordable modular cover/support systems for sprinkler piping, hydronics, plumbing, cable and conduit. DecoShield products are manufactured using an engineered resin of a Class I/A material meeting most model code requirements, and are clean, paintable, easy to install, tamper-resistant, durable and economical. The DecoShield cover will not dent, crack, rust or corrode. As an alternative to constructed soffits and suspended ceilings, the DecoShield Systems can be installed without disturbing asbestos ceilings and can be easily installed in occupied premises. We also offer assistance with design, installation and anchoring problems.



Dixon Powhatan

800 High Street
Chestertown, Maryland 21620
Telephone: 410.778.2000
Toll Free: 800.355.1991
FAX: 410.778.4702
Internet: www.dixonpowhatan.com

Primary Products/Services:
Brass Fire Products/Accessories

Market Area:
U.S., Canada, Mexico, Middle East

Hours of Operation:
8:00 a.m.-5:00 p.m. Mon.-Fri.

Management:
Bob Grace, Division Manager

Hazen Arnold, Sales Manager
Craig French, Plant Manager

Sales Contact:
Hazen Arnold, Sales Manager

Telephone:
410.778.2000

FAX:
410.778.4702

Company Profile:
Dixon Powhatan is a manufacturer and distributor of fire protection products. Specializing in brass goods, our Winchester, Virginia manufacturing facility continues the proud tradition of Powhatan; making quality products at a competitive price. We stock our products in 13 warehouses around the country to support our distributors and get products on the job site fast. These products include: Pressure Reducing Factory Set Valves, Angle, Globe Wedge Disc Gate Valves, Chicago Pattern, Nozzles, Adapters, Fire House, Racks, Reels and Fire Department Connections. We proudly carry FM Approval, UL listings and MEA Approvals on numerous products.



Elkhart Brass

1302 West Beardsley Avenue
Elkhart, Indiana 46514
Telephone: 574.295.8330
Toll-Free: 800.346.0250
FAX: 574.293.9914
Internet: www.elkhartbrass.com

Founded:
1902

Primary Products/Services:
Fire Fighting Equipment

Market Area:
United States & International

Management:
Hans Ashbaugh, President
Dominic Monico, V.P. Sales & Bus. Dev.
Don Sjolín, V.P. Mktg & Bus. Strategy
Paul Albinger, Director of Sales

Company Profile:
Elkhart Brass is the industry's most experienced manufacturer of firefighting equipment. For more than a century the company has produced innovative firefighting and fire protection products that lead the industry in safety, versatility and performance.

Engineering America, Inc.

647 Hale Ave. North
Oakdale, Minnesota 55128
Telephone: 651.777.4041
FAX: 651.777.5312
Internet: www.eng_america.com

Founded:
1980

Primary Products/Services:
Fire Protection Storage Tanks

Hours of Operation:
Mon.-Fri. 8:00 p.m.-5:00 p.m.

Management:
Travis A. Hackworthy, President
Kendall Smith
Tony Grant
Rob Gravatt

Sales Contact: *names listed above*

Company Profile:
Think tank for all your fire protection storage tank needs, Engineering America, since 1980, has sold completed erected tanks and accessories turn key at very competitive prices.

Contact Info:
Travis Hackworthy
Engineering America, Inc.
647 Hale Ave. N.
Oakdale, MN 55128

Phone:
651.777.4041

Fax:
651.777.5312

EAI WEST, INC.

Kendall Smith
6706 N. Franklin
Loveland, CO 80538
Phone: 970.962.9400
Fax: 970.962.9412

EAI CENTRAL, INC.

Tony Grant
18900 W. 158th St. Suite E
Olathe, KS 66062
Phone: 913.782.7774
Fax: 913.782.7776

EAI SOUTH DAKOTA OFFICE

Rob Gravatt
3530 14th Ave. NW
Watertown, SD 57201
Phone/Fax: 605.886.4224

ERICO

34600 Solon Road
Solon, Ohio 44139
Telephone: 440.542.3864
FAX: 440.542.6948

Primary Products/Services:
ERICO is a designer, manufacturer and marketer of precision-engineered specialty metal products

Ferguson Fire & Fabrication, Inc.

2750 S. Towne Avenue
Pomona, California 91766
Telephone: 909.517.3085
Fax: 909.517.3980
Internet: www.fergusonfire.com

Founded:
1989

Primary Products/Services:
Fire Sprinkler Material, Special Hazards and Fabrication

Market Area:
Continental United States plus Alaska and Hawaii

Hours of Operation:
7:00 a.m. - 4:30 p.m. Mon.-Fri.

Management:
Lee Klein, President/General Manager
Lou Razza, Area Manager-West coast
Mike Klein, General Manager
J. Johnson, National Sales Manager

Company Profile:
Ferguson Fire and Fabrication supplies the highest quality fire protection products in 30 states from 74 warehouse facilities dedicated to the fire sprinkler contractor. 26 of these facilities also have fabrication capabilities. We also do Special Hazards. We continue growing our business and reputation

**Fire Protection Products, Inc.**

6241 Yarow Drive Suite A
Carlsbad, California 92011-1541
Telephone: 760.931.1168
Toll-Free: 800.344.1822
FAX: 760.931.8080
Internet: www.fppi.com

Founded:
1989

Primary Products/Services:
Fire Sprinkler Accessories

Market Area:
Worldwide

Hours of Operation:
6:30 a.m. - 5:00 p.m. PST Mon.-Fri.

Management:
Randy Greenslate, President

Sales Contact:
Customer Service

Telephone:
800.344.1822

FAX:
760.931.8080

Company Profile:
Fire Protection Products, Inc. FPPI supplies fire sprinkler accessories to manufacturers, distributors and fabricators. The company's focus is on being the premier low-cost provider of fire sprinkler accessory products while maintaining the highest levels of product quality and customer service. FPPI also carries escutcheons, sealants and lubricants, gaskets and gasket kits, hangers & fasteners, valves, hose valves and accessories, miscellaneous brass, fire department connections and accessories and pressure gauges and accessories. Insist on FPPI.

Fire Spec Sprinkler Supply Company, Inc.

PO Box 296
Raynham Center, Massachusetts 02768
Telephone: 508.279.0058
Fax: 508.279.0288

Management:
Christopher Gray, Owner

**FlexHead Industries, Inc.**

56 Lowland Street
Holliston, Massachusetts 01746
Telephone: 508.893.9596
Toll-Free: 800.829.6975
FAX: 508.893.6020
Internet: www.flexhead.com

Founded:
1991

Primary Products/Services:
Flexible Sprinkler Connections

National Fire Sprinkler Association

Hours of Operation:

8:30 a.m. - 5:00 p.m. Mon.-Fri.

Management:

Norman MacDonald III, President
Peter MacDonald, Vice President
Paul Silcox, CFO
Mike Dooley, Nat'l Sales Mgr.

Sales Contact:

Timothy Robinson, East Coast Regional Sales Manager

Company Profile:

FlexHead Industries manufactures a complete line of one piece flexible sprinkler connections for suspended ceilings in commercial buildings, cleanroom environments, institutional applications and industrial exhaust ductwork. These systems are FM approved, UL2443 listed and have been used in industry for over 12 years without a failure. These products dramatically reduce installation and maintenance costs and promote overall facility safety by allowing rapid inspection, maintenance and relocation of sprinklers.

Fox Sprinkler Supply Corporation

951 Estes Court
Schaumburg, Illinois 60193
Telephone: 847.524.8250
FAX: 847.524.8262
Internet: www.foxsprinkler.com

Founded:

2000

Primary Products/Services:

Distribution/Fabrication

Market Area:

Illinois, Indiana, Iowa, Wisconsin, Minnesota, North & South Dakota

Hours of Operation:

Mon 5:30 a.m.-5:00 p.m.
Tu-Wed 4:30 a.m.-5:00 p.m.
Th-Fri 5:30 a.m.-5:00 p.m.
Sat 8:00 a.m.-12:00 p.m.

Management:

Scott Sandfox, President
Daniel Sandfox, Secretary of Corporation
Dan Rossol, Operations Mgr.

Sales Contact:

Danielle Sandfox, Sales Mgr.

Company Profile:

Fox Sprinkler Supply Corp. is a fire sprinkler supply company with people dedicated to bringing the utmost in service to our customers. Employees with exceptional knowledge and over 20 years experience in the fire sprinkler industry.

FPE Software, Inc.

P.O. Box 1748
Prince Frederick, Maryland 20678
Telephone: 410.586.2128
Toll-Free: 877.586.2128
FAX: 410.586.2085

Founded:

1988

Primary Products/Services:

Computer Software

Market Area:

United States and International

Hours of Operation:

9:00 a.m. - 6:00 p.m. Mon.-Fri.

Management:

Mark A. Lentocho, P.E., President
Fred Musser, Sales Manager

Company Profile:

FPE Software, Inc. produces PC software designed to fulfill the needs of the fire protection industry. FIRE PUMP EVALUATION PROGRAM 2002 is designed for users who perform fire pump tests and are responsible for recording test results, determining and monitoring the adequacy of a pump & calculating and plotting up

to four pump curves on a single graph. "THE" SPRINKLER PROGRAM 2001 is a user friendly sprinkler hydraulics program. Program capabilities include: supply or demand calculations, on-screen results overlay, extensive error checking, user modifiable pipe diameters and fitting equivalent lengths, supply/demand graph output and more. HYDRAULIC HELPER 2008 is a collection of useful hydraulic formulas and utilities such as water supply curve graphing and hydraulic gradients.

Furman Insurance Agency

1314 E. Atlantic Blvd.
Pompano Beach, Florida 33061
Telephone: 954.943.5050
FAX: 954.590.9964

Primary Products/Services:

Commercial Property and Casualty Insurance

Management:

Carlos Chinchilla, CPCU Vice President

"Drop In" Roll Grooving

Now, you can turn a pipe threader into a roll groover in just seconds.



- Grooves 1" – 6" pipe
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US Toll Free: 800-321-7950 Fax: 440-992-2925
e-mail: wheeler@wheelerrex.com www.wheelerrex.com

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General Air Products, Inc.

118 Summit Drive
Exton, Pennsylvania 19341
Telephone: 610.524.8950
Toll Free: 800.345.8207
FAX: 610.524.8965
Internet: www.generalairproducts.com

Founded:

1936

Primary Products/Services:

Air compressors, residential backflow & pump systems

Market Area:

Worldwide

Hours of Operation:

8:00 a.m. - 5:00 p.m. EST Mon.-Fri.

Management:

Raymond R. DeCecco, Mgr, Customer Service

Geoff Pridham, V.P., Engineering

Raymond Fremont, Jr., Marketing

Sales Contact:

Raymond R. DeCecco, Manager -Customer Service

Company Profile:

General Air Products, Inc. has developed the Insure Flow, the first alarmed backflow control valve for residential fire protection, in addition to our innovative residential fire protection pumping solution for NFPA 13D applications-the RFP System. Each built with the same high level of quality you've come to expect from us. Also, General Air Products remains the only company to offer a complete line of air compressors specifically designed for all types of dry pipe sprinkler systems. Visit our website for details, drawings and more!



Globe Fire Sprinkler Corporation

4077 Air Park Drive
Standish, Michigan 48658
Telephone: 989.846.4583
Toll Free: 800.248.0278
FAX: 989.846.9231
Internet: www.globesprinkler.com

Founded:

1987

Primary Products/Services:

Manufacturers of sprinklers, valves, etc.

Market Area: Worldwide

Hours of Operation:

7:00 a.m.-5:00 p.m., Mon.-Fri.

Management:

Robert C. Worthington, President

Steven R. Worthington, Executive V.P.
Brian T. Hoening, V.P.-Engineering
John M. Collins, V.P.-Manufacturing

Sales Contact:

Steven R. Worthington, Executive V.P.

Telephone:

989.846.4583

FAX:

989.846.9231

Company Profile:

Globe Fire Sprinkler Corp. is an independent, privately owned company that strives to exceed customer expectations, offering top quality, competitive products and a high level of customer service. Approximately 30% of Globe's net sales are to overseas customers. Globe continues to develop new products as the world market demands and is happy to state that its relationship with various approval authorities, such as Underwriters Laboratories, Inc., FM approvals and the Loss Prevention Certification Board UK is excellent. Globe has the LPCB UK certification for ISO 9000 series Quality Assurance, therefore exhibiting proof of the quality it continuously builds into each of its 100% factory-tested products.



Guardian Automatic Sprinkler

555 Brick Church Park Drive
Nashville, Tennessee 37207
Telephone: 615.255.8393
Toll Free: 800.251.4208
FAX: 615.259.3271

Founded:

1973

Primary Products/Service:

Fabrication and Sprinkler Supply

Market Area:

Southeastern and Mid-Western U.S.

Hours of Operation:

6:00 a.m. - 10 p.m., Mon. -Fri.

Management:

Larry McNamara, President
Tom Galbreath, Sales Manager
Tommy Banasiewicz, Credit Manager

Sales Contact:

Tom Galbreath, Sales Manager

Telephone:

615.838.5560

FAX:

615.859.1372

Company Profile:

Guardian Automatic Sprinkler Company, Inc. was one of the first, and is now one of the few remaining, independent distributors of quality fire sprinkler products, who

deal specifically with fire protection contractors. Located in Nashville, Tennessee, and operating since 1973, we bring over three decades of industry experience to the table and attribute our longevity to the strong personal relationships that we have formed with our clients. Now, we are combining our industry experience, customer-driven business model and a focus on continuously improving to innovate ways to best serve fire protection contractors with both fabrication and supply.



Guardian Fire Equipment

3430 NW 38th Street
Miami, Florida 33142
Toll Free: 800.327.6584
FAX: 800.827.3869

Primary Products/Services:

Fire Standpipe Equipment

Market Area:

Worldwide

Management:

Richard H. Childress, President
Lisa C. Peterson, Vice President



Harvel Plastics, Inc.

PO Box 757
300 Keubler Rd.
Easton, Pennsylvania 18044-0757
Telephone: 610.252.7355
FAX: 610.253.4436
Internet: www.harvel.com

Founded:

1964

Primary Products/Services:

Manufacturers of PVC & CPVC Piping Products

Market Area:

National & International

Hours of Operation:

7 days/24 hrs.

Management:

Earl E. Wismer, President, CEO
Patrick M. Foose, VP, Sales & Marketing
Roy Burpee, National Sales Manager, Fire Protection; William P. Weaver, Director, Technical Services

Sales Contact:

Roy Burpee, National Sales Manager, Fire Protection

Telephone:

610.252.7355

FAX:

610.253.4436

National Fire Sprinkler Association

Company Profile:

Harvel Plastics, Inc., a high quality manufacturer of thermoplastic piping products since 1964, is a pioneer producer of CPVC Fire Sprinkler Pipe. Many of the first UL tests performed to evaluate CBVC for fire sprinkler service were conducted on pipe manufactured by Havel. Harvel CPVC piping products consistently meet the tough performance requirements for fire service as verified through on-going UL, FM and LCPR testing. Harvel's steadfast dedication to quality and unmatched manufacturing experience has earned the company the reputation of "The Quality Line"



HD Supply-Fire Protection

601 West Church Street Ste. 100
Orlando, Florida 32805
Telephone: 407.841.4755
Primary Products/Services:
Full line Supplier and Fabricator

Market Area:

National

Hours of Operation:

8:00 a.m.-5:00 p.m., Mon.-Fri.

Management:

Chuck Reed, Regional VP

Sales Contact:

Chuck Reed, Regional VP

Telephone:

407.893.9010

FAX:

407.893.7379

Company Profile:

HD Supply-Fire Protection offers the full array of fire protection products and services. With an ever growing footprint, our strategically located supply and fabrication facilities maintain vast inventories and enable us to service our customers with the products they need, when they need it, where they need it. Our fabrication facilities offer take-off and listing services by Nicet certified personnel. Backed by strict quality control procedures, we offer custom fabrication to meet the needs of your next project.

HD Supply-Fire Protection

Branch locations:

PHOENIX, ARIZONA

447 W. Watkins St. #1

Phoenix, Arizona 85003

Telephone: 602.256.0050

FAX: 602.256.7117

UNION CITY, CALIFORNIA

34151 Zwissig Way

Union City, California 94587

Telephone: 510.441.1650

FAX: 510.441.1620

SAN FRANCISCO, CALIFORNIA

155 De Haro St.

San Francisco, California 94103

Telephone: 415.431.8722

FAX: 415.431.8567

SACRAMENTO, CALIFORNIA

1120 Blumenfeld Drive

Sacramento, California 95815

Fresno, California

4710 E. Commerce Ave.

Fresno, California 93725

Telephone: 559.441.7171

FAX: 559.441.7175

LA HABRA, CALIFORNIA

751 E. Lambert Rd.

La Habra, California 90631

Telephone: 562.690.8800

FAX: 562.690.1419

TAMPA, FLORIDA

4511 E. Osbourne Ave.

Tampa, Florida 33610

Telephone: 813.620.9058

FAX: 813.626.6912

ORLANDO, FLORIDA

3333 Old Winter Garden Rd.

Orlando, Florida 32805

Telephone: 407.299.2275

FAX: 407.298.5038

PALM BEACH, FLORIDA

1751 L Avenue

Riviera Beach, Florida 33404

Telephone: 561.863.5600

FAX: 561.845.6120

FORT MYERS, FLORIDA

8091 Supply Drive

Fort Myers, Florida 33912

Telephone: 239.437.9444

FAX: 239.437.9969

MIAMI, FLORIDA

10810 NW 92nd Terrace

Ste. 108

Miami, Florida 33178

Telephone: 305.477.2383

FAX: 305.805.4923

JACKSONVILLE, FLORIDA

11310 Distribution Ave. West

Jacksonville, Florida 32256

Telephone: 904.260.4705

FAX: 904.260.4644

ATLANTA, GEORGIA

2157 Tucker Industrial Road

Tucker, Georgia 30084

Telephone: 770.414.1212

FAX: 770.414.1883

CHICAGO, ILLINOIS

5144 West 73rd St.

Bedford Park, Illinois 60638

Telephone: 708.728.9793

FAX: 708.728.9826

INDIANAPOLIS, INDIANA

8615 East 33rd St.

Indianapolis, Indiana 46226

Telephone: 317.898.4879

FAX: 317.898.4868

COLUMBIA, MARYLAND

9325 Snowden River Pkwy #C

Columbia, Maryland 21046

Telephone: 410.290.8020

FAX: 410.290.8019

CHARLOTTE, NORTH CAROLINA

75 Odell School Rd. S

Concord, North Carolina 28027

Telephone: 704.784.4700

FAX: 704.789.9288

LAS VEGAS, NEVADA

4011 W. Oquendo Rd.

Las Vegas, Nevada 89118

Telephone: 702.382.0331

FAX: 702.382.0671

N. KINGSTOWN, RHODE ISLAND

244 Burlingham Ave.

North Kingstown, Rhode Island 02852

Telephone: 401.294.9532

FAX: 401.294.9534

MYRTLE BEACH, SOUTH CAROLINA

385 French Collins Rd.

Conway, South Carolina 29526

Telephone: 843.347.5950

FAX: 704.789.9288

MEMPHIS, TENNESSEE

1851 John Paul Dr.

Memphis, Tennessee 38114

Telephone: 901.745.3106

FAX: 901.744.3204

DALLAS, TEXAS

1975 California Crossing

Dallas, Texas 75220

Telephone: 972.830.9370

FAX: 972.830.9385

HOUSTON, TEXAS

5823 Thomas Rd.

Houston, Texas 77041

Telephone: 713.937.4568

FAX: 713.937.0493

RICHMOND, VIRGINIA
738 Goodes St.
Richmond, VA 23224
Telephone: 804.232.2003
FAX: 804.232.1255

SEATTLE, WASHINGTON
10013 MLK Jr. Way So.
Seattle, Washington 98178
Telephone: 206.387.4150
FAX: 206.722.9477

Hieter Industries, LLC

12155 Magnolia Ave. Suite 13-A
Riverside, California 92503
Telephone: 800.854.7473
Fax: 800.732.2228
Internet: www.hieterindustries.net

Founded:
2000

Hours of Operation:
7:30 a.m.-4:00 p.m., Mon.-Fri.

Management:
Oscar Hieter, Jr., Owner
Jennifer Orazco, Office Manager
Sales Contact:
Jennifer Orazco, Office Manager

Telephone:
800.854.7473

FAX:
800.732.2228

Company Profile:
Hieter Industries specializes in custom made escutcheons. Finishes come in Polished/Brushed Aluminum, White or Eggshell and Stainless Steel. For further information please visit our website.

Hilti, Inc.

5400 S. 122nd East Ave.
Tulsa, Oklahoma 74146
Telephone: 800.879.6000
Fax: 918.461.6841
Management:
Blake Griffin

HRS Systems, Inc.

4792 LaVista Road
Tucker, Georgia 30084
Telephone: 770.934.8423
FAX: 770.934.7696
Internet: www.hrssystem.com

Primary Products/Services:
Fire Protection Software

Management:
Hal R. Sanders, P.E., President
H. Asa Tuten, Jr., General Manager

Company Profile:
HRS Systems, Inc. presents:
HASS® for hydraulic analysis of sprinkler systems
HASS-Estimator for cost estimating
HASS HOUSE® for residential sprinkler analysis
COOSA® for CO2 system analysis.
All are Windows-Based and available in both English and Metric Units with Spanish text.

HUB International of California Insurance Services, Inc.

400 Taylor Blvd. #300
Pleasant Hill, California 94523
Telephone: 925.609.6500
Toll Free: 800.877.4560
FAX: 925.609.6550

Primary Products/Services:
Insurance & Bonds

Market Area:
Nationwide

Hours of Operation:
Mon.-Fri. 8:00 a.m.-5:00 p.m.

Management:
Rachel Stroup, V.P. Construction Division

Sales Contact:
Rachel Stroup, V.P.

Tel:
925.609.6522

Company Profile:
Full service insurance brokerage specializing in representing sprinkler contractors.

Huguenot Laboratories, Inc

101 Riverdale Road
Port Jervis, New York 12771
Telephone: 845.856.6490
Toll Free: 800.228.3793
FAX: 845.858.8821

Founded:
1998

Primary Products/Services:
MIC and corrosion mitigation, laboratory service

Market Area:
Worldwide

Hours of Operation:
7:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:
Tim O'Leary, President

Sales Contact:
Tim O'Leary, President

Company Profile:
Huguenot Laboratories, Inc. offers a MIC Testing Laboratory, test kits, engineered treatment solutions, corrosion monitoring and control services, patented chemical feed systems for portable and permanent applications, metallurgical and deposit analysis, failure analysis, litigation support, engineering and consulting services, environmentally friendly non-hazardous treatment programs including antifreeze-based products.

Hydratec, Inc.

64 Haverhill Road - Route 111
Windham, New Hampshire 03087
Telephone: 603.434.0502
FAX: 603.434.1348
Internet: www.hydracad.com

Founded:
1972

Primary Products/Services:
Design & Software Service

Market Area:
Worldwide

Hours of Operation:
9:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:
Alan Johnston, President
Stephen Downing, General Manager
Paul McKenna, Customer Support Manager
Bill McKenna, Design Manager
Sales Contact:
Art Dover, CAD Development Manager

Company Profile:
Hydratec has been providing quality software and design services for over 35 years. Our complete line of software products, along with accessible and knowledgeable customer service, gives the Hydratec customer an edge in design efficiency. Our software packages include HydraCAD for system design, HydraLIST for fabrication reports, HydraCALC for pipe sizing, HydraCALC-Sizer for pipe size estimating, HydraBID for price estimating and HydraCAD-R for NFPA 13-D Systems. These packages can be used separately, or as an integrated set to provide the best possible solution to your 2D and 3D design needs, now and in the future, for any size company and operator experience level.



Hydro Flow Products, Inc.

503 W. Golf Road
Arlington Heights, Illinois 60005
Telephone: 847.434.0101
Toll Free: 888.202.9987
FAX: 847.434.0073
Internet: www.hosemonster.com

Founded:
1995

Primary/Products Services:
The Hose Monster® pump test and flow test solutions

Market Area:
Global

Hours of Operation:
Mon.-Fri. 8:00 a.m.-5:00 p.m. CST

Management:
Fred Grenning, President

Sales Contact:
Denise Buckley, Inside Sales/Customer Service

Company Profile:
Hydro Flow Products manufactures and markets the Hose Monster line of fire pump testing and fire flow testing equipment.



ITW Buildex

1349 West Bryn Mawr Avenue
Itasca, Illinois 60143
Toll-Free: 800.284.5339
FAX: 630.595.2569
Internet: www.itwbuildex.com

Founded:
1967

Primary Products/Services:
Pipe Hangers and suspended anchoring systems including Sammys, Truss-T Hangers and pipe flashings

Market Area:
National

Hours of Operation:
8:00 a.m. – 4:40 p.m. Mon.-Fri.

Management:
Andrea Basalay, President
Suspended Anchoring Systems
Ralph Tenuta, Sales Manager, Suspended Anchoring Systems

Sales Contact:
Ralph Tenuta, Sales Manager, Suspended Anchoring Systems

Telephone:
630.787.3263

FAX:
630.595.3569

Company Profile:
ITW Buildex, a division of Illinois Tool

Works, has provided fastening solutions to the commercial construction industry since 1967. SAMMYS® and Sidewinders®, patented pipe hanging devices from ITW Buildex, provides direct installation of threaded rod in 22-20 gauge metal deck and 18-16 gauge purlin, eliminating the time and expense of a traditional trapeze. The Truss-T Hanger® for bar joist applications offers a quick and safer alternative to the beam clamp.



Jenny Products, Inc.

850 North Pleasant Avenue
Somerset, Pennsylvania 15501
Telephone: 814.445.3400
FAX: 814.445.2280

Founded:
1892

Hours of Operation:
Mon.-Fri. 8:00 a.m.-5:00 p.m.

Primary Products/Services:
Pressure washers & Air Compressors

Management:
Daniel Leiss, V.P.
Doug Lasure, Customer Support Manager
Angela St. Clair, Customer Service Rep.
Bobbie Jo Knecht, Customer Service Rep.

Sales Contact:
Angela St. Clair, C.S.R.

Company Profile:
Established in 1927, Jenny Products, Inc. is a full line manufacturer of Cold & Hot Pressure Washers, Steam Cleaners, combination Units, Cleaning Chemicals, as well as Hand Carry, Wheeled, Portable, Service Vehicle, Fire Sprinkler, Climate Control, Base-Plate Mounted and Industrial Stationary Air Compressors. Jenny Products, Inc. is a major influence in the paint, rental, equipment, stapler, fire sprinkler, industrial and OEM.



**KENNEDY VALVE/
Division of McWane, Inc.**

1021 E. Water Street
PO Box 931
Elmira, NY 14902
Telephone: 607.734.2211
FAX: 607.734.3288

Founded:
1877

Primary Products/Services:
a variety of valve products that meet AWWA specifications.

Management:
John Chalk, Customer Service Manager



Knox Company

1601 West Deer Valley Road
Phoenix, Arizona 85027
Telephone: 623.687.2300
Toll-Free: 800.55.5669
FAX: 623.687.2299
Internet: www.knoxbox.com

Founded:
1975

Primary Products/Services:
Locking FDC Plugs and Caps

Market Area:
United States

Management:
Tom Bonetto, National Account Manager
Cynthia Jones, Marketing Communications Manager

Company Profile:
The Knox FDC Protection Program is a complete system that provides protection for both the intake and discharge sides of water based fire protection systems. Knox locking FDC products provide protection against thread damage and prevent debris from being lodged into uncovered connections. Locking products are available in a 1 ½" and 2 ½" male FDC plug, a 2 ½" female SecureCap and 4" and 5" StorsLok. Plugs and caps come standard with NH threads. Other thread sizes are available upon request. The Knox™ Key Wrench, controlled by the fire department, secures and operates all locking Knox FDC products. For more information, visit www.knoxbox.com.



Loos and Company, Inc.

901 Industrial Boulevard
Naples, Florida 34104
Telephone: 239.643.5667
Toll-Free: 800.321.5667
FAX: 239.643.4558
Internet: www.earthquakebrace.com

Founded:
1958

Primary Products/Services:
Cable/Cable Hardware

Market Area:
Worldwide

Management:
Phil Cox, President



The Macomb Group

3774 Congress Parkway
Richfield, Ohio 44286
Telephone: 330.659.4577

Management:
Dennis Roberts

Master Control Systems, Inc.

910 North Shore Drive
Lake Bluff, Illinois 60044
Telephone: 847.295.1010
FAX: 847.295.0704

Founded:
1965

Primary Products/Services:
Fire Pump Controls for Fire Sprinkler Systems

Management:
William Stelter, President

Company Profile:
Master Control Systems, Inc. manufactures fire pump controllers for fire sprinkler systems. These controllers automatically start the fire pump in the event of a fire. Because they are designed with innovative features that benefit the user and engineered for long term reliability, we call our product line "The Intelligent Choice". All of these controllers meet and exceed the requirements of NFPA 20. They are listed by Underwriters Laboratories and approved by the Factory Mutual System.

The Metraflex Company

2323 West Hubbard Street
Chicago, Illinois 60612
Telephone: 312.738.3800
Toll-Free: 800.621.4347
FAX: 312.738.3815
Internet: www.fireloop.info

Founded:
1958

Primary Products/Services:
Fire Protection/HVAC Products

Market Area:
Worldwide

Hours of Operation:
8:30 a.m. - 5:00 p.m. CST Mon.-Fri.

Sales Contact:
Zeke Bochenak

Company Profile:
UL Listed Fireloop seismic expansion joint for fire sprinkler systems. Fireloop is more compact, easier to install than grooved couplings.

Miller Sales, Inc.

340 S. Lombard Rd.
Addison, Illinois 60101
Telephone: 630.458.8816
FAX: 630.458.9015
Internet: miller-sales.com

Founded:
1969

Primary Products/Services:
Wilkins Fire Protection Products

Market Area:
Northern Illinois, NE Indiana

Hours of Operation:
7:30 a.m. - 4:30 p.m., Mon. - Fri.

Management:
Harold Miller, President

Mark Petrosius, Secretary
Brian Baxter, Vice President

Sales Contact:
All listed above

Company Profile:
Miller Sales, Inc. is a manufacturers' representative for Wilkins Backflow Preventers., pilot operated control valves and floor control valves for fire sprinkler systems. Represent Decoshield Systems providing decorative pipe covering for retrofit fire sprinkler systems.

Neill Supply Company, Inc.

700 Schuyler Avenue
Lyndhurst, New Jersey 07071
Telephone: 201.939.1100
Toll-Free: 800.526.6376
FAX: 201.939.6095

Primary Products/Services:
Steel Pipe, Valves, Fittings, Sprinkler Fabrication

Management:
Bernard B. Grobart, President

NIBCO INC.

1516 Middlebury Street
Elkhart, Indiana 46516
Telephone: 574.295.3387
Toll Free: 800 234-0227
FAX: 574.295.3320
Internet: www.nibco.com

Founded:
1904

Primary Products/Services:
Fire Protection Valves and TOLCO Pipe Hangers, Supports and Seismic Bracing

Market Area:
Worldwide

Hours of Operation:
7:30 a.m. - 6:00 p.m. EST, Mon. - Fri.

Management:
Jeff Shreiner, Vice President, Sales-Wholesale

Bill Geers, Director of Marketing
Phil Liles, Senior Product Manager, Valves

Sales Contact:
Rick Brown, Sales Manager, NIBCO Fire Protection
George Von Gnatensky, Sales Director, TOLCO Fire Protection

Company Profile:
NIBCO manufactures UL, ULC, FMRC, NYC valves for the fire protection market and its valve package has expanded to include TOLCO™ pipe hangers, supports and seismic bracing products including pipe hangers, supports and seismic bracing. For more information, visit www.nibco.com

The Noble Company

PO Box 350
614 Monroe Street
Grand Haven, Michigan 49417
Telephone: 231.799.8000
FAX: 231.799.8850

Management:
Debbie Kingma, Vice President

North Alabama Pipe Corporation

P.O. Box 750
Guntersville, Alabama 35976
Telephone: 256.582.8800
Toll Free: 800. 826.2533
FAX: 256.582.0233
Internet: www.nalapipe.com

Founded:
1982

Primary Products/Services:
Welding Outlets & Pipe Fabrication Equipment

Market Area:
International

Management:
Edward H. Hayes, President

Company Profile:
North Alabama Pipe has carved a niche in the world of the Fire Sprinkler Fabricator by supplying the very best quality NAP 300 welding outlets at affordable prices. We are concentrating our design efforts on machines and other aids that are geared to the needs of the fire protection industry. NAP is willing to adapt our products to

National Fire Sprinkler Association

your needs. NAP is constantly striving to make the work of the Fire Protection Fabricator easier, faster and more economical. We presently have in production several machines including the Universal Welder, Big Cut and Quick Cut Systems, the Hole System, and the Lift and Turn.



PAC Pump & Systems, Inc.

170 Lodi Street
Hackensack, New Jersey 07601
Telephone: 201.621.0500
FAX: 201.621.0506
Internet: www.pacpump.com

Founded:
2003

Primary Products/Services:

Aurora fire pumps, Joslyn Clark fire pump controllers sales and service.

Market Area:

New Jersey, Albany, New York

Hours of Operation:

7:00 a.m. - 6:00 p.m. Mon.-Sat.

Management:

William Casey, President
Eileen Latona, Inside Sales
Craig Pastore, Sales

Sales Contact:

William Casey

Company Profile:

Sales and service for Aurora fire pumps and Joslyn Clark fire pump controllers, service on all manufacturers of pumps and controllers.



PHD Manufacturing, Inc.

44018 Columbiana-Waterford Rd.
Columbiana, Ohio 44408
Telephone: 330.482.9256
Toll Free: 800.321.2736
FAX: 330.482.2763
Internet: www.phd-mfg.com

Founded:
1972

Primary Products/Services:

Pipe hangers, beam supports, struts & accessories

Market Area:

U.S., Europe, Asia

Hours of Operation:

8:00 a.m.-5:00 p.m., Mon.-Fri.

Management:

Joe Corvino, President
Dave Neal, National Sales Manager
Rick Persing, Nat'l Sales Manager-Sprinkler Division

Sales Contact:

Rick Persing, Nat'l Sales Manager, Sprinkler Division

Telephone & FAX:

514.536.3857

Company Profile:

An industry leader in the pipe hanger supports and strut markets. PHD has successfully built a reputation of quality, customer service and dependable deliveries. Our expansive product lines, including seismic and CPVC, is well-suited to meet the needs of the Fire Protection Industry. We are excited to meet the challenges and build the same success in this expanding market place.



Pipe Fabricators

8580 Valley Forge Lane N
Maple Grove, Minnesota 55369
Telephone: 763.488.8100
Toll-Free: 866.747.7473
FAX: 763.488.8140
Internet: www.pipfabricatorsps.com

Founded:

1984

Primary Products/Services:

Sprinkler supplier with fabrication

Market Area:

Minnesota, North Dakota, South Dakota, Nebraska, Illinois, Wisconsin, Iowa

Hours of Operation:

5:00 a.m.-10:00 p.m. Mon.-Fri.

Sales Contact:

Jerry Fritz, General Manager

Telephone:

763.488.8100

FAX:

763.488.8140

Company Profile:

Pipe Fabricators is a supplier of fire protection products and fabrication. Since its establishment, Pipe Fabricators has evolved from a fabricator to a sprinkler supplier with fabrication. Our company has emerged over the years and will continue to grow as we enter new markets and expand our product line.



Plumbers Supply Company

1000 E. Main St.
Louisville, Kentucky 40206
Telephone: 502.540.0223
Toll Free: 800.626.5133
FAX: 502.540.0330
Internet: www.plumbers-supply-co.com

Founded:

1928

Primary Products/Service:

Plumbing, Hydronics, HVAC, Fire Protection

Market Area:

Kentucky, Tennessee, Indiana, Western West Virginia

Hours of Operation:

Mon.-Fri. 7:00 a.m.-5:00 p.m. call 24 hrs. f/emergency

Management:

Sam Alvey, G.M. Fire Protection Sales, all locations

Phone:

502.540.0332

Cell:

502.817.2079

Inside Sales:

Louisville, Kentucky

Mike Newton

Phone: 502.540.0332

Cell: 502.817.2079

Sean Post

Phone: 502.540.0322

Inside Sales, Lexington, Kentucky

Ronnie Wilson

Toll Free: 800.467.7586

Local: 859.255.0700

Cell: 859.621.5278

John Jutz, Fire Protection Outside Sales, KY,

TN, So. IN, WV

Phone: 502.540.0272

Cell: 502.376.0639

Brian Roberts, Fire Protection

Outside Sales, IN, part KY

3849 E. Raymond St.

Indianapolis, Indiana 46203

Toll Free: 800.886.2981

Phone: 317.783.2981

Cell: 317.557.1559

FAX: 317.783.2987

Inside Sales: Sales & Quotations

Indy and surrounding areas

Jason Davis (use Indy Phones)

Cell: 317.557.0685

Ben Smith (use Indy phones)

Brent Mabrey, Fire Protection Sales

for Evansville, IN and Surrounding IN

and KY areas

1817 W. Michigan St.

Evansville, Indiana 47712

Toll Free: 800.457.3048

Phone: 812.425.3115

Cell: 812.305.3203

Company Profile:

Started in 1921 as Plumbing and Mill Supply house. Has opened branches and mini-branches in over ten locations in our areas. Have been fire protection supply house on steel pipe and fittings since beginning, but have had a dedicated fire sprinkler sales division since late 1980's.

Polymer Molding, Inc.

1655 West 20th Street
Erie, Pennsylvania 16502
Telephone: 814.455.8085
Toll-Free: 800.344.7584
FAX: 888.257.5566
Internet: www.polymermolding.com

Founded:

1978

Primary Products/Services:

Product Protection

Market Area:

Worldwide

Hours of Operation:

8:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:

Jeff Hindman, Vice President Sales & Marketing

**Potter Electric Signal Company**

1609 Park 370 Place
St. Louis, Missouri 63042
Toll-Free: 800.325.3936
FAX: 800.768.8377
Internet: www.pottersignal.com

Founded:

1898

Primary Products/Services:

Fire Sprinkler Monitoring, Signaling Devices

Market Area:

Worldwide

Hours of Operation:

8:00 a.m. - 5:00 p.m. CST Mon.-Fri.

Management:

Bernard Lears, President, C.E.O.
Bruce LaRue, President, Fire Sprinkler Monitoring Division

Sales Contact:

Tim Freiner, National Accounts Manager

Company Profile:

Established in 1898, Potter Electric Signal Company produces a wide array of

products, including fire sprinkler monitoring systems, electronic fire systems, vault and safe security systems, boiler/chiller and industrial control monitoring products. At Potter, not only do we supply our customers with products that provide real world solutions for their unique needs, we strive to provide them with unequaled service and technical support. Every employee at Potter is committed to providing you, the customer, the peace of mind in knowing that when you purchase our products, you are providing your customers the very best product available for the protection of life and property.

Potter is THE symbol of protection.

Potter Roemer

17451 Hurley Street
Industry, California 91744
Toll-Free: 800.366.3474
FAX: 888.404.7960
Internet: www.potterroemer.com

Founded:

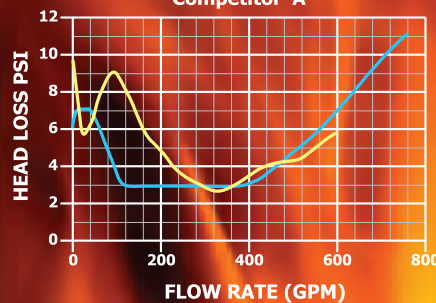
1937

Primary Products/Services:

Fire Extinguishers, Hoses, Valve Cabinets

The Best Curves In The Fire Protection Business!

4" Wilkins #350 (USC) vs. Competitor 'A'



4" Wilkins #350
Length 37.25"
Weight 281 lbs.
OS&Y Gates

Competitor 'A'
Length 40"
Weight 258 lbs.
OS&Y Gates



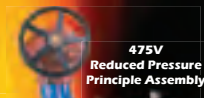
450 DA
Double Check Detector



375AOSY
Reduced Pressure
Principle Assembly



350 ADABGVIC
Double Check Detector



475V
Reduced Pressure
Principle Assembly



350ADABGVIC
Double Check Detector

Sometimes Less is More!

Especially when it comes to head loss. When pressure loss is important, ask for original approval agency documentation.

This ensures accurate performance information as flow increases from no-flow to fire-flow.

Wilkins publishes detailed, accurate FCCCHR@USC letterhead curves!

If you are not buying Wilkins, ask your source for their USC curves, and Compare!

Customer Service Representatives available Monday through Friday
5:30 am to 5:00 pm PST • Call: 877-222-5356 or 805-226-6297
info@zurwilkins.com or visit us online at www.zur.com

WILKINS
A ZUR COMPANY

National Fire Sprinkler Association

Market Area:

U.S.A.

Management:

George Brown, Vice President Sales

Company Profile:

Potter Roemer has been the leading supplier of interior hose and standpipe equipment to the fire protection industry. From four regional shipping facilities, PotterRoemer has the largest uncommitted inventory in stock and available for your project.



Quimby Equipment Company, Inc.

35 Central Drive
Farmingdale, NY 11735
Telephone: 631.454.8411
FAX: 631.454.8423
Internet: www.quimbyinc.com

Primary Products/Services:

Pump Sales

Management:

Greg Ross, Sales Representative



REHAU Incorporated

1501 Edwards Ferry Road,
Leesburg, Virginia 20176
Telephone: (703) 777-5255
FAX: (703) 777-3053
Internet: www.rehau.com

Founded:

1948

Primary Products/Services:

Fire Protection Fittings & Pexa Pipes

Market Area:

U.S., Canada, Mexico, Central America

Hours of Operation:

8:00 a.m.-5:30 p.m., Mon.-Fri. EST

Management:

Bill Johansen, Business Unit Manager,
Michael Cabral, Sales Coordinator, Fire
Protection
Eric Caimal, Marketing Coordinator, Fire
Protection

Sales Contact:

Mike Cabral, Sales Coordinator, Fire
Protection

Telephone:

314.412.1800

Company Profile:

A leading supplier of polymer-based solutions to construction, Rehau addresses sustainable design priorities by engineering products that enhance comfort and convenience, reduce energy costs, create healthy and safe environments and

conserve finite resources. Rehau's products and systems for heating, plumbing and fire protection complement each other in integrated high-performance solutions.

BRANCHES:

REHAU Industries, Inc.
327 Murray Road
Little Shemogue, New Brunswick E4M 3P3
Tel: 506.538.2346 #014 800.565.7342
Direct Dial Tel: 506.538.2818 #013
Fax: 506.538.7458
St. John's
13Sagona Avenue
Donovan's Industrial Park
Mt. Pearl, Newfoundland A1 N 4P8
Tel: 709.747.3909 #012 800.205.1991
Fax: 709.368.6248

SIO TORONTO

11 49 Pioneer Road
Burlington, Ontario L7M 1 K5
Tel: 905.335.3284 800.561.9609
Direct Dial Tel: 905.335.4533 #001 Fax:
905.335.1112

SIO WINNIPEG

11 Plymouth St., Unit 100
Winnipeg, Manitoba R2X 2V5
Tel: 204.697.2028 #004 Fax: 204.697.2091

SIO MONTREAL

3440 Griffith
Ville St. Laurent, Quebec H4T 1A7
Tel: 514.905.0345 #009 800.361.0830
Fax: 514.905.0490

SIO VANCOUVER

REHAU Industries Inc.
26620, 561h Avenue Unit # 102
Langley, BC V4W 3x5
Tel: 604.626.4666 #002 800.668.1173
Fax: 604.626.4667

Alberta

5328 Calgary Trail, Suite 1337
Edmonton, Alberta T6H 4J8
Cell: 780. 982.2237 #023 Fax: 780.468.3409
REHAU employees please use the direct
dial line

REHAU S.A. de C.V.

Blvd. A. Lopez Mateos No 932 Celaya,
Gto. C.P. 38060
Tel: 461.618.8000 #090
Fax: 461.6 18. 8004

SIO MONTERREY

REHAU S.A. DE C.V.
Av. Circuito Industrial Humberto Lobo
No. 9313
Parque Industrial Mitras, Garcia N.L.

C.P. 66000

Tel: 81.81 21 0130 #081 Fax: 81. 81 21 0150

CHICAGO chic

REHAU Inc.
901 S. Route 53, Suite H
Addison, IL 60101
Tel: 630.317.3500 800.457.3428
Direct Dial: 630.317-3505 #006
Fax: 630.317.3550

SIO MINNEAPOLIS

Rehau Inc.
7710 Brooklyn Blvd., Suite #207
Brooklyn Park, MN 55443
Tel: 763.585.380 #005 800.297.6371
Fax: 763.585.9180

SIO GRAND RAPIDS

REHAU Inc.
625 en moor: Suite 105
Grand Rapids, MI 49546
Tel: 616.285.6867 866.734.2869
Direct Dial: 616.285.5823 #006 Fax:
616.285.7622

SIO LOS ANGELES

REHAU Incorporated
4254 Green River Road
Corona, CA 92880-1669
Tel: 951.549.9017 #011 800.944.1011
Fax: 951.549.9018
Fax: 925 454-8996

S/O GREENSBORO

REHAU Inc.
Hickory Building
3 Centerview Drive, Suite 250
Greensboro, NC 27407-3725
Tel: 336.852.2023 #008 800.947.3428
Fax: 336 855-381 5



The Reliable Automatic

Sprinkler Company, Inc.
103 Fairview Park Drive
Elmsford, New York 10523
Telephone: 914.829.2042
Toll-Free: 800.431.1588
FAX: 800.848.6051
Internet: www.reliablesprinkler.com
Email: info@reliablesprinkler.com

Founded:

1918

Primary Products/Services:

Fire Sprinkler, Valves, Special Hazard/
Systems and Fire Sprinkler System

Components

Market Area:

Worldwide

Hours of Operation:

7:30 a.m. - 5:30 p.m. EST Mon.-Fri.

Management:

Frank J. Fee, III, President

Kevin T. Fee, Executive Vice President

Michael R. Fee, Vice President, Marketing & Sales Operations

Company Profile:

As a major manufacturer of automatic fire sprinklers, valves and special hazards/ systems products and a distributor of sprinkler system components, The Reliable Automatic Sprinkler Company, Inc. is your one source for all your fire protection needs. Headquartered in Elmsford, New York, the company has built a new state-of-the-art manufacturing facility in Liberty, South Carolina and has offices strategically located throughout the U.S. and overseas. Reliable is dedicated to developing new innovative products. Go to www.reliable-sprinkler.com to learn more.

Corporate Office:

103 Fairview Park Drive
Elmsford, NY 10523
Tel.: 800.821.2138
www.reliable-sprinkler.com

Corporate Manufacturing Facility:

1470 Smith Grove Road
Liberty, SC 29657
Tel.: 864.843.1700

**Regional Distribution Centers
& Sales Offices:**

NORTHEAST REGION:
New York, NY (Elmsford)
Tel.: 800.431.1588
Fax: 800.848.6051

MID-ATLANTIC REGION:
Washington, DC (Lorton, VA)
Tel.: 877.883.8831
Fax: 877.851.1553

SOUTHEAST REGION:
Atlanta, GA (Norcross)
Tel.: 800.652.1819
Fax: 800.848.6052

Orlando, FL (Longwood)
Tel.: 800.801.3097 / Fax: 800.862.0934

MIDWEST REGION:
Chicago, IL (Hanover Park)
Tel.: 800.228.6274
Fax: 800.848.6053
Minneapolis, MN (Roseville)

Tel.: 877.827.2816
Fax: 877.827.3043

SOUTHWEST REGION:

Dallas, TX (Carrollton)
Tel.: 800.442.6742
Fax: 800.848.6054

Denver, CO
Tel.: 877.440.2598
Fax: 877.205.7230

WEST COAST REGION:

Los Angeles, CA (Brea)
Tel.: 800.352.4365
Fax: 800.848.6055

Seattle, WA (Kent)
Tel.: 877.327.2563
Fax: 877.327.2574

Las Vegas, NV
Tel.: 866.927.7775
Fax: 866.927.7776

INTERNATIONAL:

Eastern Canada
Tel.: 800.790.6443
Fax: 800.790.6486

Western Canada
Tel.: 604.542.1864
Fax: 604.542.1894

Mexico & Latin America
Tel.: 800.442.6742
Fax: 800.848.6054

London, United Kingdom
Reliable Fire Sprinkler, Ltd.
Tel.: 011.44.1342.316800
Fax: 011.44.1342.314679

Manchester, United Kingdom
Tel.: 011.44.1618774488
Fax: 011.44.1618770101

Manheim, Germany
Tel.: 011.49.621.2999.163
Fax: 011.49.621.2999.362

Nacka, Sweden
Tel.: 011.46.87165570
Fax: 011.46.87140395

Beijing, PR China
Tel.: 011.86.10.87216178
Fax: 011.86.10.87216179

Hong Kong, PR China
Tel.: 011.852.3421.0648
Fax: 011.852.3421.0649



RelMark Group

961 Pottstown Pike
Chester Springs, Pennsylvania 19425
Telephone: 610.3271.1010
Toll Free: 8000874.5880
FAX: 610.321.1011

Primary Products/Services:
Insurance, Risk Management

Market Area:
U.S.A.

Management:
Top Myers

Sales Contact:
Top Myers

Telephone:
610.327.1010 ext. 219 FAX: 610.321.1011

Company Profile:

Tired of insurance companies with underwriters and claim handlers that don't understand your business? Looking for an insurance partner? Servicing Fire Sprinkler Contractors are all we do. We partner you and your broker to get you the "right" insurance. RelMark Group is comprised of professionals that are united in their mission to provide quality products and services to sprinkler contractors. In addition to the insurance policy, we provide in-house, dedicated sprinkler claim specialists and "best practices" focused risk management services. Contact your local insurance agent and let RelMark Group Program Managers quote your insurance. Start now for a long-term relationship with professionals who understand your business. You are an expert in fire sprinklers. Why not start working with someone who is an expert in fire sprinkler contractors' insurance. You have nothing to lose. www.relmarkgroup.com



Shurjoint Piping Products, Inc.

4601 East Cheyenne Avenue,
Suite 105
Las Vegas, Nevada 89115
Telephone: 702.644.4492
Toll-Free: 877.476.6833
FAX: 702.644.1091
Internet: www.shurjoint.com

Primary Products/Services:
Grooved and threaded piping components

Market Area:
National and International

Hours of Operation:
8:00 a.m. - 5:00 p.m. Mon.-Fri.



EXPERIENCE

PATENTS

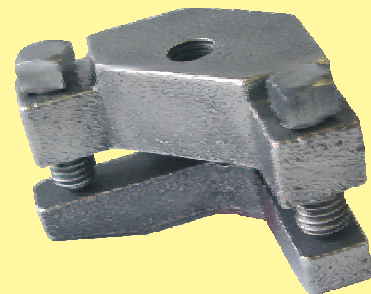
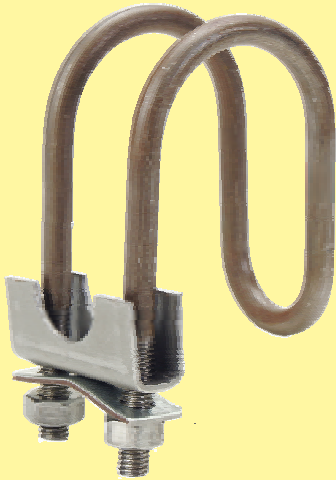
KNOWLEDGE

SUPERIOR SWAY BRACING

10" STEEL

CPVC

COPPER



National Fire Sprinkler Association

Management:

Mark Beach, Vice President

Sales Contact:

Mark Beach, Vice President

Company Profile:

With over three decades of experience, Shurjoint is recognized as a leader in the design and manufacture of grooved, hole-cut, and threaded piping components. Shurjoint offers a full line of grooved fittings and couplings, a complete line of ductile iron threaded fittings, welding outlets and flow control components. Shurjoint manufacturing facilities are certified to ISO 9001. The company's products are listed, approved and/or certified by UL, cULus, FM, VdS, LPCB and others. Shurjoint is a proud member of the NFSA, CASA, IFSA, AFSA, NFPA, and USGBC.



Smoke and Fire Prevention Systems

110 9th Street

Clarksville, Virginia 23927

Telephone: 434.374.8537

FAX: 434.374.8217

Internet:

www.smokeandfireprevention.com

Primary Products/Service:

Sales and installation of smoke and fire prevention systems.

Management:

Toby Newcomb, Exec. Vice President



The Soffi-Steel® System/ Grice Engineering, Inc.

121 East Burbank Avenue
Janesville, Wisconsin 53546

Telephone: 608.757.1335

Toll-Free: 800.800.3213

FAX: 608.757-1452

Internet: www.soffisteel.com

Founded:

1994

Primary Products/Services:

The Soffi-Steel System

Market Area:

U.S.A. & Canada

Hours of Operation:

7:30 a.m. -5:00 p.m. CST, Mon.-Fri.

Management:

Jack Grice, P.E., President

Allen Stowers, Contract Sales

Sales Contact:

Allen Stowers, Contract Sales

Telephone:

608.757.1335

FAX:

608.757.1452

Company Profile:

When your facility is plagued by potentially vulnerable and unsightly fire sprinkler systems, choose the Soffi-Steel® System to safely cover them up. Grice Engineering designs, manufactures and installs the Soffi-Steel System, an adaptive steel soffit that provides a secure yet streamlined finish in any residential, commercial or institutional application. We recognize that no project is the same; your mechanical concealment needs determine the dimensions, profile, finish and gauge of the soffit system received! Ideal for retrofit or new construction use, the Soffi-Steel System is available within 2-3 weeks nationwide! FM Tested and Approved! Pending UL listing. 10Year Warranty! For more information, product catalogs, samples, budgetary proposals or plan take-offs, please contact Grice Engineering toll-free at 1-800-800-3213.



S-P-D Incorporated

1167 Tower Road

Schaumburg, Illinois 60173

Telephone: 847.882.9820

FAX: 847.882.9825

Internet: www.spdinc.com

Primary Products/Services:

NFPA 13D Residential Fire Pump Systems

Market Area:

Worldwide

Hours of Operation:

7:00 a.m. -5:00 p.m., Mon.-Fri.

Management:

David M. Whitfield, President

Nick Di Giovanni, Vice President

Betty Lauer, Office Manager

Jeff Kubik, Service Manager

Sales Contact:

David Whitfield, President

Nick Di Giovanni, V.P.

Company Profile:

S-P-D Incorporated is the exclusive manufacturer of THE GUARDIAN NFPA 13D Residential Fire Pump System. THE GUARDIAN is a completely assembled, self-contained, easy to install residential pump system, configured to meet your specific requirements. THE GUARDIAN serves as the heart of the residential fire sprinkler system. Once installed and in service, it provides the required capacity and pressure so that the sprinkler system can perform as designed. THE GUARDIAN meets all NFPA 13D code requirements.

It is available in two models, the G5000 for wall mounting and the G3000 for floor mounting and is available in a wide range of pump sizes. Both units are available in 115 VAC and 220 VAC, single phase, depending on the horsepower of the pump. Each unit is custom assembled to the customer specifications and thoroughly tested in our factory prior to shipment. Our systems are simply designed, enabling quick and easy installation. Large selections of pump systems are in stock and ready for immediate delivery. We provide a full selection of lightweight, durable, high-density polyethylene tanks that exceed specification for installation of residential fire sprinkler systems. Our tanks are competitively priced and promptly delivered. They fit through standard 32" and 36" doorways, are rotationally molded, one-piece, free standing construction to ensure exceptional tank integrity. The tanks come complete with automatic fill valves, top entry lids, gallon markers and bulkhead fittings for suction, fill and overflow connections. S-P-D Incorporated sells, services and installs fire protection equipment, including fire pump controllers, transfer switches, jockey pump controllers, low suction shutdown panes, remote alarm panels, water storage tanks, pressure and flow switches, level control systems and related devices for residential, commercial, industrial, municipal and governmental applications. We've served the public and private fire protection industry for over 55 years. Our key staff members have more than 135 years of combined experience in this industry. Our substantial client list covers the U.S.A. and circles the globe. We provide knowledgeable and informed fire protection solutions, representing and servicing products of many of the most trusted, esteemed and respected manufacturers in the industry. Some of the products we represent and distribute include those from: Metron, Inc., Angus Fire Control, Arrow Tank & Engineering, Columbia TecTank, Dwyer Instruments, Inc., Residential Water Tanks and Xerxes Corp.



Spears Manufacturing Company

PO Box 9203

Sylmar, California 91342

Telephone: 818.364.1611

FAX: 818.362.1596

Internet: www.spearsmfg.com

Primary Products/Services

Fittings and Valves

Management:

Wayne Spears, President

**Specialized Fire & Security, Inc.**

108 Algonquin Trail
Wayne, New Jersey 07470
Telephone: 973.616.8771
Fax: 973.860.5600

Management:

Chris Kelly, President

**Starfire Systems, Inc.**

3550 South Iowa Ave.
St. Francis, Wisconsin 53235
Telephone: 414.483.5959
Toll Free: 800.347.3776
FAX: 414.483.1566
Internet:
www.starfireusa.com/starfireinc@usa.net

Founded:

1987

Primary Products/Services:

Fire Protection

Market Area:

Midwest & Southwestern U.S./International

Hours of Operation:

7:00 a.m. -5:00 p.m. CST, Mon. -Fri.

Management:

Raymond J. Malek, President
Denise Malek, Executive Vice President
Gil Brzezinski, Vice President
Scott Mathwig, Treasurer

Sales Contact:

Gil Brzezinski, Vice President

Tel:

414.483.5959/800.347.3776

FAX:

414.483.1566

Company Profile:

Starfire Systems is an independent, full-line fire protection distributor with locations in Wisconsin and California. We offer a broad line of products, including sprinklers, fittings, valves, electronic monitoring devices, bladder expansion tanks, surge suppression tanks & fire pump systems. Our collective experience and vast product line helps fire protection contractors meet their deadlines and improve their profitability.

Branch Office:**Starfire, Inc.**

1391 N. Kraemer Blvd.
Anaheim, California 92806
Telephone: 714.632.8713
Toll Free: 800.444.6144
FAX: 714.632.1014

Website:www.starfireusa.com**Email:**starfireca@aol.com**Sales Contact:**

Paul Bennett

**Superior Systems, Inc.**

17696 County Road 112
Bristol, Indiana 46507
Telephone: 574.848.4104
Toll Free: 800.662.0906
FAX: 574.848.5270
Internet: superiorsystemsinc.com

Founded:

1991

Hours of Operation:

8:00 a.m. -5:00 p.m.

Management:

David Alexander, President
Aaron Alexander, Project Manager

Sales Contact:

David Alexander, President

Company Profile:

Superior Systems manufactures and installs customized "soffit systems" for the sprinkler industry. Our extensive selection of products is manufactured in various gauges of steel and aluminum materials, depending on the individual project requirements and finishes. For the right product to conceal and protect sprinkler systems and keep your project "up to code and out of sight," call 800.662.0906 or visit our web site at superiorsystemsinc.com for detailed selections and information.

**Suppression Systems, Inc.**

301 South 4th Street
Pennsburg, Pennsylvania 18073
Telephone: 215.679.6291
Toll Free: 800.360.0687
FAX: 215.679.6028
Internet: www.suppressionssystems.com

Founded:

1983

Primary Products/Services:

Special Hazard Fire Protection/Fire alarms

Market Area:

NY, PA, NJ, MD, DE, VA

Hours of Operation:

Mon. -Fri. 8:00 a.m. -5:00 p.m.

Management:

Jeff Lambert, President
J. David Winder, Suppression Sales Mgr.,
David Moyer, Operations Manager

Sales Contact:

Byron Keeble, System Sales & Design Consultant

**System Sensor**

P.O. Box 1424
Lansdale, Pennsylvania 19446
Telephone: 610.222.8081
Toll-Free: 800.736.7672
FAX: 610.222.8082
Internet: www.systemsensor.com

Founded:

1984

Primary Products/Services:

Fire Sprinkler System Monitoring Products

Market Area:

Worldwide

Hours of Operation:

7:30 a.m. - 5:00 p.m. CST Mon. -Fri.

Management:

John Hakanson, President
Chuck Kitts, Director of Sales
Andy Kuester, Marketing Manager
Dennis Sekermestrovich, Western Regional Manager

Sales Contact:

Chuck Kitts, Director of Sales

Company Profile:

System Sensor is a global manufacturer of sprinkler monitoring products, including water flow detectors, supervisory switches, pressure switches, deluge releasing panel, alarm bells and explosion-proof products. With sales, service and manufacturing facilities extending throughout the Americas, Europe and Asia, System Sensor promises to continue developing advanced ideas that deliver advanced solutions. Our high production standards and constant communication with our customers gives you a quality product with the information and support you need to install and maintain our products. Because we place a premium on research and development, System Sensor sprinkler monitoring products are quick and easy to install and maintain.



Talco Fire Systems

5695 SE International Way Ste. D
Milwaukie, Oregon 97222
Telephone: 503.653.8055
FAX: 503.653.8797
Internet: www.talcofire.com

Founded:
1981

Primary Products/Services:
Package Pump systems

Market Area:
USA & Canada

Hours of Operation:
Mon.-Fri. 8:00 a.m.-5:00 p.m.

Management:
Victor Tallon, President
Gary Ike, National Sales Manager
Sales Contact:
Scott Shaffer, Product Specialist

Tel:
503.653.8055

FAX:
503.653.8797

Company Profile:
Talco manufactures package pump systems including residential 13, 13R systems and NFPA 20 packaged systems. See our website at talcofire.com for more detailed information, which includes drawings and data in CAD format.



Tank Connection

PO Box 579
3609 N. 16th
Parsons, Kansas 67357
Telephone: 620.423.3010
FAX: 620.423.3999
Internet: www.tankconnection.com

Primary Products/Services:
Water Storage Tanks

Market Area:
Worldwide

Hours of Operation:
Mon.-Fri. 6:00 a.m.-6:00 p.m.

Management:
Justin McKee, Liquid Tank Sales Manager
David Hamilton, Liquid Tank Sales Manager
Vince Horton, V.P., Sales

Sales Contact:
Vince Horton, V.P. Liquid Sales

Tel:
620.423.3010

FAX:
620.423.3999

Company Profile:
Tank Connection designs, manufactures and installs the top-rated bolted tank design available for fire protection applications...worldwide. Designed to meet Factory Mutual and NFPA 22 requirements, the Tank Connection performance package remains unmatched in the industry.

- Precision RTP (rolled, tapered panel design) is the top-rated bolted tank design for fire protection applications...worldwide
- Standard accessory packages include access ladders/stairways, manways, level controls, heaters, insulation and other customized spec requirements
- Unmatched performance of LI Fusion 7000 FBE™ interior powder coat system in NSF 61 approved and comes with a standard 5-year limited warranty
- The NO LEAK bolted water storage tank design
- Designed for long life... low maintenance storage
- Designed and manufactured at the #1 rated bolted tank facility worldwide

GET CONNECTED with the Engineer's 1st choice in fire protection storage tanks!



**Telgian Corporation
- A TVA Company**

2615 South Industrial Park Avenue
Tempe, Arizona 85282
Telephone: 480.753.5444
FAX: 480.753.5450
Internet: www.telgian.com

Primary Products/Services:
The service offerings of Telgian Companies include:

- Membership, advocacy and representation in industry standards making organizations.
- Fire Sprinkler and Alarm Design and Engineering Services.
- Customer centric Fire Protection equipment research and development.
- Loss Control Services and Risk Management Information Systems .
- Jurisdictional advocacy and representation for national and international clients.
- International Construction Services for Fire Sprinkler and Fire Alarm systems.
- Self performed Compliance Testing and Inspections.
- Centralized coordination and service call

management for fire sprinkler, alarm, portable extinguishing devices, back flow devices and special hazard systems.

- Large scale special projects and capital replacement programs.
- Fire and Life Safety program management and development.

Management:
Russell Leavitt, CEO
Thermafitt Industries, Inc.
11120 Sherman Way
Sun Valley, California 91352

Telephone:
818.503.1094

FAX:
818.759.5114

Management:
Armond Sarkisian, CEO



TOLCO, A Brand of NIBCO

1375 Sampson Avenue
Corona, California 92879
Telephone: 951 737-5599
Toll-Free: 800 786-5266
FAX: 951 737-0330
Internet: www.tolco.com

Founded:
1967

Primary Products/Services:
Pipe Hangers, Supports, Seismic Bracing

Market Area:
Worldwide

Hours of Operation:
7:00 a.m. - 5:00 p.m. Mon.-Fri.

Management:
Scott Beutler, Vice President and General Manager, TOLCO
George Von Gnatensky,
Director of Sales, TOLCO Fire Protection
Mike Golini, Director of Sales, TOLCO Mechanical/Industrial
Greg Shaughnessy, Director of Marketing

Sales Contact:
George Von Gnatensky,
Director of Sales, Fire Protection

Telephone:
951 737-5599 ext. 220

Company Profile:
TOLCO® is a manufacturer of quality, UL, ULC, FMRC, NYC products including pipe hangers, supports, seismic bracing and TOL-Strut™ Channel. TOLCO has over 40 years of experience in the residential and commercial fire protection markets. TOLCO has introduced a series of new products including the Figure 75, a unique swivel attachment, and the Figure 29, a double offset CPVC hanger and restrainer for plas-

tic fire sprinkler pipe. Both products are available through your full line distributor of TOLCO products. For more information, visit www.tolco.com.



Tyco Fire & Building Products

451 North Cannon Avenue
Lansdale, Pennsylvania 19446
Telephone: 215.362.0700
Toll Free: 800.558.5236
Internet: www.Tyco-Fire.com

Primary Products/Services:

Water based fire suppression systems valves, sprinklers, SprinkCAD software, CPVC, Grinnell Mechanical

Market Area:

International

Management:

Cammine Schiavone, General Manager, Americas

Company Profile:

Tyco Fire & Building Products is a global manufacturer of water-based fire suppression system components and ancillary building construction products. It continually expands its capabilities through aggressive research and product development to provide its customers effective fire protection and construction solutions for residential, commercial, industrial and institutional buildings.

BRANCHES:

AVON
27R Doherty Avenue
Avon, Massachusetts 02322
Telephone: 508.583.8447
FAX: 508.583.0034

BREA
3170 Nasa Street
Brea, California 92821
Telephone: 714.993.6111
Toll Free: 800.310.3366
FAX: 714.993.6043 or 714.993.2154

CAROL STREAM
CAROL COURT
Carol Stream, Illinois 60188
Telephone: 630.871.7700
Toll Free: 800.323.9485
FAX: 630.871.7464

COPPELL
1150 Enterprise Drive
Coppell, Texas 75019
Telephone: 972.745.0043
Toll Free: 800.442.3541
FAX: 972.745.8594

DECATUR
3080 N. Lanier Pkwy.
Decatur, Georgia 30034
Telephone: 404.243.7336
Toll Free: 800.241.9370
FAX: 404.244.7375

JESSUP
8230-C Preston Court
Jessup, Maryland 20794
Telephone: 301.604.7133
Toll Free: 800.950.9233
FAX: 301.604.7138

KENT
19307 70th Avenue South
Kent, Washington 98032
Telephone: 253.872.6030
Toll Free: 800.843.2919
FAX: 253.872.6547
Manager: Troy Wiltbank

NORRISTOWN
2800 Potshop Lane
Norristown, Pennsylvania 19403
Telephone: 610.239.9925
Toll Free: 800.523.2753
FAX: 610.239.9936

MURRAY
4303 South 590 West
Murray, Utah 84123
Telephone: 801.269.0688
Toll Free: 800.486.2767
FAX: 801.269.0733

PARMA
5565 Venture Dr.
Parma, Ohio 44130
Telephone: 216.265.0505
Toll Free: 800.741.5833
FAX: 216.265.8354

POMPANO
1802 SW 2nd St.
Suite A
Pompano Beach, Florida 33069
Telephone: 954.781.0866
FAX: 954.781.1475

TIGARD
7500 S.W. Tech Center Dr.
Suite 110
Tigard, Oregon 97223
Telephone: 503.620.4203
Toll Free: 800.210.8447
FAX: 503.620.3817

N. KANSAS CITY
1219 Macon Ave.
N. Kansas City, Missouri
Telephone: 816.842.2424
Toll Free: 800.245.9178
FAX: 816.842.4433

Regulations Technology ARE CHANGING

**What is YOUR Business
Doing To Be As Competitive
As It Can Be?**

**Fire protection contractors
may not realize the impact that
changes in regulations and
technology have on
their bottom line.**

INCREASE REVENUE

Contractors who have trained their employees on the latest technology can often leverage that skill to *be more competitive in the bid process.*

DECREASE COSTS

Those contractors often see a jump in accurate designed and quality of work, resulting in *fewer change orders or rework.*



TRAINING

**Tyco now offers 2 & 3 day fire
protection training seminars
with CEU credit in Cranston, RI.**

TOPICS INCLUDE:

- ◆ Changes in Technology
- ◆ Hands On Experience
- ◆ Live Demos
- ◆ Industry Direction

tyco Fire Suppression
& Building Products

www.tyco-fire.com

401-781-8220 ext. 500
Training@TycoFP.com



Unique Fittings and Flanges

12600 Cardinal Meadow
Sugar Land, Texas 77448
Telephone: 281.275.3900
FAX: 281.242.0575
Internet:
www.uniquefittingsandflanges.com

Primary Products/Services:

Pipe Fittings

Management:

William P. Vollmar, Manager



United Brass Works, Inc.

714 South Main Street
Randleman, North Carolina 27317
Telephone: 336.498.2661
Toll Free: 800.334.3035
FAX: 800.498.4696
Internet: www.ubw.com

Founded:

1910

Primary Products/Services:

Bronze Valves

Market Area:

Worldwide

Hours of Operation:

8:30 a.m. - 5:00 p.m. Mon.-Fri.

Management:

Mike Berkelhammer, President
Natasha Trogdon,
Director of Administration
Jim Sattler, Sales Manager

Sales Contact:

Jim Sattler, Sales Manager

Company Profile:

United Brass Works manufactures a wide range of bronze and ductile iron valves for fire protection applications. Bronze products include globe and angle valves, swing checks, ball drips, three-way gauge valves as well as OS&Y gate valves. Ductile iron products include UL/FM water check valves, groove check valves and male by female check valves.



Uponor Inc.

5925 148th Street West
Apple Valley, Minnesota 55124
Telephone: 952.997.4241
FAX: 952.891.2008
Internet: www.uponor-usa.com

Founded:

1620 yes, 1620

Primary Products/Services:

Life, safety and comfort system solutions

Market Area:

Worldwide

Management:

Eric Skare, Product Manager

Company Profile:

Uponor is a worldwide leader in radiant heating, plumbing and residential fire safety systems using cross-linked polyethylene PEX tubing. Uponor is recognized for delivering intelligent, intuitively designed products that set the highest standards in the industry. Uponor AQUASAFE® residential fire sprinkler systems are designed as an extension of your home's plumbing. Using proven Uponor PEX-a-tubing, ProPEX® fittings and Reliable™ sprinklers, AQUASAFE® systems are available in both networked and looped configurations that meet or exceed NFPA 13D requirements. So, not only will an AQUASAFE® system save lives, it'll save money on installation and insurance costs too.



USA Tank Storage Systems

PO Box 506
14174 Highway 43
Seneca, Missouri 64865
Telephone: 417.776.2500
FAX: 417.776.2524
Internet: www.usatanksales.com

Founded:

1999

Primary Products/Services:

Belted steel tanks & erection

Hours of Operation:

8:00 a.m. - 5:00 p.m. CST, Mon. - Fri.

Management:

Brain Bell, President
Chris Slinkard, General Manager, Steve Currence, Director of Sales and Marketing

Sales Contact:

Steve Currence, Director of Sales and Marketing

Company Profile:

USA Tank Storage Systems is the single source provider for Liquid Storage and Dry Bulk Storage applications. From the initial proposal stages through engineering, fabrication, installation, and customer service after the sale, USA Tank delivers unmatched performance.

We can provide turnkey solutions for all your storage needs.

After decades in the tank sales and construction business, we've learned that "quality" and "value" are not negotiable.

Our track record for quality and dependability is impeccable because our people apply decades of industry experience to every project, and loyalty to every customer.

BRANCHES:

KANSAS CITY OFFICE
1600 Genesee, Suite 918
Kansas City, Missouri 64102
Telephone: 816.472.1890
FAX: 816.472.0598

Sales Contact:

Jerry Biritz

Email:

jerryb@usatanksales.com

Charles Spears

Email:

charless@usatanksales.com

South Dakota Office

North Plains Office

Watertown, South Dakota 57201

Telephone:

605.886.4224

FAX:

605.886.4224

Sales Contact:

Robin Gravatt

Email:

robg@usatanksales.com



Victaulic Company

4901 Kesslersville Road
Easton, Pennsylvania 18040
Telephone: 610.559.3300
Toll-Free: 800.PICK.VIC
FAX: 610.250.8817
Internet: www.victaulic.com

Founded:

1925

Market Area:

Global

Management:

Bob Freidl, V.P., Sales and Market Development

Company Profile:

Victaulic is the worldwide leader in mechanical pipe joining solutions. Since pioneering grooved end technology for mechanical pipe joining in 1925, Victaulic has been providing customers the world over with innovative, reliable piping systems solutions for multiple applications and markets.





The Viking Corporation

210 N. Industrial Park Drive
Hastings, Michigan 49058
Telephone: 269.945.9501
Toll Free: 800.968.9501
FAX: 269.945.9599
Internet: www.vikinggroupinc.com

Founded:
1897

Primary Products/Services:

Fire Sprinklers/Systems, fire protection valves, CPVC Pipe and Fittings, fabrication services, steel pipe, threaded fittings, grooved products, hangers & fasteners, electrical products, foam systems, FDC equipment, backflow prevention, tools & accessories

Company Profile:

Together, the companies of The Viking Group are dedicated to serving fire sprinkler contractors with unparalleled customer service and product availability. For nearly 90 years, Viking Corporation has manufactured the finest fire sprinklers, valves and systems. More recently, Viking Plastics was formed to produce high quality BlazeMaster® CPVC pipe at a state of the art, ISO 9001 certified facility. Through Viking Fabrication Services, contractors have access to complete, turnkey fabrication solutions. Finally, Viking SupplyNet links it all together by providing the industry's broadest line of fire protection products through over 30 company-owned locations in the U.S. and over 50 worldwide.

BRANCH OFFICES:

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Hastings, Michigan 49058
Toll Free Phone: 800.968.9501
Fax: 269.945.4495

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Fairfield, NJ 07004
Phone: 800.845.4645
Fax: 973.227.4605
Email: east@supplynet.com
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Terry Laffey, Jerry Barbara, Rich Lambert

VIKING SUPPLYNET HARTFORD
800 Marshall Phelps Rd. Bldg. 4
Windsor, CT 06095
Phone: 860.688.0001
Fax: 860.688.0001
Sales Contact: Tim Christie, Rich Lambert

VIKING SUPPLYNET PHILADELPHIA
2564 Industry Lane
Norristown, Pennsylvania 19403
Phone: 610.631.9950
Fax: 610.631.9955
Sales Contact: Jim Dooley, Rich Lambert

VIKING SUPPLYNET BALTIMORE
8310 Sherwick Ct.
Jessup, Maryland 20794
Phone: 301.490.5514
Fax: 301.490.5367
Sales Contact: Jim Dooley, Rich Lambert
VIKING SUPPLYNET RICHMOND
4593 Carolina Ave.
Richmond, VA 23222
Tel: 804.228.1107
Fax: 804.225.1556
Sales Contact: Charles Robison, Jim Dooley, Rich Lambert

VIKING SUPPLYNET MIDWEST
Regional Headquarters
2353 International Street
Columbus, OH 43228
Phone: 800.926.7757
Fax: 614.527.5818
Email: Midwest@supplynet.com
Sales Contact: Bob Fischer, Tom Bowers

VIKING SUPPLYNET DETROIT
2137 Heide St.
Troy, Michigan 48084
Phone: 248.244.2929
Fax: 248.244.2929
Sales Contact: Tom Mobley, Tom Bowers

VIKING SUPPLYNET ST. LOUIS
1600 Park 370 Place, Ste. 1
Hazelwood, MO 63042
Phone: 314.291.4800
Fax: 816.231.8220
Sales Contact: Dan Koziol, Tom Bowers

VIKING SUPPLYNET KANSAS CITY
1886 N. Topping Ave.
Kansas City, MO 64128
Phone: 816.231.8211
Fax: 651.644.1275
Sales Contact: Dan Koziol, Tom Bowers

VIKING SUPPLYNET CHICAGO
640 Center Ave.
Carol Stream, IL 60188
Phone: 630.462.5860

Fax: 630.871.1898
Sales Contact: Ron Bergquist, Tom Bowers

VIKING SUPPLYNET MINNEAPOLIS
2079 Ellis Ave.
St. Paul, MN 55114
Phone: 651.644.1264
651.644.1275
Sales Contact: Jason Wardour, Tom Bowers

VIKING SUPPLYNET ATLANTA
800 Westlake Pkwy, Ste. 820
Atlanta, Georgia 30336
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Fax: 404.346.6771
Email: south@supplynet.com
Sales Contact: Adam Owens, Allen Sneathen, Jeff Trew

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Ind Ctr Building IV
Hollywood, Florida 33312
Phone: 954.791.1756
Fax: 954.791.1614
Sales Contact: Versie Vigie, Jeff Trew

VIKING SUPPLYNET ORLANDO
503 Ocoee Business Pkwy
Ocoee, FL 34761
Phone: 407.656.7600
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Sales Contact: Versie Vigie, Jeff Trew

VIKING SUPPLYNET HOUSTON
11850 Hempstead Hwy, Ste. 250
Houston, TX 77092
Phone: 713.695.6591
Fax: 713.695.6593
Sales Contact: Trey Rogers, Jeff Trew

VIKING SUPPLYNET DALLAS
1536 Hutton Dr. Ste. 120
Carrollton, TX 75006
Phone: 972.466.0933
Fax: 972.466.0853
Sales Contact: Perry Adams, Jeff Trew

VIKING SUPPLYNET MEMPHIS
Airport Distribution Center #8
4299 Air Trans Rd.
Memphis, TN 38118
Phone: 901.360.9401
Fax: 901.360.9428
Sales Contact: Tommy Haberman, Jeff Trew

VIKING SUPPLYNET CHARLOTTE
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Charlotte, NC 28216
Phone: 704.921.3270
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Sales Contact: Mark Van Dyne, Jeff Trew

National Fire Sprinkler Association

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VIKING SUPPLYNET SACRAMENTO

5081 Kelton Way, Ste. 100
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Phone: 916.923.1080
Fax: 916.923.1080
Sales Contact: Dan Tornio, Jim Gudger

VIKING SUPPLYNET RIVERSIDE

6480 Box Springs Blvd.
Riverside, CA 92507
Tel: 951.656.3111
Fax: 951.656.2606
Sales Contact: Dave Swanson, Scott Harrison, Jim Gudger

VIKING SUPPLYNET LAS VEGAS

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Las Vegas, NV 89118
Phone: 702.795.8002
Fax: 702.795.0105
Sales Contact: Scott Harrison, Jim Gudger

VIKING SUPPLYNET PHOENIX

625 E. Watkins St.
Phoenix, AZ 85004
Phone: 602.252.0400
Fax: 602.252.2028
Sales Contact: Paul Cress, Jim Gudger

VIKING SUPPLYNET SEATTLE

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Kent, WA 98032
Phone: 253.872.8444
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Sales Contact: Kevin Kane, Jim Gudger

VIKING SUPPLYNET DENVER

12360 E. 46th Ave. #400
Denver, CO 80239
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Fax: 303.576.0611
Sales Contact: Scott Franklin, Jim Gudger

VIKING FABRICATION SERVICES

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147 Lincoln Drive

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640 Center Avenue
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Underdale, SA 5032, Australia
Phone: +61.8.8352.2888
Fax: +61.8.8352.2755
Email: fireprot@e-access.com.au
Sales Contact: Rick Tanner

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Fax: +27.11.396.1810
Email: dave@firequip.co.za
Sales Contact: Dave Martin

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PO Box 30737
Lower Hutt 5040
New Zealand
Phone: +64.4.589.0856
Fax: +64.4.589.0413
Email: vikingnewzealand@vikingcorp.com
Sales Contact: Peter Clark



Watts Regulator Company

815 Chestnut Street
North Andover, Massachusetts 01845
Telephone: 978.689.6108
FAX: 978.689.6247

Management:

Bruce Parrott, Marketing Manager

Company Profile:

Watts Water Technologies, Inc. with worldwide sales over \$1 Billion Dollars, designs, manufactures, and sells an extensive line of valves and related flow control products to the Plumbing and Heating and Water Quality markets.



F.W. Webb Company

152 Will Drive
Canton, Massachusetts 02021
Telephone: 781. 828.5559
FAX: 781.828.8060
Internet: www.fwwebb.com

Company Profile:

Since 1866 Webb has continuously serviced its customers in New England and upstate New York. Currently, the Webb network is comprised of 70 locations offering our complete package of Plumbing, Hydronics, HVAC, LP Gas Products, Biotech, Valve Automation and Pipe-Valves-Fittings. The core business of the F.W. Webb Company is distribution. Our unique inventory system utilizes the latest technology. Central Distribution, our 400,000+ sq. ft. facility in Amherst, NH replenishes branches daily with a fleet of tractor trailers. Also, the new pipe depot in Sturbridge, MA has four additional flatbeds which deliver pipe, copper tubing, valves and fittings to branches and major mechanical contractors.

Most Webb locations have been extensively expanded or renovated in the past three years. The intent is to use technology and modern physical distribution to increase efficiency and to better serve our customers. We are proud of our 95%+ fill rates and our ISO 9002 certification.



Wilkins, A Zurn Company

1747 Commerce Way
Paso Robles, California 93446
Telephone: 805.238.7100
FAX: 805.238.5766
Internet: http://www.zurn.com

Founded:

1906

Primary Products/Services:

Valves for Fire Suppression Systems

Market Area:

Worldwide

Hours of Operation:

6:30 a.m. - 5:00 p.m. PST Mon.-Fri.

Management:

Chris Connors, General Manager
Rick Fields, Vice President, Sales & Marketing, Pete Chapman, National Sales Manager
Mike Mallas, Sales Manager Fire Protection

Sales Contact:

Pete Chapman, National Sales Manager

Telephone:

415 456-7166

FAX:

415 456-7166

Company Profile:

Wilkins, a Zurn Company, offers a complete line of American made factory set, easy field adjustable, and master zone control valves. Available in 1½" – 6" sizes, in angle and inline pattern and threaded, flanged, and grooved connections.



Xerxes Corporation

7901 Xerxes Avenue South
Minneapolis, Minnesota 55431
Telephone: 952.887.1890
FAX: 952.887.1882
Internet: www.xerxescorp.com

Founded:

1979

Primary Products/Services:

Underground Storage Tanks

Market Area:

United States

Management:

Tom Tietjen, Vice President, Sales and Marketing


Sales Contact:

Terry Jensen, Manager, Sales and Marketing Services

Telephone:

952.887.1828

Company Profile:

Xerxes is a manufacturer of fiberglass underground storage tanks which are used by the fire protection industry for storage of standby water supply. Nationwide delivery is available from four manufacturing facilities, which produce tanks with capacities up to 65000 gallons. Xerxes tanks are light weight, easy to install and price competitive with alternative products. 

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eric.gregoire@marioff.fi



NFSA PROFESSIONAL MEMBERS GUIDE

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FAX: 787.281.6963
Contact: Alex Sanchez, Engineer

Able Fire Protection Associates

916 Broadhaven Dr.
Raleigh, North Carolina 27603
Tel: 919.779.5834
FAX: 919.771.0927
Contact: Robert Jacques, F.P.C.E.T.

Accént Fire Engineering International, Ltd.

4001 Office Court Drive
Suite 606
Santa Fe, New Mexico 87507
Tel: 800.503.1961
FAX: 505.474.4184
Website: www.accentfire.com
Contact: Jerry D. Watts, S.F.P.E., President
Services: Licensed fire protection engineers (14 states); certified fire inspectors & licensed fire investigators, NICET designers.

Accurate Fire Sprinkler Designs LLC

PO Box 22106
Phoenix, Arizona 85028
Tel: 602.482.1168
FAX: 602.354.7394
Contact: Jan Johnson

AEM, Inc.

1917 West Altorfer Dr.
Peoria, Illinois 61755
Tel: 309.693.7936
FAX: 309.693.9785
Website: www.aemfiresystems.com
Contact: Scott Leopold, P.E., Operations Director
Services: AEM, Inc. is a multi-discipline consulting/inspections firm specializing in plumbing and fire protection systems.

AES Associates, Inc.

29009 188th Ave. SE
Kent, Washington 98032
Tel: 253.630.5321
Contact: J.D. Harpole III

Alaska Analysis & KIC Construction

2439 Cottonwood St.
Anchorage, Alaska 99503
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Contact: Brooke Adkinson

Albert FG Bedinger Consulting Engineers, P.C.

500 Clyde St.
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FAX: 865.523.8186

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Contact: Albert Bedinger

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Contact: David Lussier, Engineer

Anderson Williams Consulting Engineers

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Angus Incorporated

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Applied Fire Protection Services

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Contact: Michael Pleszkoch, Jr. S.E.T.

Aquatech, Inc.

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Morrisville, Pennsylvania 19067
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FAX: 215.428.9661
Contact: Rocco Dillio

Architecture Plus

1207 13th St.
Ste 6
Modesto, California 95354
Tel: 209.577.4661
Contact: Frank Boots, A.I.A.

Associates Engineering Systems LLC

5445 Wakefield Ave.
Racine, Wisconsin 53406
Tel: 262.898.9160
Website: www.associatesengineering.com
Contact: Mark E. Miller, P.E., President
Services: Consulting Services including bio documents and analysis. Shop drawings for sprinkler systems, waterspray systems, foam systems, standpipe systems and fire pump systems.



Assurance Agency, Ltd.

One Century Centre
1750 E. Golf Rd.
Schaumburg, Illinois 60173
Tel: 847.463.7296
FAX: 847.440.9127
Website: www.assuranceagency.com
Contact: Gary Peterson, Vice President
Services: Ranked among the top 75 brokers of U.S. Business, Assurance provides business, employee benefits programs and personal insurance to more than 4,000 clients.

ATCO Fire Protection Services, Inc.

3300 King Ave.
Cleveland, Ohio 44114
Tel: 216.621.8899
FAX: 216.621.6939
Contact: Arthur Tiroly, Owner

Athwal & Associates

171 Madison Ave.
New York, NY 10016
Tel: 212.532.5335
FAX: 212.532.8433

Atlantic Design Resources, Ltd.

PO Box 496
Greenland, New Hampshire 03840
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FAX: 603.418.6375
Contact: Robert Mangold, Partner

BCE Engineers, Inc.

6021 12th Street East
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Tel: 5253.922.0446
FAX: 253.922.0896
Contact: Fred Blanchard, F.P.E.

BCER Engineering, Inc.

12449 West Bowles Drive
Littleton, Colorado 80127
Tel: 303.422.7400
Contact: Todd Brand

BMT Engineering, P.C.

333 West Main Street
Boonton, New Jersey 07005
Tel: 973.331.5121
FAX: 973.331.1690
Contact: Thomas Bravante, P.E., President
Services: Design & engineering of fire protection systems.

Briggs & Stratton

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Milwaukee, Wisconsin 53207
Tel: 414.256.5170
Contact: George Borowski

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Tel: 918.295.4464
Contact: Arthur Shelton

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650 Smithfield Street
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Capital Fire Protection Enterprises

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FAX: 845.353.6933
Contact: John Coogan, President

Circles and Lines Design, Inc.

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PO Box 1793
West Chester, Pennsylvania 19382
Tel: 610.918.9698
FAX: 610.918.9693
Contact: Michael McCullough

National Fire Sprinkler Association

Crane Engineering

2355 Polaris Lane North
Plymouth Minnesota 55447
Tel: 763.557.9090
FAX: 763.557.0710
Contact: Dave Kramer, P.E.

Crossroads Church Services

212 West 1st St.
Dumas, Texas 79029
Tel: 423.802.2242
FAX: 815.301.5477
Contact: Jerome Price

Cummings & Associates

181 Bow Bog Rd
Bow, New Hampshire 03304
Tel: 603.224.7453
FAX: 603.224.7467
Contact: Robert Cummings, President

Dakota Drafting & Design

47185 Wild Clover Circle
Ste 200
Sioux Falls, South Dakota 57107
Tel: 605.543.5170
FAX: 605.543.5171
Contact: Troy Anderson

Dave Watson Associates

1325 West Beecher St.
Adrian, Michigan 49221
Tel: 517.263.8988
FAX: 517.263.2328
Contact: Dave Watson

Davidson Fire Protection Svcs, Inc.

8899 Brooksdie Ave.
Suite 202 C & D
West Chester, Ohio 45069-7112
Tel: 513.777.1407
FAX: 513.777.1898
Contact: Ralph E. Davidson, C.E.T., Pres.
Services: 38 years of design and consulting experience. Preliminaries, detailed shop drawings & hydraulic calculations. NICET certified. Will travel.

Davis Fire Protection, Inc.

6223 Pottsborg Plantation Blvd.
Jacksonville, Florida 32216-8953
Tel: 904.805.8801
FAX: 904.805.8802
Contact: Jim Davis, President

Design Line Fire Protection, Inc.

7910 171st Lane NW
Ramsey, Minnesota 55303
Tel: 763.274.0768
FAX: 763.241.1659
Email: dspline@aol.com
Contact: Bruce Thomas, Owner
Services: Fire Protection Design

Dolphin Backflow, Inc.

2335 Holly Leaf Lane
Orange Park, Florida 32073
Tel: 904.269.5489
FAX: 904.215.6025
Contact: David Miller

Donald G. Westenhofer, P.E.

9135 Chatham Circle
North Ridgeville, Ohio 44039
Tel: 440.353.0884
FAX: 440.353.0884
Contact: Donald Westenhofer, President

Donald Mayo-Fire Protection Consultant, Inc.

150 Grove Circle
Pleasant Hill, California 94523
Tel: 925.933.6299
FAX: 925.933.6288
Contact: Donald Mayo, Engineer

G.P. Dossett Design

700B Timber Oak Drive
Mt. Juliet, Tennessee 37122
Tel: 615.758.7802
Email: gpdossett@comcast.net
Contact: Garry P. Dossett, Manager
Services: Fire Sprinkler Design

Down Home Sprinkler Design Co., Inc.

17452 Hibiscus Ave.
Lakeville, Minnesota 55044
Tel: 952.997.2430
FAX: 952.997.3230
Contact: Daniel Haley

Draw 4 Me Fire Systems

2728 Tradition Way
Modesto, California 95355
Tel: 209.543.6190
FAX: 209.543.6190
Contact: Aaron Juarez

DRB Fire Inspection Services, LLC

PO Box 434
Tangerine, Florida 32777-0434
Tel: 352.348.8110
FAX: 352.383.5309
Email: drbailey@cfl.rr.com
Contact: Daryl R. Bailey, Owner/Manager
Services: Fire code consulting, CAD drawings, backflow testing, property analysis.

EBL Fire Engineering-Div. of EBL Engineers

8005 Hartford Rd.
Baltimore, Maryland 21234
Tel: 410.668.8000
FAX: 410.668.8001
Contact: Jeffrey Paul McBride

EGI Mechanical, Inc.

1000 East Pearl St.
Seymour, Wisconsin 54165
Tel: 920.833.1070
FAX: 920.833.1074
Contact: Todd Olsen

Electrical Systems Design & Control

1705 S. Baltimore
Tulsa, Oklahoma 74119
Tel: 918.949.3670
FAX: 918.949.3672
Contact: Lloyd Herndon

Empiretech Consulting Associates

505 Eighth Ave.
Suite 2202
New York, New York 10018-6505
Tel: 212.695.5050
FAX: 212.695.3030
Contact: Abbas Shah, Engineer

Engineered Fire & Safety

3138 Commerce Dr.
Anchorage Alaska 99501
Tel: 907.274.7973
FAX: 907.274.6265
Contact: Jeremy Hansen

Engineered Fire Systems, Inc.

11832 Tammy Way
Grass Valley, California 95949
Tel: 530.274.9400
FAX: 530.274.9488
Contact: Eric Price, President

Engineering Services Group, Inc

900 East Hill
Ste 350
Knoxville, Tennessee 37915
Tel: 865.522.0393
FAX: 865.522.0166

Exponent, Inc.

17000 Science Drive
Ste 200
Bowie, Maryland 20715
Tel: 301.2941.2515
FAX: 301.291.2598
Contact: Andrew Blum

F.R.A. Engineers

530 Summit Point Dr.
Henrietta, New York 14467
Tel: 585.359.0280
FAX: 585.359.9607
Contact: David Myers

V. Fichera Associates, Inc.

2 North St. Ste. 2C
Wasldwick, New Jersey 07643
Tel: 201.493.0999
FAX: 201.493.1829
Contact: Vincent Fichera

Fire Code Analysts, Inc.

584 Castro St. #187
San Francisco, California 94114
Tel: 415.553.6038
FAX: 415.863.1075
Contact: Robert Fuller, P.E.

Fire Control Design, LLC

1660 Eagle St.
Rhineland, Wisconsin 54501
Tel: 715.369.5945
FAX: 715.369.5947
Contact: Peter Neilio

Fire Design, Inc.

3784 Holly Ridge Trail
Marianna, Florida 32448
Tel: 850.526.1886
FAX: 850.526.1884
Website: www.fire-design.com
Contact: Cliff Whitfield, President
Services: Using AutoSprink design software, we provide fire sprinkler design based on experience, cost effectiveness and common sense. NICET level IV-24 years experience.

Fire Protection Consulting

3115 NW 132nd Pl.
Portland, Oregon 97229
Tel: 503.531.8717
FAX: 503.531.8564
Contact: David Gessert, P.E.

Fire Protection Design, Inc.

102 Red Hill Rd.
New City, New York 10956
Tel: 845.634.2133
FAX: 845.623.1533
Contact: Andrew Koutsoftas, President

Fire Safety Consultant, Inc

509 Lashmere Dr.
Harrisburg, Pennsylvania 17109
Tel: 717.561.8787
FAX: 717.561.7877
Contact: Richard Botts, P.E., President

Fire Sprinkler Design, Inc.

114 Laura Court
Hamilton, Ohio 45013
Tel: 800.939.0066
FAX: 513.844.2818
Contact: Bill Schmidt, President

Fire Systems Enterprise, Inc.

PO Box 12573
Albany, New York 12212
Tel: 518.381.6026
FAX: 518.381.6026
Contact: Richard Fifield

Fire System Services

40 Beach Road
Ossining, New York 10562
Tel: 914.941.0338
FAX: 914.944.0809
Contact: Roland Asp, P.E.

Fire Systems, Inc.

PO Box 28
Catavia, Georgia 31804
Tel: 706.563.6952
FAX: 706.565.6578
Contact: Dan Hunsinger

Fire-Tech Design, Inc

7419 Oak Hill Rd.
Evansville, Indiana 47725
Tel: 812.868.0010
FAX: 812.867.8363

Email: randymccune@gmail.com
Contact: Randy McCune, President
Services: Sprinkler design, plan/survey and calculations, since 1985. NICET certified. Get it designed your way.

**Florida Fire Protection Consultants, Inc.**

18429 49th St. North
Loxahatchee, Florida 33470
Tel: 561.333.1861
FAX: 561.333.1868
Email: info@flfire.com
Website: www.flfire.com
Contact: Jim Duke, President
Services: Fire protection design and consulting. Our goal is to ensure the most accurate system be designed and installed, ultimately saving you time and money.

FMI Corporation

5301 W. Cypress St.
Ste. 201
Tampa, Florida 33607
Tel: 813.636.1247
FAX: 813.636.9601
Contact: Randy Stutzman

FPS Ingenieria S.C.

PO Box 2812
120 W. Cole Rd. -Ste 5
Calexico, California 92231
Tel: 686.841.0300
Contact: Randy Stutzman

Fuss & O'Neill, Inc.

146 Hartford Rd.
Manchester, Connecticut 06040
Tel: 860.646.2469
FAX: 860.646.0717
Contact: William Cieslak, P.E.

Gagnon Engineering

2660 Daisy Road
Woodbine, Maryland 21797
Tel: 410.442.1600
Fax: 410.489.0140
Website: www.gagnonengineering.net
Contact: Robert M. Gagnon, Fire Protection Engineer
Services: Fire protection engineering services: design, calculation, review, supervision of fire protection and detection systems.

National Fire Sprinkler Association

George Butler Associates, Inc.
 9801 Renner Blvd.
 Lenexa, Kansas 66219
 Tel: 913.577.8221
 FAX: 913.577.8346
 Contact: Parker Anderson

Global Fire Engineering, Inc.
 8450 Linger Lodge Rd.
 Bradenton, Florida 34202
 Tel: 941.758.2551
 FAX: 941.739.6383
 Website: www.global-fire.com
 Contact: Brian Foster, President
 Services: We offer fire sprinkler, alarm and special hazards design services. We are a hydrate shop and provide stocklisting services.

GoCAD LLC
 18309 Starboard Dr.
 Houston, Texas 77058
 Tel: 281.333.3033
 FAX: 888.234.4150
 Contact: Gus Olson

Griffith Engineering
 1432 Russell Ave.
 Jefferson City, Tennessee 37760
 Tel: 865.471.0255
 FAX: 865.471.0256
 Contact: Randy Wells

Hakenwerth Fire Sprinkler Design
 1765 Grothe Rd.
 Wentzville, Missouri 63385
 Tel: 636.332.9578
 FAX: 636.332.3822
 Contact: Tony Hakenwerth

Harriman Associates
 1 Auburn Business Park
 Auburn, Maine 04210
 Tel: 207.784.5100
 FAX: 207.782.3100
 Contact: Susan Hathaway

Harrington Group, Inc.
 3055 Breckinridge Blvd.
 Suite 310
 Duluth, Georgia 30096
 Tel: 770.564.3505
 FAX: 770.564.3509
 Website: www.hgi-fire.com
 Contact: Diane Stone, Marketing Coordina-

tor Services: Fire protection engineering, safety & health engineering, property loss control consulting, post loss investigation, litigation consulting.

Hawk Fire Protection & Design, LLC
 177 Jupiter Trail
 Weatherford, Texas 76088
 Tel: 817.594.4454
 FAX: 817.594.9775
 Contact: Mark Davis

HCC & Associates, Inc.
 3 Mill Park Court
 Newark, Delaware 19713
 Tel: 302.369.6901
 FAX: 302.369.6902
 Contact: Hal Cohen

Henderson Engineers, Inc
 8325 Lenexa Drive
 Suite 400
 Lenexa, Kansas 66214
 Tel: 913.742.5405
 FAX: 913.742.5001
 Contact: Eric Neill, Sr. Designer

Holston Engineering
 301 Montgomery St.
 Jefferson City, Tennessee 37604
 Tel: 423.926.5991
 FAX: 423.926.9119
 Contact: Christopher Walker

Horizon Engineering & Fire Protection, Inc.
 14725 Balgowan Rd. #205
 Miami Lakes, Florida 33016
 Tel: 305.512.4002
 FAX: 305.512.4003
 Contact: Juan Fajet, P.E.

Hughes Associates, Inc.
 3610 Commerce Dr.
 Ste 817
 Baltimore, Maryland 21227
 Tel: 410.737.8677
 FAX: 410.737.8688
 Contact: Don Hopkins, Phillip DiNenno

HYT Corporation
 3498 Clayton Rd., Ste 101
 Concord, California 94519
 Tel: 925.681.2731
 FAX: 925.681.2733
 Contact: Bret Tresidder

Icon Fire Systems Design
 92-324 Pueonani Pl.
 Kapolei, Hawaii 96707
 Tel: 808.672.7214
 FAX: 808.672.7214
 Thomas Burtness, Owner

InterCode Inc.
 1036 Casuarina Rd.
 Delray Beach, Florida 33483
 Tel: 561.278.0922
 FAX: 561.771.1701
 Contact: Amanda Hickman

Interface Engineering
 708 SW 3rd Ave.
 Ste 400
 Portland, Oregon 97204
 Tel: 503.382.2266
 FAX: 503.382.2262
 Contact: Kathleen Roach, CFPS, Fire Safety Team Leader

International Fire Sprinkler Design, Inc.
 13967 Marquesas Way #5
 Marina Del Rey, California 90292
 Tel: 310.933.2932
 FAX: 310.383.7650
 Contact: Gary Blaskavitch

Iron Mountain
 12 Old Cross St.
 Hanover, Massachusetts 02339
 Tel: 617.542.2827
 FAX: 617.542.7291
 Contact: Don Hirsch

J&T Consulting, LLC
 8220 Rob Lane
 Indianapolis, Indiana 46237
 Tel: 317.889.4300
 FAX: 317.889.1895
 Contact: Timothy Callas, President

K & E Fire Protection Corporation
 14 Plaza Nine
 Manalapan, New Jersey 07726
 Tel: 732.303.1717
 FAX: 732.780.6310
 Contact: Carolyn Reese, President

Kelso-Regen Associates, Inc.

6709-B Kingston Pike
Knoxville, Tennessee 37919
Tel: 865.588.5348
FAX: 865.558.8267
Contact: John Regen

Kennelly Fire Protection Engineering

2024 Flesher Ave.
Jacksonville, Florida 32207
Tel: 904.396.7022
Email: johngator1@comcast.net
Contact: John Kennelly, President
Services: Design of fire sprinkler, fire alarm, life safety and smoke control systems. Hydracad drawing for fire sprinkler systems with stocklisting.

Kerr Greulich Engineers, Inc.

1534 Ormsby Station Court
Louisville, Kentucky 40223
Tel: 502.426.9457
FAX: 502.426.2945
Website: www.kerr-greulich.com
Contact: Kenneth Hoffman, COO
Services: Consulting engineering firm specializing in mechanical, electrical and industrial design. We primarily focus on buildings in the commercial, educational, healthcare, institutional and industrial markets.

K-Factor Consulting & Design, LLC

7745 Alberta Beach St. NE
Louisville, Ohio 44641
Tel: 330.418.7475
FAX: 330.875.4930
Email: k-factor.sissy@gmail.com
Contact: Sissy Long, Owner
Services: Fire sprinkler system design services

Kohler Ronan Engineers

301 Main St.
Danbury, Connecticut 06801
Tel: 203.778.1017
Contact: Kevin Czamecki

K-Factor Consulting & Design, LLC

7745 Alberta Beach St. NE
Louisville, Ohio 44641
Tel: 330.418.7475
FAX: 330.875.4930
Email: k-factor.sissy@gmail.com
Contact: Sissy Long, Owner
Services: Fire sprinkler system design services

LG Fire Sprinkler Service

5200 Transport Blvd.
Columbus, Georgia 31907
Tel: 706.561.6410
FAX: 706.561.6492
Contact: Steven Boyette

Liberty Mutual Property

2210 E. Bell Rd. Apt 128
Anaheim, CA 92806
Tel: 603.781.7308
FAX: 603.334.8027
Contact: Noah Withington

LKPB Engineers, Inc.

1935 West County Rd. B2
Suite 300
Saint Paul, Minnesota 55113
Tel: 651.633.1223
FAX: 651.633.1355
Website: www.lkpb.com
Contact: Karen Sampson, Marketing Manager
Services: Mechanical and electrical design consulting services, including fire protection/life safety systems.

Lockheed Martin Mission Service

6201 Balsam St.
Cocoa, Florida 32927
Tel: 321.853.9561
FAX: 321.730.2739
Contact: Kerry Hammers

Lockheed Martin/KAPL, Inc.

1804 Lookout Lane
Clifton Park, New York 12065
Tel: 585.395.6446
Contact: Richard Malek

Lockwood Engineering LLC

10419A SW Barbur Blvd.
Portland, Oregon 97219
Tel: 503.546.0628
FAX: 503.445.6388
Contact: Dee Lockwood

Lowes Companies, Inc.

1605 Curtis Bridge Rd.
REEC Dock, Mail Code ECN6-1
Wilkesboro, North Carolina 28697
Tel: 336.658.4359
FAX: 336.658.3257
Contact: Mark Eckard

M.Trummel & Associates

PO Box 10
Cabot, Arizona 72023
Tel: 501.605.0780
FAX: 501.605.8673
Contact: Kent Stewart, Max Trummel

M/E Engineering, P.C.

10 Airline Drive. Ste 201
Albany, New York, 12205
Tel: 518.533.2171
FAX: 518.533.2177
Contact: Beth Ann Bilger, Project Designer

Malek & Associates Consultants, Inc.

3560 S. Iowa Ave.
St. Francis, Wisconsin 53235
Tel: 414.483.0100
FAX: 414.483.1211
Contact: David Malek, President

Market Hardware, Inc.

7200 Wisconsin Ave/ Ste. 312
Bethesda, Maryland 20814
Tel: 301.358.4470
FAX: 301.476.4585
Contact: James Short

Maxwell Electric

1717 Leroy St.
Ferndale, Michigan 48220
Tel: 248.399.2162
FAX: 248.399.5683
Contact: James Maxwell

McNeil & Company-FireWatch Insurance Program

20 Church St.
Cortland, New York 13045
Tel: 800.474.3332
FAX: 717.646.8887
Website: www.mcneilandcompany.com
Contact: Shawn Yingling, Program Manager
Services: National Insurance Program for the total Fire Protection Industry. Risk Management and Loss Control Services provided to clients.

MDE, Inc.

700 South Industrial Way
Seattle, Washington 98108
Tel: 206.622.2007
FAX: 206.622.2248
Contact: Michael Fitz, P.E., VP

National Fire Sprinkler Association

Mechanical Designs, Ltd.

19 Erie Dr.
PO Box 2188
Natick, Massachusetts 01760
Tel: 508.653.5452
FAX: 508.655.1318
Contact: Maurice Pilette

M-Engineering

700 Brookside Blvd.
Westerville, Ohio 43081
Tel: 614.818.9070
FAX: 614.818.1931
Contact: Corey Thobe

MEP Design Group

508 S. Spring Ave.
Tyler, Texas 75702
Tel: 903.597.3444
FAX: 903.597.3430
Contact: Lowrie Floyd, Jr.

Merck & Company, Inc.

2 Merck Dr. WS2W-12
Whitehouse Station, New Jersey 08889
Tel: 908.423.4220
FAX: 908.735.1390
Contact: Dave Kerr

MFP Design, LLC

2508 E. Lodgepole Dr.
Gilbert, Arizona 85298
Tel: 480.505.9271
FAX: 480.430.6107
Contact: Travis Mack

MG Fire Design, Inc.

16688 Shurmer Road
Strongsville, Ohio 44136
Tel: 440.878.9621
FAX: 440.878.3939
Contact: Elizabeth Andjeskik, Office Manager
Services: Fire Protection design services. Commercial, industrial, residential, retrofit & limited area. NICET certified. Design exclusively with Auto SPRINK software. Managing partner of Pro Design Group.

Michael P. Perri, Architect

8 Jumel Pl.
Saratoga Springs, NY 12866
Tel: 518.526.9265
FAX: 518.587.0620
Contact: Michael Perri

Michael Walters Fire Protection Design, LLC

20180 St. Rt. 698
Jenera, Ohio 45841
Tel: 419.326.9621
FAX: 419.326.4621
Contact: Michael Walters

Midwest Sprinkler Design

29806 Jerald Dr.
Newburgh, Indiana 47630
Tel: 812.217.0646
FAX: 812.490.2462
Contact: Eric Tatum, Sr.

Morse Zehnter Associates

2240 Palm Beach Lakes Blvd. #300
West Palm Beach, Florida 33409
Tel: 541.484.9080
FAX: 541.484.6849
Contact: Henry Glass

Mortier Engineering

144 E. 14th Ave.
Eugene, Oregon 97401
Tel: 503.293.5451
FAX: 503.245.4144
Contact: Tamarra Martino

MVP Design, LLC

2508 E. Lodgepole Drive
Gilbert, Arizona 85298
Tel: 88.714.8625
FAX: 866.430.6107
Email: tmack@mfpcdesign.com
Contact: Travis Mack, Owner
Services: Fire sprinkler system design & layout, fabrication listing, permit, field & as built drawings, AutoSprink & HydraCAD.

N.W. Plumbing Concepts

11575 SW Pacific Highway #213
Tigard, Oregon 97223
Tel: 503.293.5451
FAX: 503.245.4144
Contact: William LeFave

NANA/Colt Engineering, LLC

999 E. Tudor Rd.
Anchorage, Alaska 99503
Tel: 907.375.2511
FAX: 907.375.2519

National Fire Control

2427 W. Lake Hazel Rd.
Meriden, Idaho 83642
Tel: 208.888.1721
FAX: 208.887.7709
Contact: Nick Anderson

National Sprinkler Design

6594 Monte Vista Dr.
Cincinnati, Ohio 45224
Tel: 513.542.2011
FAX: 513.542.2503
Contact: Dwayne Powell, Owner

National Training Center

4148 Mantle Ave
North Las Vegas, Nevada 89084
Tel: 702.648.8899
FAX: 702.648.8111
Website: www.nationaltrainingcenter.net
Contact: Bryan McLane, Vice President
Services: The very best in training, including NICET Certification for fire sprinkler and fire alarm systems.

Nebraska Public Power District

72676-648 A Ave.
Brownville, Nebraska 68321
Tel: 402.825.5081
FAX: 402.825.5102
Contact: Clifford Long

Nelson Architectural Engineers, Inc.

2740 Dallas Pkwy
Plano, Texas 75093
Tel: 469.429.9000
FAX: 469.326.5200
Contact: Nick Huser

Neptune Fire Protection Engineering

616 Davis St.
Neptune Beach, Florida 32266
Tel: 904.652.4200
FAX: 904.212.0868
Contact: Stephen Kowkabany

Norfire Design, Inc.

1011 2nd St. North
Ste 100
St. Cloud, Minnesota 56303
Tel: 320.656.1345
FAX: 320.656.5319
Contact: Ed Meijer

Norman B. Yelin Architect

1517 34th Ave.
Seattle, Washington 98122
Tel: 206.323.2707
FAX: 206.323.9156
Contact: Norman Yelin

Northstar Fire Design & Consulting Inc.

PO Box 27421
Prescott Valley, Arizona 86312
Tel: 928.772.6805
FAX: 928.772.6805
Contact: Brian Gustke, President
Services: Fire sprinkler system design, wet, dry, antifreeze, preaction, NFPA #13, 14, 13R, 13D, fire pumps, storage, etc.

Northwest Sprinkler Designs

PO Box 27421
Prescott Valley, Arizona 86312
Tel: 928.772.6805
FAX: 928.772.6805
Contact: Brian Gustke

Northwest Sprinkler Designs, LLC

18207 E. 10th Ave.
Spokane Valley, Washington 99016
Tel: 509.924.0520
FAX: 509.924.5348
Email: nwsd1@comcast.net
Contact: Rene Gordon, Owner
Services: Fire Sprinkler Design

NRG Consultants Inc.

PO Box 377
Jamison, Pennsylvania 18929
Tel: 215.491.1318
FAX: 215.491.3796
Contact: Richard Hallowell, President
Services: Design of fire sprinkler systems for commercial and industrial facilities. Forensic analysis of failed or faulty fire sprinkler systems.

O'Neal, Inc

304 Cherry Hill Rd.
Greenville, South Carolina 29607

P.W. Sinz & Associates

Jaen E-12 Vistamar Marina Este
Carolina, Puerto Rico 00093
Tel: 809.257.8429
FAX: 809.757.0280
Contact: Peter Sinz

Peace Health Facilities

1255 Hilyand St.
Eugene, Oregon 97401
Tel: 541.335.2539
FAX: 541.686.3991
Contact: Richard Foote

Perfection Fire Design, LLC

12616 Tomlinson Drive SE
Albuquerque, New Mexico 87123
Tel: 505.275.6807
FAX: 505.275.6807
Contact: Jeremy Towery

Performance Consultants, Inc.

31 Massaconnic Trail
Holland, Massachusetts 01521
Tel: 413.245.3716
FAX: 413.451.5876
Website: www.pci-fire.com
Contact: William Pucci, P.E., President
Services: Licensed fire protection engineers (MA/CT), sprinkler system design and analysis, hazards analysis, code consulting, expert witness/litigation support, training.

Performance Fire Design Service, LLC

540 Farm Distric Td.
Fernley, Nevada 89408
Tel: 775.575.6444
FAX: 775.575.4666
Contact: Ralph Menke

Peterson-Bernard

1550 Southern Blvd. #300
West Palm Beach, Florida 33046
Tel: 561.686.5005
FAX: 561.471.5603
Contact: Eric Peterson

Phiscon Enterprises, Inc.

213 S. Davis Ave.
Audubon, New Jersey 08106
Tel: 852.310.9088
FAX: 852.310.0487
Contact: Philip Sconyo, P.E., President

Poole Fire Protection

19910 W. 161st St.
Olathe, Kansas 66062
Tel: 913.747.2050
FAX: 913.829.8690
Contact: Jack Poole, P.E., President

PPL Generation

2 N. 9th St.
Allentown, Pennsylvania 18101
Tel: 610.774.6820
FAX: 610.774.4622
Contact: Rick Schartel

Precise Fire Designs

1409 Remsing St.
Hartland, Michigan 48353
Tel: 810.955.2408
Contact: Jason Buell

Princeton University/Office of Design & Construction

MacMillan Bldg.
Princeton, New Jersey 08512
Tel: 609.258.6706
FAX: 609.258.2298
Contact: Robert Allen

Pro Fire Systems LLC

181 High Street
Nutley, New Jersey 07110
Tel: 973.338.3800
FAX: 973.338.6499
Email: lennyg@profiresystems.com
Contact: Len Guancione, Principal
Services: Fire protection system engineering, design and consulting. Pipe systems, foam and alarm systems.

Professional Fire Protection Design, LLC

12 Colonial Rd.
Bolton, CT 06043
Tel: 860.617.1515
FAX: 860.812.2063
Contact: Ronald Roark
45669555
Protection Design & Consulting
8849B Complex Drive
San Diego, California 92123
Tel: 858.751.2930
FAX: 858.751.2933
Internet: www.protectiondesign.com
Contact: Terri S. Leyton, Vice President
Services: Fire protection system engineering, design and consulting services.

Protection Development, Inc.

401 Austin Hwy., Ste 218
San Antonio, Texas 78209
Tel: 210.828.7533
FAX: 210.828.7534
Contact: Peter Vallone

PSJ Engineering, Inc.

634 W. Main St.
Madison, Wisconsin 53703
Tel: 608.251.5820
FAX: 608.251.4774
Contact: Jeremiah Strese

PSRA

PO Box 591647
San Francisco, California 94159
Tel: 415.531.4408
FAX: 877.877.1469
Contact: Peter Sahlmel

Q.E.D. Sprinkler Design

2836 North Drake Unit 3F
Chicago, Illinois 60618
Tel: 773.704.2571
FAX: 866.308.1367
Contact: Damien Shannon

OFA, Inc.

PO Box 1889
Overton, Nevada 89040
Tel: 702.397.2801
FAX: 702.397.2804
Contact: William Pickett, F.P.E.

RA Kenz Company

275 Calvary Ln.
Naples, Idaho 83847
Tel: 208.267.9776
FAX: 208.267.6332
Contact: Robert Kenz, President



Rask Fire-Life Safety, LLC

203 West State Road 130
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Designing and Sizing Functioning Fire Pump and Riser Rooms

By Jeff Hugo

There is a saying in the contracting/design business and it goes like this, "It looked good on paper". That saying can and is applied probably most often in sizing of the fire pump and riser room. As a former building official and plans examiner, I can honestly say that during the review of a project most times a riser room or a pump room looked adequate in size compared to specifications of the products used. However, at final inspection time or even rough piping inspection, reality trumps ink every time. The end result is usually the room is too small because of changes in the design/construction documents unknown to the contractors. I've been witness to the cage match in the job trailer and hope to outline an outline for architects to consider during the design and construction phase.

General

Fire pump and fire sprinkler riser rooms require routine maintenance, repairs, and possible replacement, thus, adequate working clearances are needed. Typically one could assume that a 36" work space in front of the piece of equipment would be adequate, but the design sizes and layout of these rooms is limitless, and the designer should rely on the manufacturer to lay out specific guidelines for their equipment. This outline is intended to relieve the workforce responsible for maintaining such equipment, provide adequate room for fire fighters, and give designers some direction in this area.

The NFSA as an industry representative is constantly hearing this plea from its members throughout the country. Rooms designed or built too small, have no or little space to maneuver equipment and other unnecessary impairments to the flow of normal repair are the most common complaints. Such delays can cause more expense and in some cases personal injury, causing more expense to the building owner and contractor. Valves and backflow preventers can weigh several hundred pounds and could be several feet long, fire pump controller cabinets fall into the same category. Insight to the size, weight, layout, along with the manufacturer's recommended working space can aid the designer in accomplishing this task on paper prior to the construction of the room.

Another consideration is for equipment to fit through the doors along with an adequate path out of the structure so that interior walls aren't damaged and finishes do not need to be removed, and/or replaced. Relying on the building owner to repair a fire resistive wall is a gamble on the original design intent. Similar language for other trades equipment clearances can be found in the IMC, IPC, and the National Electrical Code.

The best advice I can give to architects (frequently during seminars) is to contact the potential fire sprinkler bidders or a commonly used fire sprinkler contractor/layout technician for advice. Not only on the size of these rooms, but also on the rest of the project. Architectural features

are desired components, but can lead in some cases to more coverage requirements leading to a more expensive sprinkler design. Consultation with a fire sprinkler contractor will lead to advice on such components in placement and location to minimize cost to the project.

Fire Pump Rooms

The IBC doesn't give us any guidance on sizing a fire pump room. The architect will have to rely on the manufacturer of the fire pump, jockey pump, and controllers for equipment sizes and then adhere to the requirements of NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection. A fire sprinkler contractor can assist in the design of the room to not only give them the room to work in, but to also efficiently layout the piping.

Requirements from NFPA 20 that architects need to consider are:

- The fire pump, driver, controller, water supply, and power supply shall be protected against possible interruption of service through damage caused by ex-

>> CONTINUED ON PAGE 74



Jeff is NFSA's
Manager of Codes

Jeff Hugo

plosion, fire, flood, earthquake, rodents, insects, windstorm, freezing, vandalism, and other adverse conditions.

- Indoor fire pumps in high-rise buildings shall be physically separated or protected by 2-hour fire-rated construction.
- Indoor fire pumps in non-high-rise buildings which are not sprinklered shall be physically separated by a minimum of 50 ft. or have a 2-hour fire resistive rating. Indoor fire pump in sprinklered rooms protecting a sprinklered building shall be separated by 50 ft or have a 1-hour fire resistive rating.
- Location and access to the fire pump room shall be pre-planned with the fire department.
- Rooms containing fire pumps shall be free from storage and penetrations not essential to the operation of the pump and related components.
- Fire pump units located outdoors shall be located at least 50 ft (15.3 m) away from any exposing building.
- Fire pump buildings or rooms enclosing diesel engine pump drivers and day tanks shall be protected with an automatic sprinkler system installed in accordance with NFPA 13.
- An approved or listed source of heat shall be provided for maintaining the temperature of a pump room or pump house, where required, above 40°F.
- Artificial light shall be provided in a pump room or pump house.
- Emergency lighting shall be provided in accordance with NFPA 101, and shall not be connected to the engine starting battery.
- Provision shall be made for ventilation of a pump room or pump house.
- Floors shall be pitched to adequately

drain escaping water away from critical equipment such as the pump, driver, controller, and shall be provided with a floor drain that will discharge to a frost-free location.

- Ample head room and access for removal of the pump shall be maintained.
- If a backflow preventer is installed in the suction piping, or if a horizontal change in direction occurs in the suction piping, a straight run of pipe the length of ten times the diameter of the pipe needs to be installed between the backflow preventer, tee or elbow and the fire pump suction flange. For example, a 1,000 gpm fire pump requires a minimum of an 8" suction pipe. If a backflow preventer or horizontal change in direction occurs in this suction pipe, there must be a straight run of pipe 80" long leading to the pump.
- A listed check valve or backflow preventer shall be installed in the pump discharge assembly.
- A listed indicating gate or butterfly valve shall be installed on the fire protection system side of the pump discharge check valve.
- Transfer of power to the fire pump controller between the normal supply and one alternate supply shall take place within the pump room.
- In zones where freezing temperatures (32°F) could be encountered, the fuel tanks shall be located in the pump room.

Fire Sprinkler Riser Rooms

Again, the IBC doesn't give us any guidance on sizing the riser room. The architect will have to rely on the manufacturer of the piping, valves, backflow

preventers, air compressors and the like for equipment sizes and then adhere to the requirements of NFPA 13, Standard for the Installation of Sprinkler Systems. A fire sprinkler contractor can assist in the design of the room to not only give them the room to work in, but to also efficiently layout the piping.

Requirements from NFPA 13 that architects need to consider are:

- The dry pipe valve and supply pipe shall be protected against freezing and mechanical injury.
- Rooms shall be lighted and permanently heated (for dry systems)
- Heat tape shall not be used in lieu of heated valve enclosures to protect the dry pipe valve and supply pipe against freezing.
- Piping, valve, backflow preventer arrangement.

NFPA 13 doesn't give the architect a lot of direction in the design of the room, but the architect must consider the size and weight of the equipment for the annual maintenance requirements of NFPA 25. Valves and backflow preventers need to be maintained, and if damaged, need to be replaced at times. Consider ample working room around such components due to the size and weight of these items. A 6" dry valve can weigh around 250 pounds, an 8" backflow preventer can vary in weight from 400 - 800 pounds. Removal of such components may need a mechanical lift and at least two workers. Other items to consider are the doorways and the pathway to the outdoors. Rooms should have doors large enough to remove the largest piece of equipment. Since the removal of such items are years past the completion of the project, the equipment may be dirty, oily, and have stagnant water, residue, and/or scale dripping off while transporting. It would be wise to have a non-absorbent floor covering on the path to the outdoors.

The fire sprinkler industry realizes that perhaps every trade begs the architect for more room, and is put in the middle. However, this article should serve to enlighten our designer friends and give guidance on the needs of this industry.①

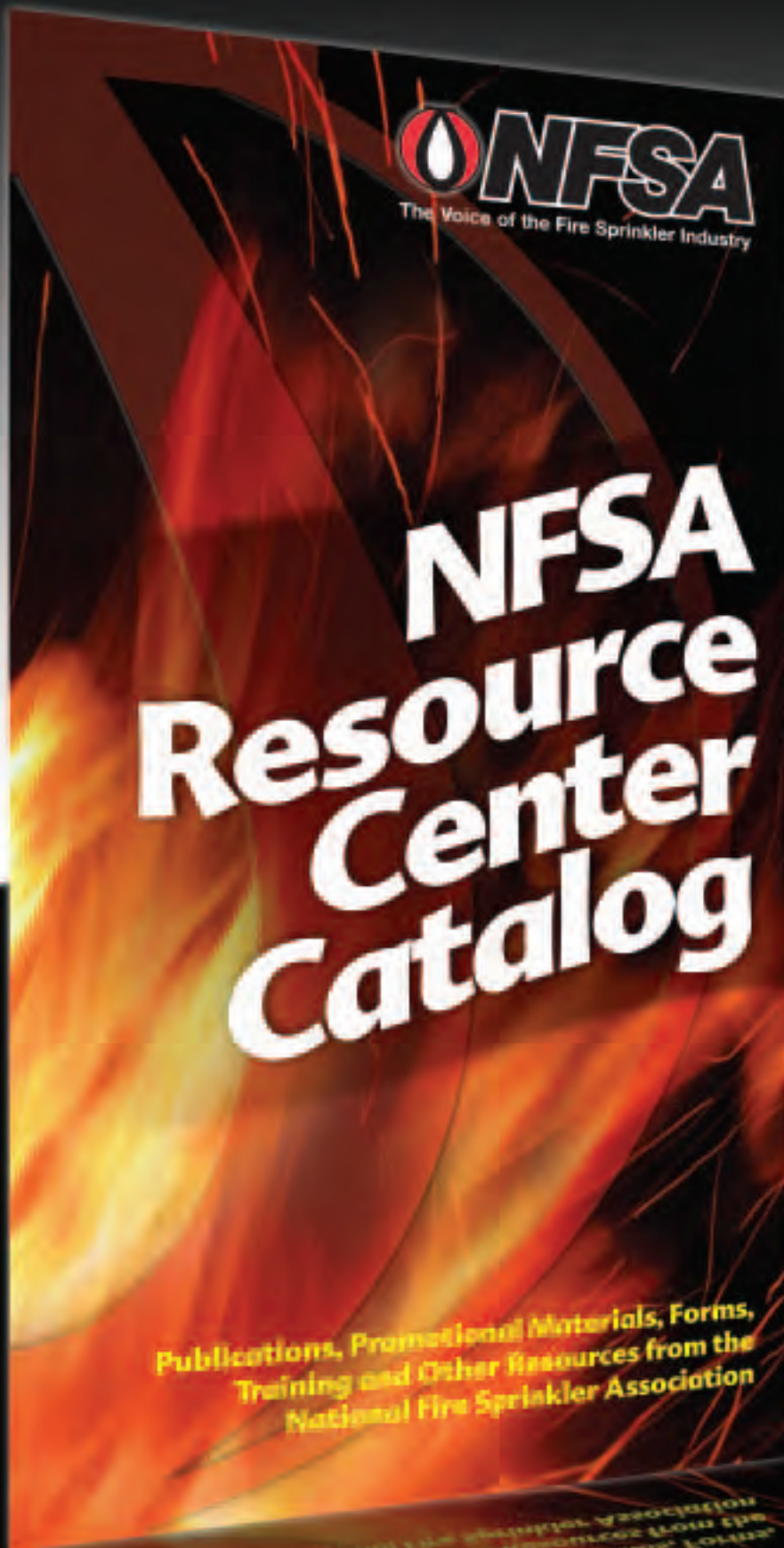


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Evaluating Protective Bags for Sprinklers

Small bags have been used for decades for the protection of sprinklers from paint overspray, either on a temporary basis during ceiling painting or on a more permanent basis as in paint spray booths, where they must be regularly replaced when loaded. There is general acknowledgement within the fire protection community that while the use of these bags can be expected to delay sprinkler activation, replacing the bags is far more practical than replacing painted sprinklers.

The use of the protective bags is mentioned in both NFPA 13 - Installation of Sprinkler Systems and NFPA 25 - Inspection, Testing and Maintenance of Water-Based Fire Protection Systems. A peculiarity was noticed, however, in the sense that the requirement is not the same for the two standards. The 2005 edition of NFPA 25 calls for "plastic" or "small paper" bags¹:

5.4.1.7.1 Sprinklers subject to overspray accumulation shall be protected using plastic bags having a maximum thickness of 0.003 in. (0.076 mm) or shall be protected with small paper bags.

In contrast, the 2007 edition of NFPA 13 specifies the use of "cellophane" or "thin paper" bags²:

6.2.6.4.2 Where protected in accordance with 6.2.6.4.1, cellophane bags having a thickness of 0.003 in. (0.076 mm) or less or thin paper bags shall be used.

NFPA 13 also contains this same specification in language that appears in Section 21.4.2.2 and which is taken from NFPA 33 - *Standard for Spray Application Using Flammable or Combustible Materials*, which may be the original source of the requirement.³

When NFPA 13 went into a standards change cycle leading to the 2010 edition of the standard, NFSA staff proposed a change to eliminate the conflict by aligning NFPA 13 with NFPA 25, calling for the use of plastic or paper bags, in recognition of the widespread availability of common polyethylene sandwich bags. In fact, because most sandwich bags on the market have a thickness of 1 mil or less, the proposal included an added call for thinner bags. The suggested language was this⁴:

6.2.6.4.2 Where protected in accordance with 6.2.6.4.1, plastic bags having a thickness of 0.002 in. (0.051 mm) or less or small paper bags shall be used.

This proposal was accepted unanimously by the NFPA Committee on Sprinkler System Installation Criteria without major discussion and without committee comment. The obvious problem with this lack of debate is that while the change resolved the conflict, it did not ensure that the conflict was being resolved in the proper direction. In other words, why should NFPA 13 conform to NFPA 25 rather than vice versa?

We decided to conduct some basic

research into the matter using a simple sprinkler plunge test apparatus (Figure 1), provided by JOB GmbH. The test apparatus is configured to approximate the temperature (275°F or 135°C) and velocity (8.3 ft/s or 2.5 m/s) specified for testing the sensitivity of ordinary and intermediate temperature sprinklers in accordance with UL 199 and ISO 6182/1. The tests involved the creation of geometrically similar "bags" using 150 mm x 150 mm sections of sample materials (Table 1). All tests were conducted using ordinary temperature (155°F or 68°C) bulb sprinklers, but three different sensitivities of sprinkler were used, represented by 3 mm, 5 mm, and 8 mm bulbs, with respective sensitivities (RTIs) of 36, 105 and 200 m^{1/2}s^{1/2} or 65, 190 and 360 ft^{1/2}s^{1/2}. Three tests were conducted for each variation of bag and sprinkler.

As expected, the tests showed that all protective coverings reduce the sensitivity of sprinklers (Figures 2 and 3). Another observation was that sensitivity is reduced with added thickness of the covering material, and that the thickness

>>CONTINUED ON PAGE 78



NFSA's Executive Vice President and represents the Association on both the NFPA 13 Technical Corrologating Committee and the NFPA 25 Committee

Russell P. Fleming, P.E.

Bag	Type	Advertised Thickness	Measured Thickness
A	Plastic	0.5 mil (12.7 μm)	1 mil (25.4 μm)
B	Plastic	2.5 mil (63.5 μm)	2.5 mil (63.5 μm)
C	Plastic - sand. Bag		0.8 mil (20.3 μm)
D	Plastic	0.9 mil (22.8 μm)	1.5 mil (38.1 μm)
E	Plastic	1.1 mil (28 μm)	1.5 mil (38.1 μm)
F	Paper - brown bag		1.5 mil (38.9 μm)
G	Plastic	0.4 mil (10.1 μm)	0.6 mil (15.2 μm)
H	Cello (polypropylene)		1 mil (25.4 μm)
I	Cello (polypropylene)		1 mil (25.4 μm)
J	Cellophane		1 mil (25.4 μm)

Table 1 - Bags Types Used in Testing

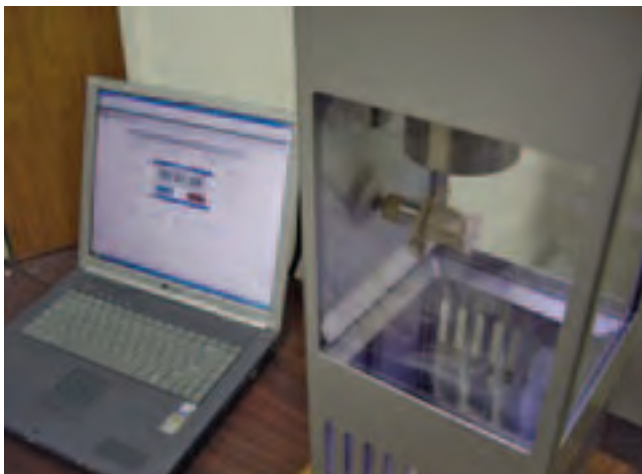


Figure 1 - Plunge Test Apparatus

has a more significant effect on response than the type of material, i.e. paper vs. plastic (Figures 4 and 5).

At the same time the NFSA was proceeding with the tests, we also undertook a literature search on the subject, which found that the Swedish fire test organization SP had conducted a similar test program in 1993, consisting of both plunge tests and full-scale room fire tests.⁵ The tests looked at the relative performance of plastic (polyethylene) and paper bags and found that the use of such bags increased the response time by up to a factor of five.

The NFSA tests therefore confirmed the findings of the SP tests. However, there was an important unexpected find-

ing related to NFSA's intent to include cellophane bags in the test program, namely that it was difficult to locate a source for cellophane bags. Although polyethylene plastic bags are commonplace, bags marketed as "cello" bags in novelty stores were found to be actually made of polypropylene. Within the packaging industry, polypropylene has largely replaced cellophane due to the fact that it retains its clarity with age, while cellophane tends to yellow. While cellophane is still used today for some food items, sales have dwindled since the 1960's.

As a bit of history, cellophane was originally invented in 1908 by Jacques Brandenberger, a Swiss textiles engineer. By comparison, polyethylene was discov-

ered in 1933 and polypropylene in the early 1950s. The first widespread use of cellophane was in 1912, when Whitman's Candy in the U.S. began importing cellophane from France for their "Whitman's Sampler". In 1924 DuPont built the first U.S. cellophane plant.

The big difference between polypropylene and cellophane is that polypropylene is a plastic, while cellophane is made of regenerated cellulose. That difference affects its behavior when heated, as shown in Table 2, taken from a study of materials used for archival storage of documents. Of special significance is the information relative to shrinkage. In the plunge tests, it was noted that the polyethylene bags

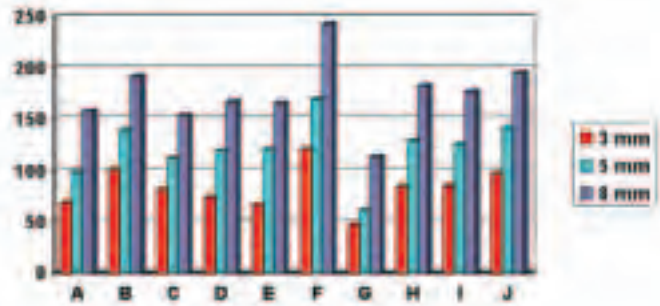


Figure 2 - Average Response (sec) for Sprinkler Operation with Different Coverings

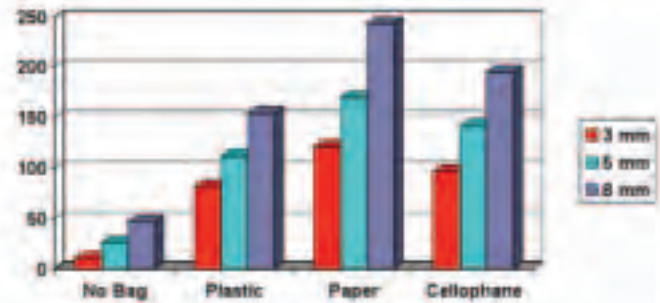


Figure 3 - Average Response (sec) for No Bag vs. Plastic Sandwich Bag (C) vs. Paper Lunch Bag (F) vs. Cellophane Bag (J)

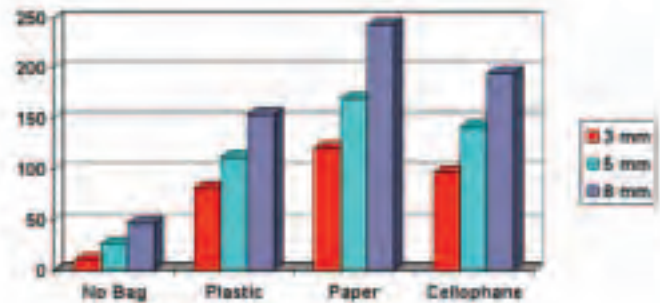


Figure 3 - Average Response (sec) for No Bag vs. Plastic Sandwich Bag (C) vs. Paper Lunch Bag (F) vs. Cellophane Bag (J)

Material	Heat Test	Burn Test
Cellophane	Does not distort due to heat equalization, will become brittle and shrink slightly due to moisture loss	Does not melt, drip, or form beads; burns same as paper; continues to burn when withdrawn from flame
Oriented Polyester	Deorientation and severe shrinkage takes place past heat set point (approx. 300-350° F)	Melts, burns slowly, heading back without dripping, leaves an ash residue
Oriented Polypropylene	Deorientation and severe shrinkage takes place past heat set point (approx. 280-300° F)	Melts, burns slowly, heading back without dripping
Polyethylene	100% approximate shrinkage	Fairly rapid; melts and drips like wax
Polyvinylidene Chloride (Saran)	Deorientation and severe shrinkage takes place past heat set point	Extinguishes itself when removed from flame

Table 2 - Shrinkage Characteristics of Packaging Films (from Iaylor)



Figure 6 - Some plastic bags that exhibited shrinkage were found to obstruct sprinkler spray patterns

exhibited considerable shrinkage around the sprinklers. In follow-up flow tests, this shrinkage was shown to be capable of significantly altering the water distribution from the sprinklers, frequently skewing the spray pattern into errant jets (Figure 6). While it was initially believed that this was only a problem with polyethylene and not the “cello” polypropylene bags (see Figure 7), it was recognized that this was only a function of the plunge test temperature of 135°C (275°F). As shown in Table 3, the melting point of polyethylene is 120°C (248°F), while the melting point of polypropylene is 165°C (320°F). Since it is possible that sprinklers could be exposed to the higher temperature prior to activation in an actual fire, the concern for shrinkage

must be extended to polypropylene bags as well as polyethylene bags.

This points out the wisdom of the original NFPA 13 wording. Neither paper nor cellophane has a melting point, and neither exhibits the shrinkage characteristics prior to thermal degradation. As shown in Figure 8, the application of a direct flame to a polyethylene or polypropylene bag results in shrinkage away from the flame, but the application of a flame to a cellophane bag burns the bag as it would a paper bag, as seen in Figure 9.

Why didn't the prior Swedish testing observe shrinkage? It did, with the following observation: “Another problem was that the plastic bags wrinkled around the sprinkler frame and influenced the spray

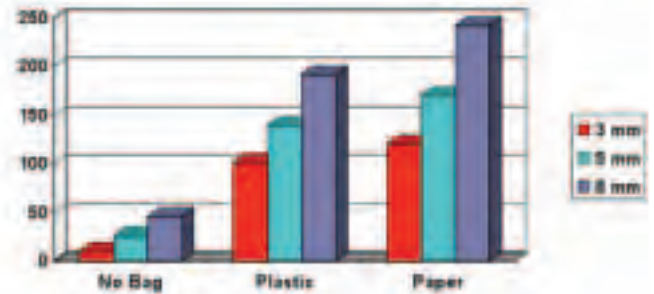


Figure 4 - Average Response (sec) for 2.5 mil Plastic Bag (B) vs. 3.5 mil Paper Bag (F)

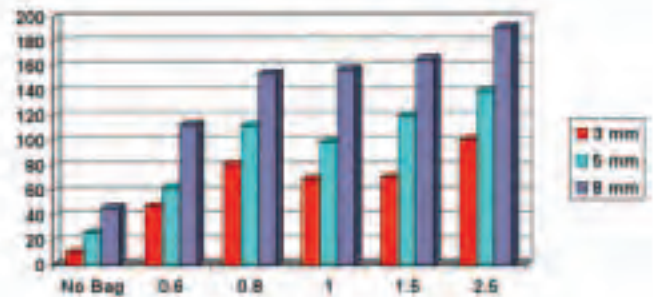


Figure 5 - Average Response (sec) for Plastic (polyethylene) Bags of Various Thicknesses (G, C, A, D/E, and B) in mils

pattern when the sprinkler operated”. This was not further pursued as a possible negative, perhaps on the expectation that the plastic bag remnants would burn off during an actual fire. Once the sprinkler has activated and water provides continual cooling, however, it can be expected that only the mechanical action of the water spray has the potential to remove the remnants of the plastic bag. But the water discharge sometimes finds a path through the shrunken bag, and there is no guarantee that the discharge will be in the intended spray pattern.

Since NFPA 13 does not currently permit the use of plastic bags, the results of the tests point to no actual change

Material	Melting Point	Density
PVC	80°C (176°F)	1.3 g/cm ³
Polyethylene (LDPE)	120°C (248°F)	0.9 g/cm ³
Polypropylene i.e. "Cello"	165°C (320°F)	0.9 g/cm ³
Cellophane	Degrades before melting	1.4 g/cm ³

Table 3 - Approximate Properties of Plastics and Cellophane



Figure 8 - Plastic bags can shrink onto sprinkler frame rather than burn away when exposed to heat and flame



Figure 7 - Relative shrinkage at 275oF (135oC) of Plastic (polyethylene) bag at left and "Cello" (polypropylene) bag at right



Figure 9 - Unlike plastics bags, true cellophane bags burn away without shrinkage

needed in the standard. As a result, the NFSA submitted a comment to NFPA 13 to reverse its course, and a proposal to NFPA 25 to adopt the NFPA 13/NFPA 33 language. This proposal has been tentatively accepted for incorporation in the 2011 edition of NFPA 25.

Only paper bags should be used as protective coverings for sprinklers unless a source of true cellophane bags can be found. In this regard there is good news on the horizon. For environmental reasons, cellophane packaging is beginning to make a comeback. There are once again sources for cellophane bags, like Pak-Sel, Inc. (www.pak-sel.com). The companies now promoting and selling cellophane

are aware that they are providing an environmentally-friendly option for packagers, but probably don't realize that they are also improving the options for the fire protection community.

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Author's Note: Assistance from Job GmbH, Hoffman & Feige, and Technician Margaret Fleming is gratefully acknowledged.

25 Years and Counting...

The year was 1984. Do you know what took place in that year? Let's take a stroll down memory lane...

- Average income per year \$21,600
- One gallon of gas \$1.10
- Yearly inflation rate USA 4.3%
- Year end close Dow Jones industrial average 1211
- The cost of first class postage 20 cents

A few popular movies of the time were: Gremlins, Indiana Jones and the Temple of Doom, and Beverly Hills Cop.

In sports, the Los Angeles Raiders defeated the Washington Redskins 38-9 in Super Bowl XVIII. The Detroit Tigers defeated the San Diego Padres to win the World Series in five games.

Some headlines for that year were that more than 70 U.S. banks failed. Subway vigilante Bernhard Goetz shot four youths on a Manhattan subway. "Where's the Beef?" was the world's biggest question.

And... in 1984, John A. Viniello became National Fire Sprinkler Association's President.

In 1973, John Viniello resigned his position as Dean of Admissions at Fordham University's Lincoln Center Campus Graduate School of Business and Education in New York City to take a position at the National Fire Sprinkler Association. He had earned a Bachelor of Science degree in Economics and a Master's Degree in Guidance and Counseling, at Fordham prior to becoming a school teacher.

At the NFSA, he held various positions from 1973 to 1980. He began as Assistant Director of Engineering and Standards, served as a Regional Manager for the Northeast Region (back then it was called Regional Executive Coordinator) and became the Vice President of Field Opera-

tions. He left NFSA in 1981 to accept a high level position with Grinnell Fire Protection Systems Company's Residential Sprinkler Department. At its February 1984 Board of Directors meeting in Boca Raton, Florida, the NFSA Board elected John as NFSA's President.

John has written many articles in support of the fire sprinkler industry, most notably his regular column "From the President's Desk" published in NFSA's SQ magazine. His "State of the Industry" addresses are a consistent highlight of NFSA Annual Seminars.

One of the early leaders in the Congressional Fire Services Institute (CFSI,) in October 1990, John was invited to an historic and important event that took place at the White House. He was among several fire protection industry representatives attending a special ceremony at which President George H.W. Bush proclaimed the official observance of National Fire Protection Week.

In the Spring of 1991, President Viniello, together with then NFSA Chairman of the Board Kevin Fee, received the Congressional Fire Services Institute's Partnership Award on behalf of the Association. This prestigious award is given to the organization or corporation that has contributed significantly to the American fire service and the CSFI.

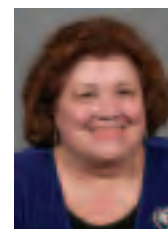
In 1991, John was the driving force behind the NFSA spokesperson initiative, utilizing the services of entertainer Shirley Jones, former Notre Dame head basketball coach Richard "Digger" Phelps, and renowned golfer Arnold Palmer, in the "Look Up For Safety" campaign. The campaign was designed to promote the unique lifesaving benefits of fire sprin-

klers. He participated in a fire sprinkler demonstration in a ten-minute segment on the NBC Today Show, where he gave his famous "thumbs up" report to Bryant Gumble.

In 1999, he played a key role in bringing together manufacturers from North America and Europe to form the International Fire Sprinkler Association. Today, John continues to serve that organization as its Managing Director.

In 2005, John received the coveted NFSA Golden Sprinkler Award during the opening ceremony at the Association's 100th Anniversary Celebration & Exhibition in New York City. This award is given annually to acknowledge a person who has worked towards the betterment of the fire sprinkler industry and to give recognition to this person for their efforts within the sprinkler industry.

His responsibility as President has been a very challenging and rewarding one. On a daily basis, he is responsible for planning, coordination and development of all NFSA activities. As President, he manages and directs all NFSA business and affairs. He continues to work to fulfill the mission of the Association: *"To protect lives and property from fire through the widespread acceptance of the fire sprinkler concept"*.



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The Opinions Expressed Here Are Not Necessarily...

By Barry Waterman

As everybody predicted, members of the homebuilding industry have been a bunch of busy little beavers since the International Code Council voted to include fire sprinklers for one- and two-family dwellings in the 2009 edition of the International Residential Code. They aren't building a lot of homes right now, so they have time and energy to express outrage, sputter, appeal outcomes, call legislators, propose ordinances and generally fortify their front in the war.

And let's not kid ourselves. This is war. In the seven years that I have been blathering in print in SQ, I have had exactly one word edited from what I submitted—about 30 articles.

I don't think this is because my articles are written at such a lofty level. I think it is because those who asked me to opine wanted a different kind of article from the technically informative and lucid material that fills most of the pages. They have left me alone to speak my piece, and I have greatly appreciated that. This time, I'm probably going to get bleeped a bit, so I apologize in advance for the unexplained blank spaces.

You see, I don't like homebuilders, and I need to get a few things off my chest. My grandmother used to read me a great children's book called "Sophocles the Hyena." The hero, when attending his first day of animal school told the class, "I'm a mean, lazy, stupid, low-down, ornery, good-for-nothing hyena. My mother told me so." My grandma and I always laughed at this.

Substitute "homebuilder" for "hyena," and you pretty much get the essence of

my view of the homebuilder. And in my experience, they are all the same. I have never met one I liked. I have never met one I respected. I can just barely stand to be in the same room with one for long. They are invariably overbearing, loud-mouthed bullies that are just insufferable and god-awful. My mother told me so.

Members of the Illinois Fire Service have told me so, too. This is why I feel I can speak with some authority. Since we started helping village fire officials go for 13D sprinkler mandates about ten years ago, I have heard my share of anecdotes about mean, underhanded tactics, shall we say "disingenuousness," and other forms of contemptible behavior by homebuilders and their representatives. And then they brag about it, so I'm not too worried that some homebuilder will get a hold of this piece and get his (big, bulbous, pimply) nose out of joint.

Seriously, in their publications they brag about how big their lobbying efforts are, how much influence they peddle and how good they are at pushing people around. It just makes you retch, but that is how they are and they apparently enjoy that image. Fire Service guys are a classy group, and they keep their public utterings pretty reserved. But I have no such restraints and not too many people have ever referred to me as classy.

Homebuilders believe that they - and only they - know what should be included in a home. The list is long of safety items they have opposed from smoke detectors to ground fault interrupter outlets to stairway dimensions to fire sprinklers, to itemize a part of the list. Then when they

lose the fight, and, over time homes become safer, they brag about greater home safety like it was their idea. No, pal. Homes are safer in spite of you, not because of you.

And to me the big irony is that the first thing a homebuilder does when a home is completed is leave. The homeowner moves in all of his belongings and occupies the home. The local fire department is stationed in the community with the responsibility to respond to any and all emergencies.

The local taxpayers stay behind too, to pay for fire stations, firefighting equipment, firefighter pay, insurance, pensions and any and all other expenses not provided by the long-gone homebuilder. Homebuilders have a lot of nerve moaning about costs.

Another group that makes me crazy is realtors. They routinely buddy up with homebuilders to testify against sprinkler legislation. "Too costly. This will ruin the market. The expense can't be justified." Well let me ask you this. Can anybody name a more unjustified expense than a real estate commission?

Realtors suck from four to seven per-

>>CONTINUED ON PAGE 84



Barry Waterman

Independent consultant
to the Northern Illinois Fire
Sprinkler Advisory Board.

cent of the cost of a property right off the top every time it changes hands. Think about that for a second. Four to seven percent each time a property changes hands. This makes a one-time cost of two to three percent for a residential sprinkler system look like a freebie.

In my life I have sold three homes "by owner" and I'm still here to tell about it. I just completed a commercial real estate deal with a handshake. America: get rid of

real estate brokers, or at least make them bid for your business. And how about some flat fees? This percentage nonsense just increases their take as property appreciates. Ever notice how they get their cut right at closing from the bank?

Bank fees, title companies, real estate commissions—what a system. Why doesn't anybody (except me) rail against these costs? No... it's the sprinkler system that drives the cost of homeownership

out of the range of people. Give me a break! (There's one of those blank spaces I promised.)

Whew. I had to take a second there to wipe the froth off my mouth. The busy little homebuilders are getting gullible legislators to introduce anti-residential sprinkler legislation in states all over America. They claim to be practically broke, but they sure are spending a ton on lobbying their anti-sprinkler message. The Illinois version we got shot down used the word "illegal." It would be "illegal" for anyone to introduce a 13D sprinkler ordinance in a village.

If you don't agree with me that we are at war, think about that. We are now - if the homebuilders have their way - trafficking in illegal products. Just like a drug dealer. That make you feel good? As my all-time favorite movie actor - Bugs Bunny - said once after a load of buckshot from the shotgun of Elmer Fudd whistled between his ears, "Yeeeahh. This means war!"

Come to think of it, old Elmer Fudd looked just like a homebuilder. ☹



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NFSA proudly presents "How to Become a Fire Sprinkler Technician" available for viewing at **www.YouTube.com**.

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NFSA Announces Gey as 2009 Golden Sprinkler Award Recipient

NFSA's Awards Committee has announced Wayne Gey as this year's Golden Sprinkler Award Recipient. Gey started Wayne Automatic Fire Sprinklers, Inc. in 1978 with two employees, lifelong friend Chuck Price and his 14 year old son, Clark. 31 years later, Wayne Automatic Sprinklers has grown to become a thriving, successful enterprise, largely because of Wayne's philosophy of doing every job the right way and always taking pride in one's work. Wayne built the company from within by rewarding employees for hard work though shared profits and earnings. His integrity and passion for the industry has never faltered. Gey is the immediate past chairman of NFSA's Board of Directors. He is a past-President of the Florida Fire Sprinkler Association, serving on the Board of Directors since 1978. His longtime support of both the NFSA and Florida Fire Sprinkler Association - a Chapter of NFSA is well documented.

Common Voices Advocacy Group Recipients of Senator Paul S. Sarbanes Fire Safety Leadership Award

The Congressional Fire Services Institute and the National Fallen Firefighters Foundation have selected Common Voices for the Senator Paul S. Sarbanes Fire Service Safety Leadership Award. Named after retired Senator Paul S. Sarbanes of Maryland, the award recognizes organizations for their outstanding contributions to firefighter health and safety. Sarbanes was a strong advocate of the nation's firefighter and rescue personnel during his 36-year career in Congress.

Common Voices, which was founded through support from the National Fire Sprinkler Association (NFSA), is committed to preventing death and injury from fire. Six women who have been sharing their stories of personal loss are the primary spokespeople for the organization and focus on the life-saving role fire

sprinklers play in preventing death. The group has visited Capitol Hill numerous times to meet with members of Congress and advocate the Fire Sprinkler Incentive Act. They testified during the International Code Council (ICC) hearings last September when home fire sprinkler systems were added to the International Residential Code. They also travel across the country speaking to the fire service and decision makers and testify at code hearings to move forward fire sprinkler initiatives.

For more information about Common Voices, visit www.FireAdvocates.org.

NFSA Manager of Codes Obtains CBCO Designation

NFSA is very pleased to announce that its Manager of Codes, Jeff Hugo, recently passed the International Code Council (ICC) building official exam, earning him the Certified Building Official or CBO designation. Having the CBO credential along with his other inspector and plan review certifications has qualified Jeff to become one of only a few Certified Building Code Officials (CBCO) across the country. Of the approximately 2,300 registered inspectors in the state of Michigan where Jeff resides, he will be only the eleventh to earn the CBCO designation. Such designations are highly regarded in the fire and building official communities and can be compared to a NICET Level III or IV certified sprinkler layout technician.

Jeff represents the fire sprinkler industry in the model building code arena and over the years with NFSA has enjoyed making significant improvements to the fire protection requirements in the ICC family of codes. He is a member of the ICC Existing Building Code Committee and represents NFSA on several NFPA technical committees.

Jeff works out of NFSA's Essexville, Michigan office and can be reached by email at hugo@nfsa.org or by phone at 845.519.5963. ☎

NFSA ADDRESS CHANGE

Due to changes at the local post office, NFSA is **discontinuing the use of the P.O. boxes for NFSA and IP mailings** (Box 1000 and Box 448). Mail will be delivered directly to NFSA at 40 Jon Barrett Road. As such, please discontinue the use of the P.O. boxes in all correspondence, payments, billings et al. sent to NFSA headquarters in New York. The post office will forward from the P.O. boxes for a while, but at some point in 2009 will stop honoring the forwarding instructions.

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2008 Sprinklerman™ Coloring Contest Winners Announced

After what was a long and difficult decision process, the winners have finally been selected for the 2008 Sprinklerman™ Coloring Contest. The contest picture was available in both GrassRoots and on the NFSA website.

The NFSA takes pride in announcing that almost 200 entries were received,

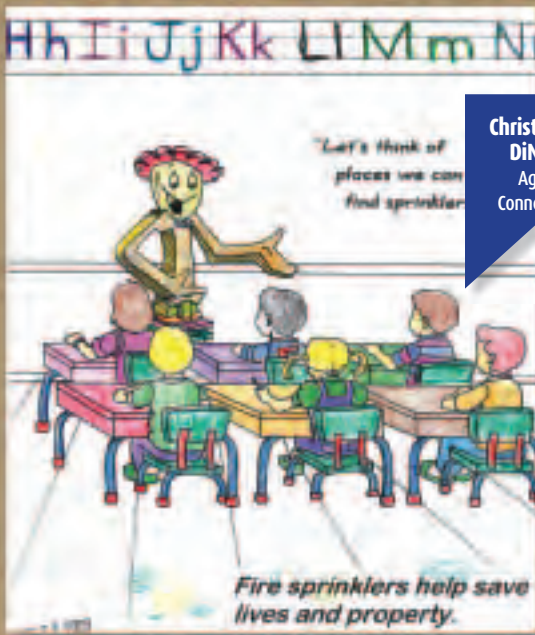
significantly more than the number of entries received in the last contest, held in 2007. It is very gratifying to see this great increase in participation and to know that more and more children are learning about fire sprinklers. The pictures were all exceptional and the time and care taking in completing them were evident in each and every one.

Entries were separated into four categories, based on age: 3-4, 5-7, 8-9 and

10-12. The winner of each category will receive a \$50 savings bond. Thanks go out to all who entered.

Congratulations to our 2008 Sprinklerman Coloring Contest Winners:

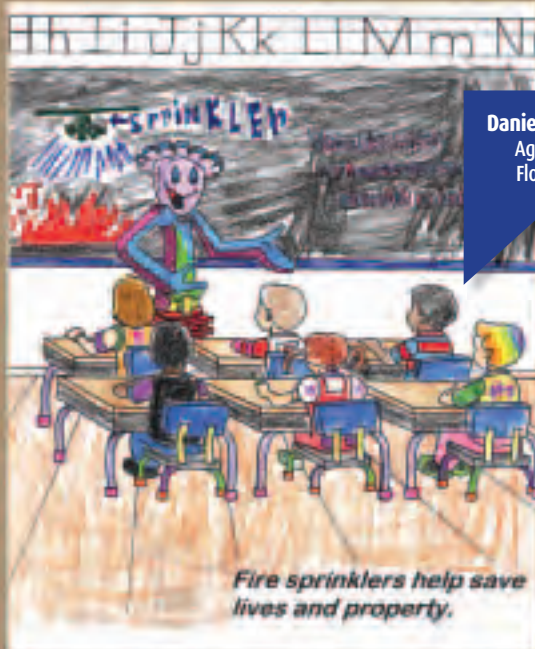
- **Christopher DiNoto**, Age 4, Connecticut
- **Renia Branch**, Age 7, Illinois
- **Kezia De La Cruz**, Age 8, New Hampshire
- **Daniel Raike**, Age 10, Florida



Christopher DiNoto
Age 4
Connecticut



Renia Branch
Age 7
Illinois



Daniel Raike
Age 10
Florida



Kezia De La Cruz
Age 8,
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NEW ENGLAND REGION

Tim Travers, Regional Manager



Sprinkler saves Canton Warehouse

Fire officials are investigating the cause of a two-alarm

fire that broke out at a large warehouse, owned by pharmaceutical company Otis Clapp in Canton, Massachusetts.

Only a small amount of damage was done, according to Lt. John Hutchinson, of the Canton Fire Department, but the fire presented unusual challenges to firefighters, due to the amount of smoke. The fire started at about 2:20 a.m., and it set off a sprinkler in the building, which controlled the fire and alerted the fire department. The company manufactures a variety of over-the-counter medications, and the area in which the fire started included a laboratory.

Sprinkler Contains Blaze in Cambridge Store

Firefighters responded to a call from a Whole Foods store in Cambridge, Massachusetts after a pile of wood stored in front of the store was set afire.

According to Deputy Fire Chief John Gelinias, they went to the market on Alewife Brook Parkway at 2:00 a.m. to extinguish a working fire that shattered two glass windows and damaged some of the store's food products. Some employees were inside the store at the time stocking shelves. There were no reported injuries. A sprinkler inside the store was able to contain the blaze, Gelinias said, but the front of the building suffered minor damage. After the store was inspected it was opened to the public.

Tim Travers is the NFSA Regional Manager for the New England region. He can be reached at travers@nfsa.org or 751 Washington Street, Whitman, MA 02382 Phone 845.661.5876 Fax 781.524.1026.

NEW YORK REGION

Dominick Kasmauskas, Regional Manager

The "Size Up" Honor Roll: NY State Association of Fire Chiefs Recognition

of New York's Fully Fire Sprinklered Fire Stations – Chautauqua Fire Department – Chautauqua County



Chautauqua Fire Department in western New York serves the greater Chautauqua Institution and surrounding community providing fire, rescue, and EMS services. The department's existing building was antiquated, and no longer adequate for the apparatus needed to protect the community. Hunt Engineers, Architects & Land Surveyors designed a 14,000 square foot addition to the existing building, which allows for expansion into a public safety complex. The existing village police department occupies a portion of the old building, which facilitates a coordinated emergency response system during summer tourist season. The fully (fire) sprinklered facility also includes a community room and adjoining spaces on one floor that are easily accessible from either the street or rear parking area. The addition complements the historic character of Chautauqua, while providing modern facilities to the fire department. - Reprinted with permission of NYS Association of Fire Chiefs, "Size Up" Magazine, & Naylor, LLC

Dominick Kasmauskas is the NFSA Regional Manager for the New York Region. He can be reached at Kasmauskas@nfsa.org or 1436 Altamont Ave. Suite 147 Rotterdam, New York 12303 Phone 914.414.3337, Fax 518.836.0210.

MID-ATLANTIC

Raymond W. Lonabaugh, Regional Manager



Sprinkler Save - Upper Darby, Drexelbrook Banquet Facility

On January 11th Upper Darby Township firefighters were dispatched to the historic Drexelbrook Banquet Facility in the Drexel Hill section of Upper Darby Township. The facility is very large, housing several banquet rooms. Some of the responding firefighters recalled the multiple alarm fire that was fought at the facility 30 years prior. This

time was very different. When firefighters arrived, they found smoke conditions throughout the building but also found the building's automatic fire sprinkler system had activated and contained the fire. Upon investigation it was determined that candles had caught window curtains on fire. As the fire progressed up through the curtains the heat activated the automatic fire sprinkler system. Firefighters credited the automatic fire sprinkler system with saving one of Drexel Hill's historic landmarks. Firefighters remained on the scene evacuating smoke in the large facility and assisting in the clean up. Once the clean up was completed the facility was back in business. A personal note: The Drexelbook hosts numerous weddings, banquets and meetings, including the Delaware County Firemen's Association Annual Awards Banquet. Any business interruption would have been disastrous for the facility. During fire sprinkler ordinance hearings, we often hear opponent's cries over the cost of sprinkler systems. With the exception of some insurance savings we never hear how a fire sprinkler system paid for itself. Knowing this facility, there is no doubt the fire sprinkler system paid for itself on this day.

Raymond W. Lonabaugh is the NFSA Regional Manager for the Mid Atlantic Region. He can be reached at: Lonabaugh@nfsa.org or P.O. Box 126, Ridley Park, Pennsylvania, 19078. Phone: (610) 521-4768.

SOUTHEAST REGION

Wayne Waggoner, Regional Manager



Habitat Homes Destroyed by Fire in Nashville, Tennessee

Four local families are left without a home this weekend after a massive early morning fire on Sunday. Crews arrived to find flames shooting 30 feet into the air in the Providence development built through Habitat for Humanity just three years ago.

Around 3:00 a.m. a fire started at one of the homes. Firefighters say strong winds

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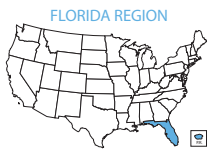
carried the fire to three other homes. The people inside the home where the fire started said their dog's barking woke them up. To escape, the family had to run out back and jump a six-foot fence to get to safety.

Most of the homes in this neighborhood are Habitat for Humanity homes. They were built nearly three years ago. Now all that's left of the American Dream is a few toys and ashes. Metro firefighters say two of the four homes were destroyed by the fire, while the others had only damage to the sides and roofs. Firefighters also say all the homes were insured.

Wayne Waggoner is the NFSA Regional Manager for the Southeast Region. He can be reached at: Waggoner@nfsa.org or PO Box 9, Andersonville, Tennessee 27705, Phone 865.755.2956, Fax 865.381.0597.

FLORIDA REGION

David Bowman, Regional Manager



Task Manager Program Benefits Florida

Several Regional Operations Task

Managers will be brought to Florida to present at our September 2009 Annual Conference, which will be held at PGA. A main feature of the conference will be a Residential Fire Sprinkler Summit. Presenters at the Summit will detail a wide variety of topics that will help contractors, AHJ's and other stakeholders prepare to successfully work through the ongoing rise in the residential market, due to the overwhelming support and passage of recent residential fire sprinkler initiatives from a variety of sources, including the ICC change which will move the requirement for residential sprinklers in one and two family residences as part of the 2009 International Residential Code.

Task Managers will cover a wide variety of topics, including: how local communities have moved through the code adoption process to successfully pass and implement residential requirements. Bob Kleinheinz, NFSA's Illinois Regional Manager will share information from his experience in the Chicagoland area, where more than

50 communities have implemented fire sprinkler ordinances. Dom Kasmauskas, New York Regional Manager will speak about water supply issues and the "Green Movement" in the fire sprinkler industry.

One of the newest members of the Regional Operations Staff is Ron Brown, who is the Regional Manager for the Great Lakes Region will share his experiences working through the legislative process. In his short time with NFSA, has established himself as a valuable resource on a number of legislative issues.

We will also present the latest updates on other related topics that affect the industry, including progress in solving CPVC issues. Top Myers, of Relmark, will present a CPVC update. While we are in the early stages of conference preparation, the NFSA Regional Operation's Task Managers will be utilized to assure that the PGA Conference will be a premiere source of information for assisting members and other stakeholders as we work through the residential fire sprinkler initiative.

David Bowman is the NFSA Regional Manager for the Florida Region. He can be reached at Bowman@nfsa.org or 6572 SE 173rd, Court Ocklawaha, Florida 32179 Phone 845.519.7648, Fax 661.455.3968.

GREAT LAKES

Ron Brown, Regional Manager



Fire Destroys Construction Project in Downtown Indianapolis

Half a city block was destroyed by fire on March 12, 2009 in Indianapolis, Indiana. More than 100 firefighters from the Indianapolis Fire Department responded to the three-alarm fire at the Cosmopolitan on the Canal, a group of luxury apartments under construction. The complex covers an entire city block.

Firefighters attacked the fire from several different directions to keep it from spreading. The fire broke out at around 3:20 a.m. and fourteen hours later, firefighters were still working to put it out.

Much of the complex is in ruins. Flames destroyed or heavily damaged the luxury

apartment and retail buildings still under construction. The fire was so massive that firefighters were on the defensive from the moment they arrived.

Unable to enter the burning buildings, crews surrounded the square block area with ladder trucks trying to drown the flames from a distance. Hours into the fight, firefighters still had their hands full trying to control the blaze.

The complex was two weeks away from having the sprinkler system activated. The condominiums were slated to be partially occupied in May. The buildings involved are likely to be a total loss.

Ron Brown is the NFSA Regional Manager for the Great Lakes Region. He can be reached at Brown@nfsa.org or 1615 Cypress Spring Drive, Fort Wayne, Indiana 46814, Phone 845.661.6534 Fax 260.625.4478.

ILLINOIS REGION

Bob Kleinheinz, Regional Manager



Back-Flow Legislation

Our lobbyists along with others are working with Rep.

Linda Chapalavia to come up with better ways to enforce cross-contamination and back-flow prevention. More details will follow on this committee in the months to come.

Dormitory Fire

The state requirements for sprinkler protection paid off on December 16th, 2008. A smoldering mattress in Parrott Hall on the Olivet Nazarene University campus activated both smoke detectors and the sprinkler system in the four story residence hall. Damage was estimated at \$10,000.

Bob Kleinheinz is the NFSA Regional Manager for Illinois. He can be reached at Kleinheinz@nfsa.org or 509 Dawes Street, Libertyville, Illinois 60048. Phone 914.671.1975.

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REGIONAL ROUNDUP

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NORTH CENTRAL

Dan Gengler, Regional Manager



Sprinkler System Limits Fire Damage at Madison Newspapers

Four fire sprinklers were all that was needed to extinguish an early morning fire at Madison Newspapers in Madison, Wisconsin. The automatic fire sprinkler system activated when a compressor caught fire in a mechanical room at this facility. Employees were evacuating the building when firefighters arrived on the scene. The first fire crew entered the building with a hoseline and found a mechanical room filled with smoke. They heard the sounds of equipment operating and water running in the room. Firefighters observed the smoke, noting that it was cool and not increasing in volume. This indicated that the fire was under control or extinguished.

Dan Gengler is the NFSA Regional Manager for the North Central Region. He can be reached at Gengler@nfsa.org or PO Box 280, Williams Bay, Wisconsin 53191. Phone 262.245.5255, Fax 262.245.5258.

SOUTH CENTRAL

Steven Randall, Regional Manager



Oklahoma Fire Sprinkler Contractors Association

The OFSCA January meeting was a busy one with many issues being addressed. Steve Randall will prepare a letter to the Oklahoma State Fire Marshal's office to address the length of time it takes for fire sprinkler plan review. Currently plans clear the building review in a matter of days and when fire review takes months.

Ron Edwards announced that the new Fire Marshal in Tulsa is David Dayringer and that he is a proponent of fire sprinklers. We wish Chief Dayringer the best in his new position. Ron Edwards, Gary Field and Tim McCoy were nominated to represent the association on the State Licensing Board. They will rotate with each

spending a year on the Board starting in March.

Four vacancies exist on the Association Board of Directors. Dale Garrett, Buddy Moore, Ron Edwards, Jim Younger and Tim McCoy were nominated to fill those positions. A fax ballot will be sent to the membership to elect four of the five.

Steven Randall is the NFSA Regional Manager for the South Central Region. He can be reached at: Randall@nfsa.org or 7165 Lazy Meadow Lane, Frisco, Texas 75034 Phone (972) 668-4022, Fax (972) 668-4077.

CENTRAL REGION

Chris Gaut, Regional Manager



Legislative Reports: Missouri

Bill HB25391 was not moved in the 2008 Legislator. We are waiting to see if it will be reintroduced for the 2009 session. There is another bill which was introduced in 2008 which would require any type of contractor to be licensed in the state of MO. The bill number is HB 2452 and can be viewed here Missouri: House Bill 2539.

Bill Location on web:

<http://www.house.mo.gov/billtracking>

Again we are waiting to see if this bill will be reintroduced in the 2009 session.

I am looking for known towns or cities which have any type of ordinance which requires fire sprinkler systems above the model code standards. I am specifically looking for any type ordinance and any square footage requirements that may be included. This information is needed to update our database. Please email me any information you may have on this. Thank you.

Chris Gaut is the NFSA Regional Manager for the Central Region. He can be reached at gaut@nfsa.org or 189 Eureka Town Center Dr. Suite 135, Eureka, Missouri 60325 Phone 845.803.6426, Fax 636.410.7700.

GREAT PLAINS

Terry Phillips, Regional Manager



New Executive Board for the Colorado Fire Protection Association

The Colorado Fire Protection Association recently held elections for Officers and Directors for the Association. The following were elected to the Officer and Director positions: President-Paul Klatt, Quality Fire Protection, Inc.; Vice President-Tim Trostel Jr., Associated Fire Sprinkler Systems, Inc.; Secretary/Treasurer Darren Mansur, Jenssen Pump and Equipment, Inc.; Directors-Joe Tortorici, Tyco Fire & Building Products, Terry L. Phillips, National Fire Sprinkler Association, Inc. and Supplier Advisory-Chuck Gallagher, Reliable Automatic Sprinkler Co., Inc.

Congratulations are in Order

Kris Kregel, Fire Marshal/Division Chief, Greater Brighton Fire Protection District has announced congratulations are in order to Dan Biro for passing the FPE exam he took last October. RJ Dussart, Fire Protection Consultant with JBAConsulting Engineers, 13952 Denver West Parkway #250, Lakewood, CO 80401, has recently passed the FPE exam also. WAY TO GO DAN AND RJ!

Terry Phillips is the NFSA Regional Manager for the Great Plains Region. He can be reached at: Phillips@nfsa.org or Phone 914.525.4396, Fax 307.514.0406.

SOUTHWEST

Doyle Sutton, Regional Manager



Sprinkler Save-Utah

Salt Lake City employees of Envirotech near 1000 West and North Temple were evacuated early in the morning when machinery caught on fire. The fire department was called at approximately 2:00 a.m. A spokesman for the fire department said the fire was started by a process that

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makes polymer moldings. The fire sprinklers in the building activated and put the flames out by the time fire crews arrived. There were no injuries, fire damage was minimal and employees were able to return to work.

Doyle Sutton is the NFSA Regional Manager for the Southwest Region. He can be reached at: Sutton@nfsa.org or Phone 303.854.8677, Fax 303.496.7501.

WEST REGION

Bruce Lecair, Regional Manager



Fire Sprinklers Douse Marijuana Garden Fire in Sacramento

Firefighters were called to an apartment complex off El Camino Avenue in Sacramento, California on December 5, 2008. A fire had started in Stefan Dorman's guest bedroom. Dorman soon realized there was a fire in his indoor pot growing operation. He said an electric cord to grow lights melted and caught the carpet on fire. The flames spread to a cardboard box surrounding 20 small plants. Dorman has a doctor's permission

to use pot for pain.

Sacramento Metro Fire spokesman Christian Pebbles said Dorman won't get in trouble for the marijuana. But he is in trouble for plugging six lights and a power strip into an extension cord.

Fortunately, the apartment's sprinklers doused the fire before it grew.

Bruce Lecair is the NFSA Regional Manager for the West Region. He can be reached at: Lecair@nfsa.org or Phone: 951.277.3517, Fax: 951.277.3199.

PACIFIC NORTHWEST

Don Pamplin, Regional Manager



Washington State Forms Fire Sprinkler Coalition

Which state will be the first one to fully adopt the International Residential Code (IRC)? If the Fire Chiefs, Fire Marshals, State Fire Commissioners, State Council of Firefighters and the Volunteer Firefighters of Washington State are successful in doing what they plan to do, then Washington State could be the first state in the Union to accomplish that formidable task. And it is a

formidable task in Washington State as the homebuilders associations there, as in other states, are already strategically planning a variety of initiatives to derail any movement towards state adoption of the IRC.

The first meeting of the Coalition is was February 5, 2009 in Des Moines and had a very positive and detailed agenda. Along with regional representatives with the NFPA, the NFSA and Paul O'Connor, Director of the Fire Sprinkler Advisory Board of Puget Sound are on board for this very interesting and challenging journey. Stay tuned for on-going developments and information that may help other states in the Pacific Northwest (and other US areas as well) do the same thing as what Washington State is attempting to do. NFPA has a brand new website to provide information to help all jurisdictions across the county in getting the IRC passed. The website is www.firesprinklerinitiative.org and the motivating theme of the movement is "Bring Safety Home".

Don Pamplin is the NFSA Regional Manager for the Pacific Northwest Region. He can be reached at Pamplin@nfsa.org or 1436 Harrison Avenue Blaine, Washington 98230 Phone 380.332.1948, Fax 380.422.1752.

Upcoming NFSA Seminars

Location:
McFarland Fire Department
5915 Milwaukee Street
McFarland, WI 53558

5/6/09 Sprinklers for Dwellings
5/7/09 CPVC
5/7/09 Foam
5/8/09 Inspection, Testing & Maintenance

Location:
Nebraska State Office Building
310 Centennial Mall South
Lincoln, NE 68508

5/12/09 CPVC Piping
5/12/09 Commissioning & Acceptance Testing
5/13/09 Inspection, Testing & Maintenance
5/14/09 NFPA 13 Update

Location:
Colorado Springs Fire Department,
3737 Airport Road, Colorado Springs,
CO 80910

5/19/09 Hydraulics
5/20/09 Inspection, Testing & Maintenance
5/21/09 Sprinklers for Dwellings

Location:
City Hall West -
Gordon Hoyt Training Room
201 South Anaheim Blvd.
Anaheim, CA 92805

5/26-27/09 NFPA 13 Overview
5/28/09 Plan Review Policies & Procedures

Location:
Branson Fire & Rescue Station #1
110 Crosby Street
Branson, MO 65616

6/2-3/09 NFPA 13 Overview
6/4/09 Inspection, Testing & Maintenance

Location:
Hillsboro Building Department
150 E. Main Street, Hillsboro
OR 97123

6/15/09 Introduction to Sprinkler Systems
6/16/09 General Storage
6/17/09 Hydraulics
6/18/09 Basic Seismic
6/18/09 Advanced Seismic

Location:
University at Albany
State University of NY
Empire Commons Community Bldg.
University Drive West
Albany, NY 1222

6/23/09 Residential Sprinklers:
Homes to High Rise
6/24/09 Introduction to Sprinkler Systems
6/24/09 Commissioning & Acceptance Testing
6/25/09 Sprinkler Protection for Special Storage

Location:
New Lenox Fire Department
261 E. Maple
New Lenox, IL 60451

7/7/09 Hydraulics
7/8-9/09 NFPA 13 Overview

Location:
Apple Valley Fire Protection
19235 Yucca Loma Road
Apple Valley, CA 92307

7/28/09 Commissioning and Acceptance
7/28/09 CPVC
7/29/09 Inspection, Testing & Maintenance
7/30/09 Storage Protection for Rack Storage

Location:
Brighton Area Fire Department
1580 South Old US 23
Brighton, MI 48114

8/19-20/09 NFPA 13 Overview
8/21/09 Dwellings

SimplexGrinnell Earns CustomerSat Achievement in Customer Service Excellence (ACE) Award from Markettools, Inc.

SimplexGrinnell has been selected by MarketTools, Inc. to receive a 2008 CustomerSat Achievement in Customer Excellence (ACE)[™] Award in recognition of outstanding achievement in customer satisfaction.

Since 2005, the annual ACE Awards have recognized companies that demonstrate rigorous application of customer feedback processes and outstanding performance, resulting in exceptional customer satisfaction. ACE Awards validate an organization's success and effectiveness in serving customers and building loyalty.

Over the past several years, customer satisfaction surveys have become an integral component of the SimplexGrinnell business. In 2008, CustomerSat, a MarketTools company, conducted more than 10,000 surveys of SimplexGrinnell customers. SimplexGrinnell achieved an overall customer satisfaction mean score of 8.7 out of a possible 10 points, well above the qualifying score of 8.2. Additionally, SimplexGrinnell's top-box customer satisfaction percentage achievement of 84.5% was well above the qualifying score to qualify for an ACE award.

For additional information or to locate the nearest SimplexGrinnell district office, visit www.simplexgrinnell.com.

Building Security Remains at Top of Americans' List

A nationwide survey conducted by Bethesda, MD-based Society for Fire Protection Engineers (SFPE) reveals that building security topped a list of characteristics as Americans' most important feature in public buildings. The list included comfort, fire safety, environmental friendliness and other amenities.

The results of this survey revealed 28 percent of Americans feel security is the most important feature, while 12 percent of respondents indicated that fire safety is the most important aspect of a building's design. Americans also ranked comfort

In Memoriam

It is with great sadness that Potter Electric Signal Company, LLC announces that Robinson 'Robbie' P. Murray, Age 61, passed away on Thursday, February 5, 2009 at Columbia Presbyterian Hospital in New York. Robbie was hired by Potter in May 2008 as Global Product Training Manager for the Fire and Security Division. Prior to Potter, Robbie held several key roles within the industry over the last 25 years. These roles included 10 years as ADT Security System's Manager of Fire Design and 11 years as Cooper Wheelock's Director of Global Business Marketing. Robbie is remembered by many as living life to the fullest and enjoying every moment with his family and friends. Robbie is survived by his devoted wife, Barbara Sue (nee-Sabatino) and his loving daughter, Ashleigh.

and amenities higher than fire safety.

The results are similar to SFPE's 2006 survey, in which the same question was asked.

The survey also revealed that when compared to natural disasters, 45 percent believe fire is the event that will most likely cause harm to them or their family. Included in this list were lighting strikes (18%), hurricanes (15%), earthquakes (12%) and floods (10%).

These findings support statistics that show people are more likely to be harmed by fire when compared to natural disasters. Although natural disasters such as hurricanes and earthquakes are covered widely in the national news media, many more people die each year as a result of fire.

Another noteworthy finding reveals that over 58 percent of those surveyed worry about the dangers of fire less than once a year. At the same time, wealthy Americans think about the risk of fire less frequently than those with lower incomes.

The survey commissioned by the Society for Fire Protection Engineers and conducted in February, 2009 by Synovate, polled more than one thousand American adults. The findings have a margin of error of plus (+) or minus (-) three percent.

More information about SFPE can be found at www.sfpe.org.

Academy of Fire Sprinkler Technology to open in August

Cecil Bilbo has founded the Academy of Fire Sprinkler Technology, and he will of-

fer degrees in conjunction with Parkland College. The academy is scheduled to open in August.

He's developed a curriculum based on what he has been teaching, and that curriculum has been approved by Parkland and the Illinois Community College Board, he said. It will cover building codes, standards for installation of sprinkler systems, building construction, computer-aided design systems to layout a blueprint, and hydraulic analysis.

Bilbo said the work is very specific and requires an understanding of how to deliver a certain amount of water over a certain area.

Students will also create sprinkler systems for a building, working on projects provided by sprinkler contractors throughout the country. Mark Karr, who owns a contracting business in Cleveland, will oversee the work-study portion of the academy and develop relationships with contractors who will send work to the academy students.

Students will also take a handful of classes at Parkland. They'll be able to earn a one-year certificate or a two-year associate degree. The degree is aimed at those who will design systems for buildings, not at those who will install, inspect or maintain the systems.

Bilbo said there is a demand for trained designers in the industry, and it is a good-paying career. He has received donations and pledges of support from contracting businesses and the National Fire Sprinkler Association.

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The academy will accept up to 40 people the first year, and Bilbo said he already has 12 ready to apply.

Lubrizol Announces Completion of Testing to Identify First Proven CPVC-Compatible Antimicrobial Steel Pipe Coatings

The Lubrizol Corporation has completed compatibility testing on the first two antimicrobial products that have applied for inclusion in the company's FGG/BM/CZ™ System Compatible Program. As a result, the company's compatibility program now includes two additional BlazeMaster®-compatible products to provide installers with a manufacturer-applied antimicrobial solution, as well as an effective after-market product.

The new additions include Potter Pipe-Shield™ Corrosion Inhibitor from Potter Electric Signal Company and Wheatland Tube Company's MIC SHIELD™ Coating manufactured after February 22, 2009. Together, these products provide specifiers and contractors with a proven, CPVC chemically compatible option for a manufacturer-applied protective coating, as well as an aftermarket corrosion inhibitor.

Potter Pipe-Shield is a patent-pending, biostatic, environmentally friendly corrosion inhibitor specifically developed to protect wet, dry and pre-action fire sprinkler systems from Microbiologically Influenced Corrosion (MIC) and oxygen corrosion. Developed with the environment in mind, it is non-regulated, non-hazardous and completely biodegradable with a neutral pH. It does not contain biocides or pesticides commonly used to control or kill bacteria, and it is available in 5-, 15- and 55-gallon containers.

The MIC SHIELD coating is applied to the inner wall of the pipe at the manufacturing facility. This initial coating acts as a rinsing agent to clean the contact surface. After the initial application, MIC SHIELD Coating adheres to the pipe wall, serving as a protective coating that guards against contamination by impeding the attachment of microbes to the pipe wall. The integrity of this protection

and its benefits can be preserved through a combination of additional and routine treatment options as outlined in NFPA 13. MIC SHIELD is not available as an after-market product. Contractors can verify chemical compatibility by simply identifying the date stamped on the pipe.

The FGG/BM/CZ System Compatible Program is designed to test and monitor ancillary products on an ongoing basis

to ensure chemical compatibility with FlowGuard Gold®, BlazeMaster and Corzan® CPVC piping systems. In the case of antimicrobial-coated products, compatibility testing is only relevant to fire sprinkler systems.

All designated products qualify for the program by undergoing rigorous testing, which assures the product will not cause

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FlowGuard Gold, BlazeMaster or Corzan CPVC pipe and fittings to fail as a result of chemical incompatibility. Because CPVC products are made from base resins having different molecular weights and varying chlorine contents and compound additives, the FGG/BM/CZ System Compatible Program can only verify chemical compatibility with the products with which they have been tested.

Products in the program display the FGG/BM/CZ System Compatible mark on their labels or on accompanying literature. This mark quickly assures installers that the product is chemically compatible with FlowGuard Gold, BlazeMaster and Corzan CPVC products. Only manufacturers that have passed these specific chemical compatibility tests are able to place the FGG/BM/CZ compatible mark on their product labels. Product manufacturers agree not to change the formulation of the products accepted into the System Compatible Program without advance written notice and to submit the products to periodic testing to ensure they remain chemically compatible.

The FGG/BM/CZ System Compatible Program is the only known program of its kind in the building industry designed to increase user confidence and help eliminate the guesswork about which products are chemically compatible.

To learn about all the chemically compatible products in the program, call (888) 234-2436 or visit www.systemcompatible.com.

Potter Electric VSR Waterflow Alarm Switch

The Potter Electric VSR Waterflow Alarm Switch is the FIRST AND ONLY waterflow switch with separate low and high voltage wiring chambers to allow safer installation of different voltage applications. The retard and switch assembly is designed to allow for easy replacement while in the field, and the updated retard dial provides better accuracy while setting the switch.

The design of the VSR eliminates the possibility of any type of corrosion concerning dissimilar metals or MIC. Syn-

chronized snap action switches provide a visual indication of activation.

Additional information can be obtained by contacting Potter Electric by phone at 866-572-3005 or via e-mail at sales@pottersignal.com.

Potter Electric PS Series Pressure Switch

The PS Series Pressure Switch, from Potter Electric Signal Company, LLC, has been designed with separate wiring chambers and two 1/2" knockouts, allowing for dual high/low voltage functions or in/out wiring, creating the only NEC 760.55 code compliant pressure switch in the industry.

The PS Series is a compact device with a single captive tamper-proof screw, allowing for quick access and easy installation in tight spaces. The NEMA 4 solid metal enclosure has been designed with a rain-lip for protection against the elements. The PS Series pressure switch also comes equipped with a 1/2" male NPT fitting, factory installed neoprene gasket and maintains an industry leading 5-year warranty. The device has a pressure range of 4-15 psi and is 300 psi system pressure rated. The PS series is UL, ULC, CSFM, FM, LPC, NYMEA, and CE approved.

Additional information can be obtained by contacting Potter Electric Signal Company, LLC by phone at 866-572-3005, via email at sales@pottersignal.com or at www.pottersignal.com

Harvel Publishes New CPVC Fire Sprinkler Piping Installation Guide

Harvel Plastics, Inc., has published a new comprehensive 72-page CPVC Fire Sprinkler Piping Installation Guide to provide the fire sprinkler industry with its most comprehensive printed resource for technical data on installing CPVC fire sprinkler systems.

The guide includes complete instructions for handling and fabricating a Harvel® CPVC fire sprinkler piping system, as well as extensive engineering and design data, application listings and approvals, detailed reference tables and pressure ratings, industry standards and test meth-

ods, explicit assembly procedures, safety and caution data, storage and handling information, contractor resources, and much more.

Harvel CPVC fire sprinkler pipe is produced in strict compliance with ASTM standards and is in conformity with all major model codes. It is NSF certified for potable water use, listed by UL and C-UL, Factory Mutual approved, and approved for NFPA light hazard applications (NFPA 13, 13R & 13D systems).

Harvel's CPVC material characteristics and pipe dimensions provide unique advantages in fire sprinkler installations including superior hydraulics, ease of joining, and increased hanger spacing in comparison to other plastics. It is assembled with inexpensive, readily available tools and is based on a product with a continuous service history of more than 40 years.

Harvel's CPVC Fire Sprinkler Piping Installation Guide is available by contacting Harvel. A downloadable version is also available at www.harvelsprinklerpipe.com.

Elkhart Brass Joins Forces with Government Sales Group

Elkhart Brass Mfg. Co. Inc. has joined forces with Government Sales Group (GSG) of Georgia to market Elkhart Brass products to US Government agencies worldwide.

Effective immediately, any calls and inquiries from US Government personnel or agencies for Elkhart Brass products will be handled by GSG personnel, backed by support staff from Elkhart Brass. Contact information for GSG staff is listed on the Elkhart Brass website, <http://www.elkhartbrass.com/pages/inquiries-sales>.

EBL Announce the election of Robert H. Stratemeyer, PE

EBL Engineers, LLC is pleased to announce that Robert H. Stratemeyer, P.E. has moved up to the position of President of the Building Congress & Exchange (BCE) of Metropolitan Baltimore. His one-year term began effective November 7, 2008

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at their Annual Dinner. Mr. Stratemeyer's history with the organization includes membership on the Ambassador Committee, a three-year term on the Board of Directors and terms as Secretary, Treasurer, Vice-President and President-Elect.

The mission of the Building Congress & Exchange of Metropolitan Baltimore, Inc. is to foster interaction among its members for the exchange of ideas and information, for the improvement of the construction industry and for the education and service to its members and to the community. As the "umbrella association, it's membership includes architects, engineers, general contractors, subcontractors, suppliers, interior designers, as well as developers, insurance representatives, financial institutions, bonding companies, legal advisors, and other affiliated industry groups. The strength of the Building Congress & Exchange is the active involvement and diversity of its members.

The Building Congress & Exchange was organized as the Builders Exchange in 1888, incorporated in 1890, and then reorganized in 1936 as a consolidation with the Baltimore Building Congress. Since 1936 the organization has been known as its present name. It is the oldest organization of its kind to acknowledge the building trades in Maryland.

Two Honored at NFSA February Board Meeting

During the February meeting of the NFSA Board of Directors, two received honors for their dedication and commitment to the Association. Having decided to not run for re-election, Jeff Bennett was recognized for 15 years of service on the Board. He was the Pacific Northwest Area Director representing members from the states of Alaska, Washington, Oregon and Idaho. Also, in honor of his 25th year as President of the NFSA, John Viniello received a plaque signed by all the current members of the Board of Directors. He was appointed to the position in 1984.



NFSA Chairman Gregg Huennekens congratulates John Viniello on the anniversary of his 25th year as President.



John Viniello (l) and Gregg Huennekens (r) present Jeff Bennett with tokens of the Board's appreciation for his 15 years of service.



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TO JOHN VINIELLO:

Dear President Viniello:

It was a distinct honor to have you speak at our Illinois Residential Summit meeting in conjunction with NFPA President Jim Shannon. We truly had the "twin towers" of fire safety together to help us in our fire safety efforts.

Your presentation gave a true historical perspective to the many new fire and building officials of the long-standing NFSA efforts to promote fire sprinklers by educating the public with trailer demos, TV spots through Digger, Arnold and Gretzky.

We were with you as you engaged and challenged the crowd about the protection of their own homes, and were just as equally quiet and reserved as you recited the words in the unknown fire sprinkler poem.

We knew we were challenged when you agreed to come to Illinois because we had to have the right audience, but we (all) were not disappointed in your educational and inspirational presentation. All we can offer you in return, John, is our sincere thanks for what you do, for helping us achieve and maintain our fire safety objectives.

Your leadership and guidance really define what NFSA is today, and for the foreseeable future. Thank you for all of your efforts.

Respectfully,

Tom Lia
Executive Director
Northern Illinois Fire Sprinkler Advisory Board

TO JIM DALTON

Dear Jim:

Thank you for a fantastic Fire Team USA presentation in Addison, Illinois on February 3rd and 4th, during our joint Illinois Residential Summit Conference. I was happy that you and the Fire Team Staff agreed to return to Illinois, and for taking a chance on a new partnership with our existing Residential Fire Sprinkler Summit.

It was a risk in many ways for both of our organizations, but the results proved otherwise as there were over 150 participants the first day, and 316 participants the second day, representing 70 municipal fire and building departments, 24 fire districts, dozens of individuals and 22 fire related organizations and associations, surpassing our 2008 Summit of 287 attendees.

Please thank John Corso, National Training Manager, Associate Director Shane Ray, Associate Director Vickie Pritchett, Regional Manager Wayne Waggoner and the support team for giving it their all and making the combined Summit an unqualified success. All of the comments were very positive and greatly supportive.

We thank you for your leadership and dedication to the fire sprinkler concept. And we thank John, Wayne, Vickie and Shane for sharing their motivation and expertise with us in our efforts to expand and preserve our fire safety program. I am truly grateful for your trust and foresight and for working together on the project.

Sincerely,

Tom Lia
Executive Director
Northern Illinois Fire Sprinkler Advisory Board

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